An Investigation of Leadership Behavior of International Nurses after Completing American/Canadian Graduate Nursing Education Program

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AN INVESTIGATION OF LEADERSHIP BEHAVIOR OF INTERNATIONAL
NURSES AFTER COMPLETING AN AMERICAN/CANADIAN
GRADUATE NURSING EDUCATION PROGRAM

by

Jane E. Parker-Conrad

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

May

1987
ACKNOWLEDGEMENTS

I wish to express my sincere gratitude and appreciation to my dissertation director, Dr. Terry E. Williams, for his encouragement, personal interest and support in completing this research project. In addition, I wish to thank Dr. Jack A. Kavanagh and Dr. Kevin J. Hartigan for their assistance as members of my dissertation committee.

Special thanks are also extended to the University of Illinois College of Nursing, particularly Dean Mitzi Duxbury and Dr. Virginia Ohlson, for help and encouragement to continue this study of international nurses.

Dr. Helen K. Grace, Program Director of the W.K. Kellogg Foundation and former Dean of the University of Illinois College of Nursing, has been instrumental in stimulating my professional growth in both international health and occupational health nursing. I appreciate her support and encouragement at an important time in my career.

I also wish to thank Dr. Amelia Maglacus, Senior Nurse Scientist, and Dr. Thomas Lambo, Deputy-Director, of the World Health Organization for working so closely with me while I was the Acting Dean of the Office of International Studies at the University of Illinois in the development of the WHO Collaborating Centre in Nursing.

I appreciate the help and enthusiastic cooperation of the many international nurses who took time and paid their own postage to return their questionnaires to me.
A very special thank you is warmly extended to my sister, Caroline, and her family for the help in the last six months while I was commuting to Chicago from Tennessee.

Finally, I dedicate this dissertation to my husband, Dr. Dan Conrad, for his support, encouragement, patience and understanding during this entire process. Thank you!
VITA

The author, Jane Ellen Parker-Conrad, was born November 19, 1941 in Richland County, Wisconsin.

Her elementary education was obtained in the public schools of Viola, Wisconsin. Her secondary education was completed in 1959 at the Viola High School.

In September, 1959, Ms. Parker-Conrad entered Methodist Hospital School of Nursing, Madison, Wisconsin, receiving a diploma in nursing in August, 1962. She received a Bachelor of Science degree in nursing in 1969 and a Master's degree in 1976, both from the University of Wisconsin-Madison. While attending the University of Wisconsin she was elected a member of the Phi Delta Gamma and was a Knapp Scholar.

Jane Parker-Conrad held several nursing consultant positions at the Wisconsin Division of Health and was the Deputy Chief of the Section of Occupational Health. From 1979 to 1982 she was an assistant professor and director of the graduate program in occupational health nursing at the University of Illinois College of Nursing. In 1983 she was promoted to associate professor and from 1984 to 1986 she was the Acting Dean of the Office of International Studies. She recently moved to Knoxville, Tennessee where she is working as a consultant.
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For over a decade, organizations and agencies such as the World Health Organization (WHO), the W.K. Kellogg Foundation and various country ministers of health and education have promoted and provided funding for international nursing leadership programs. This support has primarily been in the form of fellowships and traineeships for nurses who are seeking additional education, beyond their basic nursing education, to improve their skills or to obtain an advanced degree. These fellowships have provided the opportunity for dozens of nurses, especially from developing countries, to gain this advanced education in other countries--mostly in the United States or Canada. During the period between 1975-1985, increasing numbers of nurses from developing countries have traveled to the United States and Canada for graduate study primarily matriculating at the University of Illinois College of Nursing in Chicago, at the University of California in San Francisco, and at a few other major American and Canadian institutions (Ohlson, 1986). Neither of the two major funding agencies, WHO or Kellogg, nor the two major educational institutions have undertaken an extensive study to document the success of these funding and educational efforts (Telephone interviews, January, 1986).

The need for effective nurse leaders, particularly in developing
countries, has never been greater. Since 1978, the World Health Organization has embarked on a goal of providing health for all people in the world by the year 2000 and primary health care is considered the key to attaining this target (WHO, 1978, p. 3). Primary Health Care (PHC) is defined as:

essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, as constitutes the first element of a continuing health care process" (WHO, 1978, pp. 3 and 4).

The eight elements of PHC emphasized are:

* education concerning prevailing health problems and the methods of preventing and controlling them;
* promotion of food supply and proper nutrition;
* an adequate supply of safe water and basic sanitation;
* maternal and child health care, including family planning;
* immunization against the major infectious diseases;
* prevention and control of locally endemic diseases;
* appropriate treatment of common diseases and injuries; and
* provision of essential drugs (p. 4).

The primary health care approach is important to world health because it focuses on community involvement, distributing health resources more evenly, re-orienting the health care delivery system and it is multisectoral in nature (International Nursing Foundation of
In 1981, the World Health Organization (WHO) convened a working group of nurse experts from all regions of the world to consider the role of nursing in providing primary health care. These experts "recognized the importance of four factors to support the changing roles and functions of the nurse: new attitudes and values; reorientation of educational programmes; better resource allocation; and well-defined policies and plans for the development of nursing personnel" (WHO, 1985, p. 11).

Because of this Primary Health Care initiative, the Director-General of WHO, Dr. Halfdan Mahler, stated at the 1985 World Health Assembly that nursing leadership would be one of the most important factors in achieving the health for all through primary health care goal because nursing is an essential component of any health system and is the backbone of most health services (WHO, 1985).

"Behind every successful movement there are effective leaders.... It is a key factor in motivating people, bring about change, and maintaining morale. Nurses can voice the feelings of people whom they serve, and can give them credibility and reasoned support" (WHO, 1985, p. 2).

According to Dr. Amelia Maglcus (1983), WHO Senior Nurse Scientist, "an important part of the WHO plan is to educate and motivate nurses throughout the world to assume a greater role in health care policy development including policies on health delivery workforce" (p. 3).

The development of nurse leaders is largely an educational
process which academic nursing institutions, particularly in the United States, hope to accomplish through their graduate programs (University of Illinois at Chicago, 1986). According to Bernhard and Walsh (1981), "Since leadership can be learned,... nurses should be educated to become leaders" (p. xi). Some nursing colleges are "presently expanding its scope to include opportunities on an international level" (UIC, 1986, p. 1). "As nurses in the United States teach an increasing number of international students in this country, consult with their international colleagues, study the world's health care needs, and teach and practice in other countries, they develop an international perspective on nursing practice" (Ohlson & Franklin, 1985, p. 1).

Nursing leadership is a world-wide concern and as nurses reach out to learn and share with their colleagues from various parts of the globe it is important to develop strategies to address leadership issues (Maglacus, 1983).

**Purpose and Objectives of the Study**

The purpose for this investigation is to examine the self-perceived leadership behaviors of international nurses who have participated in graduate nursing education programs in the United States or Canada. The following research objectives are addressed in this study:

1. To assess self-perceptions of international nurses regarding their leadership behavior using the Leadership Behavior Description Questionnaire (LBDQ) following graduate study in the United States or Canada.

2. To determine whether a significant relationship exists between self-perceived leader behavior of international nurses as
measured on the LBDQ and a measure of their overall leadership effectiveness.

(3) To determine whether a significant relationship exists between selected demographic characteristics (i.e., age, years of nursing experience, type of graduate program, and nursing specialty) and self-perceived leadership behavior of international nurses on the Leadership Behavior Description Questionnaire (LBDQ).

(4) To assess self-perceptions of international nurses regarding contributions made in nursing and health care in their country after completion of graduate study in the United States or Canada.

Significance of the Study

In 1981, the World Health Organization (WHO) convened a working group of nurses from all regions of the world to consider the role of nursing in primary health care (PHC). One recommendation for the nursing profession which came from this conference included the development of a corps of nurse leaders in each country who would be informed about primary health care and who would help to expedite the needed changes in the nursing system such as the restructuring of nursing practice and of the nursing educational programs.

In 1986, the University of Illinois at Chicago, College of Nursing, was named a WHO Collaborating Centre for the Development of Nursing in Primary Health Care. One of the Centre's major goals is to assist in the development of the corps of nurse leaders proposed by the WHO. Therefore, understanding more about leadership behavior among nurses is now considered very important. As nurses from various countries increasingly engage in graduate study in the United States, the need for these graduate institutions to be able to demonstrate that their educational programs are effective in motivating nurses to
assume leadership roles within their country's health care system will likewise increase. This is particularly important since the need for effective nurse leaders in the role of health for all by the year 2000 through the primary health care mechanism has been given such a high priority by the World Health Organization.

In addition, the WHO, the W.K. Kellogg Foundation and other philanthropic organizations help to support health care professionals in academic endeavors through fellowship programs "to stretch their perspectives, ... and develop a richer knowledge and experience background. The goal is to prepare people for expanded leadership roles in a society where issues grow more complex each year" (The Chronicle of Higher Education, 1986, p. 21). Since there are no documented studies of an organized evaluation of the effectiveness of these leadership development opportunities this study may contribute significant information for the continued funding and advanced graduate education opportunities afforded other international nurses.

In order to assess the value of these educational programs, certain questions must be addressed. For example, who is a leader and how is a potential leader identified? What factors in the educational program contribute to the leadership development of potential nurse leaders? What factors in the work setting contribute to the leadership development of potential nurse leaders? Which knowledge and skills should be taught to nursing students who will become the future generation of nurse leaders? How are the outcomes of nurse leadership development evaluated? What are the leadership behaviors of nurses who have engaged in a leadership development program? From
this list of important questions, the latter two are addressed by this study.

**Conceptual Framework**

The theoretical framework for this study is based on a two-dimensional leadership theory developed by scholars at the Ohio State University which focuses on Consideration and Initiating Structure as the two major dimensions of leadership behavior (Stogdill, 1963). In order to become an effective leader, according to Halpin (1966, p. 42), one must have an understanding of his or her own leadership behavior, the personality and behavior of his or her followers or members of the group, and knowledge of the situational requirements. Halpin points out that leader behavior focuses on observed behavior rather than some special trait or ability that might be inferred from his or her behavior. While this theory can not be labeled a pure situational theory, Halpin (1959, p. 11) indicates that "no a priori assumptions are made that leadership behavior which a leader exhibits in one situation will be manifested in other group situations." This theory explains that leadership is the process of influencing a group "in a particular situation, at a given point in time, in a specific set of circumstances" that stimulates the group to achieve objectives with satisfaction (Cribben, 1972, p. 9). A leader is one who is in a position to initiate change when the situation is ready for change (Brown, 1936). This theory presupposes that the leader is "able to adapt his style to the demands of the situation. He will stress task relationships when necessary, but will also provide support and consideration if required" (Moloney, 1979, p. 31).
This model suggests that leadership style is a dynamic process. It is a concept which may be related to the nurse's influence on such things as health care, health policies or nursing education in many countries.

There has been extensive research over the last three decades utilizing the Ohio State leadership theory with various populations including community health workers, school superintendents, and aircraft workers (Moloney, 1979). While there has been support for the importance of leaders who demonstrate behaviors which are high on both Initiating Structure and Consideration, no best "style" has been identified (p. 137).

Korman (1966) reviewed the various leadership studies and their relationship to leader effectiveness criteria. He stressed the importance of including situational variables in future research as potential moderators of these relationships. He concluded that "there is yet almost no evidence on the predictive validity of Consideration and Initiating Structure nor on the kinds of situational moderators which might affect such validity" (p. 360). And, finally, Hollander (1971, p. 1) indicates that although the leader is instrumental in shaping the situation by creating expectations and setting the stage, he or she is also an important factor, from the follower's viewpoint, in the situation.

In summary, the two major dimensions of leadership, Consideration and Initiating Structure, are important variables in examining leader behavior. These behaviors focus on task/goal orientation and concern and consideration for people. The Leadership Behavior Description
Questionnaire (LBDQ) is the instrument developed by the Ohio State University team to test this theory.

**Assumptions**

Basic assumptions for conducting this study include the following:

1. The perceptions of nurse respondents will be honestly and accurately given.

2. All nurse respondents will be able to read and understand questions written in English since all the international nurses in this study attended an institution of higher education in the United States or Canada where classes were taught in English.

3. Academic institutions, particularly in the United States, assume that their graduate education programs in nursing are an important component in the development of potential leaders.

**Definitions**

Certain terms basic to this investigation are defined as follows:

1. **Graduate nurses.** Nurses who have completed a basic program in nursing and who may have obtained a B.S. or B.A. degree or its equivalent in nursing. Minimally, it means the nurse is considered to be similar to a registered nurse in the United States.

2. **Master's degree nursing program.** A graduate nursing program, usually one year or more in length, taken in an institution of higher education which leads to a master's degree in nursing.

3. **Doctoral nursing program.** A graduate program, usually three or more years in length, which leads to a doctoral degree, Ph.D. or DNS, usually obtained through a nursing college which is part of a
4. **Non-degree, for-credit, program.** A program of study in a nursing school, specifically designed for the student which is usually about one year in length. Courses are taken for college credit; however, a degree is not obtained.

5. **Non-degree, not-for-credit, career development or short term fellowship program.** A program of courses and or clinical work taken neither for credit nor for a degree, ranging from four months to one year in length. Sometimes this option involves a travel schedule which enables the nurse to visit, observe and discuss his/her area of interest with experts in the nursing field.

6. **Leadership behavior.** The behavior of the international nurse leaders as they interact with their superiors, peers and followers.

7. **Consideration.** Behavior which denotes levels of respect, warmth, mutual trust, friendship and concern between leaders and individuals with whom they work (Halpin, 1966, p. 1).

8. **Initiating Structure.** Behavior which reflects the extent to which leaders are likely to structure their role and the role of others toward the accomplishment of certain goals while attempting to establish channels of communication and well-defined procedures and patterns of organization (Halpin, 1966, p. 1).

**Limitations**

One of the major limitations present in this study is that the study was limited to responses received from selected international nurses who attended a university college of nursing as graduate students in the last 12 years in the United States or Canada and who
were reachable via mailing lists provided by participating graduate institutions and the W.K. Kellogg Foundation. Because of the problem of locating other international nurses who have studied abroad, generalizations cannot be made to the population from which these subjects were drawn. Also, one cannot predict from this study the direct effect of their educational programs on the leadership behaviors of international nurses. However, the results of this study can provide some insights into the outcomes of the educational programs by the contributions made by these nurses to health care and nursing in their country.

Description of the Study

This investigation consists of five chapters. The first describes the purpose of the study, lists the research questions to be explored, and defines some of the key terms which are used in the study. The limitations of the study and the general description of the paper also are discussed.

The second chapter, the review of the literature, is divided into three sections. Literature which provides an overview of international nursing is reviewed first. Then, research related to leadership development is presented. Finally, leadership studies in the field of nursing are reviewed.

Chapter III describes the research methodology utilized in this study of 160 international nurses. Selection of the sample, the research instrument, data collection, research questions, and data analysis are discussed.

A description of the research findings is presented in Chapter
IV. First, the demographic and professional characteristics of the international nurse subjects are discussed. Then, each of the four research questions is examined. Finally, a summary of the questions regarding nursing and health care contributions following their study abroad is described.

Chapter V includes a summary of the study followed by conclusions and recommendations for further research.
CHAPTER II

REVIEW OF RELATED LITERATURE

Chapter II provides a review of the related literature and research in the areas of (a) international nursing, (b) leadership development, and (c) nursing leadership studies.

**International Nursing**

Nurses who leave their native country for a period of time to practice, teach or study nursing in another country are referred to as international nurses (Parker-Conrad, 1985). Yet, defining the term international nursing has been, and still is, problematic for many scholars. While the practice of international nursing has often been used interchangeably with cross-cultural nursing, Melias (1984), a University of California nursing professor, defines international nursing as "the organized delivery of services related to health care in general, and nursing care in particular, to a host nation. That care is provided by a nurse who was educated, resides, or practices in another donor nation or by an organization on its behalf and is limited in duration" (p. 38). Dr. Melias adds that the international nurse "needs the tools to identify the salient human, environmental, and cultural system of the recipient nation, the useful aspects of indigenous, sociocultural health and illness practices, and the expectations of which aspects of health care are to be carried out by the nation's social and cultural systems and which by the health care
The International Council of Nurses (ICN) is the official agency and the voice for nursing, internationally. The ICN headquarters is in Geneva, Switzerland and it represents 95 national nurses' associations from throughout the world. ICN's official purpose is "to provide a medium through which national nurses' associations share their common interests working together to develop the contributions of nursing to the promotion of the health of people and the care of the sick" (ICN, 1983, p. 1). The ICN has been active in efforts "to improve standards for nursing care and the professional, social and economic position of nurses" (Masson, 1984, p. 21).

Historically, American nurses have been practicing international nursing for close to four decades (Masson, 1984). The contribution which American nurses have made to the advancement of nursing and health care, globally, has received little recognition outside the profession. Some of the first nurses to work in other countries were those who went as missionaries, army nurses, consultants and educators such as Dr. Virginia Ohlson, an international nursing expert from the University of Illinois. She was invited by the Rockefeller Foundation to travel to Japan after the Occupation to advise health officials at the highest level of the government and to assist in the development of a new nursing program in that country. American nurses have been "recognized as pacesetters by our international colleagues ... our textbooks have been translated and distributed worldwide and our theories are discussed and often adopted in foreign schools of nursing" (Masson, 1984, p. 13).
Nursing education programs in most countries are not administered at the university level but, instead, are hospital-based and emphasize skill training which prepares nurses for practice in the hospital setting. There has been little emphasis on learning to care for individuals with prevailing health problems of the country and these programs usually do not focus on illness prevention or health promotion issues. There, also, are relatively few graduate nursing programs outside the United States and, therefore, when nurses from other countries wish to pursue advanced education they usually attempt to find funding to study in an American university (Ohlson & Franklin, 1985, pp. 9-10).

The Institute of International Education (1986) reports in its annual *Open Doors* publication that 343,777 international students in all fields of study were enrolled in U.S. institutions in 1985-86 which is an increase of almost 300% since 1966. Over 10,000 of these students are classified as health science majors but this report does not provide data about the number of nursing students, specifically. No other data are readily available about the number of nurses who currently study or practice in the United States or of the number of American nurses who are practicing nursing on a limited basis, internationally.

Three key international nursing journals, recognized by the International Council of Nurses (ICN) and the American Nurses Association (ANA), as well as all of the journals listed in the International Nursing Journal Index were searched for relevant information and studies pertinent to this study. The three
international journals are: the International Nursing Review which is the official journal of the ICN, the Journal of Advanced Nursing which is published in England but also carries articles by nurses from the U.S. and other European countries, and the International Journal of Nursing Studies. These journals provide an overview of global nursing concerns and particularly issues which may be instrumental in molding nursing practice and education throughout the world.

