EXPERIENCES ASSOCIATED WITH THE DEVELOPMENT OF OUTSTANDING LEADERSHIP BEHAVIORS IN HEAD NURSES

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EXPERIENCES ASSOCIATED WITH THE DEVELOPMENT OF OUTSTANDING LEADERSHIP BEHAVIORS IN HEAD NURSES

Although effective nursing leadership is critical to the delivery of health care, there has been little research into the role experiences have in developing leadership effectiveness in head nurses. The purpose of this investigation was to identify developmental experiences which differentiate more effective from less effective head nurses. The subjects of this study were 124 Army head nurses. Participants included 24 nursing supervisors, and 363 staff nurse subordinates. Developmental experiences--background, education, continuing education, leadership experiences, clinical experiences, and career developmental relationships were explored using a fifty item questionnaire. Each head nurse was self-rated and rated by three subordinates using the Leader Behavior Description Questionnaire (LBDQ), and was self-rated and rated by the subject's supervisor and subordinates using a single Likert-type scale item of overall leadership effectiveness (Single Item Rating). The following were completed: (1) a table describing the head nurses' background using simple frequency counts and percentages; (2) chi square analyses for experience items differentiating high and low scorers on the Initiating Structure and Consideration scales, and total scales of the subordinate-furnished LBDQ;

and (3) Pearson product-moment correlation coefficients among the LBDQ ratings, the Single Item Ratings, Subordinate-furnished LBDQs and Single Item Ratings, and head nurses' LBDQ and Single Item Ratings. There were significant differences between head nurses rated high and those rated low on the Initiating Structure, Consideration, and total scales of subordinate-furnished LBDQs in the areas of education, leadership experience, clinical experience, continuing education, and career development relationships. For subordinates rating the head nurse, there was a significant relationship (.9081) between the LBDQ and the Single Item Rating. It is recommended that (1) a similar study be conducted in the civilian community, (2) an ethnographic study of outstanding head nurse leaders be conducted, and (3) results of this study be used in programs whose object is the identification and development of head nurse leaders.

(Copies available from Micrographic Department, Doheny Library, USC, Los Angeles, CA 90007)

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TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

THE PROBLEM

Background

Virtually all individuals are interested in the availability of quality health care for themselves and their loved ones. The nurse is an important component of health services. "In most hospitals, 90% of patient care . . . is delivered by nurses" (Kramer & Schmalenberg, 1988, p. 13). During the last several years, the quality of health care and nursing care across the country has been questioned.

Overworked, underpaid, and undervalued nurses cannot look only to the outside for help. Much of the answer lies within nursing. Kramer and Schmalenberg (1988) found that magnet hospitals, institutions of excellence, had eliminated their internal nursing shortage by creating positive organizational conditions. In their study of 16 hospitals using the eight characteristics identified by Peters and Waterman (1982) in their best-selling book, In Search of Excellence, they found not only an absence of high turnover, constant orientation, inexperienced staff, agency nurses, and feuding staff, but also a positive, energized "upbeat" nursing staff.

Strong, well-educated head nurses were key to the success of magnet hospitals. The individual units became small, adaptive units for which the head nurses determined unit-based standards and policies (Kramer & Schmalenberg,

1988). Head nurses translated the vision, mission, philosophy, and policies to the nursing staff providing the patient care (Zander, 1983). They also were "the prime movers and allocators of the majority of staff resources" (Zander, 1983, p. 78).

Powerful, innovative leadership empowered the nursing staff at the magnet hospitals. The nurses exuded power and confidence. What was the magical leadership? How can it be taught or developed?

Area of Concern

Effective nursing leadership is critical to the delivery of health care. But how are effective nursing leaders developed? What experiences--educational preparation, continuing education, career developmental relationships, clinical and leadership experiences-- are common to effective head nurses? Traditionally, it has been assumed that outstanding clinical nurses make effective head nurses. Nurses have been promoted to their leadership position as a reward for clinical excellence. This new position is often seen as a rung on a clinical ladder not requiring either new skills (Zander, 1983) or different skills.

Purposes of the Study

The major purpose of this investigation was to identify patterns of responses to developmental experience items in a

questionnaire that would permit formation of a profile of developmental experience variables associated with the selection and preparation of outstanding head nurses. A second purpose was to ascertain whether any developmental variables would differentiate between leaders who had been classified by a professional panel of staff nurses as high in leadership behaviors from those who had been classified as low in leadership behaviors.

Importance of the Problem

Health care is a topic of great national concern. Nurses compose the largest group of health care professionals. The need for effective nurse leaders has never been greater. The head nurse is the leader at the unit level. She is responsible for the care of patients twenty-four hours a day, seven days a week. Patient safety and well-being are her responsibility. The head nurse is also the role model for all other nurses on the unit responsible for their development as nurses.

By discovering differences between high and low scoring leaders on leadership effectiveness in such developmental experiences as educational preparation, clinical and leadership experiences, career developmental relationships, and continuing education and leadership effectiveness, one may be able to devise a development pattern profile for effective head nurses.

Selective Review of the Literature

To provide an improved understanding of leadership behavior in the context of professional health care, a brief review of the massive leadership literature in general is presented, followed by an emphasis on the sparse literature on leadership development of nurse managers. Attention is given to leadership training at the basic college level, in graduate school, in continuing education offerings, and on the job itself. Specifically, the following topics are addressed: (a) leadership in general, (b) leadership in nursing, (c) nursing leadership development, (d) basic education preparation, (e) graduate education, (f) continuing education, and (g) career development relationships.

Leadership in General

Stogdill (1959, p.20) defined leadership as a process of "influencing the activities of an organized group toward goal-setting and goal-achievement." Tannebaum and Wechslerl (1959) described leadership as a process of influence exercised in a situation and directed through communication toward goal attainment.

Leadership has been extensively studied both in the laboratory and in the field of organizations over the past 100 years. Early studies were done at Harvard University (Roethlisberger & Dickson, 1940, 1952), the Ohio State University (Fleishman, Harris, & Burtt, 1955; Stogdill &

Coons, 1957), and the University of Michigan (Katz & Kahn, 1966; Likert, 1967). The Ohio State University Studies group developed the Leader Behavior Description Questionnaire (LBDQ) with twelve scales (Stogdill, 1963). In 1962, Fleishman and Harris took two of those scales, Structure and Consideration, and introduced a two-factor construct to describe leadership behavior. Later research on leader behavior included the work done by Fiedler (1972) that comprised over 20 years of research and fifty studies. This work not only explained that effective leadership results from a good fit between style and circumstance but also described two different kinds of leadership--task-oriented and relationship oriented. In a related endeavor, Hersey and Blanchard (1977) developed a leadership effectiveness model with three dimensions--task orientation, relationship orientation, and the followers' maturity. These two researchers generally agreed that leadership is based upon the operationalization of task-relevant and relationship-oriented behaviors. Hersey and Blanchard described effective leadership as the situationally appropriate mix of these two groups of behaviors.

Task oriented behavior is the same behavior as that described by Fleishman and Harris (1962) as initiating structure, which is defined as behavior directed toward organizing and delineating group activities. Consideration is behavior that is directed toward encouraging respect,

mutual trust, and rapport between the supervisor and group. This behavior is the same as that described by some leadership theorists as relationship oriented.

Leadership in Nursing

Although numerous books have been written discussing the research on leadership in general, comparatively few on nursing leadership, and even fewer on developing leadership skills in nurses have appeared. Studies have documented the importance of head nurse characteristics and leadership behaviors (Longo & Uranker, 1989; Meighan, 1990; Pedersen, 1993; Pfaff, 1987; Prescott & Bowen, 1987). Several investigators have positively correlated the Fleishman and Harris's (1962) leadership dimension of consideration in head nurses with job satisfaction (Duxbury, Armstrong, Drew, & Henly, 1984; Nealey & Blood, 1968; Pryer & Distefano, 1971).

Nursing Leadership Development

Although nursing has demonstrated the importance of leadership behaviors, there has been a paucity of research on how to develop these behaviors. "If there is anything you can say for sure about leaders, it's that they don't emerge fully formed from any kind of formal training or education" (Lee, 1989, p. 1). Effective leaders learn from their many experiences--family background, work experiences, social and community experiences, relationships with peers, bosses, and subordinates, continuing education, and formal

training. Bergman, Stockler, Shavit, Sharon, Feinberg, and Danon (1981) suggested that a preparatory program for head nurses should build on professional experiences and on basic nursing education with both formal program training and continuing education.

There has been only one identifiable study (Irurita, 1988) in the literature in which an exploration was made of the relationship between head nurse leadership effectiveness and developmental variables such as basic nursing education, present level of education, leadership continuing education, clinical experience prior to assuming head nurse role, and previous leadership experience. The small sample consisted of 37 head nurses with one to four staff nurses each evaluating each head nurse. In summary, the study revealed that previous leadership experience in school, community, or professional committees and nursing management experience were positively related to leadership effectiveness. There were no interrelationships found among the level of education, continuing education, and non-leadership experiences.

