

**AN ANALYSIS OF NURSE EDUCATORS' EDUCATIONAL
ORIENTATION: ANDRAGOGICAL OR PEDAGOGICAL**

by

Mildred Allman Hopkins

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APPROVED:

H. W. Stubblefield, Chairman

L. H. Cross

L. Miles

W. C. Giegold

W. H. McAfee

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Blacksburg, Virginia

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Chapter 1

THE PROBLEM

Background of the Problem

Nursing education has traditionally been a highly directive and tightly controlled process since the first schools of nursing were established in the United States hospitals in 1873. The first schools were patterned after public schools with the students known as "pupil nurses" and the head of the school called the "principal." The students were taught by the apprentice method; each student worked under the direction of a more experienced nurse. The older nurse who taught the student was cast in the role of strict disciplinarian, giver of information and evaluator of how well the student performed the prescribed duties. In this manner each nurse in turn learned the value of conformity to hospital rules and doctors' orders. In the late nineteenth century, Dock (1893:96) wrote that "absolute obedience must be the foundation of the nurse's work . . . and the price of the well-drilled nurse is to make this service perfect."

As a result of this educational process, the practice of nursing evolved as task oriented rather than as intellectually directed. The nurse was prepared to carry out procedures assigned by the doctor and to perform tasks, such as bedmaking, for the patient. Psycho-motor skills were more important than cognitive ability. The nursing image was that of a caring, dedicated person content to be a hand-

maiden to the physician. A nurse, it was believed, did not need to be a problem solver, make decisions, or continue her education after the basic preparatory program was completed. Any learning that occurred later resulted from experience on the job.

With the practice setting described above in mind, the traditional or pedagogical approach employed by teachers of children was also believed to be appropriate for teachers of nurses. Hadley (1975:7) identified the pedagogically oriented educator as one who sees the teacher's role as that of authority, expert, director of students' intellectual efforts and controller of subject matter. This educator has as his major concern that learners acquire knowledge of ideas and practices of the past (tradition) which have been accepted as effective (conventional). This seemed to be the appropriate attitude for nurse educators when the major virtue of nursing students was obedience. It, however, hardly provides support for the development of an autonomous, risk-taking, self-directive student.

Through the years the behaviors expected of practicing nurses have changed as nursing has sought identification as a profession. In nurses, attributes such as self-regulation, problem-solving, critical thinking, and commitment to education are now highly prized; obedience is deemphasized. As the expectations for nursing practice have changed it would be expected that the approach to nursing education would have changed also. Jacox (1978:12) acknowledged that progress has been made but noted that "obedience is still seen (by selection committees) as a major virtue for young people who are interested in becoming nurses." The student nurse is expected to conform, be non-assertive,

and malleable.

The pedagogical orientation of nurse educators has been identified as one of the reasons why the preparation of nurses for practice has not kept pace with the demands placed on them by the profession and society to assume greater roles as providers of health care and as continuing learners. Cooper (1977.7), in an article published in 1969, wrote that "Poor teaching in schools of nursing may ... have taken its toll in discouraging learning." Eleven years later Knowles (1980) observed that one of the reasons for a tendency toward legislated requirements for continuing education for health professionals is that the health professions have done a poor job in teaching students how to be self-directed in learning.

The teaching methods commonly utilized in schools of nursing have not encouraged students to be independent in seeking learning experiences. Closely directed learning activities in the classroom and in the clinical laboratory leave little room for the students to grow by having to seek answers for themselves. Fahy said that nursing educators should look not so much at what they teach but how they teach it:

Past and sometimes present curricula offerings in undergraduate programs, with their emphasis on a rigid program for all students ... can hardly cope with the present problems of nursing practice ... It is believed that to meet the demands of the future, emphasis in nursing education at the undergraduate level is best placed on the use, rather than the mere acquisition, of knowledge and its sources.
(Fahy 1978:24)

Knowles points out that when an individual achieves a self-concept of essential self-direction he psychologically becomes adult. Students who have entered a professional school "have made a big

step toward seeing themselves as essentially self-directive ... Any experience that they perceive as putting them in a position of being treated as children is bound to interfere with their learning."

(Knowles 1973:45) Most people, writes Knowles (1973:42), including people in professional training, have been taught as if they were children.

In order for nurse educators to teach nursing students as adults, rather than children, it may be necessary for them to accept and internalize a new orientation to education, that of andragogy. Andragogy, according to Knowles (1973), is a new technology for the education of adults which is evolving from a rapidly developing theory of adult learning. Andragogy differentiates assumptions about the characteristics of adult learners from assumptions about child learners. The andragogically oriented educator, as described by Hadley (1975:7):

... perceives his relationship to learners as that of helper, consultant, resource, and co-learner or co-inquirer ... The andragogical educator assesses the learning effectiveness of specified situations by the degree to which learners participate in determination of their learning needs, in choice of learning objectives, and in diagnosis and rediagnosis of achievement of these objectives.

These attitudes would be appropriate for educators if nursing students are "psychological adults." In the andragogically oriented environment the learner feels responsible for his learning, his objectives and his use of resources.

In the literature, the need for a new orientation to continuing nursing education has been recognized for some time. McKenna (1978:18), in writing of these needs for faculty of colleges and universities to assume more responsibility for the continuing education of nurses, said

this:

It will mean that we will have to have faculty with different kinds of expertise than we normally have seen in large numbers on our faculties. We do not usually have adult learners as students in institutions of higher learning at the baccalaureate level. Now, the faculty will be dealing only with adult learners, whose characteristics are quite different from the young adult or the child, and the faculty who teaches them needs to be prepared to do so.

This statement by McKenna, a dean of a baccalaureate program in nursing, points to the need for a consideration of the andragogical approach in generic nursing programs. At times the graduates of traditional nursing schools have difficulty adjusting to continuing education programs presented with an andragogical approach (Burgess, 1974; Miller, 1975; Thomas and Heick, 1970).

The many changes in nursing practice have been recognized by Chaska (1978), Aydelotte (1978), and Christman (1978), who stressed the need for a new approach to nursing education. Christman (1978: 364) characterizes this new approach as the development of centers of excellence in nursing (universities) where there is a "cultivation of a learning milieu for students" which will prepare nurses to move into a "full autonomous model" (Christman 1978:362). Implementation of Christman's idea may be difficult until a different orientation to education has been interjected into the educational preparation of the teachers themselves. Nurse educators may be perpetuating the traditional approach to education because they themselves were taught in that manner.

Hershel Hadley in 1975 developed the Educational Orientation Questionnaire (EOQ) for the purpose of assessing educators' orientation

with respect to the constructs of andragogy and pedagogy. After examining theories of learning and teaching, Hadley was able to indicate which were pedagogically orientated and which were andragogically oriented. His instrument provides a means of empirically assessing or measuring these two "ideal" types of educational orientations.

Although there is abundant literature concerning curriculum development, teaching strategies, writing objectives, and problems of faculty, there is little written on the educational orientation of nurse educators toward andragogy or pedagogy in associate degree, diploma, or baccalaureate degree schools of nursing. There is literature which describes the characteristics of the three types of educational programs and the desired competencies of these graduates. There is a paucity of data, however, about the orientations of faculty toward education which would foster or inhibit students learning necessary to bring about the desired behaviors of graduates of the three types of nursing education programs.

Statement of the Problem

The problem addressed by this study was the assessment of the andragogical-pedagogical orientation of nurse faculty in associate degree, diploma, and baccalaureate schools of nursing with respect to the andragogical-pedagogical orientation of other adult educators. Specifically, two research questions were posed:

1. What is the andragogical-pedagogical orientation of nurse faculty in associate degree, diploma, and baccalaureate schools of nursing with respect to the andragogical-pedagogical orientation of

other adult educators as assessed by Hadley (1975) using the Educational Orientation Questionnaire?

2. What relationship, if any, exists between the dependent variable, educational orientation, and the independent variables:

- a. Years in Nursing Practice
- b. Years in Nursing Education
- c. Geographic Location of Basic Nursing Education
- d. Educational Background
- e. Current Appointment
- f. Type of Employing Institution
- g. Subject Matter
- h. Level of Position
- i. Instructional Setting
- j. Preparation of Syllabus
- k. Adult Education Courses Completed
- l. Continuing Education Courses Taught
During Past Year
- m. Attitude Toward Mandatory Continuing
Education for Relicensure
- n. Pursuing Advanced Degree

Objectives of the Study

The first objective of the study was to obtain valid data about nurse educators' attitudes toward adult education. More specifically, the data obtained permitted assessment of the educational orientation of nurse educators in associate degree, diploma and

baccalaureate schools of nursing with respect to a numerical continuum varying from consistently pedagogical on the one extreme to consistently andragogical on the other.