Not only has there been controversy about the definition of international nursing, but also debate continues over what to classify as international nursing research. International nursing research is described in the literature in at least six ways: (a) research by an American nurse which is done in another country, (b) research done cross-nationally to test theories which were generated in the U.S., (c) research which utilizes subjects other than those in the U.S., (d) research which studies nursing concerns identified by U.S. nurses, but utilizes subjects living outside the U.S., (e) research conducted by a foreign nurse in her country, but is reported in a U.S. or an international journal, and (f) research conducted by a foreign nurse in the U.S. using an American or foreign sample (Melias, In Press, p. 6). Melias believes the best definition for international nursing research is "research addressing a nursing phenomenon or concern using a sample outside the United States and published in a U.S. nursing journal. It is also research representing global nursing concerns and published in key international journals" (p. 6). This is the definition used in this literature review.

Many of the articles found in the three international journals,
previously mentioned, are descriptive in nature but, nevertheless, provide a state-of-the-art picture of the conditions or major issues confronting nursing in various countries. These published articles include material which can be classified in three ways: descriptive studies, participant observation/case study information and data-based research.

International nursing studies which are descriptive tend to be based on the author's experience and, often, involve a description of clinical nursing practice or a report of a nurse's experience in another country. For example, Eldar and Eldar (1984) describe the role of the family in hospital care and Siassi and Fozouni (1982) report on the care of elderly psychiatric patients in the Middle East.

Participant observation reports provide an overview of nursing, internationally, and of some issues that nursing personnel face in various countries of the world. Many of these studies include reports of nursing practice, education and administration. Nursing education studies involving international students include a description of the types of and resources available for nursing education (Henkle, 1979; Jato et al., 1979; Ugwuebu & Ogundexin, 1977) and a survey of foreign nursing students reaction to the U.S. educational system (Abu-Saad & Kayser-Jones, 1981; Barnes, 1980; Kayser-Jones & Abu-Saad, 1982).

Factors cited as problems for international nurses who study in the United States include language difficulties, loneliness, food intolerances and cultural differences. A study by Cordiner and Hall (1971) discusses predictors in the selection of Scottish nursing students. Davitz and Sameshima (1976) studied the interactions of
international students with American nurses. They report many differences in cultural and role expectation among both American and international nursing students.

Research reports have changed in the last decade from articles which are largely retrospective and descriptive surveys to those which are data-based and which often involve subjects from more than one country. This information is most helpful in understanding the practice and influence of nursing, globally. These articles include reports of various roles played by nurses and of images portrayed of nurses. Kelly (1973), Adebo and Chokrieh (1980), and Jaegar-Burns (1981) report findings of nursing students’ beliefs about nursing education, findings of the nurses’ self-image and of nursing’s relationships to primary health care, internationally.

Another data-based research topic which has received much attention in the literature is the migration problem found in international nurses. For example, Bergman (1975) and Ronaghy, Zeieghhami, Rouhani, and Zimmer (1975) reveal that the status, image of nursing, and preference for better working conditions play a major role in reasons nurses migrate to other countries to work. The World Health Organization became concerned about this problem and funded a study to investigate the migration of health professionals, particularly physicians and nurses (Logan, 1980; Mejia, Pizurki & Royston, 1979). These studies report that approximately 15,000 nurses, many from developing countries, leave their native countries each year to practice in another country.

Clinical nursing research, recently, has focused on maternal and
child health issues such as breast feeding and infant feeding practices (Bergman & Feinberg, 1981; Chai, 1983) and on mother-infant bonding (Marshall, 1983). There also are reports of the nurse's role in patient care (Bhanumathi, 1977) and of a Philippine study which investigates the treatment of post-operative pain (Locksin, 1981).

In summary, this section has reviewed the information about international nursing and has provided examples of studies which are descriptive, those which involve participant observation, and some examples of the more current data-based research. While Ohlson and Franklin (1985) indicate there is a dearth of international nursing research, particularly in the developing countries, this review of the literature indicates there is increasingly more activity in nursing research, internationally, in the last decade. And, "systematic research studies are needed to document the contribution nursing is making or could make to the advancement of a primary health care system in the developing countries and in the underserved areas of the more developed countries" (p. 11).

Leadership Development

This section includes a review of the literature concerning leadership and, secondly, of research which pertains specifically to the variables of interest to this study.

In order to more fully understand the international nurses' leadership role, it is important to describe the nature of leader behavior and leadership. There is not a clear agreement among scholars about the meaning of leadership. Leadership is often used interchangeably with the concept of management.
According to Katz and Kahn (1960), three major meanings of leadership are found in the literature: a personal characteristic, a positional attribute, and a category of behavior. Moloney (1979, p. 10) states, "Those individuals who believe in the personal characteristic idea view leadership as influencing others through the leader's observed characteristics. Individuals who believe that leadership is manifested only in persons in status positions are inclined toward the positional approach. Others assume that leadership can be described by categories of behavior" (Moloney, 1979, p. 10).

In 1959, Stogdill reported leadership is a "process of influencing the activities of an organized group toward goal-setting and goal-achievement" (p. 20). And, in 1974, he published a systematic review of over 3,000 studies on leadership issues. He concluded that future research should include such issues as characteristics about leaders, followers, and the group as well as information about outcome measures. These outcomes which need an operational definition may be group cohesiveness, motivation, drive, productivity, follower satisfaction and follower acceptance of leader (p. 427).

According to Wayson (1975), "leadership is the process by which a member helps a group to solve one or more of the problems that every group must solve ... and the leader must keep the group together, preserve the basic values of the organization, produce whatever the rest of society expects them to produce, secure the needed resources, review the people's goals by meeting as many as possible, and adapt to
meet the world's changing conditions" (p. 13). Thus, leadership may be viewed as the influencing of other people or groups to strive toward a goal.

Early research on leadership focused on traits or qualities present in identified leaders. This followed the "great man" theory which acknowledged that certain persons in leadership positions such as the President of the United States hold different or unique qualities not possessed by others (Stogdill, 1974).

Initial investigation into the "trait" approach to leadership utilized personality tests and inventories and attempted to support the notion that leaders are born (Davis, 1977). While leaders were found to exceed others in scholarship, intelligence, social participation, and socioeconomic status; not all leaders held the same or all the characteristics (Stogdill, 1974, p. 62). One of the most important findings of the "traitist" theory was the conclusion that leadership can be learned (Bernhard & Walsh, 1981).

These initial theories, however, failed to account for the interaction or situational context affecting the leader's behavior. However, some of the early studies did suggest that characteristics of the leader were partially affected by the situation (Stogdill, 1974).

One of the problems not accounted for in the situational theory of leadership is that even if a leader does emerge, the leadership may not be effective. Also, a leader, good or bad, may not emerge in every situation (Bernhard & Walsh, 1981).

Finally, interaction theory attempts to add another dimension to the previous information. It suggests that it is the interaction
between the leader’s personality and the situation that moves the group to a common goal. The goals and needs of members of the group are also important components of this theory.

The positive aspects of the interactional theory is that it made both the traitist and situational theories of leadership usable by relating the characteristics of the leader to the context of the group and the group’s goals. The interaction theory supports the belief that anyone can become a leader given an appropriate situation. The only negative aspect of interaction theory is that it does not predict outcomes or prescribe actions that would direct leaders in their role (Bernhard & Walsh, 1981, p. 47).

According to Tannenbaum, Weschler and Massarik (1961), three forces help determine the degree of control a leader will use in interacting with group members. These forces are found a) within the situation, b) within the group members, and c) within the leader (p. 73). The degree of freedom given to members and the amount of control given to the leader are influenced by forces within the situation. The size and structure of the organization affect the quality and quantity of interaction between the leader and group members.

Theories of Leader Style

Remembering that the role of the leader is to help the group achieve its goal, it becomes very worthwhile to examine the manner in which the leader does this. Each person in a leadership position must rely on a unique set of values and experiences that determine the leadership style to be used (Matula, 1982, p. 24).

Leadership style is related to the amount of control or freedom allowed subordinates. The most commonly known leadership styles include autocratic, democratic, and laissez-faire. According to Tannenbaum et al. (1961), style can be theorized as a continuum
consisting of a range of possibilities. Autocratic style is viewed as having the greatest control by the leader and minimal freedom for members of the group. Democratic style permits moderate freedom and control for both the leader and the followers. And, laissez-faire leadership style suggests minimal leader control with maximum freedom for the group (p. 69).

O'Donovan (1975) indicates the autocratic leader is often seen as the "organization man" or the "bureaucrat" whose main focus is on maintaining the organization with little concern for the individual. The democratic leader encourages group participation in setting its own agenda prior to beginning work while the laissez-faire leader provides the resources, gives the group complete freedom in how to accomplish the task, and does not give feedback unless requested (Owens, 1976).

Another popular leadership strategy is known as Management by Objectives (MBO) which is a spin-off of McGregor's Theory X and Theory Y. Theory X is the basis of managerial theory which describes the traditional view of control and direction for the leader. On the other hand Theory Y, the basis for MBO, suggests an integration of individual and organizational goals. MBO proposes that teams work together instead of in competition and this leads to increased productivity and satisfaction. The key elements in the MBO process are "goal setting," "action planning," "self-control," and "periodic progress reviews" (Raia, 1974, p. 12).

A final method of describing leadership and how it influences productivity and satisfaction is found in two behaviors known as "Consideration" and "Initiating Structure" (Fleishman, 1975).
"Consideration is the behavioral dimension of a leader that emphasizes concern for the individual. It includes trust, respect, warmth, and rapport, and encourages communication. Initiating Structure is the dimension of a leader that focuses heavily on the concern of the goals or the work of the organization" (Fleishman & Harris, 1962, pp. 43-44).

In summary, several theories of leadership have been developed which may be useful to the nurse-leader. First-level theories answer the question, "Who is a leader?" Second-level theories and the styles of leadership tell what the leader does or can do. Third-level theories indicate the consequences or possible outcomes of selected leader action (Bernhard & Walsh, 1981, p. 61). While this third level of theory has not been widely tested in a variety of nurse settings, "by analyzing the situational variables including leader, members, and the environment, an effective style can be predicted" (p. 61).

LBDQ and Leader Behavior Studies

In order to identify the components of leader behavior, many studies have been conducted and numerous research tools have been developed to examine these variables. One of the prime instruments developed to assess leader behavior is the Leader Behavior Description Questionnaire (LBDQ) initiated in 1945 by Hemphill at the Ohio State University, and later refined by Halpin and Winer (Stogdill, 1963). The LBDQ measures two important leader dimensions, Initiating Structure and Consideration, and the developers of this instrument believe these two subscales "are sufficient to account for all observable variance in leader behavior" (p. 2). The LBDQ was
originally tested on highway patrol officers and military personnel. Later, a study was conducted of ministers, community workers, United States senators and corporation presidents. Results of these studies may be found in Appendix K with the Manual for the LBDQ. The LBDQ, Form XII, which is utilized in this research represents the fourth revision of the questionnaire (p. 2).

Hills (1963) conducted a study of elementary school teachers which asked them to evaluate the leader behavior of their school principals. Those principals who scored higher on both Consideration and Initiating Structure were also rated higher on several attitude dimensions by these teachers and were rated higher by their supervisors.

Among one of the later studies, Parker (1975) studied the relationship of organizational position of school superintendents and perceptions of their leader behavior. There was agreement among the four groups of administrators regarding how ideal superintendents should behave.

The LBDQ has been used by numerous respondents to describe an ideal behavior and for leaders to describe their behavior as the way they think they behave. Separate scores for Consideration and Initiating Structure are determined by summing the 10 item responses relating to each dimension. It was determined very early that the two leader subscales were independent, distinct dimensions which may range from high to low in any respondent. While there has been reluctance to identify any behavior as not good, there generally is consensus that ideal leaders score high on both dimensions of Initiating
Structure and Consideration. Halpin (1955) did conclude that effective leaders are most often associated with high scores on both subscales and different institutional settings tend to encourage different leadership behaviors.

Fleishman and Harris (1962) used the LBDQ in a study to determine if there was a relationship between supervisory style, job turnover and grievances. They concluded that high Consideration behavior can compensate for high Initiating Structure but that low Consideration will not be compensated by low Initiating Structure. House, Filley, and Kerr (1971) found in a similar study, that job turnover and grievances tend to increase with increased Initiating Structure but tend to decrease with higher scores on Consideration. Fleishman and Simmons (1970) studied the effectiveness of Israeli foremen and found supervisors who scored low on both Initiating Structure and Consideration were least effective leaders, whereas those with high scores on both dimensions were most effective.

In reviewing the literature, it appears that leaders are considered most effective when they are considered high on both Initiating Structure and Consideration. These are also behaviors which are preferred by most of their subordinates and many of their superiors. Leaders who emphasize considerate relationships with their group and who organize and provide direction toward group goals will apparently be thought of as strong leaders.

Nurse Leadership Studies

To date, according to the current literature, no examination has been made of the performance of international nurse leaders. Much of
the research which exists of American nurse leaders focuses on leadership style and job satisfaction, relationship of leadership with teaching skills such as assertiveness training, communication skills, and management techniques for hospital nurses, and other "how to" tips on being a good nurse manager. There have been numerous studies in the last decade which have examined leadership style/behavior in various academic administration settings, and more recently, several research studies which have systematically described leadership behavior in other nursing settings. In addition, there are a number of recent studies based on the two primary dimensions of leadership style which was developed by Halpin at Ohio State University (Stogdill, 1963).

Gooding (1978) replicated Halpin's study using the LBDQ to evaluate administrative heads of baccalaureate nursing programs. She found these leaders placed considerable emphasis on the importance of the situation as it effects leader behavior.

Moloney (1979) studied 40 deans of university schools of nursing to compare how the dean was perceived by the vice-president, the faculty and by herself and to determine if their perceptions of the dean were related to their evaluation of her overall leadership. She reported that the most effective leaders are high in both Consideration and Initiating Structure. She also found that faculty generally prefer deans who are high in consideration, while higher level administrators such as vice presidents favor deans strong in Initiating Structure. There is no significant relationship between the perceptions of the dean's leader behavior on Initiating Structure
or on Consideration and evaluation of her overall leadership.

Among the many studies of academic nurse leaders, Lenz (1982) studied 160 nursing education administrators of associate degree, diploma, and baccalaureate degree programs to determine if any relationship exists among the variables of age, education, salary, and experience and the leadership behaviors of Initiating Structure and Consideration as measured by the LBDQ. The subjects scored high on both Consideration and Initiating Structure behaviors. Salary was not found to be related to leader behavior scores.

Powers (1985) studied nursing faculty to determine if specialty area had any effect on their leadership behavior. The 173 faculty were selected from 36 schools of nursing and were asked to complete the LBDQ. In this sample, Powers found that psychiatric faculty were task-oriented and directive. The difference in leadership style of medical-surgical faculty was best explained by their activity in a professional organization and by their years of teaching experience.

Blanchard and Henry (1977) found that there is no single best leadership style but rather a variety of relationship and task combinations which are dependent on the maturity of group members. "Thus the effective leader is one who accurately assesses the group's maturity and adapts the appropriate leader behavior" (p. 43).

Lucas (1983) investigated the relationship between the self-perceived leadership behavior of 240 deans of U.S. nursing programs and such organizational characteristics as faculty expertise, maturity, size, economic pressure, and nursing education tasks and with parent institution characteristics of control, educational task
and size. The dean's Consideration scores were significantly related only to nursing/faculty expertise--programs with a greater proportion of faculty with earned doctorates. Deans who scored higher on Initiating Structure had more doctoral faculty, more graduate students, and anticipated a larger budget in the following year.

Johnson (1981) describes the association between leader behavior and job satisfaction of hospital nurses. Secondly, she was interested in how personal characteristics of nurses and organizational variables of the hospital affected this relationship. Using the LBDQ as the instrument, she found that two aspects of leader behavior, "role assumption" and "consideration", were highly correlated with supervisory satisfaction.

Aftahi (1981) studied the relationship between job satisfaction and leadership style of hospital nurse supervisors using the Consideration and Initiating Structure dimensions. She also was interested in the relationship between organizational and personal variables and job satisfaction of the supervisory personnel. Leader Consideration style was found to be a better predictor of job satisfaction of this sample of California nurses than Initiating Structure.

A study by Rothacker (1985) addresses the political activity of nurses, an aspect which may relate to leadership behavior. However, rather than using the LBDQ, a political activity tool was chosen to measure political behavior. Nurses with master's degrees were described as politically more active than nurses with less education. Nurses employed in nursing education were more active, politically,
than nursing administrators or clinicians. And, nurses in various specialty areas, such as public health, were politically more active than other specialty nurses.

Peterson (1985) focused her study on nursing service administrators and graduate nursing students to determine if their perceptions of ideal leader behavior were similar. The instrument used was Fleishman's Leadership Opinion Questionnaire (LOQ) which also addresses Consideration and Initiating Structure. No significant differences were found in the two groups' perceptions of leader behavior for the role of nursing service administrator.

Fairchild (1980) used the LBDQ, Form XII, to evaluate the leadership style of head nurse's behavior in relation to their subordinate's job performance and termination decisions in selected nursing homes in the Detroit area. Initial analyses did not demonstrate that leadership had any influence on job performance or organizational commitment. However, further examination revealed that the charge nurse's leadership and professional commitment of the employee to work had a significant impact on nursing care activities.

Finally, Kim (1983) conducted the only investigation found in the literature on nursing leadership style in an international setting. She studied Korean nursing education administrators and faculty using the LBDQ, Form XII. High Consideration and high Initiating Structure behaviors were found to be the most effective style in Korean nursing educators. Also, nursing position was strongly correlated with job satisfaction.

In reviewing the literature related to the study, the
investigator has found no research that specifically focuses on the leadership of international nurses who have participated in graduate education programs in another country. The present study gathers pertinent information concerning leadership behaviors, leader effectiveness and contributions made to nursing and health care in the native country by international nurses.

Summary

This chapter has examined the literature pertinent to the current study. While there are numerous leadership studies reported, many of them in nursing, there is a dearth of systematic research on international nursing, particularly on leadership development programs, and on the contributions of nursing leaders to world health. Documentation of how these international nurses perform following graduate education in another country will provide direction for and is essential to the continued support of future nursing leadership development programs.
CHAPTER III

METHODOLOGY

As stated in Chapter I, the purpose of this study was to investigate the self-perceived leadership behaviors of international nurses who have participated in graduate nursing education programs in the United States or Canada.

The procedures developed and utilized in collecting data in this study are described in this chapter. Specifically, the research methodology consisted of the following elements: (a) selection of the sample, (b) research instruments, (c) data collection, (d) research questions, and (e) data analysis.

**Selection of the Sample**

The sample used in this study consisted of 160 international nurses from approximately 40 countries who attended a university-based college of nursing in the United States or Canada between the academic years 1972 and 1985. All the nurses attended one of three types of graduate programs of study offered to international nurses. The international students chosen for this study were registered nurses, or a category considered essentially equivalent within their own country, before coming to the United States for additional study. Their names and addresses were provided by the Office of International Studies at the University of Illinois at Chicago College of Nursing, the University of California--San Francisco School of Nursing, and by
the W.K. Kellogg Foundation in Battle Creek, Michigan.