Basic Education Preparation

In the 1970s nursing schools began to emphasize interpersonal skills. Patz, Biordi, and Holm (1991) found that the most highly ranked characteristic for a nurse manager to possess was human relations skills. This variable was ranked as far more important than clinical

nursing skills. Two research studies (Dyer, Cope, Monson, & Drimmelan, 1972; Dyer, Monson, & Drimmelan, 1975) demonstrated that older nurses with much nursing experience received lower scores on leadership ability and interpersonal skill than did recent graduates. In comparing nursing students in school in 1976 with those enrolled in 1959, Gardiner (1976) found that 1976 nursing students scored higher on the Edwards Personal Preference Schedule (EPPS) (Edwards, 1953 - 1994) in autonomy than did the 1959 enrollees.

The increase in interest in development of leadership at the basic nursing preparation level resulted not only in more autonomous and interpersonally skilled nurses, but also in more studies on initial preparation of nurses with leadership skills. Techniques have been utilized that allow nursing students to put leadership and management theory to practice. In 1984, Oechsle and Volden demonstrated the success of a program that allowed students to select clinical sites based on career goals or self-identified strengths and/or weaknesses. Lawrence and Lawrence (1984) described a program in which students progressively developed leadership skills over a two-and-one-half year period. Leadership skills were measured as the students' abilities to implement change in the community.

Zanecchia (1985) evaluated the leadership ability of students before and after a course on leadership including

both theory and practice components, and observed that there was a significant improvement--the students were more democratic, less autocratic and aggressive, and less laissez-faire. Brandt and Craig (1985) presented a method for students to acquire leadership concepts by "following the leader". The students observed leaders in action and analyzed the leadership theories incorporated in the leaders' practice. Tolbert and Gardner (1985) described a clinical experience that included team leading by senior nursing students who supervised and evaluated the nursing care given by four to five junior students.

Spickerman, Lee, and Eason (1988) dealt with the difficult problem of teaching content and searching for clinical placement to reinforce those concepts by developing learning modules that dealt with conflict management, change, and motivating others. This study, as were most studies (except for Zanecchia's [1985] investigation and the comparison studies between recent nursing graduates and experienced nurses), was a case study involving evaluation of a single program. In all the articles there was either an implied or explicit assumption that interpersonal skills were essential to leadership.

Graduate Education

There have been no identifiable studies that link graduate education per se with effective head nurse leadership. In a study of 75 nurse administrators of acute

care hospitals, Koszalka (1990) demonstrated that nurse administrators with graduate degrees in nursing administration and in administration and management scored significantly higher on leadership effectiveness than did nurse administrators without such degrees. There have been some graduate programs in nursing management or administration that have had management practicums or internships as part of their degree requirements. There have been a few studies on these practicums in nursing and teaching. When studying administrative internships, Ferrerira (1970) found that attitudes of the student were not directly affected by role-model, the manager, or administrator with whom the student was assigned. But the study did show that the student's attitudes were affected by the role expectation of the significant other.

Other investigations have expressed opinions regarding graduate education. Loughran (1965) recommended post doctoral residencies for faculty members interested in developing leadership skills to serve as nurse-deans. Hills (1975) stated that internships could make the differences between moderate and outstanding leadership. Arminger (1976) described the Academic Administration Internship program which consisted of nine to fifteen months of a prospective dean interning with an experienced dean. From personal experience with a graduate practicum in nursing management, this researcher knows that graduate practicums

do exist. The literature does not reflect or evaluate this common practice. A prolonged internship with an excellent leader intuitively seems to be an ideal way to develop interpersonal skills and related skills for structuring individuals and groups toward goal accomplishment.

Continuing Education

There has been very little in the literature to support or not to support the value of continuing education in the development of leadership skills. Ingmire (1973) reported that a program designed to develop new attitudes and leadership skills was a great success and that the participants developed greater self-awareness, insight, understanding, and an increased sense of self-worth. A leadership development workshop for teachers at the University of Tennessee yielded the same positive results (Hughes & Ubben, 1970). The emphasis of the small body of literature on continuing education has been that of the development of interpersonal skills. Again the literature offered information that consisted primarily of the results of evaluation of programs, not research.

Career Development Relationships

During the last 20 years, mentoring has become a topic much written about and studied. Vance (1982) stated that most of the available research on the mentor relationship had focused on three major benefits--one of the most important being the preparation for the leadership role.

Zaleznik (1977) accentuated the importance that a sensitive mentor plays in developing leaders.

Lunding, Clements, and Perkins (1978) found that mentor relationships were essential in the development of such leadership qualities as people skills, creativity, and risk taking. "The novice leader can learn what qualities are of consequence, what skills are necessary . . . through close observation and by testing ideas while 'under the wing' of the mentor" (Vance, 1982 p. 8). The mentor relationship is much more encompassing than teaching a technique or a skill. It is essentially developmental, a helping relationship, modelled on parenting (Vance, 1982).

The mentor relationship has been researched to a greater extent than has any other area of leadership development. Sheehy (1976) stated that the mentor connection was the secret link in a successful woman's world. Her findings indicated that almost without exception women who had gained recognition in their careers had been nurtured by a mentor. Phillips' study (1977) of the career development of women managers revealed that mentoring was more common than she had expected, with 61 per cent of the managers having been mentored. Shapiro, Haseltine, and Rowe (1978) found that a role model was not enough; women desiring to advance needed a sponsor or mentor.

The previously cited studies were concerned with male dominated professions. Vance (1982) studied the experiences

of nursing leaders, most of whom attested to the importance of mentorship in their career development. Eighty-three per cent of the respondents reported the significance of a mentor relationship in their career development. Boyle and James (1990) made a similar finding in that 79% of nurse managers at a large hospital in the Pacific Northwest reported that they had had a mentor at sometime during their career and that the experience had resulted in positive changes in their careers. In a study of 36 nurse leaders in Scotland and England, Hardy (1984) observed that the mentor relationship had assisted 75% of the nurse leaders. A less positive finding was that only 43% of the mentoring episodes occurred in the early part of one's career--age 20 to 35.

This finding was in keeping with the observations of Hennig and Jardin (1977) that women tended to make their career decisions in their early thirties, when they accepted the potential reality that they might work for the rest of their lives. Perhaps many women were not open to mentorship at an earlier age. Price et al., (1987) noted that the majority of nurse executives had not planned to become nurse administrators and had not sought education for the role. However, 83% of the women stated that they had been strongly influenced by a role model or mentor. "Deliberate career planning and education in administration were, for the most part, lacking" (Price et al., 1987 p. 238).

Although the amount of research on mentorship has been abundant when compared to that in other areas in the development of nursing leaders, it suffered from small sample sizes, initial exploratory efforts, and a muddling of the mentorship concept with other career development relationships such as role-modeling, precepting, peer strategizing, and sponsorship (Yoder, 1990). A flaw in almost all the studies surveyed was the assumption that high level management positions may be equated to successful leadership. Successful leadership is more difficult to measure than the attainment of a leadership position.

Research Questions

This investigation sought to answer the following questions:

1. What significant differences, if any, were present between the developmental experiences of the head nurses who scored high in leadership behaviors and those who scored low in leadership behaviors on the Initiating Structure scale of the Leader Behavior Description Questionnaire (LBDQ) (Stogdill, 1963)?

2. What significant differences, if any, were present between the developmental experiences of the head nurses who scored high in leadership behaviors and those who scored low in leadership behaviors on the Consideration scale of the LBDQ?

3. What significant differences, if any, were present between the developmental experiences of the leaders who placed high in overall leadership behaviors and those who placed low in overall leadership behaviors on an unweighted composite of all twelve scales of the LBDQ?

4. For the sample of head nurses being evaluated for leadership effectiveness, what were the intercorrelations among the following five variables: (a) total scores on an unweighted composite of the twelve LBDQ scales furnished by the head nurses themselves, (b) total scores on an unweighted composite of the twelve LBDQ scales provided by the staff nurses, (c) ratings or scores on a single Likert-type scale item of overall leadership effectiveness given by staff nurses, (d) ratings or scores on a single Likert-type scale item of overall leadership effectiveness reported by section chiefs (supervisors), and (e) ratings or scores on a single Likert-type scale item of overall leadership effectiveness recorded by head nurses themselves?

Delimitation

The following delimitation was present: Participation was restricted to Army head nurses who supervised at least three staff nurses on units that operated for twenty-four hours per day at one of eight Army Medical Centers. Any conclusion based on the finding should be limited to the Army Nurse Corps.

Definitions of Terms

Definitions of the following terms are given to facilitate understanding of this study:

Background

The background is the collective set of experiences of the head nurse that are primarily demographic. It includes such items as age, marital status, participation in athletics, organizational membership, and birth order.

Career Development Relationships

A career development relationship is defined as a relationship in which there is a conscious goal to provide for socialization into the organization and to develop the leadership abilities of one or both partners. This developmental process includes the mentoring, role-modeling, peer and significant other support.