The second objective was to compare the mean score of nurse educators as assessed by the EQQ with the mean score of other adult educators also using the EQQ to determine if the mean scores differed significantly and, if so, how did they differ.

The third objective was to determine whether the nurse educators' educational orientation was related to certain background variables.

The fourth objective was to derive the implications, based on the educational orientation of nurse educators for the development of continuing education programs to acquaint practicing teachers of nurses with theories of adult learning.

The fifth objective was to derive the implications, based on the educational orientation of nurse educators, for including theories of adult learning in the curricula offerings for the preparation of teachers of nursing.

Significance of the Study

The changing nature of nursing practice challenges nursing education to produce practitioners who have the ability to think independently, solve problems, and seek those learning experiences necessary to growth both personally and professionally. If the students of nursing are to acquire these skills, nurse educators must be prepared to teach as though the students were capable of making decisions about their

own learning experiences, solve problems in their educational process, and have the ability to be professionally responsible for their own actions.

This study is important for the following reasons: First, the study utilized data about the attitudes of nurse educators toward education, nature of learners, characteristics of the learning experience, management of learning experiences, evaluation of relationships between educator and learner and among learners to arrive at a composite score which shows the extent to which nurse educators were oriented to andragogical or pedagogical processes. The study allowed a mean score on the EQQ by nurse educators to be compared with the mean scores of other adult educators measured by the same instrument.

Second, the study diagnosed problem areas where some nurse educators are more pedagogically inclined than other nurse educators as measured by the EQQ. Additional education in how adults learn may be indicated for the educators, who placed toward the pedagogical extreme of the pedagogical-andragogical continuum, through continuing education or beginning the practice of including courses in adult education in the curricular offerings of graduate programs preparing teachers of nurses.

Third, the study has shown that, as a group, nurse educators tend to be more pedagogical in their approach to nursing education than are adult educators in general. Further study as to the reason for this orientation would seem to be warranted if a new approach to nursing education is to be undertaken.

Finally, the study demonstrates the usefulness of the EQQ

as an instrument to assess the educational orientation of a faculty group as it relates to the school's stated philosophy, objectives and teaching methodologies. Individual faculty members may want to use the EQQ for self-diagnosis in this area.

Definition of Terms

For the purpose of this study, the following definitions apply. Some of the terms are elaborated upon in later discussions.

1. Educational orientations

Andragogical orientation - inclination of an instructor to stress free choice of alternative goals for learning, with independent decision and action among students and between students and educator as the basis of effective learning. The educator perceives his relationship to students as that of helper, resource consultant, and co-learner (Hadley 1975:7). In this study andragogical orientation is measured by Hadley's EQQ.

Pedagogical orientation - Inclination of an educator to emphasize the learner's acquisition of knowledge and skills that the educator judges as true and effective. The personal judgment of the educator is based on tradition, accepted views and practice, or current knowledge of the physical and social universes. The educator sees his primary relationship to learners as that of an authority, technical expert, director of their learning, and judge of their achievement. The educator stresses techniques to transmit ideas efficiently, develops presentations of subject matter which are logically organized, motivates learning by encouraging competitive individual achievement, and maintains

control of what is learned (Hadley 1975:8). In this study pedagogical orientation is measured by Hadley's E00.

2. Organizational setting

Associate degree schools of nursing - refers to those schools of nursing provided in two-year or community colleges. An associate degree in nursing is awarded at the completion of two academic years and one summer session.

Diploma schools of nursing - refers to programs in nursing sponsored by hospitals where the governing body also is the governing body of the school. A diploma is awarded by the hospital after completion of the program. These programs may vary in length from two to three years.

Baccalaureate schools of nursing - refers to those schools of nursing located in four-year colleges and universities. The bachelor's degree is usually awarded after two years of general education courses and two years in the upper division of nursing.

3. Nursing education

Nurse faculty - registered nurses who are employed in teaching positions in schools of nursing. Their educational backgrounds may range from diploma awarded by a hospital to a doctoral degree. The advanced degrees may be in nursing or other disciplines.

Continuing education - refers to planned learning experiences which take place after the completion of the basic nursing education program. The learning experiences may be workshops, seminars, institutes, programmed instruction, independent study, or formal college classes.

4. Nursing practice

Nursing - refers to the systematic process by which safe, individualized care is given to the client/family by a licensed practitioner of nursing.

Practice - refers to the act of nursing for compensation by a person who has completed an approved program in nursing education and is licensed to practice nursing.

Limitations of the Study

Although schools of nursing which are accredited by their particular council of the National League for Nursing (NLN) and their respective state board of nursing are very similar in curricular offerings and faculty backgrounds, there are enough differences from state to state to make it unwise to generalize the findings of this study to all nurse educators. Schools of nursing and practice settings will vary according to geographic location with some areas more traditional in their educational approach than others.

A limitation is imposed on the population of nurse educators to be surveyed by the lists of faculty submitted by the deans and directors. These lists were not all inclusive. Some schools do not release names of faculty for research purposes without permission of the individual, therefore not all names were available. The lists of faculty taken from college catalogs yielded names of individuals no longer employed by those institutions.

While it is necessary to have a basis for comparison of the scores of nurse educators to other adult educators, the norms were

limited to those educators completing the EOO at the time of its development, as reported by Hadley. Time and budgetary restrictions placed limitations on the number of faculty groups that could be included. Therefore the study was confined to those in one state.

Organization of the Study

The first chapter presents the problem, its background and significance. Research questions which have been identified are stated and terms defined. Limitations of the study are discussed.

Chapter 2 reviews the relevant material in seven sections. First in order to establish the setting for the problem, the historical background of nursing education is presented. Next, the concepts of andragogy and pedagogy with the underlying philosophies is reviewed. Discussion of the andragogically oriented educator will follow. Finally, studies are reviewed which pertain to the preparation of an orientation to education of nurse educators and participation in continuing education. A theoretical framework for the study and a statement by hypotheses conclude the chapter.

Chapter 3 presents the design of the study. The population and sample will be described, as well as the instrumentation, method of data collection and analysis.

The fourth chapter presents the results of the data analysis.

In the fifth chapter a summary, conclusions and recommendations for further study are set forth. The report concludes with appendices and references.

Chapter 2

REVIEW OF THE LITERATURE

This chapter presents a review of the relevant literature on the historical development and contemporary approaches to nursing education at the undergraduate level and to nursing practice. The literature relative to differentiating between an andragogical and pedagogical approach to education is presented because it is basic to the framework of the study.

General questions guided the selection of literature to be reviewed.

1. Were there influences in the development of schools of nursing that promoted a pedagogical orientation for nursing education?
2. Have changes in nursing practice impacted upon the educational approach used in teaching nursing?
3. What are the philosophies of education which are the foundations for pedagogy and for andragogy? How do they differ?
4. What assumptions are made about adult learners that differ from assumptions made about child learners?
5. How does the process of teaching children reportedly differ from the process of teaching adults?
6. What are the arts and skills needed by the andragogically oriented educators?
7. Why do nursing educators believe a change from a pedagogical orientation to education is necessary for the nurse educator?

8. What evidence is there that registered nurses do or do not possess the attributes and competencies required for nursing practice with regard to problem-solving, critical thinking, and continuing learning?

Both the theoretical framework of the study and the hypotheses are presented.

Trends in Nursing Education

The development of "modern" nursing education has occurred over a relatively short period: the first school of nursing was founded in 1860. The progress of nursing education in the early schools was closely aligned with the status of women in that day, setting the stage for nurses to assume a role subservient to that of the doctors who were generally males. In recent years the rapid expansion of the nursing field has produced demands on the practitioners for which they, in the opinion of many nursing educators, are not being prepared in the pre-service programs. This "lag" between nursing education and nursing service has produced a search for a new approach to nursing education.