The overall size of the population from which this sample was chosen is not known as no agency currently collects these data. However, as indicated earlier, one international nurse authority recently stated approximately 500 nurses have come from other countries to the United States and Canada for graduate study in the last decade (Ohlson, 1986). This population of nursing students was specifically selected for this study for the following reasons: (a) to obtain research data from international nurses from several countries who had experienced graduate education in the United States, (b) to obtain a research population whose initial education and employment prior to graduate education occurred outside the United States; and (c) to obtain a research population of international nurses who have returned to their home country following completion of an academic program in the United States so that a profile of their leadership participation could be determined.

The sample selected represents a convenience or purposive sample since according to Backstrom and Hursh-Cesar (1981) "we choose our respondents deliberately, by knowing the type of people they are or where they are located" (p. 65). This technique provides the researcher with a wide range of questions about the topic for later research with a larger, probability sample.

**Research Instrument**

The research instrument was divided into three sections: Section I, Personal Data; Section II, the LBDQ and the Overall Leader Evaluation; and, Section III, Personal and Educational Program Data.
See Appendix A for samples of the questionnaire.

Section I was designed to obtain data about the nurse's experience in his/her nursing career, recent employment, and about his/her current position.

Section II, part 1, consisted of the Leader Behavior Description Questionnaire (LBDQ), Form XII Self, which was used to obtain information from the participants regarding their perceptions of their own leadership behavior following their enrollment in a graduate nursing education program in the United States or Canada. This questionnaire is composed of a series of 100 short, descriptive statements of ways in which leaders may behave. Subjects indicate the frequency which they currently engage in each form of behavior by circling one of the five choices: always (A), often (B), occasionally (C), seldom (D), or never (E). For each item, scores from one to five are assigned to each of the five possible responses. Most items are scored: A B C D E or 5, 4, 3, 2, 1 respectively. However, 20 starred items on the scoring key are scored in the reverse direction.

There are also 12 subscales for the LBDQ which have been used to describe leader behavior in various subjects. However, this study utilized only the scores on the two subscales of Consideration and Initiating Structure to describe the behaviors of the international nurses. All of the statements have positive values except for three statements which are starred on the Consideration subscale. Appendix E reveals the 10 items which make up each of the Initiating Structure and Consideration subscales. Separate scores for these two subscales were determined by summing the item responses related to each
subscale. The possible range of scores on each of these two dimensions is 10 to 50.

Considerable research using the LBDQ has been conducted in the military, industrial and educational environments since its development in 1950 (Kerr, 1974; Stogdill, 1974). The tool, considered the most widely used method for describing leader behaviors and originally consisting of 1,790 items, was subjected to factor analysis after testing with numerous groups (Hoy & Miskel, 1978). Further modifications of the instrument have been completed over the years by the Ohio State Leadership Studies staff and the Bureau of Business Research. The estimated reliability by the split-half method when corrected for attenuation is .83 for the Initiating Structure and .92 for the Consideration scores. These two dimensions were also determined to be independent (Halpin, 1957). The LBDQ, Form XII-Self, utilized in this study, modifies the pronouns which allows the measurement of how the leader perceives her/his behavior on the various dimensions of leadership.

The Overall Leader Evaluation, part 2 of Section II, consisted of a rating form of nine "Leader Effectiveness" questions. Each item, scored on a scale from one to five, was used to evaluate the overall leadership effectiveness of the international nurses (Seeman, 1960, p. 141). For the individual nurse, the range of scores was from 9 to 45. Subjects were asked to choose the adjective that most closely described their behavior. Scores from one to five were assigned to each of the five possible responses with "poor" being scored as one, "fair" scored as two, "good" scored as three, "excellent" scored as
four, and "perfect" being scored as five.

Section III of the instrument contained questions about personal and educational program characteristics such as: native country, sex, age, academic degree, specialty area of nursing, place and length of post-graduate program, degree obtained and, an educational program satisfaction index to determine how 15 job factors had been affected by the education program. Finally, questions of particular interest to the researcher were included to elicit information (mostly open ended) about which resources had been helpful in the nurses' leadership development and contributions they had made to nursing and health care since participation in graduate study.

Endorsement

This study has the endorsement of the World Health Organization and the W.K. Kellogg Foundation. Both have been instrumental in promoting nursing leadership development on an international basis and both have provided funding for educational programs for nurses in the United States as well as many other countries of the world. See Appendix C for the letters of endorsement.

Data Collection

The data were collected by means of a questionnaire mailed to the selected international nurses who had participated in graduate nursing education in the United States or Canada from 1972 to 1985.

The questionnaire was pilot tested with a group of international nurse students who were attending a graduate nursing program at the University of Illinois College of Nursing in Spring 1986. Appropriate revisions were made and the revised questionnaire was mailed in Summer
1986 with a cover letter and return envelope to 160 subjects in 40 countries. Eighty-one questionnaires were returned from this first mailing along with seven other questionnaires with "addressee moved" labels. Respondents who failed to return the questionnaires were sent a follow-up letter and another questionnaire about six weeks after the first mailing. An additional 11 completed questionnaires were received in the next month.

**Data Analysis**

The data compiled from the administration of the questionnaire were classified and tallied according to the following research questions:

(1) What are the perceptions of international nurses regarding their leadership behavior following a graduate program in nursing in the United States or Canada?

(2) Is there a significant relationship between self-perceived leader behavior of international nurses as measured on the LBDQ and their overall leadership effectiveness as measured on the OLE?

(3) Is there a significant relationship between selected demographic and professional characteristics such as age, years of experience, type of graduate education program, specialty area of nursing and the self-perceived leadership behaviors of international nurses as measured on the LBDQ?

(4) What are the perceptions of international nurses regarding their contributions in nursing and health care in their country after completion of a graduate education program in the United States or Canada?
In order to analyze and interpret the data collected in this study, a variety of statistical methods was used. Scores on the LBDQ for each of the 78 international nurses provided the primary data base for this study and were analyzed in relation to the major purposes underlying this research. Scores were obtained on all 12 subscales of the LBDQ for each nurse. The two subscales, Consideration and Initiating Structure, were evaluated separately to determine their relationships to selected personal and professional characteristics. In addition, mean scores from the rating scales on Overall Leadership Effectiveness (OLE) and the Educational Program Satisfaction Scale (EPSS) were recorded. Frequency statistics were determined on all variables including all demographic data. The standard SPSS-X program was used to obtain the statistical results for the various groups of input data. Statistical testing of the research questions involved the use of the Pearson product-moment co-efficient of correlation. The correlation survey method was appropriate for this study because it allowed the assessment of the relationships of variables not amenable to experimental manipulation. Both the direction and strength of the relationship were investigated.

Summary

This chapter has described procedures developed and utilized in collecting data for this study. The research methodology has been described including the sample selection, research instruments, data collection, research questions, and data analysis. Chapter IV will present the research findings.
CHAPTER IV

RESEARCH FINDINGS

As stated in Chapter I, the purpose of this study is to examine the self-reported leadership behavior of international nurses using the Leader Behavior Description Questionnaire (LBDQ), with a specific focus on two dimensions, Initiating Structure and Consideration. Also, the study determines the relationship between the LBDQ and selected demographic and professional nurse characteristics.

The instruments used to collect data for this study are the Leader Behavior Description Questionnaire, the Overall Leader Evaluation Scale, the Personal Data Sheet, and the Educational Program Characteristic Profile.

The results of the data analysis are provided in three sections of this chapter. Section A provides descriptive summary of the demographic data; Section B provides results from statistical analyses related to this study's research questions; and Section C presents results from the qualitative analysis of the data.

Section A: Demographic Results

Respondents

A total of 160 international nurses was sent questionnaires and asked to participate in the study. Of the 160 nurses contacted, 92 responded thus yielding an overall response rate of 57.5%. For various reasons, 10 returned questionnaires could not be used in this
study and an additional four were received after the data analysis was completed. Of the 10 unused questionnaires, two were considered ineligible because the respondents were native Americans, five were returned without the LBDQ completed, two were not currently working and, one respondent was no longer working in the field of nursing.

The following overview of data is based on the responses of 78 nurses (48.7% rate of return) who completed the Personal Data Sheet.

**Characteristics of the International Nurse Leaders**

**Age.** The age distribution of the international nurses indicates that 18.4% are between 25-35 years, 50.0% between 36-45 years, 26.3% between 46-55 years and 5.2% were 56 years of age or older. No international nurses are under 25 years of age in this study. The mean age is 43.77 with a range of 25-60 years of age (see Table 1).

**Gender.** Of the 78 nurse respondents in this study who attended a graduate program in the United States or Canada, 75, or 96.2%, are female. Only one male respondent is included in this study. Two respondents did not answer this question (see Table 1).

**Marital Status.** Concerning marital status, 37.0% (27 nurses), report they are single, 37 nurses (50.7%) are married, and nine respondents (12.3%) are separated, divorced, or widowed (see Table 1).

**Native Country.** Nurses participating in this study represent over 20 countries around the world. Of 76 nurses responding to this question, 34, or 44.7%, report Australia as their native country, 12.8% (10 nurses) are Canadian, 6.4% (five nurses) are from Taiwan, four from Thailand (5.3%) and three (3.9%) report Japan is their native country. See Table 1 for the distribution of nurses by native
Table 1
Demographic and Professional Characteristics of International Nurse Respondents

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
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<tr>
<td><strong>Age</strong></td>
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<tr>
<td>25-35</td>
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<td>36-45</td>
<td>38</td>
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<tr>
<td>46-55</td>
<td>20</td>
<td>26.3</td>
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<tr>
<td>56 or over</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<td>99.9</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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</tr>
<tr>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>Marital Status</strong></td>
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<tr>
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<tr>
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<tr>
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<td><strong>Total</strong></td>
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<td><strong>Native Country</strong></td>
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**Country of Employment**

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<td>Bahrain</td>
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<td>1.3</td>
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<tr>
<td>Chile</td>
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<td>1.3</td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td>1.3</td>
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<td>Costa Rica</td>
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<td>1.3</td>
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<tr>
<td>Israel</td>
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<td>1.3</td>
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<tr>
<td>South Africa</td>
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<tr>
<td>Sweden</td>
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<td>1.3</td>
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<td>Switzerland</td>
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**Work in Same Country in 1986 as 1980**

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<td>Yes</td>
<td>63</td>
<td>94.0</td>
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<tr>
<td>No</td>
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<td>6.0</td>
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<th>Percent</th>
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<td><strong>Years in Nursing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 – 10</td>
<td>12</td>
<td>15.4</td>
</tr>
<tr>
<td>11 – 20</td>
<td>36</td>
<td>46.1</td>
</tr>
<tr>
<td>21 – 30</td>
<td>22</td>
<td>28.2</td>
</tr>
<tr>
<td>31 or more</td>
<td>8</td>
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<td>Total</td>
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<tr>
<td><strong>Mean</strong></td>
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<tr>
<td><strong>Range</strong></td>
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**Current Nursing Position**

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<th>Percent</th>
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<tr>
<td>Academic nursing</td>
<td>33</td>
<td>44.6</td>
</tr>
<tr>
<td>Administration in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing service</td>
<td>16</td>
<td>21.6</td>
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<tr>
<td>Academic program</td>
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<tr>
<td>Prof. organization</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Clinical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charge nurse/team leader</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Asst. or head nurse</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Nurse clinician/practitioner</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Inservice educator</td>
<td>1</td>
<td>1.4</td>
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<tr>
<td>Other</td>
<td>10</td>
<td>13.5</td>
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<td>Total</td>
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**Current Work Setting**

<table>
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<tr>
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<th>Percent</th>
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</thead>
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<tr>
<td>BS or Higher Ed</td>
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<td>35.7</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>Hospital</td>
<td>12</td>
<td>17.1</td>
</tr>
<tr>
<td>Hospital Clinic</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>Community Health</td>
<td>6</td>
<td>8.6</td>
</tr>
<tr>
<td>Self-employed</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>Nursing Association</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Student Health</td>
<td>1</td>
<td>1.4</td>
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</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Nursing Home</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Emergicenter</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>12.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
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**Job Satisfaction**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good chance</td>
<td>30</td>
<td>42.3</td>
</tr>
<tr>
<td>Fairly good chance</td>
<td>31</td>
<td>43.7</td>
</tr>
<tr>
<td>Some chance</td>
<td>7</td>
<td>9.9</td>
</tr>
<tr>
<td>Very little chance</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>71</strong></td>
<td><strong>100.0</strong></td>
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</table>
Country of Employment. While the international nurses in this study report currently working in 18 different countries, four countries account for 78.2% of the respondents' place of employment in 1986. Thirty-nine nurses (50%) work in Australia, 12 in Canada (15.4%), six in Taiwan (7.7%) and 5.1% (N = 4) are employed in Thailand. Ninety-four percent are still working in the same country in 1986 as they were in 1980. See Table 1 for distribution of nurses by country of employment.

Years in Nursing as a Career. The international nurses participating in this study have been employed in nursing from one to 36 years since graduation from their basic nursing education program, for a mean of 21.6 years. Twelve nurses, or 15.4%, have been in nursing for 10 years or less, 46.1% for 11-20 years, 28.2% for 21-30 years and eight nurses report working as a nurse more than 30 years (see Table 1).

Current Nursing Position. Thirty-three of the international nurses (44.6%) report they currently hold an academic faculty position, while 24 nurses (31.9%) maintain an administrative position in either an academic, nursing service or professional organization setting. Only six (8.2%) of these nurses are working in a clinical hospital role. See Table 1 for the distribution of nurses by principal nursing position.

Job Satisfaction. When asked how much of a chance their job gives them opportunities to do things they are best at, 86.0% (61 nurses) reported their job gives a fairly good or very good chance to
do things they are best at doing (see Table 1).

**Educational Program Characteristics**

Several questions were asked regarding the international nurses' educational program using the Educational Program Characteristics Profile. The following section reports these findings.

**Month Started Graduate Nursing Program.** Forty-one nurses, 54.6%, began their overseas nursing education program in the months of September and October which, of course, coincides with the beginning of the academic year for most university graduate programs. See Table 2 for the distribution of nurses by month for beginning school.

**Year Started Graduate Nursing Program.** Over 72% of the nurses in this study began their graduate education program between the years 1980 and 1985 while only five nurses started their schooling before 1970. See Table 2 for the distribution of nurses according to the year they started their graduate education program.

**Year Finished Graduate Education Program.** Fifty-nine international nurses, 77.6%, completed their educational programs between 1980-1986. Seventeen nurses completed their education before 1980. See Table 2 for the distribution of nurses according to the year they completed their graduate program.

**Degree Completed.** It is interesting to note that 48.7%, or 37 nurses, completed either a master's degree or a doctoral degree in the United States/Canada. Over one third of the nurses, N = 32, were involved in non-degree study of one year or less (see Table 2).

**Length of Educational Program.** Thirty-nine nurses, 51.4%, attended a program in the United States or Canada for one year or less
Table 2

Educational Program Characteristics of International Nurse Respondents

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
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<td><strong>Month Started School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan - Feb</td>
<td>8</td>
<td>10.6</td>
</tr>
<tr>
<td>Mar - April</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>May - June</td>
<td>4</td>
<td>5.3</td>
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<tr>
<td>July - Aug</td>
<td>20</td>
<td>26.7</td>
</tr>
<tr>
<td>Sept - Oct</td>
<td>41</td>
<td>54.6</td>
</tr>
<tr>
<td>Nov - Dec</td>
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<td>1.3</td>
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<td><strong>Total</strong></td>
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<td>100.0</td>
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<tr>
<td><strong>Year Started School</strong></td>
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<td></td>
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<tr>
<td>1960-1969</td>
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<td>1970-1979</td>
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<tr>
<td>1980-1985</td>
<td>55</td>
<td>72.6</td>
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<td><strong>Total</strong></td>
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<td>99.9</td>
</tr>
<tr>
<td><strong>Year Finished School</strong></td>
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<td></td>
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<tr>
<td>1960-1969</td>
<td>5</td>
<td>6.5</td>
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<tr>
<td>1970-1979</td>
<td>12</td>
<td>15.8</td>
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<tr>
<td>1980-1986</td>
<td>59</td>
<td>77.6</td>
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<td><strong>Total</strong></td>
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<td>99.9</td>
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<tr>
<td><strong>Degree Completed</strong></td>
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<td>Degree Program</td>
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<td>Research fellow</td>
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Table 2 (continued)

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<th>Number</th>
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<tr>
<td><strong>Length of Program</strong></td>
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<tr>
<td>Less than 4 months</td>
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<td>4.1 - 6 months</td>
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<td>21.1</td>
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<td>12.1 - 18 months</td>
<td>13</td>
<td>17.1</td>
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<td>18.1 - 24 months</td>
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<tr>
<td>More than 1 years</td>
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<td>14.5</td>
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<tr>
<td><strong>Clinical Area of Study</strong></td>
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<tr>
<td>Nursing Administration</td>
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<td>13.3</td>
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<td>Maternal Child Health</td>
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<td>12.0</td>
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<td>Medical-Surgical</td>
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<td>10.7</td>
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<td>Public Health Nursing</td>
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<td>Gerontology Nursing</td>
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<td>Women's Health</td>
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<tr>
<td>Other</td>
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<td><strong>Total</strong></td>
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<td><strong>University Attended</strong></td>
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<td>42.5</td>
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<td>U of Illinois-Chicago</td>
<td>14</td>
<td>19.2</td>
</tr>
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<td>Wayne State-Detroit</td>
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<td>11.0</td>
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<td>U of Rochester-NY</td>
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<td>9.6</td>
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<td>U of Colorado-Denver</td>
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<td>2.7</td>
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<td>U of Washington-Seattle</td>
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<td>1.4</td>
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<td>1.4</td>
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<tr>
<td>Rush-Chicago</td>
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<td>1.4</td>
</tr>
<tr>
<td>Cal State-LB</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>U of Michigan-Ann Arbor</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>U of Calgary-Canada</td>
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<td>1.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>73</td>
<td>100.0</td>
</tr>
</tbody>
</table>
while 14.5%, or 11 nurses, participated in a program which lasted over two years. See Table 2 for the distribution of nurses according to the length of their educational program.

Clinical Area of Study. Psychiatric nursing was the category selected by 20% of the nurses, N = 15, as their clinical area of graduate study and another 10 nurses (13.3%) selected nursing administration as their specialty area. However, over one-fourth of the nurses did not choose any of the traditional seven categories offered but, instead, reported their clinical area of study as "other". Some examples they gave are computers in nursing, occupational health, transcultural nursing, oncology, rehabilitation, family health, health administration, primary nursing, primary health care, cardiac rehabilitation, intensive care (ICU), nursing process and infection control. See Table 2 for the distribution of nurses according to their clinical area of study while in graduate school.

University Attended. The 78 nurses in this study chose educational programs in 13 different universities, mostly in the United States. The four institutions attended by most nurses, in descending order of attendance, include: University of California--San Francisco (42.5%), University of Illinois at Chicago (19.2%), Wayne State University in Detroit (11.0%) and the University of Rochester in New York (9.0%). Only four nurses report attending school in Canada. See Table 2 for the distribution of nurses according to the institution attended.