Clinical Experience

Clinical experience is the length of time a head nurse has been a nurse and the amount of clinical experience prior to becoming a head nurse as well as other non-leadership experiences that have been part of nursing responsibilities.

Consideration

Consideration is defined as behavior directed toward achieving respect, mutual trust, and rapport between the supervisor and group (Fleishman & Harris, 1962) as measured on the Consideration scale of the Leader Behavior Description Questionnaire (LBDQ) (Stogdill, 1963).

Continuing Education

For this study continuing education is defined as all education after entry into nursing that is not degree directed. This education can be formal or informal, such as reading journals.

Developmental Experiences

Developmental experiences are the combination of background, educational preparation, career developmental relationships, clinical and leadership experiences, and continuing education that are hypothesized to contribute to leadership behaviors.

Educational Preparation

Educational preparation refers to the highest level of education achieved and differentiates between Masters in Nursing and a non-nursing Masters.

Head Nurse

The head nurse is the first line manager of a patient care unit responsible for the delivery of nursing care twenty-four hours a day, seven days a week.

Initiating Structure

Initiating structure is defined as behavior directed toward organizing and defining group activities (Fleishman & Harris, 1962) as measured by the Initiating Structure scale of the LBDQ.

Leadership Behavior

Leadership behavior is the rating of a head nurse by a panel of three subordinate staff nurses on the LBDQ.

Leadership Experience

Leadership experience is all prior leadership to include non-nursing leadership such as being a coach or leading an athletic team or group.

Organization of the Remainder of the Study

Chapter II includes a description of the sample, measuring instrument, and the procedures used in obtaining and analyzing the data.

Chapter III presents the findings of the investigation and a discussion of the results.

Chapter IV consists of a summary of the findings, the conclusions, and the recommendations of the study.

CHAPTER II

METHODS AND PROCEDURES

This chapter provides information regarding the sample, (a) design and statistical analysis, (b) data collection procedures, (c) the instruments including aspects related to test administration and scoring, (d) methodological assumptions, and (e) limitations.

Sample

The total study population consisted of Army Head Nurses of units that operate twenty-four hours a day at Army Medical Centers within the United States. Demographic characteristics of the head nurses are set forth in Table 1. These medical centers are located in California, Colorado, Georgia, Hawaii, Texas, Washington, and Washington D.C. All the military head nurses of the continuously operating units at eight medical centers were approached through their supervisors to participate in this study. The head nurses' supervisor randomly selected three of the head nurses' subordinate staff nurses for study participation. Total sample size was 24 section chiefs (head nurses' supervisors), 124 head nurses, and 363 staff nurses. There was a 100% participation rate for section chiefs (supervisors), 94%, for head nurses, and 96%, for staff nurses. The number of staff nurse respondents for each head nurse was two to three with most head nurses having three staff nurses' ratings.

Table 1

Description of Sample of Head Nurses
(N = 124)

Variable	N	%	Variable	N	%
SEX			MARITAL STATUS		
Male	29	23%	Married	89	72%
Female	95	77%	Single	35	28%
RANK[a]			SPOUSE'S OCCUPATION[a]		
Captain	16	13%	Military	36	29%
Major	82	67%	Civilian	53	43%
Lieutenant Colonel	24	20%	Not Married	34	28%
AGE			BIRTH ORDER		
< 30	3	2%	Only Child	8	6%
30-34	8	6%	Oldest	43	35%
35-39	65	52%	Nest to Oldest	18	15%
40-44	41	33%	Middle Child	37	30%
> 44	7	6%	Youngest	18	15%
HIGHEST EDUCATION			SOURCE OF COMMISSION[a]		
Bachelor of Science in Nursing	47		ROTC	3	4%
			Direct Commission	72	58%
Other Masters	23	19%	WRAIN	14	1x%
Nursing Masters	48	39%	ANC Student Prog	32	26%
Dual Masters	5	4%	Reservist	1	< 1%
Doctorate	1	< 1%			

[a]Not all subjects provided a response.

Data Collection Procedures

Each head nurse completed the following: (a) a Developmental Experience Questionnaire (DEQ) prepared by the present author (b) the Leader Behavior Description Questionnaire (LBDQ) Form XII survey (Stogdill, 1963) describing her own behavior and (c) one single, self-describing Likert-type scale item representing her own perceived level or general leadership effectiveness with alternatives from one to five (with one being very ineffective to five being very effective). The head nurse's supervisor (the section chief) also rated the head nurse on the single Likert-type scale item of overall leadership effectiveness but did not respond to the LBDQ. Each of three staff nurses working under the head nurse also completed the LBDQ XII relative to the leadership effectiveness of the head nurse and also rated the head nurse on the single Likert-type item of general leadership effectiveness.

The chief nurse gave each section chief a packet consisting of a page with a Likert-type rating scale (one simple single item to be rated on a Likert-type scale to describe each head nurse), a packet for each head nurse in her section, and three corresponding packets for each of three staff nurses who were subordinates to the head nurse. The instructions were that each head nurse complete the Developmental Experience Questionnaire (DEQ), a scale

describing her own life history experiences, the LBDQ (an instrument intended to describe her leadership behavior), and a simple, single item appearing on a Likert-type scale, representing a rating of her overall leadership effectiveness. The section chief was to select three staff nurses at random to describe the head nurse's behavior on the LBDQ and to rate overall effectiveness on a simple, single item appearing on a Likert-type scale. All respondents were told to complete the questionnaires at their own convenience, privately, and to return them in one week.

Instrumentation

Design of the DEQ

The instrument used in this study to determine leadership development experiences was the 60-item DEQ prepared by the researcher. The objective of the instrument was to obtain complete information about a nurse's developmental experiences in five areas--background, educational preparation, clinical and leadership experiences, continuing education, and career development relationships. Prior to use for this study, the instrument was piloted on ten Army Nurse Corps officers who had a reputation for leadership excellence, but were ineligible for participation in this study. These participants suggested additional explanation and the rewording of some questions. A copy of the DEQ is contained in Appendix A.

The major influences guiding the construction and eventual selection of items for the DEQ were previous studies that linked experience with leadership behaviors (Dyer, Monson, & Drimmelan, 1975; Gluck & Charter, 1980; Robertson & Iles, 1988), and numerous case studies and anecdotal literature that related experiences, education, continuing education, role-models, mentors, and training programs to effective leadership behaviors.

LBDQ

The LBDQ Form XII is an instrument developed to obtain descriptions of a leader's behavior by members of the group being led. It can also be completed by the leader to describe her own behavior (Stogdill, 1963). This instrument was the result of the Ohio State University Studies in the 1940s. The LBDQ has been used in numerous investigations on leadership (Brown, 1967; Day & Stogdill, 1972; Goode, 1951; Halpin, 1959). The original scales developed by Hemphill (1950) measured two hypothetical constructs--Consideration and Initiating Structure. These two constructs, which are still commonly used behavior dimensions, are described by two scales of the LBDQ Form XII.

In this study these two scales were selected to define leadership behaviors along with a composite of all 12 scales of the LBDQ. An example of an item portraying the Consideration construct is "He is friendly and approachable." An example of an item representing the

Initiating Structure construct is "He schedules the work to be done" (Schriescheim & Stogdill, 1975, p. 203). The construct and empirical validity of these two dimensions has been examined (Schriesheim & Kerr, 1974; Schriesheim & Stogdill, 1975). The Kuder-Richardson reliability estimates of scores were computed for each of the subscales and were judged satisfactory (Stogdill, 1963, p. 3).

The LBDQ questionnaire consists of 100 short descriptive statements representing 12 subscales. Each subscale constitutes a complex pattern of behaviors comprising five to ten items. The subscales include (a) Representation, (b) Demand Reconciliation, (c) Tolerance of Uncertainty, (d) Persuasiveness, (e) Initiation of Structure, (f) Tolerance of Freedom, (g) Role Assumption, (h) Consideration, (i) Production Emphasis, (j) Predictive Accuracy, (k) Integration, and (l) Superior Orientation. The respondents described the leadership behaviors of their head nurse by responding to these Likert-type items with 5 choices ranging from ALWAYS (value 5) to NEVER (value 1). (Three of the 20 items are scored in the reverse direction with ALWAYS equal to one and NEVER equal to 5. The higher the scores on the Consideration scale, the more considerate the leader. The higher the standing in the scale on the Initiating Structure scale, the more structuring the leader).

The DEQ, LBDQ, and a single item on a Likert-type scale (representing a range of leadership behaviors) were administered to the subjects during February and March 1991. Coordination was accomplished with the chief nurses of all the participating hospitals in November to request their support in the collection of data from their head nurses. A letter of endorsement for the study from the chief nurse of the Army's Health Services Command was attached to each packet of questionnaires. The chief nurses were asked to assure that all section chiefs, head nurses, and three of their subordinate staff nurses were surveyed. A letter explained to each participant that the information which was for research purposes only would be kept confidential. The respondents were given one week to complete the questionnaires and a follow-up packet was sent if there were no results within three weeks.