Historical Development of Nursing Education

In 1860 Florence Nightingale established the first school of nursing as an "educational institution" at Saint Thomas' Hospital in London. Three principles were emphasized in the establishment of the school: (1) enrollees were to be regarded as students, not as workers; (2) department heads were to be chosen for teaching ability; and, (3) the school would be financially independent of the hospital, thus controlling its own activities (Goodnow 1953:283). Although

Nightingale stated her principles clearly, they were largely misunderstood by those who were later to establish schools all over the world.

The first schools of nursing in America were hospital schools. These schools, though directed by "Nightingale nurses," were generally established in the late 1800's not to provide better nursing care for the sick, but to provide low cost workers for the hospitals (Goodnow 1953: 284).

The first schools of nursing provided training programs of one year in length which were soon expanded to two years. Students, upon admission to these two year programs in nursing, were immediately assigned to the wards as workers, placed on the hospital payroll, and paid a stipend. The work load was often so heavy that students missed the weekly lecture.

The first year of the program consisted of supervised experience in patient care and the second year provided experience in ward administration. The supervised experience of the first year was of the apprentice type with the new student assigned to work with an older student. The role of the older students might be summarized as housekeepers, trainers of themselves and teachers of younger students, and finally, comforters of the patients (Dolan 1968).

For more than a half century after the establishment of hospital schools of nursing in the United States, directors of these schools tried to educate their nurses and at the same time to care for the hospital patients - generally two conflicting aims. The nurses' education was sacrificed for routine hospital work.

The preparation of those who taught in the early schools of nursing is not often mentioned in the literature. By 1915 there were more than 1100 schools of nursing in the United States (Deloughery 1977:90), but only ten of these schools had full time paid instructors (Dolan 1968:318). Seymer (1949:175-176) notes that post-graduate courses were designed to prepare both teachers and administrators as early as 1899. The pioneer in this effort was Teachers College, Columbia University in New York which introduced in 1899 a course in hospital economics in which two students were enrolled.

In 1909 the first collegiate program was established at the University of Minnesota. Deloughery (1977:153) records that this program had a three-year curriculum; a diploma was awarded but no degree. In 1916 two schools established five-year programs leading to a baccalaureate degree in nursing - a pattern which was followed until World War II.

The nursing model that had been developed by the nurses of the early days and promoted by the educational programs followed the model expected of women of that day. The role of the nurse had become a subservient one, with a dependent relationship in the male dominated society, in which the status of the physician was superior (Dolan 1963:261).

Contemporary Undergraduate Nursing Education

The 1950's with its "explosion" of scientific knowledge and technological advances brought changes to nursing education and practice. It had become obvious to many nurse educators and hospital administrators that the preponderance of routine work and manual labor by

nurses was defeating its own purpose. A physician shortage led to professional nurses being asked to do more and more procedures formerly performed only by physicians and to assume new responsibilities (Kelly 1975:81). Auxillary workers were employed and trained by hospitals to do the manual labor, allowing nurses to assume the new responsibilities.

Curriculums of schools of nursing were adjusted to meet the modern situation (Deloughery 1977:135). More emphasis was placed on the physical and behavioral sciences, community nursing, mental health care, and teaching of patients. Attention was given to the correlation of theory with clinical practice. Hospital schools sought affiliations with colleges to provide the science courses for their students.

Collegiate programs, now four years in length, opened rapidly with more young people seeking baccalaureate education in nursing. As a result of work by Mildred Montag in 1951, junior and community colleges opened two year programs in nursing leading to an associate degree in nursing. These programs, aimed at producing a "technical nurse," expanded rapidly.

Despite the expansion of nursing education programs, some nursing leaders believe that the model of nursing established in the early years of nursing is still maintained by nursing education today. A new approach is needed. For example, Loomis (1974:9) noted that American nursing requires that the nurse be well grounded in the biological and sciences. "This value is, however, superimposed on an even more pervasive and deeply ingrained authoritarian and feminine tradition that requires

implicit obedience and loyalty to one's superiors, be they physicians, supervisors, or teachers." This clinging to traditional values is likely to limit the spirit of inquiry and exploration by students, thus producing graduates lacking the ability to continue learning independently, think critically, and be decision-makers. Another deterrent to change in nursing, according to Loomis, is the failure of collegiate programs to provide "liberal education." Nursing students are "of" the university, but not actually an integral part of the university.

In a plea for consideration of changes in curricula which would prepare the graduate to assume a proper place in the delivery of health care, Fahy considers the students of today:

Students cannot be left out of any meaningful discussion of undergraduate curricula . . . They, the students, are brighter, more articulate, more troublesome; many came from progressive and innovative high schools and increasingly permissive homes . . . They want to be intellectually stimulated . . . They look upon professional education as a means of knowing and finding themselves. (Fahy 1974:24)

To further emphasize the need for a different approach to nursing education, Fahy stresses that the undergraduate level must provide the intellectual tools and attitudes essential to the later pursuit in depth of a specialization. By doing this, then nursing faculty can assist the student to become a competent practitioner (Fahy 1974:25).

To further support the idea of needed curricula changes, Sateren and Westover (1978) found that nurses continue to hold a traditional view of nursing, namely, nurses are accountable to the physician or the employer rather than to the consumer. They suggest that "nursing curricula need to provide a wide range of learning experiences, including opportunities to practice expanded skills and to learn to think

creatively and independently. Optimum support and supervision should be provided throughout such learning experiences"(Sateren and Westover 1978:12).

Trends in Nursing Practice

The practice of nursing has changed through the years as the needs of society have changed. The very nature of nursing and the wide range of functions from the relatively simple to the complex have resulted in the need for practitioners who are prepared to exercise judgment and technical competence.

Historical Development of Nursing Practice

As schools of nursing were established in the United States the practice of nursing by "trained" nurses grew. The first graduate nurses were found either in hospitals in administrative or supervisory positions or in private homes as "private duty" nurses. The hospitals were staffed by student nurses.

As nursing evolved, a continuing struggle ensued against the attitude of "overtraining" nurses for it was thought that education elevated the nurse above her essential task. This attitude among members of the medical profession and society has been the chief obstacle to progress (Deloughery 1977:91).

Nursing, through these formative years of establishing practice, responded to the needs of the public for better health services. Practice was expanded to public health, industry, military services, and other specialties. With the demand for expanded practice, the need

for more educational preparation was recognized. The opening of the collegiate programs did not change the educational milieu for the nursing students. The hospital school methods of teaching were simply moved to the universities and more content added.

About 1930, hospital nursing services began to change in character with graduate nurses replacing students as general duty nurses. Many persons involved in nursing practice began to create better working conditions, and the eight-hour day for nurses was established (Kelly 1975:71-72).

The advent of World War II and later the Space Age brought new opportunities for the expansion of nursing practice. The need for nurses to assume a greater role in planning and making decisions about the health care of people in the United States was becoming more apparent.

Contemporary Nursing Practice

The changes in nursing practice in the last thirty years have been astounding. In 1980 nurses are not only practicing in staff positions in hospitals but also in expanded roles such as nurse specialists, nurse clinicians, administrators in health care agencies, consultants, professors in medical schools, and in patient advocacy.

Despite the obvious need for graduates prepared to continue learning, think critically, solve problems, and be decision makers, nursing education has advanced very slowly in recognizing the need for changes in the undergraduate programs which will support and encourage nurses to develop these skills.

Expected Competencies of New Nurse Graduates. In response to

the developments in nursing practice and demands by a better informed public for accountability by professionals for the quality of health care provided, the nursing profession recently called for a definition of the goals of nursing and a delineation of the expected competencies of its practitioners. The Councils of the National League for Nursing (NLN) - Baccalaureate and Higher Degree, Associate Degree, Diploma and Practical Nursing - each developed criteria for the competencies expected of its graduates. In 1979 the National League for Nursing appointed a task force to study the statements of expected competencies of all types of basic nursing programs. One of the charges to the task force (NLN 1979:1) was to "identify differences in terms of competencies." Competency was defined as "the minimal expectation of new graduates."

Of the many identified behaviors expected of new nurse graduates, the behavior concerned with self-direction in personal and professional growth is of interest to this study. The competency in the area of self-direction identified by three of the four councils were:

- (1) the graduate of the associate degree program "assumes responsibility for self-development and uses resources for continued learning,"
- (2) the diploma graduate "pursues independent study and continuing education," and
- (3) the baccalaureate degree provides the graduate with the "basis for graduate education" (NLN 1979:3).