Section B: Data Analysis Related to Research Questions

This section presents the results of the data analysis for each
of the research questions. Correlations were determined using the Pearson Product-Moment Correlation for interval and ratio data. Analysis of variance (ANOVA) was used to determine the relationship of the leadership scores with nominal or ordinal data. The data analyses were conducted using the Statistical Package for the Social Sciences [SPSS-X] (Nourusis, 1983).

Research Question 1

What are the perceptions of international nurses regarding their leadership behavior on the LBDQ following a graduate program of study in the United States or Canada?

The survey instrument, the Leader Behavior Description Questionnaire - Form XII (LBDQ), contains 100 short, descriptive statements of leader behavior. The international nurses indicate the frequency with which they engage in these behaviors: always, often, occasionally, seldom or never. The LBDQ consists of 12 subscales. Two of these subscales, Consideration and Initiating Structure, were found by Halpin and Winer (1957) and Fleishman (1957) to be particularly indicative of important leader behavior. This research question thus focuses on how international nurses who have enrolled in a graduate education program report their leadership behavior using this instrument with a particular focus on the Consideration and Initiating Structure subscales.

Table 3 presents the mean scores, standard deviations, and possible range for the 12 subscales of the LBDQ for the international nurse respondents.
### Table 3
**Mean Scores, Standard Deviations and Range of 12 Subscales of LBDQ for International Nurses**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Representation (a)</td>
<td>18.96</td>
<td>3.17</td>
<td>006-024</td>
</tr>
<tr>
<td>2. Demand Reconciliation (a)</td>
<td>18.23</td>
<td>2.76</td>
<td>008-024</td>
</tr>
<tr>
<td>3. Tolerance Uncertainty (b)</td>
<td>34.09</td>
<td>4.63</td>
<td>019-047</td>
</tr>
<tr>
<td>4. Persuasiveness (b)</td>
<td>36.09</td>
<td>5.58</td>
<td>016-046</td>
</tr>
<tr>
<td>5. Initiating Structure (b)</td>
<td>40.87</td>
<td>5.77</td>
<td>019-050</td>
</tr>
<tr>
<td>6. Tolerance Freedom (b)</td>
<td>39.11</td>
<td>5.72</td>
<td>016-047</td>
</tr>
<tr>
<td>7. Role Assumption (b)</td>
<td>36.45</td>
<td>5.39</td>
<td>018-046</td>
</tr>
<tr>
<td>8. Consideration (b)</td>
<td>38.93</td>
<td>5.76</td>
<td>013-047</td>
</tr>
<tr>
<td>9. Production Emphasis (b)</td>
<td>32.22</td>
<td>4.29</td>
<td>022-044</td>
</tr>
<tr>
<td>10. Predictive Accuracy (a)</td>
<td>18.81</td>
<td>2.33</td>
<td>010-025</td>
</tr>
<tr>
<td>11. Integration (a)</td>
<td>19.62</td>
<td>2.92</td>
<td>009-024</td>
</tr>
<tr>
<td>12. Superior Orientation (b)</td>
<td>37.86</td>
<td>5.15</td>
<td>014-047</td>
</tr>
<tr>
<td><strong>Total LBDQ Score (c)</strong></td>
<td>367.55</td>
<td>40.25</td>
<td>188-419</td>
</tr>
</tbody>
</table>

(a) Scale range 05-25, (b) Scale range 10-50, (c) Total range 100-500

The mean score for the Total LBDQ is 367.55 which encompasses the scores on all 12 subscales and has a range from 188-419. The standard deviation is 40.25. The average score of the international nurses on the Initiating Structure leadership dimension is 40.87 from the possible 50 points. The range of scores was from 19 to 50 with a standard deviation of 5.77. The international nurses scored an average of 38.93 on the Consideration dimension, lower than the mean score on Initiating Structure.

When comparing the international nurses' mean scores on the two main subscales with the other six subscales which have the same potential range of 10-50 (e.g., tolerance uncertainty, persuasiveness,
freedom, role assumption, production emphasis and superior orientation), both Initiating Structure and Consideration have slightly higher mean scores. However, two studies reported of American Deans' of nursing programs in the United States by Lucas (1983) and Moloney (1979) revealed somewhat higher mean scores for both Initiating Structure ($\bar{X} = 40.9$, $\bar{X} = 55.8$), and Consideration with mean scores of 45.2 and 59.2 respectively. (The Maloney study had a potential range of 10 to 60.) From these results, one can conclude that international nurses in this sample are similar to American nurse leaders regarding their emphasis on consideration for their staff and degree of importance on goal directing behaviors.

Research Question 2

Is there a significant relationship between self-perceived leader behavior of international nurses as measured on the LBDQ and their overall leadership effectiveness as measured on the OLE?

Overall Leadership Effectiveness (OLE) for the international nurses was measured on a nine-item instrument which asked each respondent to choose the adjective which best described her or his leadership effectiveness: perfect, excellent, good, fair, or poor. The range of possible scores was from nine to 45. The mean score on the OLE for the international nurses was 33.06, with a standard deviation of 3.7.

The OLE scores obtained in Moloney's (1979) study of 40 American Nursing Deans were very similar to the scores for the international nurse respondents with a mean score of 32.2 and standard deviation of 3.5. More than 50% of the international nurses rated themselves as excellent on seven of the nine OLE categories. These categories are:
OLE1 (allowing staff freedom on the job), OLE2 (providing staff participation in decisions), OLE4 (source of new ideas or originator of changes in educational or clinical programs), OLE6 (support or encouragement for new ways of doing things), OLE7 (communication of attitudes and general information to one's staff), and OLE9 (self-rating of overall leadership quality). Only 43.8% of the nurses rate themselves as excellent on OLE3 (associating informally or being close to staff) and 42.5% report they are excellent in identifying one's self and interests with one's faculty or staff (OLE5). These findings indicate that international nurses may lack confidence in associating with and in understanding members of their staff. However, these responses may be influenced by cultural background and expectations that leaders should not identify with or associate too closely with subordinates.

Overall Leadership Effectiveness was correlated with the total LBDQ score at .16 (p = .085) using the Pearson Product-Moment Correlation (PPMC). OLE correlated with the Initiating Structure dimension of the LBDQ at -.07 (p = .29), and with the Consideration score at .09 (p = .22). No significant relationship was found between Overall Leadership Effectiveness, as perceived by the international nurses in this study, and responses overall on the LBDQ, or on the two LBDQ subscales of Initiating Structure and Consideration.

Research Question 3

Is there a significant relationship between selected demographic and professional characteristics such as age, years of experience, type of graduate education program, specialty area of nursing and self-perceived leadership behavior of international nurses as measured on the LBDQ?
The following demographic and professional variables are correlated with scores on the LBDQ and the subscales of Consideration and Initiating Structure: number of years in nursing (Number), country of employment in 1986 (Country 86), native country (Native), current principal nursing position (JobNow), setting of current position (Setting), a self-rating of general overall leadership quality (OLE9), age (Age), degree obtained in graduate education program (Degree), length of graduate program (Length), clinical area of study (Clinical), college attended (College), satisfaction with educational program (EPSS), influence of faculty mentor in developing leadership potential (F Mentor), level of personal influence now in health policy development in native country (Policy D), and number of contributions made to nursing and health care upon completion of graduate program (Contrib). Table 4 reveals data for the above variables and their respective Pearson Correlations.

The Total LBDQ score is significantly correlated with two of the professional characteristics; OLE9 at .24 (p = .02) and, with EPSS at .23 (p = .02). However, the subscale of Initiating Structure correlated with six demographic and professional factors: native country at -.24 (p = .02), degree obtained at .20 (p = .05), length of program at -.26 (p = .02), college attended at .21 (p = .05) and, with educational program satisfaction (EPSS) at .21 (p = .04), and with influence on health policy at -.22 (p = .04). The Consideration dimension of the LBDQ is significantly correlated with only one variable, native country, at -.21 (p = .04). While these six factors
Table 4

Correlational Relationships of Overall LBDQ, Initiating Structure and Consideration Scores with Selected Demographic and Professional

<table>
<thead>
<tr>
<th>Variable</th>
<th>LBDQ r</th>
<th>LBDQ p</th>
<th>Initiating Structure r</th>
<th>Initiating Structure p</th>
<th>Consideration r</th>
<th>Consideration p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>-.01</td>
<td>.46</td>
<td>.09</td>
<td>.21</td>
<td>-.06</td>
<td>.29</td>
</tr>
<tr>
<td>Country86</td>
<td>-.03</td>
<td>.39</td>
<td>.05</td>
<td>.33</td>
<td>-.05</td>
<td>.32</td>
</tr>
<tr>
<td>Native Co</td>
<td>-.19</td>
<td>.06</td>
<td>-.24</td>
<td>.02*</td>
<td>-.21</td>
<td>.04*</td>
</tr>
<tr>
<td>JobNow</td>
<td>.05</td>
<td>.35</td>
<td>-.04</td>
<td>.38</td>
<td>.13</td>
<td>.14</td>
</tr>
<tr>
<td>Setting</td>
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<td>.15</td>
<td>-.18</td>
<td>.08</td>
<td>-.04</td>
<td>.37</td>
</tr>
<tr>
<td>OLE9</td>
<td>.24</td>
<td>.02*</td>
<td>.05</td>
<td>.35</td>
<td>.17</td>
<td>.08</td>
</tr>
<tr>
<td>Age</td>
<td>-.05</td>
<td>.34</td>
<td>-.10</td>
<td>.20</td>
<td>-.05</td>
<td>.33</td>
</tr>
<tr>
<td>Degree</td>
<td>.11</td>
<td>.19</td>
<td>.20</td>
<td>.05*</td>
<td>.02</td>
<td>.43</td>
</tr>
<tr>
<td>Length</td>
<td>-.13</td>
<td>.14</td>
<td>-.26</td>
<td>.02*</td>
<td>-.09</td>
<td>.22</td>
</tr>
<tr>
<td>Clinical</td>
<td>-.09</td>
<td>.23</td>
<td>-.06</td>
<td>.31</td>
<td>-.03</td>
<td>.39</td>
</tr>
<tr>
<td>College</td>
<td>.14</td>
<td>.12</td>
<td>.21</td>
<td>.05*</td>
<td>.21</td>
<td>.16</td>
</tr>
<tr>
<td>EPSS</td>
<td>.23</td>
<td>.02*</td>
<td>.21</td>
<td>.04*</td>
<td>.17</td>
<td>.07</td>
</tr>
<tr>
<td>F Mentor</td>
<td>.09</td>
<td>.22</td>
<td>.02</td>
<td>.45</td>
<td>.12</td>
<td>.17</td>
</tr>
<tr>
<td>Policy D</td>
<td>-.10</td>
<td>.21</td>
<td>-.22</td>
<td>.04*</td>
<td>-.06</td>
<td>.30</td>
</tr>
<tr>
<td>Contrib</td>
<td>.01</td>
<td>.49</td>
<td>-.14</td>
<td>.13</td>
<td>.03</td>
<td>.39</td>
</tr>
</tbody>
</table>

*Significant at p < .05.
indicate statistically significant differences, the correlations are not strong, suggesting a weak relationship exists with the nurse's scores on the LBDQ.

An Analysis of Variance (ANOVA) revealed no statistically significant difference between the nurses' mean LBDQ, Initiating Structure or Consideration scores and their clinical area of study such as medical-surgical nursing or public health (see Table 5). The LBDQ, Initiating Structure and Consideration scores also did not differ significantly according to which graduate institution the nurses attended while completing their graduate nursing education (see Table 6).

Table 5

<table>
<thead>
<tr>
<th>Analysis of Variance of LBDQ, Initiating Structure and Consideration Scores for Clinical Area of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><strong>LBDQ n = 71</strong></td>
</tr>
<tr>
<td>Between groups</td>
</tr>
<tr>
<td>Within groups</td>
</tr>
<tr>
<td><strong>Structure n = 68</strong></td>
</tr>
<tr>
<td>Between groups</td>
</tr>
<tr>
<td>Within groups</td>
</tr>
<tr>
<td><strong>Consideration n = 69</strong></td>
</tr>
<tr>
<td>Between groups</td>
</tr>
<tr>
<td>Within groups</td>
</tr>
</tbody>
</table>
Table 6

Analysis of Variance of LBDQ, Initiating Structure and Consideration Scores for Graduate Institution Attended

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LBDQ</strong>  n = 69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>4629.83</td>
<td>4</td>
<td>1157.46</td>
<td>.69</td>
<td>.61</td>
</tr>
<tr>
<td>Within groups</td>
<td>109872.81</td>
<td>65</td>
<td>1690.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Structure</strong> n = 67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>169.50</td>
<td>4</td>
<td>42.38</td>
<td>1.29</td>
<td>.28</td>
</tr>
<tr>
<td>Within groups</td>
<td>2037.54</td>
<td>62</td>
<td>32.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consideration</strong> n = 69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>107.68</td>
<td>4</td>
<td>26.92</td>
<td>.77</td>
<td>.55</td>
</tr>
<tr>
<td>Within groups</td>
<td>2235.80</td>
<td>64</td>
<td>34.93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Similarly, an ANOVA revealed no statistically significant differences between the scores on the LBDQ, or the Initiating Structure or Consideration dimensions of the LBDQ instrument and the type of nursing position these international nurses currently hold such as teaching or administration (see Table 7).

The interpretation of these findings is that there is a statistically significant difference between how international nurses rate themselves on overall leadership quality (OLE9) and how satisfied they are about their educational program and how they score on the overall LBDQ. There is also a statistically significant correlation between the country these international nurses are from and how they score on both Initiating Structure and Consideration subscales. The statistically significant variables which correlated with scores
Table 7

Analysis of Variance of LBDQ, Initiating Structure and Consideration Scores for Nursing Position

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
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<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBDQ n = 64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>10322.47</td>
<td>2</td>
<td>5161.23</td>
<td>3.05</td>
<td>.06</td>
</tr>
<tr>
<td>Within groups</td>
<td>103319.01</td>
<td>61</td>
<td>1693.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure n = 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>142.35</td>
<td>2</td>
<td>71.18</td>
<td>2.03</td>
<td>.14</td>
</tr>
<tr>
<td>Within groups</td>
<td>1998.63</td>
<td>57</td>
<td>35.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consideration n = 64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>153.25</td>
<td>2</td>
<td>76.63</td>
<td>2.28</td>
<td>.11</td>
</tr>
<tr>
<td>Within groups</td>
<td>2046.61</td>
<td>61</td>
<td>33.55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

on the Initiating Structure alone were the professional degree obtained, length of educational program, institution attended, educational program satisfaction score and current influence on health policy. These findings indicate that some nursing specialties and educational institutions, the length of and satisfaction with the educational program are factors which are related to goal achievement leadership behaviors in these international nurses.

Regression Analysis. The dependent variables, LBDQ and the two subscales Consideration and Initiating Structure, were regressed on 10 predictor variables. The 10 variables were chosen because they were considered as potentially important factors in understanding how nurses score on specific dimensions of leadership. The backward regression method of regression analysis was used with these data. It
is important to include predictor variables that share components (i.e. are correlated) with the criterion, but not with other predictor variables (Matson, 1981).

Backward regression analysis yields an analysis of each independent variable's relative position and strength in the equation and removes all non-significant predictors (variables with a partial F test value with p less than .01). This method of regression, backward elimination, starts with all variables in the equation and sequentially removes them (Norusis, 1983, p. 162). "Variables are removed until none remain that do not meet the criterion. Variable selection terminates when no more variables meet entry and removal criteria" (p. 163).

Several variables linked to the scores on the LBDQ and its subscales, Initiating Structure and Consideration, were tested. Many were discounted early in the analysis for lack of statistical association with the three leader behavior measures: Total LBDQ, Initiating Structure and Consideration. Excluded as predictors were such factors as age, sex, and country.

The total LBDQ score was first entered with all 10 predictor variables (see Appendix F for the Correlation Matrix). After elimination of seven predictor variables--OLE6, OLE3, OLE7, OLE9, OLE5, OLE8, OLE4, the procedure was terminated.

Shown in Table 8 are three variables, OLE1, OLE2 and the EPSS score, that account for 18.5% of the variance in the LBDQ score and the multiple regression data before and after the elimination of the seven variables. Several trends are observed in the regression
analysis. For example, the international nurse score on the EPSS (Educational Program Satisfaction Scale) and on OLE1 (allowing staff freedom on the job) tend to be moderately predictive of their scores on the LBDQ. And, nurse scores on OLE2 (providing for staff participation in decisions that are made) are correlated with their LBDQ scores. The Beta weight for EPSS, at .24, is about two-thirds as important as OLE1 (at .36) and, about three-fourths as important as OLE2 (at .32) in predicting scores on the LBDQ.

Table 8

Backward Regression Analysis of EPSS, OLE1, OLE2, OLE3, OLE4, OLE5, OLE6, OLE7, OLE8, and OLE9 Variables on Total LBDQ Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>Multiple R²</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial 10 Variables</td>
<td>.4886</td>
<td>2387</td>
<td>1.85</td>
<td>.071</td>
<td>70</td>
</tr>
<tr>
<td>Regression</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After Elimination of 7 items</td>
<td>.4302</td>
<td>66</td>
<td>4.99</td>
<td>.004</td>
<td>70</td>
</tr>
<tr>
<td>Regression</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Residual</td>
<td>66</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Beta Weights:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>p</th>
<th>SE</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSS</td>
<td>.245</td>
<td>.036</td>
<td>.114</td>
<td>2.14</td>
</tr>
<tr>
<td>OLE1</td>
<td>.366</td>
<td>.005</td>
<td>.125</td>
<td>2.92</td>
</tr>
<tr>
<td>OLE2</td>
<td>.321</td>
<td>.014</td>
<td>.126</td>
<td>-2.53</td>
</tr>
</tbody>
</table>
Scores on Initiating Structure are also submitted for regression analysis using the backward elimination procedure and the same 10 predictor variables as those used with the Total LBDQ score. The initial multiple coefficient for Initiating Structure was .4679 with an R Squared of .2189. After elimination of all but four variables—EPSS, OLE7, OLE2 and OLE4—the procedure was terminated. Since the remaining six variables account for only 4.1% of the variance it can be interpreted that 17.8% of the predictability of how international nurses would perform on Initiating Structure can be obtained by using these four variables in the equation. Table 9 reveals the backward regression analysis for the 10 predictor variables with Initiating Structure.

These data reveal that the following variables—EPSS, the educational program satisfaction index; OLE7, how well nurses communicate attitudes and general information to their staff; OLE2, regarding staff participation in decisions; and OLE4, the nurse as a source of new ideas and/or an originator of changes in educational or clinical programs—are all slightly predictive and of similar importance since beta weights range from .221 to .275.