Design and Statistical Analysis

The data from the returned questionnaires were computerized for processing to yield the following statistical data:

1. A table (Table 1) described the head nurses with simple frequency counts and percentages of head nurses on background (demographic) items.

2. Chi-square analyses were computed for responses to fifty developmental experience items (ten of the original sixty items were deleted after statistical analysis)

relative to differentiating the high and low scorers on the Initiating Structure scale, on the Consideration scale, and on the total or composite of 12 scales of the LBDQ.

3. Pearson product-moment intercorrelations among the five variables cited in the fourth research question of Chapter I were calculated and evaluated for statistical significance.

Methodological Assumptions

The following methodological assumptions were made in the study:

1. The research design and data analysis procedures were appropriate to the intent of the investigation.

2. The LBDQ was sufficiently reliable and valid for the purposes of the investigation.

3. The DEQ contained virtually all the relevant experiences that influence the development of leadership.

4. The questionnaires were administered and scored correctly.

5. The data were accurately recorded, stored, and analyzed.

6. The sample sufficiently represented Army Nurse Corps head nurses to permit the generalization of findings to at least a small degree.

7. The involved chief nurses would support the study.

Limitations

The following limitations might have affected the extent to which any results might be generalized:

1. The external validity of this study was most likely influenced by the possibility of non-random sampling of the three subordinate staff nurses. The section chiefs were instructed to choose randomly staff nurses, but the reality of the situation might have forced them to choose the three staff nurses on the day shift of the day during which they administered the questionnaire. There was no way for the researcher to insure random sampling.

2. The external validity of the study might have been compromised by inherent differences of the military medical centers from community hospitals and civilian hospitals.

3. To the extent that any of the previously mentioned methodological assumptions were not met, the validity of the study could be compromised.

CHAPTER III

ANALYSIS AND DISCUSSION OF RESULTS

In this chapter, the findings are organized according to the five research questions asked in Chapter 1. A brief discussion of the results follows.

Analysis of Findings

In Table 2, the significant differences associated with selected demographic variables between the high scorers and low scorers on the Initiating Structure scales of the LBDQ are presented. In Table 3, the significant differences between the means of the high scorers and the low scorers on the LBDQ's Consideration scales are listed. In Table 4, the significant differences between the means of the high scorers and the low scorers on all twelve scales of the LBDQ are given. Table 5 sets forth the intercorrelations of the five variables cited in the fourth research question in Chapter I.

Differences in Developmental Experiences Between High Scorers on Leadership Behaviors and Low Scorers on Leadership Behaviors on the Initiating Structure Scales of the LBDQ (Research Question 1)

Of the 50 possible differences in six potential areas--background, education, leadership experience, clinical

Table 2

Statistically Significant Relationships Within the Sample of Head Nurses Receiving High or Low Scores on the LBDQ Initiating Structure Scale Items in Selected Categories of Developmental Experiences (N = 124)

Developmental Experience Category	Percentage of Responses Associated with Those Respondents Scoring		Chi Square Value	df	P
	Low	High			
Clinical Experience (Prior to First Head Nurse Assignment)					
< 2 Yrs	12.90	11.48	10.64	4	0.031
2 - 4 Yrs	14.52	37.70			
5 - 7 Yrs	37.10	18.03			
8 - 11 Yrs	19.35	19.67			
> 11 Yrs	16.13	13.11			
Total	100.00	99.99			
Continuing Education (Head Nurse Course)					
No	11.29	27.42	4.19	1	0.041
Yes	88.71	72.58			
Total	100.00	100.00			
Continuing Education (Command & General Staff College)					
No	75.81	50.00	7.78	1	0.005
Yes	24.19	50.00			
Total	100.00	100.00			

Table 2 (Continued)

Developmental Experience Category	Percentage of Responses Associated with Those Respondents Scoring		Chi Square Value	df	P
	Low	High			
Education					
BS (Nursing)	47.46	32.20	11.99	2	0.002
MA/MS (Non-Nursing)	27.15	11.86			
MS (Nursing)	25.42	55.93			
Total	100.03	99.99			
Career Development Relationship					
Not sought/found	14.52	3.23	10.10	4	0.039
Sought/not found	12.90	8.06			
Active mentor	19.35	30.65			
Great role model	40.32	53.23			
Didn't find	12.90	4.84			
Total	99.99	100.01			

Table 3

Statistically Significant Relationships Within the Sample of Head Nurses Receiving High or Low Scores on the LBDQ Consideration Scale Items in Selected Categories of Developmental Experiences (N = 124)

Developmental Experience Category	Percentage of Responses Associated with Those Respondents Scoring		Chi Square Value	df	P
	Low	High			
Education					
BS (Nursing)	35.59	39.66	8.926	2	0.012
MA/MS (Non-Nursing)	32.20	10.34			
MS (Nursing)	32.20	50.00			
Total	99.99	100.00			
Leadership Experience (Internship)					
Yes	16.13	33.33	3.984	1	0.046
No	83.87	66.67			
Total	100.00	100.00			
Career Development Relationship (Most Influenced Leadership)					
Present/Past Supervisor	46.77	24.59	13.92	5	0.016
Spouse/Significant Other	09.68	18.03			
Teacher	00.00	06.56			
Peer/Friend	12.90	09.84			
Previous Head Nurse	12.90	27.87			
Other	17.74	13.11			
Total	99.99	100.00			

Table 4

Statistically Significant Relationship Within the Sample of Head Nurses Receiving High or Low Scores on the LBDQ Total Scale Items in One Selected Category of (Educational Level) Developmental Experiences (N = 124)

Developmental Experience Category	Percentage of Responses Associated with Those Respondents Scoring		Chi Square Value	df	P
	Low	High			
Education					
BS (Nursing)	37.93	41.38	8.261	2	0.016
MA/MS (Non-Nursing)	31.03	10.34			
MS (Nursing)	31.03	48.28			
Total	99.99	100.00			

Table 5

Intercorrelations of Scores on Five Major Variables Representing an Evaluation of Leaderhip Effectiveness of Head Nurses (N 124)

Variables	(1)	(2)	(3)	(4)	(5)
1. LBDQ Total Scores Furnished by Head Nurses Themselves	--	.14	.16	.11	.38***
2. LBDQ Total Scores Provided by Staff Nurses		--	.91***	.22*	.16
3. Ratings on a Single Likert-Type Item of Leadership Effectiveness Given by Staff Nurses			--	.22*	.17
4. Ratings on a Single Likert-Type Item of Leadership Effectiveness Reported by Section Chiefs (Supervisors)				--	.09
5. Ratings on a Single Likert-Type Item of Leadership Effectiveness Afforded by Head Nurses Themselves					--

* p < .05
*** p < .001

experience, continuing education, and career development relationships, there were, as indicated in Table 2, only five statistically significant differences in the distributions of responses in four areas--education, clinical experience, continuing education, and career development. In education the difference was observed in the area of the highest level of education achieved, χ^2 (2, $\underline{N}$ = 124) = 11.99, $\underline{p}$ = .002. The high scorers had a Masters Degree in Nursing. In clinical experience the difference was between those with 2 - 4 years of clinical experience and those with 5 - 7 years of clinical experience prior to becoming head nurses, χ^2 (4, $\underline{N}$ = 124) = 10.64, $\underline{p}$ = .031. There were two differences in continuing education both dealing with the completion of a course: (a) the difference between those who had completed the head nurse course and those who had not, χ^2 (1, $\underline{N}$ = 124) = 4.18, $\underline{p}$ = .041, and (b) the difference between those who had completed Command and General Staff College and those who had not χ^2 (1, $\underline{N}$ = 124) = 7.70, $\underline{p}$ = .005. Finally, there was a difference in career development relationships comparing those who had found mentors with those who had neither sought nor found mentors, χ^2 (4, $\underline{N}$ =124) = 10.10, $\underline{p}$ = .039.

Differences in Developmental Experiences Between High Scorers on Leadership Behaviors and Low Scorers on Leadership Behaviors on the Consideration Scales of the LBDQ (Research Question 2)

As is apparent in Table 3, the three statistically significant differences in frequencies of responses associated with the Consideration scale of the LBDQ fell in three areas--education, leadership experience, and career development relationships. In education the statistically significant difference in patterns of responses was among the highest levels of education achieved χ^2 (2, $\underline{N}$ = 124) = 8.93, $\underline{p}$ = .012. In leadership experience, the difference in response pattern was between those who had had a management or leadership internship or practicum and those who had not, χ^2 (1, $\underline{N}$ =124) = 3.98, $\underline{p}$ = .046. In the area of career development relationships, there were significant differences in the configuration of responses between high scorers and low scorers, χ^2 (1, $\underline{N}$ =124) = 13.42, $\underline{p}$ = .016.