An analysis of these statements revealed a common thesis: the graduate is prepared to be self-directive in independent study, continued learning, and professional growth. The task force concluded that although the competency statements, including the one regarding self-direction, in themselves are clear" . . . ambiguity and lack of discrimination surfaced in specifying the differences in minimal expectations of new graduates of

the nursing programs" (NLN 1979:9).

This ambiguity and lack of discrimination had been noted earlier by Kohnke (1972) who studied the literature about the knowledge base, responsibility, and role in the curricular preparation of the nurse technician and the professional nurse. Twenty-two deans of associate degree and baccalaureate programs were then interviewed to determine the actual curricular practice so that a comparison could be made with the literature statements. Kohnke found that there was a blurring of the curriculums of the two types of programs. The implication was that curricular practice is, in fact, not in line with that described in the literature. In the baccalaureate programs, there was an emphasis on technical skill rather than the knowledge base of the described professional model. The associate degree programs required more advanced knowledge than that described in the literature for the technical nurse. A major roadblock seemed to lie in the practice realm where little discrimination is made by nursing administrators as to the preparations of the practitioners.

It appears that the faculties, according to the literature of their various types of programs, subscribe to the idea that nurses should be prepared to be independent in seeking continuing learning experiences. Studies of these practices, however, indicate that the importance of continuing education and self-direction in that area has not been instilled in the graduates of these programs.

Registered Nurse Participation in Continuing Education. The need for nurses to be continuing learners is stressed throughout the nursing literature (Curran 1977, Edelstein 1978, Fahy 1978, Kubat 1975,

Pollock 1980). Several studies have dealt with the registered nurse participant in continuing education; from these studies at least two composite pictures have developed. Curtis in 1969 stated the continuing education needs of nurses for the Western Interstate Commission on Higher Education. Curtis concluded:

. . . nurses participating in continuing education are usually between the ages of 20 and 60, with the largest age concentration around 40. Many of the nurses are graduates of diploma schools of nursing and are not familiar with active participation in the learning process. (Curtis, et.al 1969:20)

Seven years after Curtis' study, Burgess (1976) once again formed this composite picture of the "typical" nurse participant in continuing education:

She is married, has one or more children, and is employed full-time in a hospital. She is under 30 years of age, has worked for at least four years, and is likely to be employed as a staff nurse. Her career goals in terms of five years hence are those of instructor or supervisor. Her ultimate professional objective is likely to be a position as director of nursing. Her husband holds at least an associate degree and is engaged in a professional or semi-professional occupation. She attends her continuing education courses as a way of keeping "up-to-date" with current practice, and is not likely to seek further formal education for herself. (Burgess 1976:9).

These studies, published seven years apart, do not indicate that changes are being made in basic nursing programs which encourage continued study on the part of its graduates.

Kubat (1975), Curran (1977), and Schoen (1979) studied the factors affecting participation by nurses in continuing activities. Curran and Schoen examined groups already enrolled in classes, nurses employed in large metropolitan hospitals, or members of the professional organization. Kubat used a sample of 100 from the 1974 file of the State Board of Nursing in Nebraska without regard to those variables mentioned above. Kubat found that recognizable rewards, and

more importantly, legislated mandates, are among the most effective incentives for motivating nurses to continue their learning. The study concluded that if continued learning is linked to survival in one's profession, the motivation should be sufficient to assure that most nurses will engage in forms of continuing education. Thus, nurses were more extrinsically motivated to participate rather than by an internalized sense of need.

In Curran's (1977) study of 800 registered nurses in Cook County Illinois, graduates of diploma nursing programs enrolled least often in courses for college credit and rated themselves as less active continuing learners than did nurses from the other two types of nursing education programs. Nurses who had earned a degree beyond their basic nursing programs reported the greatest frequency of reading professional material, enrollment in college courses for credit and spent more money on educational materials (Curran 1977:19). These findings agree with the description by Curtis (1969) that diploma nurses may not be as internally motivated to continue study as are baccalaureate graduates.

Pollok (1979:141), in a study of 302 practicing registered nurses in Virginia regarding problems encountered in seeking a baccalaureate degree, found that 211 of the respondents had engaged in non-credit continuing education within the past three years. This finding would indicate that 30 percent of the respondents did not participate in non-credit continuing education within the past three years. No differentiation was made concerning the nurses basic education of associate degree or diploma. These findings supported the findings of Curtis and Curran that graduates of diploma schools, do not show a high percentage of attendance at continuing education programs.

Nurse Educator Participation in Continuing Education. There is little available information on the participation patterns of nurse educators in continuing education. del Bueno (1980) observed that most nurse educators are so busy teaching and providing continuing education to other nurses that they themselves quite often do not have the opportunity to participate in activities which would contribute to their own learning such as attending workshops.

In examining factors which influence choice of continuing education activities by nurse faculty, Nursing Educator magazine asked the faculties of schools of nursing in November 1978 to rank four reasons why they had decided to attend a Nurse Education Conference: program, faculty, location and CEU accreditation. Program was ranked very important by 81 of 93 respondents, faculty by 49, and location by 41 respondents. Only 12 ranked CEU's as important while 37 ranked CEU as not important. No one ranked program as not important while three ranked faculty as not important and nine found location unimportant (Conrad 1979: personal correspondence).

In Crosby's (1977) survey of 3,042 nurses in Virginia, a majority had received instruction in teaching skills during their formal nursing preparation and one-half of each group (by type of employment) indicated receiving such instruction through continuing education within twelve months prior to the survey. The groups surveyed were 68 percent of the state's teachers in schools of nursing; 17 percent of the nurses at hospitals; 54 percent of the nurse practitioners and 30 percent of the school nurses. Crosby (1977:36) concluded:

The strong degree of interest in teaching skills development was consistent throughout the state. These data suggested a recognition by Virginia nurses of the need to seek periodic instruction in teaching skills development, and an acceptance

of the concept of lifelong learning as exemplified by continuing education.

This study, restricted to instruction in teaching skills, is supported by Pollok's finding that 70 percent of the hospital nurses surveyed in Virginia had participated in continuing education programs of some type during the previous three years. No definite conclusions can be drawn about the attendance of nurse faculty except that one-half of 68 percent of the state's nurse educators reported attending continuing education programs pertaining to teaching skills.

Non-participation in Continuing Education. Edelstein (1978) addressed the issue of why nurses do not attend continuing education courses. Sixteen hundred questionnaires distributed to employees in seven metropolitan agencies yielded a return of 425. Of the respondents 32 percent had never taken a continuing education course while 18 percent had never taken an inservice course. The most prominent reason for not attending education courses was institutional responsibilities (27 percent), followed by money (21 percent) and distance (18 percent). The determinants for attendance were: the need to do prestigious or socially rewarding work, interest in increasing one's broad knowledge base, and special needs related to the particular institution where employed. The determinants for non-attendance were: education perceived as work, difficulty in giving large sections of time to study, presence of a range of preferences for different teaching methods, a majority preferring noninvolvement, and a nuclear element oriented toward involvement and participation. Once again, the non-participation percentage rate supports the findings by Pollok. Thirty

percent would appear to be a high percentage of professional nurses not attending continuing education programs.

In summary, the history of professional nursing has been a short one - 120 years - compared to other recognized professions such as medicine and law. The changes in nursing have been many and rapid: from an apprentice system of education to three types of nursing education programs, associate degree, diploma, and baccalaureate degree. These programs achieve national accreditation for high standards of education. Nursing practice has expanded from the "handmaiden to the physician" concept to a concept of joint practice with the physicians. Nursing education, however, has not kept up with the demands of nursing practice for practitioners who are prepared to think critically, solve problems, and be decision makers. Studies have found that independence was not encouraged. Nurses continue to hold a traditional view of nursing. That is, they still feel accountable to the physician or employer, rather than to the consumer.

Although paying lip service to the need for continuing education, nurses do not participate frequently in continuing education programs. Diploma graduates are less likely to participate than are baccalaureate graduates. Nurse educators are more likely to participate in continuing education than are staff nurses.

Nursing curricula need to provide opportunities for students to practice expanded skills and to think creatively and independently. In order to achieve changes in curricula, nurse educators may need first to change their attitudes toward education - from pedagogical to andragogical.