Finally, Consideration scores are entered into a backward regression analysis with the 10 predictor variables. The two variables which account for almost 12% of the variance are OLE1, the index for allowing staff freedom, and OLE2 which provides for staff participation in decision-making. In examining the importance of the beta weights for these two variables, OLE2 is three-fourths as important as OLE1 for predicting the equation for Consideration. As
Table 9

Backward Regression Analysis of EPSS, OLE1, OLE2, OLE3, OLE4, OLE5, OLE6, OLE7, OLE8, and OLE9 Variables on Initiating Structure Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>Multiple</th>
<th>( R^2 )</th>
<th>df</th>
<th>( F )</th>
<th>( p )</th>
<th>n</th>
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</thead>
<tbody>
<tr>
<td>Initial 10 Variables</td>
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<td>.2189</td>
<td>1.57</td>
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<tr>
<td>Regression</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td>56</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>After Elimination of 6 items</td>
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<td>.1776</td>
<td>3.35</td>
<td>.015</td>
<td>67</td>
<td></td>
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<tr>
<td>Regression</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
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<td></td>
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</table>

Beta Weights:

<table>
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<th>Variable</th>
<th>Beta Weight</th>
<th>p</th>
<th>SE</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
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<td>.119</td>
<td>1.97</td>
</tr>
<tr>
<td>OLE7</td>
<td>.257</td>
<td>.05</td>
<td>.131</td>
<td>1.96</td>
</tr>
<tr>
<td>OLE2</td>
<td>.275</td>
<td>.03</td>
<td>.125</td>
<td>-2.19</td>
</tr>
<tr>
<td>OLE4</td>
<td>.221</td>
<td>.05</td>
<td>.129</td>
<td>-1.71</td>
</tr>
</tbody>
</table>

Scores on OLE1 increase, nurses would be expected to score higher on the Consideration dimension of leadership. And, because of the negative beta weight of -.27 on the OLE2 variable, nurses who allow more staff participation in decision-making would be expected to score higher on the Consideration index (see Table 10).
Table 10

Backward Regression Analysis of EPSS, OLE1, OLE2, OLE3, OLE4, OLE5,
OLE6, OLE7, OLE8, and OLE9 Variables on Consideration Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>Multiple R</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>n</th>
</tr>
</thead>
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<td>1.26</td>
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<td>10</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>After Elimination of 6 items</td>
<td>.3406</td>
<td>.1160</td>
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<td>4.33</td>
<td>.017</td>
<td>69</td>
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<tr>
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<td></td>
<td></td>
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<tr>
<td>Beta Weights:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OLE1</td>
<td>.3630</td>
<td>p = .0069</td>
<td>.130</td>
<td>2.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OLE2</td>
<td>-.2735</td>
<td>p = .0393</td>
<td>.130</td>
<td>-2.10</td>
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<td></td>
</tr>
</tbody>
</table>

In summary, the regression analyses indicate: (1) that three variables, EPSS, OLE1 and OLE2 explain almost 19% of the predictability variance with the Total LBDQ; (2) that four factors, EPSS, OLE7, OLE2 and OLE4 are moderately important in predicting the Initiating Structure dimension; and (3) that only two variables, OLE1 and OLE2 account for almost 12% of the variance for Consideration.

The data analyses for this research question do not indicate a strong relationship between these demographic and professional variables and the LBDQ scores. And, only a small amount of variance is explained by the nine OLE items and the EPSS score. Therefore one
can conclude that other factors such as work environment or possibly
cultural background may account for differences in international
nurses' leadership behaviors.

Section C: Qualitative Analysis

Research Question 4

What are the perceptions of international nurses regarding their
contributions in nursing and health care in their country after
completion of a graduate education program in the United States
or Canada?

In an effort to respond to the fourth research question, each
international nurse was asked to list four or five contributions they
have made to nursing and health care in their country since completion
of their graduate education program. Forty-one nurses (57.7%) listed
four or more contributions. All responses listed appear in Appendix
H. The responses, categorized by the researcher into similar groups,
are summarized below.

Approximately 300 individual statements are offered by the 78
nurse respondents in this study. While the categories developed are
not mutually exclusive, the majority of the answers falls into nine
categories. These categories include: 1) teaching and
education-related activities, 2) continuing education, 3) research
activities, 4) administrative responsibilities, 5) clinical
accomplishments, 6) speeches, 7) writing, 8) professional activities,
and 9) other contributions.

The statements offered by the international nurses in each of the
nine categories are helpful in understanding the many contributions
these nurses have made and are making to nursing and health care in
their respective countries.

Contributions to teaching include work in curriculum development and revision, teaching new concepts in mental health, teaching nursing on a conceptual level, educational programs for re-entry to the field of nursing, improving student accessibility into courses, and development of courses on nursing knowledge. The continuing education category also often involved teaching duties but was separated because these responses involved teaching staff nurses and other community personnel rather than students who were in their basic nursing program. Many nurses reported planning and providing continuing education for hospital staff nurses, their peers, or others in the region or the country in nursing specialty. Other nurses developed a regional plan for continuing education and had increased or improved staff development and education. One nurse reported teaching staff about how to facilitate more effective patient education, increasing the quantity and quality of health promotion in each hospital, and working as a liaison with the community. Another nurse developed and conducted continuing education for nurse managers and administrators from both rural and city areas and initiated a "computers in nursing" component in her course.

Research is an area which, for most nurses, was quite unfamiliar to them prior to their graduate education program in the United States or Canada. Yet, in this survey, many of the international nurses report they now conduct their own research, have made innovative improvements in research in their own institutions, have established a research unit at their university, and even serve as consultants to
other colleges regarding nursing research.

Contributions of an administrative nature involve being the head of a newly established nursing program, being appointed President of a national college of nursing, revising a nursing education system, developing off-campus study centers, preparing proposals for the minister of health (or education) for manpower resources application, initiating change in a complex environment, organizing nursing service departments and establishing task force teams for decision-making purposes.

Clinical activities developed by international nurses after completion of an overseas graduate program may be of interest to many nurse educators who have served as faculty advisors. Several responses involved coordinating, developing, improving and introducing new program ideas, a new type of clinic, a family-centered approach to patient care, nursing documentation, or computerization; acting as a preceptor to student nurses, identifying potential clients in health care services such as patient's families, and helping to develop and improve a hospital intensive care unit (ICU).

Speeches given by international nurses were recorded as presentations not considered as part of their role as nurse educators or inservice directors. Examples of these speeches include presenting papers at conferences, delivering lectures as a guest on the topic of gerontology or mental health, accepting invitations to speak at numerous conferences and seminars, giving talks to professional and community groups, and speaking about standards of nursing education.

The nurses in this study are quite involved in writing activities
such as publishing in a journal or writing articles based on their graduate work or current specialty area. Several nurses have written books, serve on an editorial board of a national nursing journal, edit a monthly booklet which serves as an instrument for continuing education for several institutions in the country, and assist in the production of a state nursing resource directory.

Professional activities listed by these international nurses are quite extensive and indicate considerable dedication to the nursing profession. International nurses who have studied mostly in the United States report being involved in committee work for the development of state nursing standards, establishing an international council on such issues as women's health, assisting in the mobilization of nurses as a professional group, lobbying for a career structure for nurses, serving on an advisory committee to state government on nursing and health issues, working on political activities regarding nursing education, co-hosting two international conferences with an American university, raising the health minister's awareness of nursing and creating a higher profile for nursing research and nursing education in their country.

Finally, contributions which were grouped in the "other" category are also very numerous and significant to the field of nursing and to the overall improvement of health in the 20 countries represented by these international nurses. These nurse respondents are involved in evaluating nursing education programs and making influential suggestions to ministers of education and becoming one of the recognized nursing leaders in their country. Several nurses have
obtained one or more additional graduate degrees since their initial overseas nursing education experience, have been invited to provide consultation of various types to other countries, are involved in formulating migrant health policy for their country, have been appointed a member of the management committee for a state epilepsy foundation, are involved in a working party on computers in nursing, are a member of the national specialty nursing organization, are setting up quality assurance programs and have moved into higher positions within their institutions. It is apparent from these findings that these international nurses currently are making significant contributions to nursing and health care in their native countries. The documentation provided by these nurses will be important to the colleges of nursing who have hosted international nursing students as well as to the funding agencies who have provided fellowship support for leadership development programs.

Summary

Data were obtained from the administration of a three part questionnaire given to 78 international nurses from over 20 countries. Data analyses focused primarily on the examination of four research questions pertaining to self-perceived leadership behavior and contributions made to nursing and health care in their respective countries. The Pearson Product-Moment Correlation was the primary procedure utilized for analyzing the two major dimensions on the LBDQ. The results of the data analyses were presented in this chapter. Chapter V will present a summary and discussion of the study with conclusions and recommendations.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The rationale for this study, review of related literature, methodology and data analysis were presented in Chapters I, II, III, and IV. This chapter presents an overall summary and conclusions of the study, together with recommendations for future research.

Summary of the Study

The major purpose of this study is to examine the self-perceived leadership behaviors of international nurses who participated in graduate nursing education programs in the United States or Canada during the period 1960 to 1985. Seventy-eight international nurses from over 20 countries participated in the study.

The following research objectives are addressed in this study:

1. To assess self-perceptions of international nurses regarding their leadership behavior using the Leadership Behavior Description Questionnaire [LBDQ] (Stogdill, 1963) following graduate study in the United States or Canada.

2. To determine whether a significant relationship exists between self-perceived leader behavior of international nurses as measured on the LBDQ and a measure of their overall leadership effectiveness.

3. To determine whether a significant relationship exists between selected demographic characteristics and self-perceived
leadership behavior of international nurses on the Leadership Behavior Description Questionnaire.

4. To assess self-perceptions of international nurses regarding contributions made in nursing and health care in their country after completion of graduate study in the United States or Canada.

The major instrument used in this study to examine leadership behavior is the Leadership Behavior Description Questionnaire (LBDQ). The LBDQ, which was initially developed by Hemphill (1949) and further refined by Halpin and Winer (1957), is designed to measure 12 dimensions of leader behavior. The two dimensions most widely researched, Initiating Structure and Consideration, each consist of 10 items which are scored from 1 to 5; hence, the possible range of scores on each dimension is from 5 to 50. Consideration includes behavior involving interpersonal relationships of trust and warmth and Initiating Structure refers to behavior that establishes group goals, operations, and social control (Halpin, 1957).

Subjects are also asked to provide information concerning their personal and professional characteristics as well as data about their graduate education program. They were also asked to complete a short survey evaluating their overall leadership effectiveness (OLE). Finally, the nurses are asked to identify in two open-ended questions, their contributions to the nursing and health care fields in their native country and the resources which were helpful in their adjustment and professional growth while they were in their graduate program.
Results

The results of the data analysis are provided in three sections. The first section provides a descriptive summary of the demographic data. The second section provides results from statistical analyses related to this study's research questions. The third section presents results from the qualitative analysis of the data.

Demographic results. The personal and professional characteristics of the 78 responding international nurses indicate that one-half are between 36 and 45 years old, 96.2% are female and over 50% are married. In this study, it is interesting to note the high percent of nurses who are married, with family responsibilities, and potentially demanding careers as leaders in their various organizations and institutions.

The data indicate that although these nurses represent over 20 countries, the four countries most highly represented are Australia, Canada, Taiwan and Thailand. Of particular interest is that 94% of these international nurses are still working in the same country in 1986 as they were in 1980. This information reveals that even though these nurses leave their native country for advanced education, most return home to contribute to their profession and are not using the trip abroad as an eventual escape to the United States or Canada.

The nurses responding to this survey have been employed in nursing for an average of 21.6 years, and over 40% currently hold an academic faculty position in their country while 31.9% are working in an administrative position in either nursing service or nursing education. A vast majority of the nurses (78.2%) indicates their job
gives them a very good or fairly good chance to do things at which they are most qualified.

The data gathered on the educational program characteristics of the 78 responding international nurses reveal that over 70% began and completed their advanced education program between 1980 and 1985. All of the nurses participated in graduate programs in the United States except four who attended an institution in Canada.

Over one-third of the international nurses who studied abroad engaged in short-term, non-degree programs often lasting one year or less. However, almost 50% of the respondents completed either a master's or a doctoral degree.

When questioned about the clinical area of their graduate study, one-fourth of the nurses indicate they did not matriculate in one of the traditional areas of study. Instead, they selected special topics such as oncology, computers in nursing, health administration and intensive care nursing. However, 20% of the nurses studied psychiatric nursing, 13.3% chose nursing administration and 12% studied maternal-child health.

While the nurses in this study enrolled at 14 different universities, most attended either the University of Illinois at Chicago or at the University of California-San Francisco. Wayne State University in Detroit and the University of Rochester in New York also were host institutions to 15 international nurses who came to the United States for graduate education programs in nursing.

Results related to research questions 1-3. Four research questions guided this study. This section summarizes the data
collected in response to the first three of these research questions.

**Research Question 1**

What are the perceptions of international nurses regarding their leadership behavior on the LBDQ following a graduate program of study in the United States or Canada?

In examining the data related to Research Question 1, the mean score for the international nurses on the Total LBDQ is 367.55; with a mean score for the Initiating Structure dimension of 40.87 and 38.93 for the Consideration dimension. From this result, it can be noted that these international nurses rate themselves as possessing high levels of Consideration and Initiating Structure leadership behaviors. This implies that skills related to goal direction and task-orientation which are key to the behaviors found in the Initiating Structure subscale as well as Consideration for staff members are important to the international nurse leader.

**Research Question 2**

Is there a significant relationship between self-perceived leader behavior of international nurses as measured on the LBDQ and their overall leadership effectiveness as measured on the OLE?

Although international nurse respondents rate themselves high on overall leader effectiveness, their scores on the OLE score are not significantly correlated with either the Total LBDQ score, the score on Initiating Structure, or the score on the Consideration dimension of the LBDQ.

These data reveal that no relationship exists between the international nurse's self-perception of overall leadership effectiveness and self-perceptions on the two major dimensions of leader behavior.
The OLE scale is a measure which asks for a self-evaluation of nine items which are considered important factors in judging how effective one is in the leader role. It includes such factors as staff freedom and participation, closeness and support of staff, acting as a change agent, identifying and communicating with staff, knowledge of staff attitudes and an overall leadership quality rating. The items on the LBDQ which measure Initiating Structure are generally task oriented and goal directed while the Consideration behaviors are descriptions of how a leader relates to his or her staff such as "I am friendly and approachable". While it is clear that the international nurses in this study view all three leader behaviors as important there is no statistical relationship between their scores on these instruments. This finding may indicate a different instrument may be culturally sensitive, or that other factors such as work environment and job satisfaction are better predictors of leadership behavior and effectiveness.

Research Question 3

Is there a significant relationship between selected demographic and professional characteristics such as age, years of experience, type of graduate education program, specialty area of nursing and self-perceived leadership behavior of international nurses as measured on the LBDQ?

Similar results are found among the international nurses when perceptions of their leadership behavior, as measured by the LBDQ, are tested against the following selected demographic and professional variables: (a) age, (b) degree obtained, (c) clinical area, (d) native country, (e) nursing position, (f) job setting, (g) length of educational program, (h) college attended, and (i) satisfaction with
educational program.

The Initiating Structure dimension was significantly correlated with native country, degree obtained, length of program, college attended, and with satisfaction with educational program. The only demographic characteristic significantly correlated with the leadership dimension, Consideration, was native country.

When these two dimensions of the LBDQ, Initiating Structure and Consideration, are further tested using ANOVA with clinical area, college attended, and nursing position, no statistically significant differences are found.

However, when the Initiating Structure and Consideration scores are submitted to a Backward Regression Analysis, utilizing scores on the EPSS and the nine items on the Overall Leadership Effectiveness instrument, several important findings are revealed. The four variables, EPSS, OLE7, OLE2, and OLE4 accounted for 19% of the variance in the nurses scores on Initiating Structure. And, OLE1 and OLE2 are the major variables which explain almost 12% of the variance on the Consideration dimension of the LBDQ.

These findings indicate that a weak but statistically significant relationship exists between the international nurses' self-perceptions of their goal-directed behaviors (Initiating Structure) and how satisfied they are with their graduate education program, how they perceive themselves as being a source of new ideas (OLE4), how much they provide for staff participation in decision-making (OLE2), and communicate attitudes and information to their staff.

There is also a significant relationship between the
self-perceptions of international nurses in this study regarding how considerate they are with their staff (Consideration) and how they perceive themselves allowing staff freedom on the job (OLE1) and encouraging staff participation in decision-making (OLE2).

Results of qualitative analysis of Research Question 4. The perceptions of the 78 international nurses regarding the contributions they have made to nursing and health care in their native countries are reflected in nine broad categories. The nine categories of contributions include: (1) teaching and educational activities, (2) continuing education, (3) research activities, (4) administrative responsibilities, (5) clinical nursing accomplishments, (6) speeches, (7) writing, (8) professional activities, and (9) "other" contributions.

Significant contributions made to nursing and health care in the 20 countries represented by these international nurses include innovative ideas regarding nursing curriculum, developing regional continuing education programs, designing health promotion activities, initiating research units in their institutions, serving as consultants to others on various topics, heading up new nursing education programs, initiating change in complex environments, organizing and coordinating new health services, presenting papers at regional and state conferences, publishing articles in professional journals and writing books. Other professional contributions cited by these nurses include lobbying for nursing issues, committee-work for developing nursing standards in their country, co-hosting international conferences and working with their state government on
various nursing and health-related issues. Many of these activities were directly attributed to the success of their graduate education program in either the United States or Canada.

Conclusions

The following conclusions are derived from analyses of the data obtained in the study. These conclusions are applicable only to the sample studied.

Based on these findings, international nurses perceive themselves as possessing a high level of both Initiating Structure and Consideration behaviors and high levels of leadership effectiveness in their current jobs. Initiating Structure behavior determines group goals, social control and operations, and Consideration refers to interpersonal relations involving trust, warmth, and caring about those with whom one works.

Based on the results of this study, it can be concluded that, on the Initiating Structure dimension of the LBDQ, international nurses differ significantly from one another in their perceptions of how they behave as leaders according to their native country, type of degree obtained, length of graduate education program, institution attended and satisfaction with educational program. In addition, the international nurses differ significantly in their perceptions of how they behave on the leadership dimension of Consideration according to native country. However, there were no significant relationships between the international nurse's perception of her leader behavior on Initiating Structure or Consideration and the number of years in nursing, current position, job setting, age, or clinical area of
study. This finding implies that nurses from various countries may vary in leadership behavior, and that the institution nurses choose to attend, the degree obtained and length of program as well as how satisfied they are with their education program may be important in the development of specific leadership behaviors. However, factors in the job setting may also affect leader behavior and these are not accounted for here.

Following graduate education in the United States and Canada, more than 30% of the international nurses work primarily in an administrative position and almost 45% hold a faculty position; yet less than 13% specialize in administration in their graduate program and none report a specialization in teaching. This latter finding may be underreported since some clinical specialities such as public health and maternal and child health nursing offer teaching as an optional functional area and these nurses may have failed to volunteer that additional information.