Differences in Developmental Experiences Between High Scorers on Leadership Behaviors and Low Scorers on Leadership Behaviors on the Composite Twelve Scales of the LBDQ

(Research Question 3)

Of the 50 developmental experience items, only one item differentiated head nurses rated high from those rated low in leadership behaviors as indicated by the total score on the unweighted composite of twelve scales of the LBDQ. As shown in Table 4, the highest level of education accounted for the statistically significant outcome, χ^2 (2, N = 124) = 8.26, p = .016.

Intercorrelations Among Five Selected Variables (Research Question 4)

Among the five variables cited in Table 5, four of the ten possible correlation coefficients were statistically significant. Specifically, the four statistically significant correlations were as follows: (a) .38 ($p < .001$) between LBDQ Total Scores Furnished by Head Nurses Themselves (Variable 1) and Ratings on a Single Likert-Type Item of Leadership Effectiveness Afforded by Head Nurses Themselves (Variable 5), (b) .91 ($p < .001$) between LBDQ Total Scores Provided by Staff Nurses (Variable 2) and Ratings on a Single Likert-Type Item of Leadership

Effectiveness Given by Staff Nurses (Variable 3), (c) .22 ($p < .05$) between LBDQ Total Scores Provided by Staff Nurses (Variable 2) and Ratings on a Single Likert-Type Item of Leadership Effectiveness Reported by Section Chiefs (Supervisors) (Variable 4), and (d) .22 between Ratings on a Single Likert-Type Item of Leadership Effectiveness Given by Staff Nurses (Variable 3) and Ratings on a Single Likert-Type Item of Leadership Effectiveness Reported by Section Chiefs (Supervisors) (Variable 4).

Additional Findings

A summary question (Item 21 in the revised form of the DEQ) asked what training one had had to become a head nurse--(a) reading journals/management books and or discussion with peers, (b) observing past head nurses or supervisors, (c) active teaching and role modeling of a previous head nurse or current supervisor in leadership and management, (d) continuing education programs such as in-services and the Head Nurses Course, and (e) graduate education in management or leadership. Of 123 head nurses who responded to this item, the respective numbers selecting the previously cited responses as being primary were 33, 6, 11, 12, and 61. Pertinent to this same item was the percentage distribution of responses across the five item alternatives given by those nurses who had been classified as scoring high or low on the LBDQ Consideration scale. The relevant data are cited in Table 6.

Table 6

Statistically Significant Relationship Within the Sample of Head Nurses Receiving High or Low Scores on the LBDQ Consideration Scale Items in the Summary Question (Perceptions of Greatest Contributions to Head Nurse Leadership) (N = 124)

Developmental Experience Category	Percentage of Responses Associated with Those Respondents Scoring		Chi Square Value	df	P
	Low	High			
Reading Journals/ Management Books and/or Discussion with Peers	17.74	36.07	11.13	40	.025
Observing Past Head Nurses or Supervisors	08.06	01.64			
Active Teaching and Role Modeling of a Previous Head Nurse or Current Supervisor in Leadership and Management	14.52	03.28			
Continuing Education Programs such as In-services and the Head Nurse Course	11.29	08.20			
Graduate Education in Management or Leadership	48.39	50.82			
Total	100.00	100.01			

Discussion

A brief discussion of the findings is presented within the context of each of the four research questions set forth in Chapter I.

Research Question 1

There were five statistically significant findings in the four areas of education, clinical experience, continuing education, and career development.

Clinical experience. A head nurse with a limited amount (2-4 years) of clinical experience prior to her first head nurse position was more likely to be rated as high in Initiating Structure than a head nurse with more or with less clinical experience. There apparently was only one study in the literature (Irurita, 1988) which was concerned with the relationship between clinical experience and leadership effectiveness. No statistically significant relationship was found.

Continuing education. A totally unexpected finding was that of those head nurses who had not attended the head nurses' course (a two-week course designed to prepare nurses as head nurses), a large percentage was rated as high on Initiating Structure leadership behaviors. Even though this was a significant finding, a large portion of the 124 head nurses had attended the head nurses course (100 in all), but only a small number had not participated. It could well be that those individuals that did not take part perceived

themselves as being so prepared for the role of head nurse that they chose not to attend the course. It also should be pointed out that head nurses who had completed the correspondence course, Command and General Staff College with a large leadership component, in comparison with those who had not, were more likely to be rated high in Initiating Structure leadership behaviors.

Education. Head nurses with a Masters in Nursing were more likely to be rated high in Initiating Structure leadership behaviors than those with a BSN or Master in another field. There have been no studies of head nurses that have linked a Masters in Nursing with leadership effectiveness. Irurita (1988) found no clear relationship between level of education and leadership effectiveness. However, her sample consisted primarily of head nurses with associate degrees and diplomas.

Career development relationships. Head nurses who had an active mentor were more likely to be rated as high on Initiating Structure leadership behaviors. This finding supports the outcomes of numerous other studies (Phillips, 1977; Sheehy, 1976; Vance, 1982; Zaleznik, 1977) which concluded that mentorship enhances leadership or career development. Head nurses who neither sought nor found a mentor were more likely to be rated as low on Initiating Structure leadership behaviors. This question apparently had not been asked in previous studies.

Research Question 2

The statistically significant findings on the Consideration scale of the LBDQ were in the three areas of education, leadership experience, and career development relationships.

Education. Head nurses with a Masters in Nursing were more likely to be rated high in Consideration leadership behaviors than those with a BSN or Master in another field.

Leadership experience. A head nurse with the leadership experience of an internship or practicum was more likely to be rated as high in Consideration leadership behaviors than one who had not had such an experience. There was an anecdotal suggestion that management/leadership internships or practicums improve leadership skills (Arminger, 1976; Hills, 1975; Loughran, 1965), but there were no identifiable research studies that linked leadership internships with leadership effectiveness.

Career development relationships. Head nurses responding that a previous head nurse most influenced their leadership behavior were more likely to be rated as high in Consideration leadership behaviors. Head nurses who credited their present or past supervisor in comparison with those who had not were more likely to be rated as low in Consideration leadership behaviors. There have been no other studies identified in which these relationships were explored.

Research Question 3

There was only one statistically significant finding for the total score on all scales of the LBDQ. The head nurses with a Master of Science in Nursing were more likely to score high on leadership behaviors than those without such a degree. A nurse with a Masters in another field was more likely to score low on leadership behaviors than was one who had a Master of Science in Nursing. There have been no studies identified that were concerned with the relationship between a head nurse's graduate education and leadership effectiveness. A study reported by Koszalka (1990) revealed that nursing administrators of acute care hospitals with Masters in nursing administration or administration or management scored higher in leadership effectiveness than those without such a degree. This study indicated no difference between clinical Masters and Masters in nursing administration. Head nurses are closer to the rendering of patient care than a nurse administrator for the hospital. Clinical care is central to a head nurse's effectiveness.

Research Question 4

Among the intercorrelations of the five major variables representing an evaluation of leadership effectiveness of head nurses, the most striking finding was the occurrence of a correlation of .91 ($p < .001$) between LBDQ Total Scores Provided by Staff Nurses (Variable 2) and Ratings on a

Single Likert-Type Item of Leadership Effectiveness Given by Staff Nurses (Variable 3). This outcome would suggest that a single item provided by staff nurses in itself would be almost as effective as the total score provided by the administration of the very time-consuming LBDQ. This cost-effective item could be considered as validating the LBDQ, or conversely the LBDQ Total Score could be considered as the criterion against which the single item was found to be highly valid. Probably the only other statistically significant correlation of any practical significance was that of .38 ($p < .001$) between LBDQ Total Scores Furnished by Head Nurses Themselves (Variable 1) and Ratings on a Single Likert-Type Item of Leadership Effectiveness Afforded by Head Nurses Themselves (Variable 5). This modest correlation of .38 would indicate some degree of congruence between the perceptions registered by the head nurses themselves between a single item of leadership effectiveness and the total scores that they generated on the LBDQ.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Study

Purpose

The major purpose of this investigation was to identify patterns of responses to developmental experience items in a questionnaire that would permit formation of a profile of the developmental experience variables associated with the development of outstanding head nurses.

Variables

Two subscales of the Leader Behavior Description Questionnaire (LBDQ) (Stogdill, 1963)--namely, Initiating Structure and Consideration yielded scores provided by the head nurses themselves. The two distributions of scores were dichotomized at the median to provide two subgroups categorized as high scorers or low scorers. The formation of two subgroups provided a basis for subsequent statistical analyses on the relationship of membership in one of these two subgroups to responses to items in the DEQ.

In this investigation developmental experiences of head nurses--general background, formal preparatory education, continuing education, leadership experiences, clinical experiences, and career developmental relationships--were explored using a fifty item questionnaire entitled Developmental Experience Questionnaire (DEQ) prepared by the writer. In addition to completing the DEQ, the head nurses

self-rated themselves on leadership behaviors as represented by their responses to all 12 subscales (total scores) on the LBDQ. Each head nurse was also rated by three staff nurses in terms of the total scores reflected by the LBDQ. Moreover, a single Likert-type item of leadership effectiveness of head nurses yielded three ratings: one given by staff nurses, another by the section chiefs (supervisors), and third by the head nurses themselves.