Philosophical Sources of Andragogy

Pedagogical orientations and andragogical orientations to education have clear philosophical foundations. The discipline of philosophy is of critical significance in a discussion of beliefs about man, the nature of learning, the nature of knowledge and the way knowledge is acquired. A basic understanding of the various philosophies undergirding recognized educational practices is necessary before attempting to differentiate assumptions about how adults learn (andragogy) from assumptions about how children learn (pedagogy). The philosophy of adult education as expressed by Bergevin (1967) supports the use of an andragogical orientation to education as a means of developing free, creative and responsible persons.

It is not the purpose of this study to present in detail all of the philosophies of education but rather to indicate those major beliefs upon which the present structure of education is based. A brief description will be given of the philosophies which serve as basis for current practice in education and how these beliefs relate to values and attitudes. This brief examination of five basic educational philosophies will assist in providing a framework for the examination of the concepts of andragogy and pedagogy. According to Brubacher (1969:329), "There is . . . no little overlapping . . . Furthermore, complete systems of educational philosophy are rarely if ever wholly progressive or wholly conservative."

Essentialism. The formulation of this philosophy is credited to William C. Bagley in 1938. Essentialism has its roots in the general philosophies of idealism and realism. The essentialist believes that

education should emphasize history, foreign languages and the classics. There is much required reading, lectures, memorization, repetition, audio-visual materials and examination (Apps 1973). Brubacher (1969:344) notes that formal intellectual pursuits take precedence over physical and vocational education. The role of the educator is that of passing on culture from one generation to the next with major emphasis on subject matter.

Perennialism. The perennialists (Apps 1973) believe that the assumptions and knowledge of the ancient culture have as much application today as they did when they were formulated centuries ago. The basis of this philosophy has remained unchanged since the middle ages (Brubacher 1969). The major focus of perennialism is on the discipline of the mind. Study of certain subjects such as mathematics, logic, and languages serves to discipline the mind and should be studied whether the material will be used or not. Little room for student choice is allowed. Educators following the belief advocate memorization of subject matter, reading, writing and drill. The perennialists believe that education should be directed toward the gifted or the intellectually elite.

Progressivism. In progressivism, man's experience is used as a basis for knowledge (Apps 1973:22). The progressivists believe that "all things are in a state of transition with no emphasis on absolute knowledge." Problem-solving is emphasized; the scientific method is stressed. Johnson (1969:322) states that "the learner is viewed as an experiencing, thinking, exploring individual . . . Books are regarded as tools in the learning process rather than as sources of indisputable knowledge." Brubacher (1969) identified the progressive educator as a

believer in the democratic process on the premise that in the classroom the democratic teacher shares with the students as many decisions as to objectives and curriculum as possible.

Reconstructionism. Apps (1971:23) refers to reconstructionism as a part of progressivism since both subscribe to the belief that "values are man-made and relative to culture, time and place." Brubacher (1969) feels that reconstructionism arose because of a group of progressivists who were impatient with the "pace and scope" of progressivism. Although utopian, the concept is to provide the "maximum possible self-realization of the great mass of people" (Brubacher 1969:335).

The reconstructionist counts on the future and sees goal-setting as central to learning. The difference in the two philosophies, progressivism and reconstructionism, is in the concern of the reconstructionists with the ends rather than the means of education. The manner in which the ends are achieved are important for the reconstructionists rely on the scientific method and recognize that the ends will change as new discoveries are made.

Existentialism. Existentialism is based on the notion of the individual achieving self-fulfillment (Apps 1973:23). A key premise is "that existence precedes essence - the fact that an individual's existing is antecedent to any other understanding he may have of the world" (Emery 1971:5). Kneller (1961:429) stated, "Each of my students is freedom embodied in a living person . . . As an educator I scorn any system that would make me mold my student to a particular image . . . Such patterns barricade him within a character he never chose." The

existentialist educator believes education is an instrument which assists the individual in making choices and achieving autonomy. Brubacher (1969:399) says "What he chooses, that he becomes." Apps (1973:23) words it like this: "What a person is capable of knowing and experiencing is more important than what he knows." The existentialists are concerned with helping all individuals to understand their situation and themselves. The ultimate concern of existentialists is the meaning of existence.

The question arising for educationists who espouse the existential philosophy is whether students are ready to make the choices necessary and to achieve autonomy in what they want to learn. Brubacher (1969) sees the student virtually "condemned" to freedom by existentialism.

While it is true that elements from each of the philosophies may be found in current educational practices, it is helpful to differentiate those which are considered basic to the pedagogical approach from those which are considered basic to the andragogical approach. This differentiation of philosophies allows one to readily see how the teaching-learning process would differ according to the teacher's orientation to education.

Philosophies Related to Pedagogy. The philosophies of perennialism and essentialism are those which are, according to Hadley (1975), pedagogical in nature. "For perennialism and essentialism", writes Hadley (1975:23), "the reality lies in acquired knowledge of the truth . . . knowledge acquired in the past, i.e., tradition." These philosophies deal with the givens of the universe and the individual's survival depends on his knowledge of these given "realities." Education would be a matter of rigid formality, logically organized subject matter,

little spontaneity, and students learning to conform to the way things are. (Brubacher 1955:9) The perennialists and essentialists would have students learning subject matter by memorization, drill, and recitation.

Philosophies Related to Andragogy. In Hadley's view the philosophies of progressivism, reconstructionism and existentialism furnish a base for andragogical theory and practice. An oversimplification would be that andragogical philosophies of education focus on the "how," the generative learning process (Hadley 1975:25). The andragogical philosophies concentrate also on the present of "when," at the same time these philosophies recognize the usefulness of past knowledge and the importance of the future. The individual is responsible for his/her growth through "commitment, choice, and communion with others" (Hadley 1975:25). In other words, education exists for the individual to use as his own nature bids him. The student uses his own past experiences to meet new situations head-on.

This action approach to learning encourages use of acquired knowledge and experience to think through new situations, make decisions, evaluate the experiences and to seek new knowledge. These philosophies encourage the student to grow and become his own person.

The Concept of Andragogy

Knowles, a leading adult education theorist, has organized the many divergent ideas about learning into a theory of adult learning that he called andragogy. Four critical assumptions about the characteristics of adult learners that are different from those of child learners are identified as basic to the theory of andragogy. These have

to do with self-concept, experience, readiness to learn, and time perspective (Knowles 1970:39).

Self-concept. Knowles (1970) sees the child's self-concept as one of dependency on the adult which is reinforced and encouraged by the adult world. The child's role in society is that of a passive learner. In the area of education the responsibility for the child's education is taken over by the teacher, the curriculum planners and his parents. He is "frozen into a self-concept of dependency" (Knowles 1970:40).

On the other hand, the adult no longer sees himself as a full-time learner, but increasingly as a producer or doer. Knowles (1970:40) claims "His self-concept becomes that of a self-directive personality. He sees himself as being able to make his own decisions and face their consequences, to manage his own life." Consequently, a teacher who puts adult students into a dependent role is likely to encounter a rising resistance and resentment.

The adult in the learning role demands respect for himself as a person and acceptance by the teacher. This acceptance allows the person to become whatever he is capable of becoming - a person of worth. "Education," writes Van Doren (1943:73), "should make a person competent not merely 'to do' but more importantly 'to be.'" Indeed, its prime occupation should be with "skills of being."

Experience. A child has little to offer in the way of background experience. His experiences have been those which have happened to him. Knowles (1970:44) describes this as having his "self-identity derived from external sources." In comparison, adults have had more experience which has been internalized so that he is his experience.

Skillful educators are needed who can build into the curriculum the methods for using these previous experiences.

Readiness to Learn. The child's readiness to learn is most often viewed as a function of his intellectual development. Havighurst (1952), however, indicated, that children learn those things that are necessary for them to know in order to advance from one phase of development to the next. Knowles (1970:46) suggests that the same principles hold true for the adult years; that adults, too, have their phases of growth and resulting developmental tasks, readiness to learn, and "teachable moments." The assumption is that as an individual matures his readiness to learn becomes the product of the developmental tasks required for his evolving social role. In other words, as he matures, the individual will selectively learn what he "needs" in his role of worker, parent, organizational member, etc.

Time Perspective. The child, according to Knowles, tends to have a perspective of postponed application. He learns subject matter because he will use it "later." In contrast, the adult is oriented to the here and now. Immediate application of new skills largely motivates the adult to continue a learning experience. Thus, postponed, logical, sequentially developed subject matter must be eschewed in favor of field-centered, work-related learning (Newton 1977:361).