One of the important findings of this study is the documentation of the contributions made by these 78 nurses to nursing and health care in over 20 countries throughout the world. Even though more than 75% completed their graduate education since 1980, they have provided examples of significant leadership activities which many volunteered were a direct result of participation in the advanced education programs. Significant contributions mentioned by these international nurses include activities often related to their roles as faculty and administrators. They also cite many contributions made broadly to the nursing profession such as, publishing nursing books, developing new
standards for nursing, presenting papers at conferences and initiating research.

**Recommendations**

Based on the findings obtained from 78 international nurses who attended a graduate education program in the United States or Canada, the following recommendations are offered.

Since high levels of Consideration and Initiating Structure are perceived as important in the role of nursing leader, each of the graduate institutions which attract international nurses should take the necessary steps to prepare these future nurse leaders in both human relations and organization skills.

Because it is apparent that these current international nurse leaders are involved in significant amounts of educational and teaching activities, as well as administrative responsibilities, the colleges of nursing who admit international nurses to their programs need to make changes which accommodate the needs of these international nurse students. To be specific, colleges of nursing who host international nurses should provide courses and other experiences in their curriculum which will provide both theory and supervised practice in pedagogy and educational administration. The format may include opportunities for observation of other faculty and administrators in both nursing service and nursing education, courses in the principles of adult education and organizational theory, workshops or independent study programs with a faculty or nursing service mentor, and practical teaching and leadership training experience in their selected area of clinical study.
Since a large percent of these nurses has completed their educational program recently, there should be continued networking provided by the faculty of these graduate institutions so that these nurses will continue to be motivated and have the resources to maintain their level of contribution, particularly to the field of nursing.

The World Health Organization, the W.K. Kellogg Foundation, and ministers of health and education from countries where graduate nursing education is not available should be encouraged to continue to provide fellowships and support for nurses wishing to study abroad since this study indicates that most nurses do return to their home country and make significant contributions to nursing and health care in these countries.

An international resource data bank, containing information about nurses who have studied and worked internationally, their areas of expertise, publications and contributions, and other information relevant to research should be developed and funded in order to stimulate additional nursing research on an international level.

Further international leadership studies should be conducted to gain a greater understanding of the potential and actual nurse leaders of the world and how to support their growth.

Specific investigations in leadership should include the following:

a) An examination of the leadership behavior of international nurses who are selected for graduate education programs at the time they enter the program and again at the end of their program to
determine the possible effect of the educational program.

b) A longitudinal study of international nurse leaders, conducted upon entrance to, and after completion of their educational program, and every three-to-five years, to investigate contributions made to international nursing and health care.

c) An investigation of specific behaviors which faculty mentors exhibit in assisting in the international nurse's leadership development.

d) An investigation of the effects of international nurse leadership development programs and the nurse's role in primary health care.

e) A study of leadership goals of international nurses including an evaluation of their goals on record before entering the program compared to goals achieved five and ten years after completion.

f) A study of international nurses who arrive in the United States for graduate education to determine the relationship of specific leadership behaviors with an index of assertiveness and curriculum variables which stimulate leadership development.

g) A global study of international nurses who have matriculated in a graduate education program in another country with greater emphasis on situational versus educational factors affecting leadership.

h) A five year follow-up study of the 78 nurses who participated in this study regarding their continuing contribution to nursing and health care in their countries would provide even more specific documentation regarding the success of these nurse leaders who have chosen to seek advanced education in the United States or Canada.
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International Nurse's Survey

The purpose of this questionnaire is to collect data from nurses from various countries of the world who have attended graduate education programs in the USA.

The first section asks information about you at the present time. The second section concerns your perceptions of your current and previous leadership behavior. The third section concerns selected characteristics of your job, and your beliefs about educational program outcomes.

Please read each question carefully and mark your answer on the questionnaire. You will need approximately 20 minutes to complete this form.

Section I: Personal Data

1. What is the total number of years that you have worked for pay as a registered nurse since you graduated from your basic nursing education program? (Circle only one number).
   1 One or more years,
      Specify ______ Years
   2 Less than one year

2. Were you employed in nursing as of:
   March 1, 1986? March 1, 1980?
   1 Yes 1 Yes
   2 No 2 No

If you answered "No" for both 1986 and 1980, go to Section 3, page 11. Otherwise, go to Question 3.

3. Indicate your place of employment on the dates below. Consider the area where you spent most of your working time as your place of employment.
   March 1, 1986 Employment March 1, 1980 Employment
   _________City _________City
   _________Country _________Country

Questions 4-12 refer to your Principal employment setting and nursing position. If you currently hold more than one paid position in nursing, answer in terms of the position at which you spend the greatest amount of time. If you are not currently employed in nursing, go to question one, Section 3.
4. Current Principal nursing position (circle only one):

1. Staff Nurse
2. Nurse Clinician or Nurse Practitioner
3. Clinical Nurse Specialist
4. Certified Nurse Anesthetist
5. Certified Nurse Midwife
6. Charge Nurse or Team Leader
7. Head Nurse or Assistant Head Nurse
8. Inservice Education Instructor
9. Administrator/Associate/Assistant - Nursing Service
10. Administrator/Associate/Assistant - Academic Program
11. Administrator/Assoc./Assist.-Professional Organization
12. Faculty in academic nursing program
13. Other, specify

5. For your current Principal nursing position, enter the approximate percentage of time spent in the following areas during a usual work week. Please make sure the total equals 100%.

% Direct patient care, not staff supervision
% Staff supervision
% Administration
% Consultation with agencies or professionals
% Teaching students (include preparation time)
% Teaching staff (include preparation time)
% Research
% Other, specify

6. How much of a chance does your job give you to do the things you are best at? (Circle only one number.)

1. A very good chance
2. A fairly good chance
3. Some chance
4. Very little chance
5. No chance

If you spend any time during a usual work week in "direct patient care," as indicated in Question 5, Continue with Question 7. Otherwise, go to Question 8.
7. For your direct patient care functions only, indicate how often you perform each activity below. (Circle one number for EACH activity.)

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<tr>
<td>1</td>
<td>Often</td>
<td>Sometimes</td>
<td>Seldom</td>
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<tr>
<td>1</td>
<td>Obtain health histories</td>
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<td>2</td>
<td>Perform complete physical examinations</td>
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<td>3</td>
<td>Perform pschosocial examinations</td>
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<td>4</td>
<td>Perform nursing diagnoses</td>
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<td>5</td>
<td>Develop therapeutic plans</td>
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<tr>
<td>6</td>
<td>Use computer for recording inpatient records</td>
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<td>7</td>
<td>Use computer for ordering tests and/or treatments</td>
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<tr>
<td>8</td>
<td>Use computer for planning patient care</td>
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<td>9</td>
<td>Instruct patients in management of illness</td>
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<td>10</td>
<td>Instruct patients in health maintenance</td>
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<td>11</td>
<td>Assist patients in planning health care</td>
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<td>12</td>
<td>Instruct patients in prevention of illness</td>
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<td>13</td>
<td>Evaluate patient outcomes</td>
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8. Identify the setting where you currently work in your PRINCIPAL nursing position. (Circle only one number.)

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<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
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<tbody>
<tr>
<td></td>
<td>Hospital (excluding clinic and school of nursing)</td>
<td>Hospital clinic</td>
<td>Clinic (excluding hospital clinic and HMO)</td>
<td>Health maintenance organization</td>
<td>Emergicenter/acute care center (community based)</td>
<td>Physicians or dentist office</td>
<td>Nursing home or extended care facility</td>
<td>Public health or community health setting</td>
<td>Occupational health/employee health service</td>
<td>Student health service (school)</td>
<td>Practical nursing program</td>
<td>Associate degree nursing program</td>
<td>Diploma nursing program</td>
<td>Baccalaureate or higher degree nursing program</td>
<td>Self employed/receive fee for service</td>
<td>Nursing or health association</td>
<td>Other, specify ________________________________</td>
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Section II: LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE  
(Form Xll Self)

Originated by staff members of  
The Ohio State Leadership Studies  
and revised by the  
Bureau of Business Research  
Copyright 1962

On the following pages is a list of statements that may be used to describe the behavior of leaders. Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable. Although some items may appear similar, they express differences that are important descriptions of leadership. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. Its only purpose is to make it possible for you to describe, as accurately as you can, your leadership behavior.

Note. The term, "group", as employed in the following items, refers to a department, division, or other unit of organization that is supervised by you or under your direction in the case of special projects. The term "members," refers to all the people in the unit that you supervise.

Directions: 1). Read each item carefully, 2). Think about how frequently you, as a leader, engage in the behavior described by the item, 3). Decide whether you (A) always, (B) often, (C) occasionally, (D) seldom or (E) never act as described by the item. 4). Draw a Circle around one of the five letters (A B C D E) on the questionnaire.

Remember, answer how you rate yourself now on each item!
LEADERSHIP BEHAVIOR DESCRIPTION QUESTIONNAIRE

DIRECTIONS:

a. READ each item carefully.
b. THINK about how frequently you engage in the behavior described by the item.
c. DECIDE whether you (A) always, (B) often, (C) occasionally, (D) seldom or (E) never act as described by the item.
d. DRAW A CIRCLE around one of the five letters (A B C D E) following the item to show the answer you have selected.

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

e. MARK your answers as shown in the examples below.

Example: I often act as described.............................. A B C D E
Example: I never act as described.............................. A B C D E
Example: I occasionally act as described.................... A B C D E

1. I act as the spokesman of the group........................ A B C D E
2. I wait patiently for the results of a decision............... A B C D E
3. I make pep talks to stimulate the group................... A B C D E
4. I let group members know what is expected of them...... A B C D E
5. I allow the members complete freedom in their work...... A B C D E
6. I am hesitant about taking initiative in the group....... A B C D E
7. I am friendly and approachable............................ A B C D E
8. I encourage overtime work................................ A B C D E
A---Always  
B---Often  
C---Occasionally  
D---Seldom  
E---Never

9. I make accurate decisions  
10. I get along well with the people above me  
11. I publicize the activities of the group  
12. I become anxious when I cannot find out what is coming next  
13. My arguments are convincing  
14. I encourage the use of uniform procedures  
15. I permit the members to use their own judgment in solving problems  
16. I fail to take necessary action  
17. I do little things to make it pleasant to be a member of the group  
18. I stress being ahead of competing groups  
19. I keep the group working together as a team  
20. I keep the group in good standing with higher authority  
21. I speak as a representative of the group  
22. I accept defeat in stride  
23. I argue persuasively for my point of view  
24. I try out my ideas in the group  
25. I encourage initiative in the group members  
26. I let other persons take away my leadership in the group  
27. I put suggestions made by the group into operation  
28. I needle members for greater effort  
29. I seem able to predict what is coming next  
30. I am working hard for a promotion  
31. I speak for the group when visitors are present  
32. I accept delays without becoming upset  
33. I am a very persuasive talker
<table>
<thead>
<tr>
<th></th>
<th>A---Always</th>
<th>B---Often</th>
<th>C---Occasionally</th>
<th>D---Seldom</th>
<th>E---Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>34. I make my attitudes clear to the group</td>
<td>A B C D E</td>
<td></td>
<td></td>
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<tr>
<td>35. I let the members do their work the way they think best</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>36. I let some members take advantage of me</td>
<td>A B C D E</td>
<td></td>
<td></td>
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<tr>
<td>37. I treat all group members as my equal</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>38. I keep the work moving at a rapid pace</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>39. I settle conflicts when they occur in the group</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>40. My superiors act favorably on most of my suggestions</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>41. I represent the group at outside meetings</td>
<td>A B C D E</td>
<td></td>
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<td>42. I become anxious when waiting for new developments</td>
<td>A B C D E</td>
<td></td>
<td></td>
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<tr>
<td>43. I am very skillful in an argument</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>44. I decide what shall be done and how it shall be done</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>45. I assign a task, then let the members handle it</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>46. I am leader of the group in name only</td>
<td>A B C D E</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>47. I give advance notice of changes</td>
<td>A B C D E</td>
<td></td>
<td></td>
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<tr>
<td>48. I push for increased production</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>49. Things usually turn out as I predict</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>50. I enjoy the privileges of my position</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>51. I handle complex problems efficiently</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>52. I am able to tolerate postponement and uncertainty</td>
<td>A B C D E</td>
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<tr>
<td>53. I am not a very convincing talker</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>54. I assign group members to particular tasks</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>55. I turn the members loose on a job, and let them go to it</td>
<td>A B C D E</td>
<td></td>
<td></td>
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<tr>
<td>56. I back down when I ought to stand firm</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>57. I keep to myself</td>
<td>A B C D E</td>
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<tr>
<td>58. I ask the members to work harder</td>
<td>A B C D E</td>
<td></td>
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<tr>
<td>59. I am accurate in predicting the trend of events</td>
<td>A B C D E</td>
<td></td>
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</tr>
</tbody>
</table>
60. I get my superiors to act for the welfare of the group members .......................... A B C D E
61. I get swamped by details .................................................. A B C D E
62. I can wait just so long, then blow up ................................... A B C D E
63. I speak from a strong inner conviction ................................... A B C D E
64. I make sure that my part in the group is understood by the group members .................. A B C D E
65. I am reluctant to allow the members any freedom of action ................................. A B C D E
66. I let some members have authority that I should keep ................................. A B C D E
67. I look out for the personal welfare of group members ............................. A B C D E
68. I permit the members to take it easy in their work ................................. A B C D E
69. I see to it that the work of the group is coordinated ................................. A B C D E
70. My word carries weight with my superiors ..................................... A B C D E
71. I get things all tangled up .................................................. A B C D E
72. I remain calm when uncertain about coming events .............................. A B C D E
73. I am an inspiring talker .................................................... A B C D E
74. I schedule the work to be done ........................................... A B C D E
75. I allow the group a high degree of initiative ................................ A B C D E
76. I take full charge when emergencies arise .................................... A B C D E
77. I am willing to make changes ............................................... A B C D E
78. I drive hard when there is a job to be done .................................. A B C D E
79. I help group members settle their differences .................................. A B C D E
80. I get what I ask for from my superiors ..................................... A B C D E
81. I can reduce a madhouse to system and order .................................. A B C D E
A---Always
B---Often
C---Occasionally
D---Seldom
E---Never

82. I am able to delay action until the proper time occurs..... A B C D E
83. I persuade others that my ideas are to their advantage..... A B C D E
84. I maintain definite standards of performance................... A B C D E
85. I trust the members to exercise good judgment............... A B C D E
86. I overcome attempts made to challenge my leadership.......... A B C D E
87. I refuse to explain my actions........................................ A B C D E
88. I urge the group to beat its previous record................ A B C D E
89. I anticipate problems and plan for them......................... A B C D E
90. I am working my way to the top................................. A B C D E
91. I get confused when too many demands are made of me....... A B C D E
92. I worry about the outcome of any new procedure.............. A B C D E
93. I can inspire enthusiasm for a project........................ A B C D E
94. I ask that group members follow standard rules
   and regulations.......................................................... A B C D E
95. I permit the group to set its own pace......................... A B C D E
96. I am easily recognized as the leader of the group............ A B C D E
97. I act without consulting the group.............................. A B C D E
98. I keep the group working up to capacity...................... A B C D E
99. I maintain a closely knit group.................................. A B C D E
100. I maintain cordial relations with superiors................... A B C D E
Section III: Personal and Education Program Data

Directions: Listed below are some questions about you and your graduate nursing program in the United States or Canada. Please answer them as honestly as you can.

1) Native Country ___________, 2) Age ________,
3) Sex ________, 4) Marital Status ________,

5) Dates attended College of Nursing graduate program in the U.S. or Canada?

From ________, 19______ to ________, 19______.

(month) (year) (month) (year)

Please check the one category which best describes your graduate study at the U.S. or Canadian school of nursing.

I) Degree completed?
1) ___ Ph.D.
2) ___ M.S.
3) ___ B.S.N.
4) ___ Not applicable, I was a non-degree student
5) ___ Not applicable, I was a short term visitor
6) ___ Not applicable, I was a research fellow
7) ___ Other (please describe) ____________________

II) What was the Length of your graduate study program?
1) ___ Less than 4 months
2) ___ 4 to 6 months
3) ___ 6.1 to 12 months
4) ___ 12.1 to 18 months
5) ___ 18.1 to 24 months
6) ___ more than 2 years (specify time) _____________________

III) What was your clinical area of study? (Check only one)
1) ___ Medical surgical nursing
2) ___ Maternal child health nursing
3) ___ Public health nursing
4) ___ Psych/mental health nursing
5) ___ Nursing Administration
6) ___ Women's Health
7) ___ Gerontology nursing
8) ___ Other (please specify) ____________________________

IV) How was your graduate study in the U.S. financed? (Check all that apply)
1) ___ Personal/family resources
2) ___ Ministry of Health or Education
3) ___ Tuition waiver or employment at college attended
4) ___ My own employer
5) ___ Fellowship/scholarship such as WHO, Kellogg, etc.
6) ___ Other (please specify) ____________________________
V) In What University did you study? _______________________

VI) The following questions ask your opinion about changes in your nursing position/job after your period of graduate study compared to the way it was one year before you left for this nursing education program.

Please mark an X in the column which best describes your situation. That is, has your position (rank) increased, decreased, or stayed the same since you obtained your graduate education?

<table>
<thead>
<tr>
<th></th>
<th>Increased</th>
<th>Decreased</th>
<th>Stayed Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Position</td>
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<td>2) Job title</td>
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<tr>
<td>3) Salary</td>
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<tr>
<td>4) Number of people you supervise</td>
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<td>5) Job responsibilities</td>
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<td>6) Research Produced</td>
<td></td>
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<td>7) Administrative responsibilities</td>
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<tr>
<td>8) Publications</td>
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<tr>
<td>9) Clinical expertise</td>
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<tr>
<td>10) Teaching responsibilities</td>
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<tr>
<td>11) Speeches given</td>
<td></td>
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<tr>
<td>12) Job satisfaction</td>
<td></td>
<td></td>
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<tr>
<td>13) Leadership ability</td>
<td></td>
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<tr>
<td>14) Influence on health policy in country</td>
<td></td>
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<tr>
<td>15) Self-esteem</td>
<td></td>
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</tbody>
</table>

VII) To what extent do you feel the following factors at the school of nursing were helpful or not helpful in your leadership development?

Very helpful | Not at all
---|---|---|---|---|---
1) Course work | 5 | 4 | 3 | 2 | 1 |
2) Staff in International or student services office | 5 | 4 | 3 | 2 | 1 |
3) Other American students | 5 | 4 | 3 | 2 | 1 |
4) Other International students | 5 | 4 | 3 | 2 | 1 |
5) Faculty | 5 | 4 | 3 | 2 | 1 |
6) English classes | 5 | 4 | 3 | 2 | 1 |
VIII) What resources or people were helpful in your adjustment and professional growth while you were in the United States or Canada in the graduate program?

IX) How influential was your faculty mentor during your graduate study in developing your leadership potential?