Research Questions

For samples of 24 section chiefs (supervisors), 124 head nurses, and 363 staff nurses in seven Army Medical Centers within the United States this investigation sought to answer the following questions:

1. What significant differences, if any, were present between the developmental experiences of the head nurses who scored high in leadership behaviors and those who scored low in leadership behaviors on the Initiating Structure scale of the LBDQ?

2. What significant differences, if any, were present between the developmental experiences of the head nurses who scored high in leadership behaviors and those who scored low in leadership behaviors on the Consideration scale of the LBDQ?

3. What significant differences, if any, were present between the developmental experiences of the leaders who placed high in overall leadership behaviors and those who

placed low in overall leadership behaviors on an unweighted composite of all twelve scales of the LBDQ?

4. For the sample of head nurses being evaluated for leadership effectiveness, what were the intercorrelations among the following five variables: (a) total scores on an unweighted composite of the twelve LBDQ scales furnished by the head nurses themselves, (b) total scores on an unweighted composite of the twelve LBDQ scales provided by the staff nurses, (c) ratings or scores on a single Likert-type scale item of overall leadership effectiveness given by staff nurses, (d) ratings or scores on a single Likert-type scale item of overall leadership effectiveness reported by section chiefs (supervisors), and (e) ratings or scores on a single Likert-type scale item of overall leadership effectiveness recorded by head nurses themselves?

Only one investigation in the research literature could be identified that linked developmental experiences with leadership effectiveness of head nurses (Irurita, 1988). This study involved only a limited sample of 37 head nurses and 82 staff nurses. It was thought that identification of those developmental experiences important to the leadership effectiveness of head nurses would be useful in the selection of future head nurses, and in the training of those staff nurses who aspire to become head nurses.

Psychometric Procedures

The following psychometric procedures were completed:

1. A table was developed describing the head nurses' background using simple frequency counts and percentages.

2. Chi square analyses were completed for fifty developmental experience items differentiating the high and low scorers on the Initiating Structure subscale, the Consideration subscale and the unweighted composite (total) of all subscales of the LBDQ.

3. Ten Pearson product-moment intercorrelations coefficients were computed among the five major variables enumerated in the fourth research question and evaluated for statistical significance.

Selected Findings

Within the framework of the four research questions posed, the following statistical outcomes were noted:

1. With respect to those head nurses who received high scores or low scores on the LBDQ Initiating Structure subscale items, statistically significant relationships were noted between placement in the high scoring or low scoring subgroups and (a) clinical experience prior to the first head nurse assignment (with 2 to 4 years being optimal), (b) participation in continuing education courses, (c) prior formal education leading to a college degree (with a Master of Science degree in Nursing being a decisive contributor to membership in the high scoring subgroup), and

(d) relationships in career development such as those with an active mentor or a great role model.

2. With respect to those head nurses who received high scores or low scores on the LBDQ Consideration subscale items, statistically significant relationships were noted between placement in the high scoring or low scoring subgroups and (a) prior formal education leading to a college degree (with a Master of Science degree in Nursing being once again a decisive contributor to membership in the high scoring subgroup), (b) participation in a leadership experience internship, and (c) with a significant other person relationship in career development (with the association with a present or past supervisor corresponding to a higher incidence of placement in the low scoring subgroup than in the high scoring subgroup--46.77% versus 24.59%).

3. With respect to those head nurses who received high scores or low scores on the LBDQ Total Scale items, the only DEQ item revealing a statistically significant relationship to placement in the high or low scoring subgroup was that of prior formal education leading to a college degree with the Master of Science in Nursing yielding a much higher frequency of placement in the high scoring than in the low scoring subgroup--48.28% versus 31.03%.

4. Among the five variable intercorrelated, a coefficient of .91 ($p < .001$) was noted between LBDQ Total

Scores Provided by Staff Nurses (Variable 2) and Ratings of a Single Likert-Type Item of Leadership Effectiveness Given by Staff Nurses (Variable 3); a modest coefficient of .38 ($p < .001$) was observed between LBDQ Total Scores Furnished by Head Nurses Themselves (Variable 1) and Ratings of a single Likert-Type Item of Leadership Effectiveness Afforded by Head Nurses Themselves (Variable 5); the remaining eight coefficients were .22 or lower.

Conclusions

The following conclusions evolved from the data analyses:

1. Exhibiting behaviors revealing high Initiating Structure on the LBDQ measure in contrast to low Initiating Structure behaviors appears to be significantly related to clinical experience, participation in continuing education courses, the holding of a degree of Master of Science in nursing, and a prior association with an active mentor or great role model.

2. Demonstrating behaviors revealing high Consideration on the LBDQ measure in contrast to low Consideration behaviors seems to be significantly associated with holding of a degree of Master of Science in Nursing, having had a leadership experience such as an internship, and a limited relationship with a present or past supervisor.

3. Ratings on a single Likert-type item of leadership effectiveness provided by staff nurses shows evidence of the being a highly useful indicator in evaluating the leadership capabilities of head nurses as evidenced by its high correlation with the LBDQ total scores provided by the staff nurses. Such a single item shows great promise as being highly cost effective.

Recommendations

The following recommendations are offered:

1. Within the military setting it would appear that nurses aspiring to become head nurses should be encouraged to acquire a Masters degree in Nursing between their seventh and fourteenth year.

2. A qualitative methodology of interviewing outstanding head nurses and analyzing their responses using the ethnographic method might yield additional insights into what has contributed to their outstanding leadership.

3. Results of this study should be used in programs, the objectives of which are the identification and development of head nurse leaders who will contribute positively to the delivery of health care.

4. This study needs to be replicated in the civilian community.

REFERENCES

Arminger, B., Sr. (1976). The educational crises in the preparation of deans. Nursing Outlook, 24(9). 164-168.

Bergman, R., Stockler, R. A., Shavit, N., Sharon, R., Feinberg, D., & Danon, A. (1981). Role selection and preparation of unit head nurses--III. International Journal of Nursing Studies, 18(4), 237-250.

Boyle, C., & James, S. K. (1990). Mentoring. Nursing Administration Quarterly, 15(1), 44-48.

Brandt, M. A., & Craig, R. M. (1985). Follow the leader: A learning experience. Journal of Nursing Education, 24(4), 139-142.

Brown, A. P. (1967). Reactions to leadership. Education Administration Quarterly, 3, 62-73.

Day, D. R., & Stogdill, R. M. (1972). Leader behavior of male and female supervisors: a comparative study. Personnel Psychology, 25, 353-360.

Duxbury, M. L., Armstrong, G. D., Drew, D. J., & Henly, S. (1984). Head nurse leadership style with staff nurse burn out and job satisfaction in neonatal intensive care units. Nursing Research, 33(2), 97-101.

Dyer, E. D., Cope, J., Monson, M. A., & Drimmelan, J. B. (1972). Can job performance be predicted from biographical personality, and administrative climate inventories? Nursing Research, 21, 294-303.

Dyer, E. D., Monson, M., & Drimmelan, J. B. (1975). What are the relationships of quality patient care to nurses performance, biographical, and personality variables? Psychological Reports, 36, 255-256.

Edwards, A. L. (1953-1994). Edwards Personal Preference Schedule. San Antonio, TX: Psychological Corporation.

Ferreira, J. L. (1970). The administrative internship and role change: A study of the relationship between interaction and attitudes. Education Administrative Quarterly, 6(1), 70-90.

Fiedler, F. (1972). The effects of leadership training and experience: contingency model interpretation. Administrative Science Quarterly, 17(4), 453-470.

Fleishman, E. A., & Harris, E. F. (1962). Patterns of leadership behavior related to employee grievances and turnover. Personnel Psychology, 15, 43-56.

Fleishman, E. A., Harris, E. F. & Burtt, H. E. (1955). Leadership and supervision in industry. Columbus, OH: The Ohio State University.

Gardiner, H. W. (1976). Performance of student nurses on the Edwards Personal Preference Schedule. Journal of Psychology, 94, 297-300.

Gluck, M., & Charter, R. (1980). Personal qualities of nurses implying need for continuing education to increase interpersonal and leadership effectiveness. Journal of Continuing Education in Nursing, 11(4), 29-36.

Goode, C. E. (1951). Significant research on leadership. Personnel, 27, 342-350.

Halpin, A. W. (1959). The leadership behavior of school superintendants (2nd ed.). Chicago, IL: Chicago University.

Hardy, L. K. (1984). Emergence of nursing leaders--a case of in spite of, not because of. International Nursing Review, 31(1), 11-15.

Hemphill, J. K. (1950). Leader behavior description. Columbus, OH: Personnel Research Board, The Ohio State University.

Hennig, M., & Jardin, A. (1977). Women executives in the old boy network. Psychology Today, 10(1), 76-81.

Hersey, P. & Blanchard, K. H. (1977). Management of Organizational Behavior: Utilizing Human Resources (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Hills, R. J. (1975). The preparation of administrators: some observations from the firing line. Education Administrative Quarterly, 21(3), 1-20.