These four assumptions about the characteristics of the adult learner provide guidelines for attitudes and behaviors required for the successful teacher of adults. The educator should avoid placing the student in a dependent role by accepting him as a responsible, competent person. The educator will utilize the many life experiences of the students

to enrich the curriculum, building methods to do so. Recognizing the adult's needs of the moment will help the educator facilitate the learning process. Providing information when it is needed will ensure the adult's continued learning.

Knowles drew upon psychology and psychotherapy - particularly the work of Maslow and Rogers - in formulating his theory of andragogy. During the development of psychotherapy as a discipline, studies of adult behavior yielded information which has contributed to the formulation of theories about how adults learn (Knowles 1973).

The clinical psychologists "who identify themselves as humanistic" have been most deeply involved in problems of learning. Maslow (1954) saw the individual as being able to move forward and grow if the environment is such that it meets his needs and supports him. In 1968, Maslow, in speaking of the educational implications of the humanistic psychologies (Third Force Psychologists), stated that the model of education we all have tucked away in the back of our heads is the teacher who teaches a passive person who gets shaped, taught and given something which he accumulates. The learner may then retain or lose the something. Maslow (1968:690) continues: "This kind of learning too easily reflects the goals of the teacher and ignores the values and ends of the learner himself. It is also fair, therefore, to call such learning amoral." Maslow goes on to point out the value of learning about oneself which comes from life experience, not the classroom. He sees learning who we are, learning to be a person, more central to education than extrinsic goals thrust upon us by others. These ideas imply that the adult educator's mission is to help each individual learn what is needed to meet his needs and become his full self.

Carl Rogers (1961), in relating his thoughts on conditions of learning in psychotherapy to conditions of learning in education, sees the necessity of reliance on the "self-actualizing" tendencies of the student. The student who is in real contact with life problems will want to grow, to seek out, to master, and will desire to create. The key to this statement is "in real contact with life experiences." Rogers (1961:293) notes that "our whole culture . . . is deeply committed to keeping young people away from any touch with real problems." This notion of self-actualization or maturation is the basis for the andragogical idea that as one matures, he will seek new knowledge based on past experiences. When the student has been kept from facing life's problems, he has little background for making decisions about the direction his learning should take. Educational programs, particularly for the professions, which are subject-centered do not prepare the student to deal with his own problems or those of the client. Knowles (1970) concurs with Rogers' viewpoint by observing that if the assumption is that learners are subject-centered in their orientation to learning, then it is logical that the curriculum be arranged so that foundational courses are taught first in order to provide an adequate background for the practical application to follow. Therefore, in a four year program, students would not get to the field experience until the third year. This approach does not make sense for mature people, who are problem-centered in their orientation to learning. At best they see the first two years as drudgery to be "gotten through" in order to get to the real thing. This arrangement of the nursing curriculum in baccalaureate programs may account for the high attrition rate in these programs.

In 1926, Eduard Lindeman, one of America's pioneers in adult education, summed up beautifully the art and science of teaching adults, "Happy the student whose teacher knows more than his subject. And brave the teacher who dares to reveal his special subject in the context of the whole of life and learning" (Lindeman 1926:111). The final words of Lindeman's book, while not directed to the education for the professions, hold a special meaning for those teaching in professional programs, such as nursing:

It will be readily seen that adult education calls for a new kind of text-book as well as a new type of teacher. Under conventional educational systems both teacher and text attempt to make situations fit subjects whereas the demand is to make subjects serve situations. Teachers of youth assume that their function is to condition students for a preconceived kind of conduct; teachers of adults on the other hand, will need to be alert in learning how the practical experiences of life can enliven subjects. The purpose of adult education is to give meaning to the categories of experiences, not to classifications of knowledge. Specialists who wish to participate in adult learning will need to do considerable collaborating among themselves before they learn how to relate their subdivided knowledge to current situations. It is perhaps true that no single group in modern life stands in greater need of adult education than experts, specialists: those who continue to know "more and more about less and less" (Lindeman 1926:123).

The term "andragogy" was unknown to Lindeman in 1926 and was only brought into general use by Knowles in 1970. By "andragogy" Knowles means "the art and science of helping adults to learn." The clearest descriptions of the andragogically oriented educator are presented by Knowles:

. . . the adult educator must be primarily attuned to the existent concerns of the individuals and institutions he serves and be able to develop learning experiences that will be articulated with these concerns. Andragogy calls for program builders and teachers who are person-centered, who don't teach subject matter but rather help persons learn. (Knowles 1970:48).

The art of teaching to Knowles is the management of interaction and environment which together form the basic learning unit, a "learning experience."

The critical function of the teacher, therefore, is to create a rich environment from which students can extract learning and then to guide their interaction with it so as to maximize their learning from it . . . The truly artistic teacher of adults perceives the focus of responsibility for learning to be in the learner, he conscientiously suppresses his own compulsion to teach what he knows his students ought to learn in favor of helping his students learn for themselves what they want to learn (Knowles 1970:48-41).

The Nurse Educator's Educational Orientation

An examination of the assumptions about how adults learn and the characteristics of the andragogically oriented educator point to the need for assessing nurse educators' educational orientation. Do they, as a group, believe that their roles are transmitters of knowledge or facilitators, helping others learn? There is a scarcity of literature addressing this question in regard to nurse educators.

Graduate education for nurses has been a point of controversy for many years with the pendulum of opinion and actions swinging first in the direction of emphasis on functional role preparation, such as teaching, to an emphasis on clinical specializations in the sixties and seventies (Fitzpatrick and Heller 1980). The shift has left a shortage of nurses prepared to assume leadership roles in nursing education. Fewer than one-half of the current master's programs prepare teachers. Educational administrators report that while clinically expert, these nurses are not able to assume responsibilities of professional educators in the academic setting. The colleges are thus faced with the problems of teaching the teachers to teach (Fitzpatrick and Heller 1980). In

this situation it is reasonable to assume that these faculty members will not have been introduced to the art and science of teaching adults.

The viewpoint is held by some educators that the teaching of nursing is a science so exact that there is no room for students to be creative and participate in decisions about their own learning experiences, and therefore, clinical specialization is sufficient. This point of view is shared by Sheahan (1978), an educator of nurse teachers in England, who defined pedagogy as "the art and science of teaching or as the way in which a curriculum is transmitted. Terms such as the practice of education and educational method studies are synonymous with pedagogy" (Sheahan 1978:515). Although Sheahan is writing about the preparation of nurse educators in England, his viewpoint may well be shared by American nurse faculty as well:

Teachers are people who teach somebody something. Alternative ways of saying this are that teachers enable learning to take place: teaching is thus seen as an enabling process. It is possible to object to this approach on the grounds that learning is defined as an adaptive change in behavior as a result of experience, the experience could be a positive or a negative nature. It follows that negative (faculty) learning could result. Some teachers see themselves as educators concerned with the development of human potential. In this context an educationist would be defined as a combination of an incendiary and a horticulturist: the incendiary to set the imagination alight, the horticulturist to provide the conditions for growth and development. But whatever the stance taken, the subject matter is an important area for preparation. A level of knowledge which was adequate for clinical practice may be found wanting when it comes to teaching the subject. (Sheahan 1978:515).

Other nurse educators are coming to believe that there is more required of nurse teachers today than a subject based education. One of these is del Bueno, an advocate of competency based education, who while no doubt agreeing with Sheahan in terms of the importance of

the teacher being strong in the subject, takes the point of view that there is a need for nurse educators to consider the needs, perceptions and goals of individuals when developing educational programs. del Bueno believes that if individuals are conscious of the need to learn and are willing, they will find opportunities to acquire that learning. They can then apply that knowledge or skill in a real or simulated setting. The teacher can then concentrate on the application phase while the acquisition can be carried out independently if learners are provided with resources and materials. This notion when applied to nursing education calls for a teacher who is not primarily a transmitter of information but, states del Bueno (1978:11), is one who also assesses the learner "in relation to the variables of readiness, willingness, and ability to change their behavior." del Bueno goes on to say that it is difficult for some teachers to:

accept the concept of options for the acquisition of knowledge . . . Many teachers believe that learners can only learn by attending their course, or reading specific textbooks. The concept of optional ways/methods of learning is hard to internalize. The notion that there is not an inherent sequence is another difficult concept to accept. (del Bueno 1978:11)

This notion of the importance of the nurse educator's awareness of student needs was emphasized by King (1978). King (1978:21) believed that "people are basically responsible for themselves and their behavior." To apply this belief in working with a group of sophomore nursing students in a clinical nursing course of a community college King changed her teaching approach. She found that a change from "directive, didactic and definitely in control of the situation" to "humanizing" her teaching by being more "person-centered," involving and getting to know the

whole student and making use of her knowledge of the group process was more effective. With this approach nursing students are able to learn content, solve problems and reach decisions, interact more effectively with others and the teacher, when the teacher acted as facilitator and resource person rather than the didactic director.