- Not Influential
- Very Influential

1 2 3 4 5

Comment: ____________________________________________

X) How influential are you now in health policy development in your country?

- Not Influential
- Very Influential

1 2 3 4 5

XI) We are interested in learning what contributions you have made to nursing and health care in your country since you have completed your graduate education program. Will you please list below four or five of these contributions you think are especially important?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

XII) Do you have any other comments about your educational program in the United States (or Canada) and how it has influenced your leadership development. (Write below).

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for participating in this survey. Please put it in the enclosed, self-addressed envelope and return it to me immediately. If there are any other comments you wish to make about this survey, please write them in below.
APPENDIX B
Dear International Nursing Leader:

You have been selected to participate in my study about the leadership development of international nurses who have attended a college of nursing in the United States or Canada to obtain graduate education. Probably you have attended the University of Illinois at Chicago or the University of California - San Francisco or were a Fellow for the Kellogg Foundation. Some of you may remember me if you attended the University of Illinois because I was the Acting Assistant Dean of this Office after Dr. Virginia Ohlson retired while they were searching for a new dean. Dr. Ohlson sends her regards to you! She is still very active and is providing us with her guidance and consultation about 2 days a week.

This study is endorsed by the World Health Organization (WHO), and the W.K. Kellogg Foundation. Cooperation also has been obtained from both the University of Illinois and the University of California Colleges of Nursing.

This study is designed to investigate the leadership styles/behaviors of international nurses who have attended graduate education programs in the United States (or Canada). It is anticipated that the results of this study will provide a theoretical basis for nursing educators to understand and develop the nursing leadership necessary in higher education for the implementation of the World Health Organization goal of Health for All by the Year 2000 (HFA/YR 2000). Secondly, it may provide the documentation needed for continued funding for advanced nursing education by agencies such as Ministries of Health, WHO and the Kellogg Foundation.

Your participation is limited to completing the enclosed questionnaire which will take about 20 minutes to complete. You are under no obligation to participate in the study. Your completing and returning the questionnaire will be taken as evidence of your willingness to participate and your consent to have the information used for purposes of the study.

June 1, 1986
Please do not sign your name to the questionnaire. The form is pre-coded so that I will be able to do follow-up. However, your response to this study will be confidential and anonymous; data will be reported in ways that will not identify individual responses.

I regret that I am unable to send a stamped envelope for you to return this survey to me because the mail systems of various countries have not progressed to this point. However, I will make a contribution in your name to the international nursing scholarship fund of the Virginia Ohlson Endowment Fund at the University of Illinois at Chicago if you return your completed questionnaire in the self-addressed envelope within one week after you receive it. PLEASE RETURN IT AIR MAIL as the surface mail is very slow. Thank you!

Your participation in this study is greatly appreciated. The results of this study will be reported in Dissertation Abstracts International. A manuscript will also be submitted to the International Nursing Review and abstracts will be available from me upon request.

Again, thank you for your help.

Sincerely,

Jane E. Parker, R.N., M.S.

Please address reply and inquiries to:
Jane E. Parker
Office of International Studies
LBDQ Study - Room 1152
University of Illinois at Chicago
College of Nursing
845 S. Damen St.
Chicago, Illinois 60612
RCM DEC 26 1115+
LONALDOES COO

LUCIA OYO CO
MR JAN PARKER, UNIVERSITY OF ILLINOIS COLLEGE OF NURSING

Good Re: Your Letter of December. I congratulate you on choosing a very important research topic which will be very useful and worthwhile. Stop your findings could contribute to better understanding the reasons behind the non-return of our educators. Nurses' leaders stop reasonably at the moment cannot assure your fulcrum request but will explore next year after planning meetings have been held. Stop

Christine Greetings

MARCH 12TH 1975

World Health Organization

* LONALDOES COO
27510 ONE CH
Ms. Jane E. Parker, R.N., M.S.
707 Clinton Place
River Forest, IL 60305

Dear Jane:

I have delayed responding to your letter of March 15 until I had an opportunity to discuss it with some others here at the Foundation.

As you know, the Kellogg Foundation does not fund studies and does not make grants to individuals unless it is through an established fellowship program. We have concluded that we cannot make an exception to those policies, even though we recognize the importance of your dissertation. The one way we could assist you would be to handle the mailing of surveys to the Australian nurses who were Kellogg Fellows. We would be pleased to do that much if you wish. They would be mailed from our office and we would pay for the postage. Other than that, we cannot justify funding your request.

I regret that my response cannot be more positive. We do recognize the importance of your work and do hope you will be able to find funds from another source. Please let me know if you wish us to assist with mailing the surveys to the Australian Kellogg Fellows. Best wishes for your continued success.

Sincerely,

Karen R. Hollenbeck
Assistant Vice President-Administration

ERH/1sh
0689:7
APPENDIX D
September 15, 1986

Dear Nursing Friends,

Several weeks ago I mailed a survey about nursing leadership to you. For some reason your response and several others has not been returned to me. I wonder if, because of the mail system, it did not reach you? For this reason, I am sending you another questionnaire and am asking you to please complete it and return it to me as soon as possible.

We think this study is very important to the future of international nursing graduate study. I would like to have a high percentage of returns so that the results will be representative of the international nursing leaders who have studied in the United States and Canada in recent years.

Thank you in advance for your participation.

Sincerely,

Jane E. Parker
Associate Professor
Office of International Studies
Items in LBDQ which make up **Initiating Structure** Score:

**Question No:**

04 I let group members know what is expected of them
14 I encourage the use of uniform procedures
24 I try out my ideas in the group
34 I make my attitudes clear to the group
44 I decide what shall be done & how it shall be done
54 I assign group members to particular tasks
64 I make sure that my part in the group is understood by the group members
74 I schedule the work to be done
84 I maintain definite standards of performance
94 I ask that group members follow standard rules and regulations

Items in LBDQ which make up the **Consideration** Score:

07 I am friendly and approachable
17 I do little things to make it pleasant to be a member of the group
27 I put suggestions made by the group into operation
37 I treat all group members as my equal
47 I give advance notice of changes

*57 I keep to myself

67 I look out for the personal welfare of group members
77 I am willing to make changes

*87 I refuse to explain my actions

*97 I act without consulting the group

*indicates item is scored in reverse of other questions, i.e. 1-2-3-4-5- vs 5-4-3-2-1.
Correlation Matrix for Regression Analysis for LBDQ with 10 Variables

<table>
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<th>Var</th>
<th>EPSS</th>
<th>OLE6</th>
<th>OLE3</th>
<th>OLE7</th>
<th>OLE1</th>
<th>OLE5</th>
<th>OLE8</th>
<th>OLE4</th>
<th>OLE2</th>
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<td>-3.94</td>
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Correlation Matrix for Regression Analysis for Consideration with 10 Variables

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<th>OLE3</th>
<th>OLE7</th>
<th>OLE1</th>
<th>OLE5</th>
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<th>OLE4</th>
<th>OLE2</th>
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## Correlation Matrix for Regression Analysis for Structure with 10 Variables

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<th>Var</th>
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### Educational Program Satisfaction Score (EPSS)
#### Of International Nurses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Increased (percent)</th>
<th>Decreased (percent)</th>
<th>Stayed Same (percent)</th>
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<tr>
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<td>00.0</td>
<td>31.0</td>
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<tr>
<td>Job Title</td>
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<tr>
<td>Salary</td>
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<td>Supervision</td>
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<td>Publications</td>
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<td>Clinical Expertise</td>
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<tr>
<td>Speeches</td>
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<td>Job Satisfaction</td>
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<td>Leadership Ability</td>
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<td>Influence &amp; Policy</td>
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<td>Self-Esteem</td>
<td>85.1</td>
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**Mean = 62.2,**  
**Range = 47-75,**
## Educational Program Characteristics of International Nurses

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
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<tr>
<td><strong>Faculty Mentor</strong></td>
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<tr>
<td>Very influential</td>
<td>20</td>
<td>(28.2)</td>
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<tr>
<td>Influential</td>
<td>24</td>
<td>(33.8)</td>
</tr>
<tr>
<td>Neutral</td>
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<td>(15.5)</td>
</tr>
<tr>
<td>Slightly influential</td>
<td>9</td>
<td>(12.7)</td>
</tr>
<tr>
<td>Not influential</td>
<td>7</td>
<td>(9.9)</td>
</tr>
</tbody>
</table>

| **Health Policy Development** | | |
| Very influential | 5 | (6.8) |
| Influential | 19 | (26.0) |
| Neutral | 26 | (35.6) |
| Slightly influential | 12 | (16.4) |
| Not influential | 11 | (15.1) |

| **Resources Helpful in Educational Program Adjustment** | | |
| None | 5 | (7.0) |
| One | 14 | (19.7) |
| Two | 20 | (28.2) |
| Three | 22 | (31.0) |
| Four | 7 | (9.9) |
| Five | 2 | (2.8) |
| Six | 1 | (1.4) |
International Nurses Study
Contributions to Nursing & Health Care

Responses to Question XI: What contributions you have made to nursing and health care in your country since you have completed your graduate education program (List four or five which think are especially important?)

*Teaching new concepts in mental health. (130) (43)
*Writing books on psychiatric nursing.
*Giving special lectures to nurses.
*Doing research.

*Promoted the recognition and application of nursing diagnosis. (128) (42)
*Established the graduate program in nursing in our school.
*Re-evaluated the system of nursing education and make the influential suggestions to Minister of Education.
*Became one of the nursing leaders in Taiwan.
*Provide in-service programs for nursing faculty & the staff nurses.

*Identify the potential clients in health care service such as pt’s families. (126) (42)
*Introduce the importance of research in professional growth.
*Reinforce the importance of keeping up new knowledge.

*ICU is new developing science in medicine. ICU was established in our hospital two years ago and there is alot of work to do. When I came back from USA I was sent to work there. (125) (08)
*I help to develop and improve our ICU’s work, make the plan in policy & procedure.
*I help to train staff nurse working in ICU.
*I translate the English materials into Chinese and teach them to master the use of equipment.

*Participate in continuing education for clinical nurses (119) (43)
*Curriculum revision
*Coordination with the committee on master degree curriculum construction.
*Conducting a clinical research
*Clinical supervision.

*Nursing research (118) (43)
*Pediatric nursing care
*Efficiency of nursing care

*Pre-natal education; especially Lamaze Method.
*Participation of midwifery program (116) (23)
International Nurses Study
Contributions to Nursing & Health Care

- Practice and research in home health care
- Evaluational methodology (115) (22)
- Went on for Ph.D.

- Realize various aspects of nurses role (114) (22)
- More interested in clinical study with student
- Importance of graduate education
- Increase the specialty or special nurse system.

- Teaching methods in nursing practice (113) (22)
- Teaching evaluation
- Teaching implementation
- Nursing research

- Join in research (109) (34)
- Contribute actively in planning for the future of the colleges work in (research).

- Revised the nursing educational system (106) (37)
- As a member of the Central Board of X Nursing Association I influence memoranda about nursing education and health sciences in my country.

- Research in clinical area (cardiac) lead to beginning changes in the follow-up of patients (318) (06)
- Higher profile for nursing researcher and higher education within the clinical specialty (card. care).

- Increased professionalism awareness (324) (06)
- Raised nursing consciousness as a "team member" and
- Helped promote increased nursing self esteem
- Encouraged M.D.s to include nursing as team member
- Made nursing more visible
- Encourage accountability on the part of my peers.

- Text books in nursing (311) (40)
- Text books in leadership
- Leadership courses for nurse teachers
- Professional articles
- Development of nursing research activities

- Teaching nursing students (356) (06)
- Teaching community nurses
- Assisting graduate students.

- Committee of curriculum development (322) (43)
- Providing inservice education to instructors and staff nurses both in several nursing colleges and hospitals which belong to Ministry of Public Health
- President of (country regional) nurse's association
- Director of a Nursing College (name deleted)
International Nurses Study
Contributions to Nursing & Health Care

• Apply "management by objective" model to lead a nursing department of general hospital. (362) (42)
• Encourage my staff to develop & initiate quality assurance programs.
• Open a course of research and encourage staff research
• Establish many task force teams to encourage my staff participating in decision making from department level.

• Influence on curriculum and training programs for nursing education. (378) (40)
• Participation in formulating medical-technical security regulations
• Planning continuing education programs for OR nurses

• Contributed to the development of the role of a clinical specialist (333) (21)
• Initiated the establishment of research unit at the university.
• Co-hosted two international conferences with (a USA university).
• Participating in National committees on pediatric care.

• I got a higher position in nursing school (336) (42)
• Gave lectures to country's professional nurses

• Further curriculum development, e.g.; identifying curricular strands such as behavior concepts. (368) (33)
• Participation in continuing education programs as speaker and resource person, etc.
• Research activities
• Establishment of independent group nursing practice.

• Designed & implemented innovative psychiatric nursing clinic (313) (06)
• Participated in implementation of psychiatric day prog.
• Helped develop psych/mental health component of new nursing program
• Have the background to both provide quality care and help others achieve same standard.

• 2 graduate degrees since then; M.A., Ph.D. (372) (06)
• Now starting to make impact in gerontological nursing research & research consultation (developmental phase)
International Nurses Study
Contributions to Nursing & Health Care

*Hiring of new branch office executive director (310) (06)
*Raising the profile of "my" non-profit organization
*Opened negotiations to open a new branch in the area
*Improved interpersonal relations between government and this non-profit organization.

*Founder of nursing research interest group (369) (06)
*Changes made in organizational structure of an Institute based on my research
*Number of approvals of program committee of school of nursing
*Developed the administration stream & taught in masters program at university
*Designed nursing care plan kardex cards used in U.S. & Canada
*Went on for a Ph.D (in management)

*Direct participation in mental health programs (301) (10)
*Organization of master's degree nursing programs here
*As an invited professor in other countries such as Mexico, Colombia, Peru Argentina, Venezuela
*As a mental health teacher in other schools such as Education Faculty.

*Organized an outpatient clinic which is considered a model in our country (315) (07)
*Developed a nursing service for ambulatory care based on health selfcare teaching to clients and their families.
*Edited a monthly booklet on Health selfcare education that is utilized as an instrument for continuing education in several health institutions of country.

*Development of position statements in nursing in two (states)
*Dev of standards of practice for psych nursing, state and national
*Dev of position paper on continuing education for (state) nursing association
*Member of planning committee, compiler of proceedings of first national conference on continuing education in nursing
*Prepared at least 6 responses for previous employer to state government on health & education.
International Nurses Study
Contributions to Nursing & Health Care

*Initiated Distance Modes of education in region (382)
*Initiated Degree-Diploma school cooperative program(98)
*Implemented cooperative Health Service Admin -Nursing Admin M.S. program.
*Developing pysch/mental health M.S. for region
*Developing PhD. Nursing for region
*Established international council on women’s health issues
*Edit refereed publication on women’s health

*Organized a seminar on evolution of nursing education in (my country) (379)(04)
*Assisted in mobilization of nurses as a prof group
*Given inservice education to my fellow nurses
*Attended and facilitated workshop on community participation on universal child immunization by 1990
*Involved in promoting community participation as a way of enabling the people of my country to achieve WHO goal of health for all by year 200

*Teaching nursing on a conceptual level (332)(44)
*Publishing in the journal
*Giving speeches, presenting research
*Talking about nursing knowledge

*I have focused on chronic mentally ill population in teaching, lecturing all over country, in research
*Articles in (country) nursing journal (370)(31)
*A book concerning care for chronically mentally ill

*Research in evaluation of home care delivery(350)(06)
*Research with women who ask for an abortion: DNS
*Publications
International Nurses Study
Contributions to Nursing & Health Care

*Advisory committee to nursing school in our community (334) (06)
*Advisory committee to state government on nursing issues
*Organized nursing services in mental health centre roles, functions & hiring staff to do the job
*Consulted by state government on my ideas on programs in mental health, how to organize evaluate, etc.

*Consultation on aged care organizations (508) (01)
*Political activities re: nursing education (lobbying)
*Editorial board - national nursing journal
*Guest speaker at nursing organization conferences

*Active member of board of management of local hospital and am on several of its subcommittees (543) (01)
*Played a major role in developing masters by coursework to commence in 1987
*Make important contribution to decision-making process of our school of nursing & health sciences institute
*Currently involved in committee planning the relocation of school of nursing
*Frequently act for the Head of the school of nursing when she is absent.

*My knowledge has been increased so am continually using acquired knowledge on a daily basis and thru my participation on committees. (555) (01)

*Coordinating transfer of nurse education nationally to advanced education section (522) (01)
*Intervened in major industrial decision-making process to assist wage increases for nurses
*Raised awareness of Health Ministers
*Gained commitment to goal of excellence in management in health care system
*Coordinating major inquiry into medical education and medical manpower planning
*Coordinated development of national labor force nursing model

*Research presentations (532) (01)
*Establishing a research group locally

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International Nurses Study
Contributions to Nursing & Health Care

• Chair of the college of nursing, country & state executive committee (502)(01)
• Head of newly established nursing program
• Acted as a consultant for 2 other regional college programs in nursing
• College of nursing representative on State nursing council (registration body)
• Member of "Kellogg Fellows" resources group
• Assisting with production of nursing resource directory at the state level.

• Have entered into a new area of nursing (health promotion & disease prevention) (546)(06) in (01)
• Have a new position as the HPC at 2 large hospitals
• Teach staff how to participate in more effective patient education, increase quantity and quality of HP in each hospital, liason with the community and represent HP principles at every opportunity

• Sharing information & awareness with colleagues
• Feedback sessions to other health professionals
• Talks to community groups (501)(01)
• Discussions with senior nurse educators & administrators
• Introduced new program ideas in clinical area

• Tried to convince people there are different systems of nursing (503)(01)
• To be more willing to accept change
• Importance of nursing research
• Utilization of knowledge

• Involved in formulation of migrant health policy
• Involved in development of inservice courses for migrant nurses (504)(01)
• Developed cultural awareness program for health workers as well as nurses & doctors
• Published, presented papers at conferences and have commenced research

• Developing a regional continuing education program in gerontological nursing (507)(01)
• Delivering lectures, as a guest, in specialization area of gerontology
• Resource person for continuing education
• Member of management committee for state epilepsy foundation
International Nurses Study
Contributions to Nursing & Health Care

Invited to speak at numerous conferences and seminars
Published several papers (509)(01)
Appointed as consultant in computers in state gov
Involved in national working party on computers in nursing
Set up a state special interest group in the area.