Hughes, L. W., & Ubben, G. C. (1970). New leadership for the secondary school. NASSP Bulletin, 54(347), 62-69.

Ingmire, A. E. (1973). The effectiveness of a leadership program in nursing. Journal of Int. Studies, 10(1), 3-17.

Irurita, V. (1988). A study of nurse leadership. The Australian Journal of Advanced Nursing, 6(9), 43-50.

Katz, D. & Kahn, R. L. (1966). Social psychology of organizations. New York, NY: Wiley.

Koszalka, M. (1990). Preparing nursing leaders. Nursing Management, 21(7), 23.

Kramer, M., & Schmalenberg, C. (1988). Magnet hospitals: Part I. Journal of Nursing Administration, 18(1), 13-24.

Lawrence, S. A., & Lawrence, R. M. (1984). Leadership--What it is and how to teach it. Journal of Nursing Education, 23(4), 173-176.

Lee, C. (1989). Can leadership be taught? Training, 26(7), 19-26.

Likert, R. (1967). The human organization. New York: McGraw-Hill.

Loughran, H. (1965). A special training program for prospective deans. Nursing Outlook, 13(10), 34-36.

Longo, R. A., & Uranker, M. M. (1989). Why nurses stay: A positive approach to the nursing shortage. Nursing Management, 20(6), 78-79.

Lunding, F. J., Clements, G. L., & Perkins, D. S. (1978). Everyone who makes it has a mentor. Harvard Business Review, 56(4), 89-101.

Meighan, M. M. (1990). The most important characteristics of nurse leaders. Nursing Administration Quarterly, 15(1), 63-69.

Nealy, S. M., & Blood, M. R. (1968). Leadership performance of nursing supervisors at two organizational levels. Journal of Applied Psychology, 52(10), 414-422.

Oechsle, L. H., & Volden, C. M. (1984). Teaching leadership in nontraditional settings. Nursing Outlook, 32(6), 313-315.

Patz, J. M., Biordi, D. L., & Holm, K. (1991). Middle nurse manager effectiveness. Journal of Nursing Administration, 21(1), 15-24.

Pedersen, A. (1993). Qualities of the excellent head nurse. Nursing Administration Quarterly, 18,(1), 40-50.

Peters, T. J. & Waterman, R. H. (1982). In search of excellence. New York, NY: Harper & Row.

Pfaff, J. (1987). Factors related to job satisfaction/dissatisfaction of registered nurses in long term care facilities. Nursing Management, 18(8), 51-52.

Phillips, L. L. (1977). Mentors and proteges: A study of the career development of women managers and executives in business and industry. Unpublished doctoral dissertation. University of California, Los Angeles, CA.

Prescott, P. A., & Bowen, S. A. (1987). Controlling nursing turnover. Nursing Management, 18(6) 60-66.

Price, S. A., Simms, L. B., & Pfoutz, S. K. (1987). Career advancement of nurses executives: planned or accidental? Nursing Outlook, 35(5), 236-238.

Pryer, M. W., & Distefano, M. K. (1971). Perceptions of leadership behavior, job satisfaction, and internal-external locus of control across three nursing levels. Nursing Research, 20, 534-537.

Robertson, I. T., & Iles, P. A. (1988) Approaches to managerial selection. In C. L. Cooper & I. Robertson (Eds). International review of industrial and organizational psychology (pp. 159-211). Chichester, England: Wiley.

Roethlisberger, F. J. & Dickson, W. J. (1940). Management and the worker. Cambridge, MA: Harvard University Press.

Roethlisberger, F. J. & Dickson, W. J. (1952). Counselling in an organization. Cambridge, MA: Harvard University Press.

Schriesheim, C. A., & Kerr, S. (1974). Psychometric properties of the Ohio State University Leadership Scales. Psychological Bulletin, 81, 756-765.

Schriesheim, C. A., & Stogdill, R. M. (1975). Differences in factor structure across three versions of the Ohio State leadership scales. Personnel Psychology, 28, 189-206.

Shapiro, E., Haseltine, F., & Rowe, M. (1978). Moving up: Role models, mentors, and the patron system. Sloan Management Review, 19(3), 51.

Sheehy, G. (1976). The mentor connection and the secret link in the successful woman's life. New York, 8, 33-39.

Spickerman, S., Lee, B. T., & Eason, F. R. (1988). Use of learning modules to teach nursing leadership concepts. Journal of Nursing Education, 27(2), 78-82.

Stogdill, R. M. (1959). Individual behavior and group achievement. New York: Oxford Universitiy Press.

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

Stogdill, R. M. & Coons, A. E. (Eds.). (1957). Leader behavior: Its description and measurement. Columbus, Ohio: The Ohio State University.

Tannenbaum, R. & Wechslerl, C. (1959). Leadership and organizations: A behavioral approach. New York: McGraw-Hill.

Tolbert, R., & Gardiner, K. (1985). Can you learn to be a leader? Nursing Success Today, 2(7), 10-15.

Vance, C. N. (1982). The mentor connection. Journal of Nursing Administration, 12(4), 7-13.

Yoder, L. (1990). Concept of mentoring. Nursing Admin Quarterly, 15(1), 9-19.

Zaleznik, A. (1977). Managers and leaders: Are they different? Harvard Business Review, 55(3), 76.

Zander, K. (1983). Management training won't work...unless nursing administration provides it. Nursing Administration Quarterly, 7(2), 77-87.

Zanecchia, M. D. (1985). Experiential learning and changing leadership style. Journal of Nursing Education, 24(9), 360-362.

APPENDIX A

THE DEVELOPMENTAL EXPERIENCE QUESTIONNAIRE

DEVELOPMENTAL EXPERIENCE QUESTIONNAIRE

Purpose of the Inventory

On the following pages is a list of questions that describe your background and developmental experiences that may have influenced your present leadership behaviors. Although some items may appear similar, they express differences that may be different in their effects on the development of leadership behaviors. Its only purpose is to assist in a study of the development of leadership within the Army Nurse Corps.

Confidentiality

This information will be treated as confidential and will not be provided except in summary form. To help ensure your anonymity an envelope is provided in which to seal both questionnaires (the LBDQ and this DEQ). Sealed envelopes should be returned to your supervisor within one week of receipt.

Patsy L. Maloney, LTC, AN
Nursing Education and Staff Development
Tripler Army Medical Center
Telephone: 808-433-5210 (duty); 808-623-5280 (home)

(ORIGINAL 62-ITEM QUESTIONNAIRE)

1. What is your sex?
   A. Female
   B. Male

2. What is your age?
   A. 30 or younger
   B. 30-35
   C. 35-40
   D. 40-45
   E. Over 45

3. What was your entry level nursing education?
   A. LPN
   B. Associate Degree
   C. Diploma
   D. BSN
   E. Other--Masters or Doctorate

4. What is your highest education level?
   A. BSN
   B. Masters other than nursing
   C. Masters in nursing
   D. Dual Masters
   E. Doctorate

5. How were you commissioned?
   A. ROTC
   B. Direct commission
   C. WRAIN (Walter Reed Army Institute of Nursing)
   D. Army Nurse Corps Student Program
   E. Called to active duty from reserves

6. What was your position in order of birth?
   A. Only child
   B. Oldest
   C. Next to the oldest
   D A "Middle" child
   E. Youngest

7. What is your marital status?
   A. Single
   B. Married
   C. Divorced or widowed and remarried
   D. Divorced or widowed and not remarried
   E. Separated

8. Which of the following best describes your spouse?
   A. I am presently not married
   B. An enlisted service member
   C. A military officer
   D. A civilian manager
   E. A civilian non-manager

9. Which of the following best describes athletic activities in which you have participated?
   A. Rough sports like football, hockey, soccer, and lacrosse.
   B. Sports like baseball, basketball, softball.
   C. Individual activities like ballet, gymnastics, swimming, horseback riding, running.
   D. Outdoor sports like hunting, fishing, hiking.
   E. I have not participated to any extent in athletic activities.