The attitudes of nurse teachers toward the education of students as expressed in the literature are quite varied. An assessment of the educational orientation of nurse educators as a group is needed.

Determination of Education Orientation

To measure the educational orientation of adult educators, Hadley (1975) developed the Educational Orientation Questionnaire (EOQ). The instrument was designed to measure the orientation along a continuum from consistently pedagogical to consistently andragogical. The instrument was administered to adult educators who completed 409 usable forms. Fifty-four percent of the respondents were "teachers helping learners in face-to-face situations" (Hadley 1975:85), with the next largest group (33 percent) program directors or administrators. Educators in Health Education accounted for 6.7 percent of the respondents. The ages of the respondents ranged from 20 to 59 years of age. Of the 409 respondents, 340 had attended college or were college graduates.

Table 13, "Effect of Variable on Mean Total Scores" in Hadley's report (1975:157), shows that the groups with scores toward the consistently andragogical end of the pedagogical-andragogical continuum based

on five independent variables were:

<u>Variable</u>	<u>Highest Mean Score</u>
Sex	Males
Formal Education	College graduates
Subject Area	Counseling
Level of Position	Research and Training
Type of Organization	Hospital

Hadley listed ten categories of "Type of Organization." "Nursing", with a score of 201.3 was sixth under the "Hospital" group which had a score of 244.0 and could be considered toward the "pedagogically oriented" end of the continuum. There was no way of identifying who was included in either category. It can be assumed that the persons in the "Nursing" category were active in inservice teaching rather than in schools of nursing.

There were no other studies available which dealt with the educational orientations of nurses or nurse educators.

In summary, the concept of andragogy as derived by Knowles is based on those philosophies of education which promote the growth of the individual toward self-fulfillment: progressivism, reconstructionism, and existentialism. The studies by Maslow and Rogers have contributed to the formulation of theories about how adults learn. Central of these theories is the idea that the interests, goals, and life experiences of the adult learner have value in the learning situation.

Knowles made four assumptions about the characteristics of adult learners which are different from the characteristics of child learners. The adult learner sees himself as a proceeder or doer, demands respect for himself as a person, has had many life experiences, learns when he is ready, and is "here and now" oriented. These characteristics provide insight into the environment necessary for learning and into the preparation and skills needed by the educator. The andragogically

oriented educator will provide a learning environment tuned to the needs and interests of the student, giving consideration to his past experiences and the knowledge necessary to help him reach his goals.

The nurse educator, more often than not, has been prepared for a clinical specialty rather than the functional role of teacher. There are those nurse educators who believe that for the nurses subject matter is more important than teaching skills. These differing viewpoints emphasize a need for assessing nurse educators' educational orientations if a new approach to the education of student nurses at the undergraduate level is to be developed.

The assessment of educational orientation can be made by the use of the Educational Orientation Questionnaire (Hadley 1975). The study by Hadley is the only one available which deals with the adult educators' educational orientation.

Theoretical Framework

The theoretical framework of the study held that a teacher's orientation to education will fall somewhere along a continuum from a consistently pedagogical orientation to a consistently andragogical orientation. Educators' attitudes toward education will cause them to be either pedagogically oriented or andragogically oriented. There is, therefore, a dichotomy in the constructs of pedagogy and andragogy. These constructs are based on philosophies of education and theories about how adults learn.

It was further suggested that, based on Knowles' work, the characteristics of adult learners differ from the characteristics of child learners, necessitating an andragogical approach rather than a

pedagogical approach to the education of adults. The constructs of andragogy imply that students are encouraged to participate in decisions about their education, build on past experiences, exercise independent thought and action, and regard learning as lifelong. The andragogical approach to education would seem to be the appropriate one for the preparation of nurses who need to be critical thinkers, decision-makers, and who will continue to learn without external motivation.

It was also proposed that the educators' orientations are related to certain independent variables. The educational orientation can then be predicted by the presence of these characteristics.

Statement of Hypotheses

Five null hypotheses were formulated as a guide for a primary analysis of the data.

1. H_0 : The nurse educators' mean educational orientation scores do not differ from the mean educational orientation of other adult educators as measured by Hadley (1975:157).
2. H_0 : The nurse educators' mean educational orientation scores do not differ when respondents are classified according to educational background.
3. H_0 : The nurse educators' mean educational orientation do not differ when respondents are classified according to type of employing institution.
4. H_0 : The nurse educators' mean educational orientation scores do not differ when respondents are classified according to level of position.

5. H_0 : The nurse educators' mean educational orientation scores do not differ when respondents are classified according to the number of college courses completed in the field of adult education

The null hypothesis was used because "instead of asking what a population parameter is likely to have, one may simply test the null hypothesis that its value is zero against the alternative hypothesis that its value is greater or less than zero" (Nie 1975:322).

Chapter 3

METHOD OF THE STUDY

This chapter presents the design of the study, collection of data, population, sample, variables, and instrumentation. Descriptions of the Supplemental Data Sheet and the Educational Orientation Questionnaire are included. The method of data analysis is also discussed.

The Research Design

The study followed a survey research design which allowed information to be gathered about the variables and the relationships between the variables to be studied. The design included use of an instrument to estimate the educational orientation of nurse faculty in associate degree, diploma and baccalaureate programs along a numerical continuum: consistently andragogical to consistently pedagogical. A second instrument was used to gather information about the characteristics of the sample.

Data Collection

The subjects selected for the study were part and full-time nurse faculty in eight baccalaureate, eight associate degree and twelve diploma schools of nursing in Virginia. A list of these schools is found in Appendix A . All schools of nursing identified in State Approved Schools of Nursing, R.N., 1979, as accredited by the National League for Nursing (NLN), were included except one diploma program

which was in the process of closing. One associate degree program which received accreditation too late to be included in the NLN publication was included in the study.

The deans and directors of these schools of nursing were contacted by letter as shown in Appendix B requesting a list of the nurse faculty from their respective schools. Complete faculty lists were received from nineteen schools. One additional school polled its faculty and released only a list of those who expressed a willingness to participate in the study. The faculty list in the catalog of that school did not distinguish between undergraduate and graduate faculty, and, therefore, the list sent from the school was used. The faculty rosters of the other eight were taken from their school catalogs.

Population

The faculty rosters obtained from the schools and the catalogs contained 476 names. The population for the study included 180 diploma faculty, 86 associate degree faculty, and 210 baccalaureate faculty.

Sample

It was decided to select an equal number of subjects from each of the three types of programs - diploma, associate degree and baccalaureate - as some of the variables, believed to be related to educational orientation, were based on differences in the programs. Because one hundred, preferably 200 or more, subjects would be needed for regression analysis with many independent variables, according to Kerlinger and Pedhauer (1973), the largest sample possible was selected. The

small number of associate degree faculty precluded a larger selection, so that seventy were randomly selected from each group for a total of 210 educators, 46 percent of the available population.

A questionnaire with supplemental data sheets and cover letter was mailed to each of the 210 selected nurse faculty. In the cover letter as seen in Appendix C, educators were assured that all individual information would remain confidential with only group statistics being reported. The questionnaire and supplemental data sheets were coded with three-digit numbers for follow-up of non-respondents only.

From the first mailing of 210 questionnaires, 138 (66%) responses were received. A second mailing of 72 letters (Appendix D) and questionnaires to non-respondents yielded a return of 32, bringing the response to 170 (80%). Telephone calls to the schools of eight (20) of the remaining non-respondents disclosed that two teachers were no longer employed and the other six were not at the schools that day. Messages were left for these six for a yield of one more. The total return was 171 (81.4%). Of the 171, thirteen letters were returned by the schools because the individuals were no longer employed by the schools and three persons who were not teaching in the undergraduate programs returned blank questionnaires. One hundred fifty-five usable questionnaires and data sheets were received.