Further development of programs for registered nurses
Development of college-based initial preparation programs (511)(01) (DNS)
Member of nation-wide committee on external programs for R.N.’s
Development of teaching courses on nursing knowledge

Member of manpower committee (516)(01)
Speeches, talks, lectures on experiences abroad & nurse education transition from hospitals to colleges
Use of media to increase nursing profile
Increased staff development & education

Raised awareness of crosscultural nursing care
Many talks to professional & community groups
Publication on multi-ethnic issues (517)(01)
Mentor/preceptor to nursing students/peers

Am developing off campus study centers (519)(01)
Have improved student accessibility to courses

Guest lecturing (520)(01)
Inservice education for staff
Consultant as transcultural issues

Publications on computers in nursing (561)(01)
Speaker at interstate conferences on computers and nursing care of
Completed graduate program in nursing

President of state specialty nursing organization
State representative on national specialty nursing organization (560)(01)
Member of state department of health committees
Completed post graduate diploma in administration
Enrolled in master’s program in administration
International Nurses Study
Contributions to Nursing & Health Care

*Curriculum development in psychiatric nursing
*Educational administration in psych nursing
*Aided in analysis of course content of psych nursing in developing courses. (559)(01)

*President of national college of nursing 1 year
*Numerous deputations to Ministers of Health and Education re: transfer of nursing education to higher education centres (558)(01)
*Member of committees of State Institute of Technology and state committee of college of nursing which addresses current issues, eg, career structure.

*Active committee member for state nursing standards
*Assisted fellow nurses to achieve higher education
*Become more involved in teaching (556)(01)
*Upgraded standards of areas of control
*Keep up-to-date with nursing trends & communicated these to staff.

*Personal assertiveness (most important)
*Knowledge gained - lectures to professional colleagues at state level (554)(01)
*Contributions to management patterns in nursing service
*Necessity for standards for nursing practice
*Importance of leadership style in achieving goals and change.

*Moved into a senior lecturer position in a department of nursing in a college (550)(01)

*Publications in country nurses journal (548)(01)
*National councillor and state president of country congress of mental health workers
*Member of course design and clinical aspects of state interdepartmental committee re: transfer of nursing education to colleges
*As nurse consultant, provide professional development opportunities for nurses.

*Enabling progress of nurse education to college sector
*Raise and speak of standards of education for all nurses
International Nurses Study
Contributions to Nursing & Health Care

*Setting up 1st regional geriatric assessment team
*Setting up 1st regional computerized nursing home waiting list system (545)(01)
*Developing country's first nursing program on urinary incontinence.

*Set up 1st nurse consultancy in country (541)(01)
*Educational programs for re-entry to nursing
*Inservice education service by contract to organizations
*Encouraging use of adult learning techniques in nursing education
*Established close contact with state health dept and act as consultant to decision makers

*Implemented primary nursing in one hospital
*Lectures/discussions on clinical career ladder/clinical nurse specialist role across broad areas
*Narrowed the administrative/clinical gap in hospital

*Developed family centered approach to nursing care
*Committee member of health issues center: watch dog group on state policy & consumer advocacy issues
*Elected to national committee for college of nursing
*Developed regional nurses, across specialties, meetings addressing continuing education needs & opportunities for nurses to support each other (539)(01)

*Research on the elderly (537)(01)
*Improvement of nursing documentation
*Setting up quality assurance programs
*Consultative committee on aged care
*Program (curriculum) development

*Promotion of clinical nursing (536)(01)
*Promotion of nursing process
*Promotion of conceptual framework and theories of nursing.
International Nurses Study
Contributions To Nursing & Health Care

• Help set up clinical based nursing research
• Developed & conducted continuing education for nurse managers & administrators from rural and city areas
• Revised nursing administration stream & degree course
• Initiated "computers in nursing" component of course

• Assist college of nursing's national delegate to country resuscitation council
• Submission to state government on "death with dignity"
• Increased lobbying for career structure for nurses
• Role model as clinical nurse specialist

• Commitments to nursing education on attitudes regarding cancer

• Teaching student nurses
• Inservice teaching
• Preceptoring
• Speaking at conferences
• Implementing innovative community programs

• Trouble shooting as DON of a large health care facility which was in trouble
• Participation in setting up a curricula for a masters in nursing program
• Preparation of ministerial proposals for resource (manpower) application
• Initiation of change in a complex environment fraught with economic and industrial problems
APPENDIX I
Resources Helpful in Adjustment & Professional Growth:

RESOURCES or PEOPLE HELPFUL IN ADJUSTMENT and PROFESSIONAL GROWTH WHILE IN GRADUATE PROGRAM

The new idea of leadership in the courses (128)
The system & the management of settings related to nursing
The aggressiveness of the people

---------

Faculties in the school (126)

---------

The CON teachers, classes, books, & clinic practice (125)

---------

The library (120)

---------

Named 3 faculty persons (119)

---------

Named her advisor (116)

---------

Evaluation methodology of health activities (115)
Named 2 faculty persons

---------

Clinical study in the wards (114)
Med-surg instructors
Visiting nurse experience

---------

Faculty suggested me how to learn & do research (113)

---------

The international office (109)
The advisor
Other international students from the same country

---------

The libraries (106)
Wide range of books available in book stores
The level of discussion in classes
The course content
Both of the last two are dependent on the quality of faculty and students

---------

Core lecturers enthusiasm for nursing (324)
Resources Helpful in Adjustment & Professional Growth:

Retired faculty member as support person (311)
Special servic person to help with language difficulties
The international nurse students group

Friends (356)

Good advisors, good friends (322)
Good family whom I stayed with during my study period
A very kind person in charge of foreign students

My academic advisor (362)
Schoolmates
The student affairs office staff
Library

Faculty in other depts than nursing (385)
A deprived population of elderly, refugees, addicts & other low-income people.

The lady coordinating the program for foreign nurses (378)
The lady taking a great interest in papers & other activities
The "big" sister

Library (336)
Advisors
American students

Foreign students' group (368)
Faculty members
Some classmates

A few faculty (313)
Students & friends
Excellent quality of program
Government traineeship

Professor who employed me as a research assistant (372)
(took mentor role)
International student group

Professor whose interest was in community health (310)
Clinical preceptor
faculty advisor
Resources Helpful in Adjustment & Professional Growth:

Peer group support (369)
Limited faculty
-----------

Nursing professors (301)
The student services office
-----------

Faculty (315)
International students
-----------

Selected faculty who supported my decisions re: learning (340)
Classmates & other graduate students with whom I shared ideas
Availability of faculty in several disciplines
Involvement in student organizations
-----------

Degree of freedom in DNS program allowed me to reach my full potential of creativity (382)
My mentor maintains contact with me. My own mentoring skills are excellent because of her example
-----------

International student association (379)
Members of the faculty
Some of my colleagues
-----------

Other international students (332)
Some faculty members
People in student affairs
-----------

My supervisor at the university and other faculty
The person who was assigned to take care of foreigners
A fantastic secretary who typed and corrected my papers
(That was an important part of surviving with a diff lang)
-----------

My sponsor, my mentor, my host family, & friends (350)
The nurse responsible for foreign students
-----------

Nursing faculty (334)
Making new contacts with students
(I feel I did not make full use of resources available—too immature/lacked experience)
-----------

PHN and Psych faculty (345)
-----------
Resources Helpful in Adjustment & Professional Growth:

Meeting with significant nursing leaders & observing styles (508)

Fellow students in the master’s program (543)
Selected students in Ph.D program who became my friends
Friends from the local church

Faculty & the Dean (555)
Staff in continuing education
Staff generally across the hospital with whom I had occasion to work

Non-nurses outside faculty (522)
Faculty members extremely disinterested
Nursing colleagues (American) had no concept of culture shock
international students go through

One faculty member (532)
One student
Contact thru visits to other centers
The overall experience

Dean of the CON looked after me not only as an overseas student, but as a friend! (502)
Office of student services in nursing college who took me with her on her “outreach” programs.
All the faculty & staff (I was treated more as a visiting colleague than as a student, so I feel the benefits of my visit were doubled)

I didn’t find anyone very helpful I was unable to satisfy my need for support in the area of health promotion & disease prevention in clients before hospital. This put me in conflict with my clinical area which was exercise rehab. I never really adjusted or resolved my conflict. (546)

Named a faculty person (501)
International student discussions
Persons in international office & special programs

Fellow country persons (503)
Faculty
Staff development personel
American friends
Resources Helpful in Adjustment & Professional Growth:

Faculty (504)
Students

Course advisor (507)
Prominent gerontological nurses
Fellow country nurses

All the people I met on the tour were helpful (509)

Faculty (511)
Fellow students

All coordinators of my programs (516)
Library facilities

Kellogg foundation staff members (517)
Peers
Some faculty

Faculty advisor (518)

Faculty (519)
Thesis advisor

Faculty advisor (520)
Lecturers
Colleagues

Faculty at CON & hospital (561)
Fellow students

People at both university & hospital (560)

Other class members (559)
Some faculty members

Faculty involved in program (558)
International weekly social activity (coffee hour)
Members of local church community

Faculty especially X (named a person) (556)
Resources Helpful in Adjustment & Professional Growth:

--------
Library facility (554)
Deputy director of nursing systems management
Clinical personnel
--------

All staff in the hospital program (550)
CDC (Communicable Disease Center)
--------

My preceptor (548)
Other international students
Office of student affairs – very approachable & useful
--------

Fellow students (547)
--------

Kellogg Foundation staff (540)
Named a faculty person at the university
Named a nurse at the hospital
--------

Faculty (541)
Fellow students
--------

My course advisor (545)
My preceptor
--------

Faculty advisor (537)
Preceptors
--------

Other students from U.S. & other countries (539)
Faculty
--------

Some faculty (536)
Most of my fellow students
Friendly Americans in city where I studied
--------

Faculty (534)
Fellow students (peers)
--------

American & Canadian Cancer Society staff (530)
Faculty (named one specifically)
--------

Faculty (529)
Students
Resources Helpful in Adjustment & Professional Growth:

-----------------
Faculty (527)
Practicing nurses
-----------------
Family who live in US & Canada (526)
Kellogg Foundation staff
Faculty and staff at university
Neighbors on campus (students) and many others
-----------------
STATEMENT OF POLICY

Concerning the Leader Behavior Description Questionnaire and Related Forms

Permission is granted without formal request to use the Leader Behavior Description Questionnaire and other related forms developed at The Ohio State University, subject to the following conditions:

1. **Use:** The forms may be used in research projects. They may not be used for promotional activities or for producing income on behalf of individuals or organizations other than The Ohio State University.

2. **Adaptation and Revision:** The directions and the form of the items may be adapted to specific situations when such steps are considered desirable.

3. **Duplication:** Sufficient copies for a specific research project may be duplicated.

4. **Inclusion in dissertations:** Copies of the questionnaire may be included in theses and dissertations. Permission is granted for the duplication of such dissertations when filed with the University Microfilms Service at Ann Arbor, Michigan 48106 U.S.A.

5. **Copyright:** In granting permission to modify or duplicate the questionnaire, we do not surrender our copyright. Duplicated questionnaires and all adaptations should contain the notation "Copyright, 19—, by The Ohio State University."

6. **Inquiries:** Communications should be addressed to:

   Administrative Science Research
   The Ohio State University
   1775 College Road
   Columbus, OH 43210

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APPENDIX K
LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE - Form XII

The Leader Behavior Description Questionnaire, often referred to as LBDQ, was developed for use in obtaining descriptions of a supervisor by the group members whom he supervises. It can be used to describe the behavior of the leader, or leaders, in any type of group or organization, provided the followers have had an opportunity to observe the leader in action as a leader of their group.

Origin of the Scales

The LBDQ grew out of work initiated by Hemphill (10). Further development of the scales by the staff of the Ohio State Leadership Studies has been described by Hemphill and Coons (13). Shartle (16) has outlined the theoretical considerations underlying the descriptive method. He observed that "when the Ohio State Leadership Studies were initiated in 1945, no satisfactory theory or definition of leadership was available." It was subsequently found in empirical research that a large number of hypothesized dimensions of leader behavior could be reduced to two strongly defined factors. These were identified by Halpin and Winer (9) and Fleishman (3) as Consideration and Initiation of Structure.

The two factorially defined subscales, Consideration and Initiation of Structure, have been widely used in empirical research, particularly in military organizations (5, 6), industry (2, 3, 4), and education (6, 8, 12). Halpin (7) reports that "in several studies where the agreement among respondents in describing their respective leaders has been checked by a 'between-group vs. within-group' analysis of variance, the F ratios all have been found significant at the .01 level. Followers tend to agree in describing the same leader, and the descriptions of different leaders differ significantly."
### L.B.D. XII Profile

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</table>
The Development of Form XII

It has not seemed reasonable to believe that two factors are sufficient to account for all the observable variance in leader behavior. However, as Shartle (16) observed, no theory was available to suggest additional factors. A new theory of role differentiation and group achievement by Stogdill (17), and the survey of a large body of research data that supported that theory, suggested that a member of variables operate in the differentiation of roles in social groups. Possible factors suggested by the theory are the following: tolerance of uncertainty, persuasiveness, tolerance of member freedom of action, predictive accuracy, integration of the group, and reconciliation of conflicting demands. Possible new factors suggested by the results of empirical research are the following: representation of group interests, role assumption, production emphasis, and orientation toward superiors.

Items were developed for the hypothesized subscales. Questionnaires incorporating the new items were administered to successive groups. After item analysis, the questionnaires were revised, administered again, reanalyzed, and revised.

Marder (14) reported the first use of the new scales in the study of an army airbourne division and a state highway patrol organization. Day (1) used a revised form of the questionnaire in the study of an industrial organization. Other revisions were employed by Stogdill, Goode, and Day (20, 21, 22) in the study of ministers, leaders in a community development, United States senators, and presidents of corporations. Stogdill (18) has used the new scales in the study of industrial and governmental organizations. Form XII represents the fourth revision of the questionnaire. It is subject to further revision.

2.
Scoring Key

The subject indicates his response by drawing a circle around one of the five letters (A, B, C, D, E) following an item. As indicated on the Scoring Key, most items are scored: A B C D E

\[
\begin{array}{ccccc}
5 & 4 & 3 & 2 & 1 \\
\end{array}
\]

A circle around A gives the item a score of 5; a circle around B gives it a score of 4; and a circle around E gives the item a score of 1.

The 20 starred items on the Scoring Key are scored in the reverse direction, as follows: A B C D E

\[
\begin{array}{ccccc}
1 & 2 & 3 & 4 & 5 \\
\end{array}
\]

In use at the Bureau of Business Research, the score is written after each item in the margin of the test booklet (questionnaire).
The assignment of items to different subscales is indicated in the Record Sheet. For example, the Representation subscale consists of items 1, 11, 21, 31, and 41. The sum of the scores for these five items constitutes the score for the subscale Representation. The score for Demand Reconciliation consists of the sum of the scores assigned to items 51, 61, 71, 81, and 91. The score for Tolerance of Uncertainty consists of the sum of the scores on items 2, 12, 22, 32, 42, 52, 62, 72, 82, and 92.

By transferring the item scores from the test booklet to the Scoring Sheet, it is possible to add the item scores quickly to obtain an accurate score for each subscale.
<table>
<thead>
<tr>
<th>Subscale</th>
<th>Army Division</th>
<th>Highway Patrol</th>
<th>Aircraft</th>
<th>Ministers</th>
<th>Community Leaders</th>
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<td>Mean  SD</td>
<td>Mean  SD</td>
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<td>19.8 3.1</td>
<td>19.7 3.3</td>
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<td>35.6 4.6</td>
<td>33.2 6.2</td>
<td>37.5 6.3</td>
<td>37.7 5.6</td>
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<td>36.5 5.5</td>
<td>42.1 4.7</td>
<td>39.5 5.5</td>
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<tr>
<td>5. Initiating Structure</td>
<td>38.6 5.7</td>
<td>39.7 4.5</td>
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<tr>
<td>6. Tolerance Freedom</td>
<td>35.9 6.5</td>
<td>36.3 5.3</td>
<td>38.0 5.9</td>
<td>37.5 6.0</td>
<td>36.4 5.0</td>
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<tr>
<td>7. Role Assumption</td>
<td>42.7 6.1</td>
<td>42.7 5.3</td>
<td>40.9 5.6</td>
<td>41.5 5.4</td>
<td>39.8 5.6</td>
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<td>20.5 2.3</td>
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<td>39.1 5.1</td>
<td>38.6 4.2</td>
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Number of Cases: 235 185 165 103 57
Table 1. Means and Standard Deviations (continued)

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<th>Subscale</th>
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<th>Labor Presidents</th>
<th>College Presidents</th>
<th>Senators</th>
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<td>52.9</td>
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Number of Cases | 55 | 44 | 55
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<th>Aircraft Executives</th>
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REFERENCES


Scoring Key

The subject indicates his response by drawing a circle around one of the five letters (A, B, C, D, E) following an item. As indicated on the Scoring Key, most items are scored: A B C D E

5 4 3 2 1

A circle around A gives the item a score of 5; a circle around B gives it a score of 4; and a circle around E gives the item a score of 1.

The 20 starred items on the Scoring Key are scored in the reverse direction, as follows: A B C D E

1 2 3 4 5

In use at the Bureau of Business Research, the score is written after each item in the margin of the test booklet (questionnaire).
There are no norms for the LBDQ. The questionnaire was designed for use as a research device. It is not recommended for use in selection, assignment, or assessment purposes.

The means and standard deviations for several highly selected samples are shown in Table 1. The samples consist of commissioned and noncommissioned officers in an army combat division, the administrative officers in a state highway patrol headquarters office, the executives in an aircraft engineering staff, ministers of various denominations of an Ohio Community, leaders in community development activities throughout the state of Ohio, presidents of "successful" corporations, presidents of labor unions, presidents of colleges and universities, and United States Senators.

Reliability of the Subscales

The reliability of the subscales was determined by a modified Kuder-Richardson formula. The modification consists in the fact that each item was correlated with the remainder of the items in its subscale rather than with the subscale score including the item. This procedure yields a conservative estimate of subscale reliability. The reliability coefficients are shown in Table 2.
Administering the LBDQ

The LBDQ is usually employed by followers to describe the behaviors of their leader or supervisor. However, the questionnaire can be used by peers or superiors to describe a given leader whom they know well enough to describe accurately. With proper changes in instructions, the questionnaire can also be used by a leader to describe his own behavior.

The questionnaire can be administered individually or in groups. It is usually not necessary for the person making the description to write his name on the test booklet. However, the name of the leader being described should be written on the test booklet. It is necessary to identify the person being described whenever it is desired to add together (and obtain an average of) the descriptions of several describers.

How many describers are required to provide a satisfactory index score of the leader's behavior? Halpin (7) suggests that "a minimum of four respondents per leader is desirable, and additional respondents beyond ten do not increase significantly the stability of the index scores. Six or seven respondents per leader would be a good standard."

In explaining the purpose and nature of a research project to a group of respondents, it has not been found necessary to caution them about honesty or frankness. It has been found sufficient to say, "All that is required is for you to describe your supervisor's behavior as accurately as possible." Whenever possible to do so, it is desirable to assure the respondents that their descriptions will not be seen by any of the persons whom they are asked to describe.
SCORING KEY  

*Starred items are scored 1, 2, 3, 4, 5
All other items are scored 3, 4, 3, 2, 1

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.
APPROVAL SHEET

The dissertation submitted by Jane E. Parker-Conrad has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April 2, 1987

Date

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