10. In sports, have you ever served as a team leader/captain?
   A. No
   B. Yes

11. In sports, have you ever coached a team or individuals?
   A. No
   B. Yes

12. Which of the following best describes the type of organization in which you have been an active member? (select all that apply)
   A. None
   B. Church
   C. Service organization
   D. Professional organizations
   E. Neighborhood organizations

13. In how many organizations have you held office?
   A. None
   B. One or two minor offices
   C. One or two major offices
   D. Several minor offices
   E. Several major offices

14. How long have you been a nurse?
   A. Less than 4 years
   B. 4 to 7 years
   C. 8 to 11 years
   D. 12 to 15 years
   E. 16 years or longer

15. How long have you been in the Army Nurse Corps? (Do not count years in a student nurse program)
   A. Less than 4 years
   B. 4 to 7 years
   C. 8 to 11 years
   D. 12 to 15 years
   E. 16 or longer

16. How long have you been in your present position as head nurse?
   A. Less than 1 year
   B. 1 year
   C. 2 years
   D. 3 years
   E. Greater than three years

17. How many prior head nurse positions have you held?
   A. None
   B. 1
   C. 2
   D. 3
   E. 4 or more

18. Excluding your present head nurse position, how much prior experience have you had as a head nurse?
   A. Less than 1 year
   B. 1-2 years
   C. 3-4 years
   D. 5-6 years
   E. 7 or more years

19. To how many professional organizations do you belong?
   A. None
   B. 1
   C. 2
   D. 3
   E. 4 or more

20. How much time do you spend reading professional journals?
   A. None
   B. Less than 1 hour a week
   C. 1 to 2 hours a week
   D. 2 to 3 hours a week
   E. More than 3 hours a week

21. Do you read leadership/management journals?
   A. No
   B. Yes

22. Which of the following books do you read most frequently during leisure time?

A. Fiction
B. Social Science
C. Nursing
D. Management/Leadership
E. Current nonfiction

23. How is your first head nurse in the Army Nurse Corps best described?

A. A role model of clinical expertise
B. A role model of leadership who developed subordinates' leadership
C. An effective leader of the unit or ward, but did not develop subordinates as leaders
D. Neither an effective leader nor a clinical role model
E. Combined all roles effectively--leader, clinical expert, and leadership developer

24. Of your previous Army Nurse Corps leaders, how many embodied the roles of clinical expert, effective leader, and professional developer of subordinates?

A. None
B. 1
C. 2
D. 3
E. 4 or more

25. Of your previous Army Nurse Corps leaders, how many embodied the roles of effective leader and professional developer of subordinates?

A. None
B. 1 or 2
C. 3 or 4
D. 5 or 6
E. 7 or more

26. Your training as a head nurse has been primarily from:

A. Reading journals/management books and or discussion with peers
B. Observing past head nurses or supervisors
C. Active teaching and role modeling of a previous head nurse or current supervisor in leadership and management
D. Continuing education programs such as in-services and the Head Nurses Course
E. Graduate education in management or leadership

27. Which of the following contributed most to your development as a leader?
   A. A senior, influential person who invested time and effort into guiding my development
   B. Nothing, I don't feel as if I have been developed as a leader
   C. My graduate education
   D. My continuing education--in-service and short courses
   E. My previous experiences as a leader

28. The person most influential on your overall development as a leader is:
   A. My present or past supervisor
   B. My spouse or significant other
   C. A past teacher
   D. A peer/friend
   E. A previous head nurse
   F. Other (parent, relative, etc.)

29. Your present day-to-day leadership behaviors are most influenced by which of the following?
   A. My immediate supervisor
   B. My spouse/significant other
   C. My peers
   D. My past leadership experiences
   E. My education

30. Have you attended the Head Nurses Course?
   A. No
   B. Yes

31. Have your attended the Advanced Course?
   A. No
   B. Yes

32. Have you attended Combined Arms & Staff College (CAS Cubed)?
   A. No
   B. Yes

33. Have you completed Command and General Staff College?
   A. No
   B. Yes

34. Have you had any supervisory experience other than head nurse?
   A. No
   B. Yes

35. Have you ever been an evening or night supervisor?
   A. No
   B. Yes

36. Have you ever been a section chief, chief, nursing administration or chief nurse?
   A. No
   B. Yes

37. Which of the following best describes your participation in leadership or management continuing education?
   A. Never
   B. Once a year
   C. Twice a year
   D. Once a quarter
   E. Monthly

38. Which of the following areas was the major concentration of your graduate studies?
   A. Management/Administration
   B. Clinical-Nursing
   C. Education
   D. None, I have a graduate degree in a different area
   E. None, I have not participated in a graduate program

39. How much clinical nursing experience did you have prior to your first assignment as a head nurse?
   A. Less than 2 years
   B. 2-4 years
   C. 5-7 years
   D. 8-11 years
   E. More than 11 years

40. How many hours of leadership/management continuing education have you attended in the last 5 years?
   A. 25 hours or less
   B. 26-50 hours
   C. 51-75 hours
   D. 75-100 hours
   E. More than 100 hours

41. Which of the following statements best describes the mentor relationships you have found in your career?
   A. Did not seek and did not find a mentor
   B. Sought but did not find a mentor
   C. Had an outstanding role-model, but not an active mentor
   D. Had an active mentor, who modelled leadership and took an active interest in my career
   E. Did not find a role model to emulate.

42. Did your undergraduate program have a leadership/management component?
   A. Yes
   B. No

43. Did your graduate program have a leadership/management component?
   A. Yes
   B. No
   C. I did not attend graduate school.

44. Have you ever participated in a management/leadership practicum or internship?
   A. Yes
   B. No

45. What is your present military rank?
   A. Captain
   B. Captain (P)
   C. Major
   D. Major (P)
   E. Lieutenant Colonel

46. Did your undergraduate program emphasize interpersonal skills?
   A. Yes
   B. No

47. Did your graduate program emphasize interpersonal skills?
   A. Yes
   B. No
   C. I did not attend a graduate program.

48. Have you participated in any practicums or clinical experiences designed to improve interpersonal skills?
   A. Yes
   B. No

49. How many hours of interpersonal or people skills continuing education have you attended in the last 5 years?
   A. Less than 25 hours
   B. 25 to 50 hours
   C. 50 to 75 hours
   D. 75 to 100 hours
   E. > 100 hours

50. Have you ever held any of the staff positions? (For example, Recruiting or ROTC Command; Instructor or Director of a course; NESD; QA; Clinical Nurse Specialist; NMA.
   A. No
   B. Yes

51. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of education facilitator
   A. No
   B. Yes

52. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of quality assurance facilitator
   A. No
   B. Yes

53. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of representative to the policy and procedure committee
   A. No
   B. Yes

54. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of CPR or other NESD volunteer instructor
   A. No
   B. Yes

55. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of Infection Control Facilitator
   A. No
   B. Yes

56. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of Standardization Committee
   A. No
   B. Yes

57. As a Clinical Staff Nurse, I did not volunteer for or was assigned to the additional duty of Standardization Committee
   A. No
   B. Yes

58. In which of the following clinical areas do you now work?
   A. Medical-surgical unit
   B. Post-partum/antepartum unit
   C. Normal newborn or pediatrics unit
   D. Intensive care unit--adult, peds, or neonate
   E. Labor and delivery
   F. Emergency room
   G. Recovery room
   H. Other (specify)_____

59. Which of the following clinical areas do you consider your specialty?

A. Medical-surgical unit
B. Pediatrics
C. Intensive care--adult, peds, neonate
D. Obstetrics
E. Emergency
F. Other (specify)_____

60. What was the maximum number of staff you supervised as a charge/staff nurse?

A. 1-2
B. 3-4
C. 5-6
D. 7-8
E. more than 8

61. How many people work for you now?

A. 4-8
B. 9-13
C. 14-17
D. 18-21
E. 22 or more

62. Do you have any additional information or comments about experiences that have contributed to your development as a leader?

(REVISED 50-ITEM QUESTIONNAIRE)

1. What is your sex?
   A. Female
   B. Male

2. What is your age?
   A. 30 or younger
   B. 30-35
   C. 35-40
   D. 40-45
   E. Over 45

3. What is your highest education level?
   A. BSN
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8. In sports, have you ever served as a team leader/captain?
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9. In sports, have you ever coached a team or individuals?
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   B. No
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   A. Yes
   B. No

40. What is your present military rank?
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   B. Captain (P)
   C. Major
   D. Major (P)
   E. Lieutenant Colonel

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   B. No
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B. Yes

48. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of representative to the policy and procedure committee
A. No
B. Yes

49. As a Clinical Staff Nurse, I volunteered for or was assigned to the additional duty of CPR or other NESD volunteer instructor
A. No
B. Yes

50. Do you have any additional information or comments about experiences that have contributed to your development as a leader?

APPENDIX B

LEADERSHIP EFFECTIVENESS RATINGS

SECTION CHIEF'S RATING

Please rate each of your head nurses as a leader.

How would you describe each of the following headnurses as a leader (motivating others to accomplish the nursing care mission)?

	1 very ineffective	2	3 average	4	5 very effective
head nurse#1 Serial #_____	1	2	3	4	5
head nurse#2 Serial #_____	1	2	3	4	5
head nurse#3 Serial #_____	1	2	3	4	5
head nurse#4 Serial #_____	1	2	3	4	5
head nurse#5 Serial #_____	1	2	3	4	5
head nurse#6 Serial #_____	1	2	3	4	5
head nurse#7 Serial #_____	1	2	3	4	5

HEAD NURSE SELF-RATING

Serial #_____

Please answer the following question:

All in all how effective do you think your leadership behavior is?

1	2	3	4	5
very ineffective		average		very effective

STAFF NURSE RATING

Serial #_____

Please answer the following question:

All in all how effective do you think your head nurse's leadership behavior is?

1	2	3	4	5
very ineffective		average		very effective