Instrumentation

The two instruments employed for data collection were the Educational Orientation Questionnaire to determine the educators' educational orientation - andragogical or pedagogical - and a

Supplemental Data Sheet which included fourteen items of personal background information.

Educational Orientation Questionnaire. The EOQ, developed by Herschel Hadley (1975), was selected since it was, at the time of the study, the only instrument designed to measure andragogical-pedagogical orientation.

The EOQ contains sixty Likert-type statements and a five choice response scale. The statements, which may be seen in Appendix E for the exact wording, express the pedagogical view or express the androgogical view of six dimensions of adult education: (1) purposes of education, (2) nature of learners, (3) characteristics of learning experience, (4) management of learning experiences, (5) evalaution, and (6) relationships between educator and learner and among learners. Since, according to Hadley, most educators will hold a blend of the pedagogical and andragogical attitudes, the orientations will fall along a numerical continuum without break from consistently andragogical at one end to consistently pedagogical at the other. High scores indicate an andragogical orientation while low scores indicate a pedagogical orientation. A five point response scale is used ranging from "strongly agree" to "strongly disagree."

The stability of the scores was tested by administering the questionnaire twice to 254 respondents with an average time of two weeks between administration. Hadley reports the correlation of total scores was 0.89. Internal consistency reliability was determined by the average intercorrelation of item scores (.21) which for sixty items yielded a coefficient alpha of 0.94 (Hadley 1975).

Hadley (1975) reported that 409 respondents completed forms that were usable for one or more of the analyses. The subjects were teachers of adults in face-to-face settings (54%), directors of programs (33%), and trainers of adult educators and research responsibilities (7.2%). Respondents educational background varied from secondary education only (10.8%) to either college or graduate education (87.2%). There were seventeen subject areas represented such as adult education, social science, liberal arts, health education and religious education. Eleven types of organizations were representative of businesses, hospitals and different educational programs. Fifty-six percent of the respondents were male and forty-four percent were female. Analysis of variance demonstrated the EQQ detected differences in educational orientation (significant at the .05 level or less) among adult educators with respect to variables of sex, subject matter or specialty, level of position, and type of organization (Hadley 1975). For the variable of formal education completed, differences in orientation were significant at the .09 level causing Hadley to recommend further study in this area.

In addition to the EQQ, Hadley developed a criterion instrument, the Educational Orientation Scales, which was composed of six graphic scales. Three persons selected by each of 163 respondents rated the respondent on the six scales. The mean of these three ratings was the criterion measure used to assess predictive validity (Hadley 1975: 125). Correlations between the mean criterion ratings and questionnaire scores ranged from .28 to .40 and all were significant at the 0.001 level. Regression analysis showed that correlations of item scores with criterion scores could be increased over correlations of criterion

ratings with total scores. The multiple correlation coefficients ranged from 0.50 to 0.60 and were all significant beyond the 0.001 level. There were percentage increases from 44% to 82%.

The instrument was reproduced and used with written permission of the author and copyright holder, Herschel Hadley.

Supplemental Data Sheet. The Supplemental Data Sheet, developed by the writer for this study, listed fourteen variables believed to be related to the educational orientation of nurse educators. The fourteen were: (1) years in nursing practice, (2) years in nursing education, (3) geographic location of basic nursing education, (4) educational background, (5) current appointment, (6) type of employing institution, (7) subject matter, (8) level of position, (9) instructional setting, (10) preparation of syllabus, (11) adult education courses completed, (12) continuing education courses taught during past year, (13) attitude toward mandatory continuing education for relicensure, and (14) pursuing advanced degree. A copy of the Supplemental Data Sheet with exact wording of the variables may be seen as Appendix F.

Four of the variables - educational background, type of employing institution, level of position, and college credits earned in the field of adult education - were selected for major consideration in the study because it was believed that these variables were the most likely to discriminate among nurse educators for educational orientation. Educational background was selected because diploma programs, as noted in the literature, are more likely to hold traditional views of education, and, therefore, it was believed those faculty with

diploma backgrounds would tend to be more pedagogical in their approach. It seemed likely, also, that teachers would hold beliefs about education in accord with the educational philosophies of their employing organizations, that is, diploma school faculty would be expected to be more pedagogical than faculties in universities in their educational approaches. Hadley's (1975) finding that educational attitudes were affected by types of employing organization supported the selection of this variable. Level of position was expected to discriminate among nurse educators' educational orientations because teachers who had achieved higher levels of position and rank usually had university education and had experienced themselves the need of an approach to education different from a pedagogical approach. This notion was supported by Hadley's (1975) finding that level of position discriminated among adult educators for educational orientation. It was anticipated that nurse faculty who had completed college courses in the field of adult education would subscribe to the theories about how adults learn and, hence, be andragogically oriented toward education.

Other variables which were considered likely to affect educational orientation were included in the study. Subject matter taught was found by Hadley (1975) to discriminate among adult educators and was considered to be germane to the study of nurse educators also. Years in practice and years in education were selected because the literature speaks of the changes taking place in education and practice in recent years. Those who have long years in either practice or education would be expected to hold more traditional attitudes toward education than those of recent graduates. The geographic location of

basic nursing education was selected as schools in different parts of the country may differ in their educational approaches and the faculty members in Virginia schools represent many parts of the country. Instructional setting and preparation of syllabus were selected because the literature speaks of the prevailing idea in nursing of authoritarian nurse teachers and the rigidity of curriculums which are characteristic of a pedagogical approach to education. Continuing education courses taught, attitudes toward mandatory continuing education for relicensure and pursuing advanced degree were chosen because each would be expected to influence the nurse educator's attitude toward education as the teachers taught adults, considered life-long learning, and had been students themselves.

Data Analysis

The criterion variable for the study was the educational orientation as measured by the Educational Orientation Questionnaire. The predictor variables were the fourteen demographic variables described under instrumentation. Data obtained from the Supplemental Data Sheet and the Educational Orientation Questionnaire were analyzed using the Statistical Package for the Social Sciences (SPSS) programs (Nie 1975; 2nd edition).

A single mean score was used to analyze the educational attitudes of educators. To arrive at a single mean score, the five point response scale for the statements which were pedagogical in nature was reversed for scoring by computer; therefore, a recoding of thirty responses was

done. A mean score was then obtained for each subject and then for the group.

The frequencies and basic distributional characteristics of each of the fourteen independent variables were computed by the program, FREQUENCIES, which provided descriptive statistics for each distribution. A consideration of these tables showed that, for the planned analysis of variance procedures, some of the variable categories should be regrouped in an attempt to equalize cell frequencies. This regrouping is explained in Chapter 4 under Hypothesis 2.

A major interest of the study was whether or not the mean EQQ score of the nurse educators differed significantly from the mean EQQ of the adult educators as reported by Hadley (1975). This determination was made by a t-test.

A ONEWAY analysis of variance was performed to test the significance of the difference between the mean EQQ score of the different groups represented by the levels of independent variables. For the analyses of variance that yielded significant F values, Tukey's honestly significant difference post-hoc test was applied to compare all possible pairs of group means. The 0.05 level was used for this test.

The REGRESSION procedure was used to analyze the linear relationship between the dependent variable and four independent variables which showed a relationship to educational orientation via the ONEWAY analysis of variance. Because some of the independent variables were of nominal classification, a system of dummy variables was applied. Thus, members of a given category were assigned to 1, while others were assigned an 0, and so on for each level of coded nominal variables.

It was of interest to evaluate the relative contribution of the four individual variables which showed a relationship to educational orientation in explaining the variances of the EQQ. To this end, the order of entry of these variables into the regression equation was controlled in such a way that the contribution of selected variables could be evaluated independently and in conjunction with others already in the equation. In these analyses, the dummy coded variables associated with a particular nominal variable were entered on a single step so that the contribution of the whole set of coded variables could be evaluated.

Chapter 4

FINDINGS AND DISCUSSION

This chapter presents a partial description of the student participants as derived from the Supplemental Data Sheet. The chapter includes, from a primary analysis, the findings and a discussion of the findings by hypothesis. Consideration is given to other variables and a discussion of the findings of a secondary analysis is also included.

The independent, or predictor variables, were:

- I. Primary analysis:
 - A. Educational Background
 - B. Type of Employing Institution
 - C. Level of Position
 - D. College Credits Earned in Field of Adult Education
- II. Secondary analysis:
 - E. Number of Years in Nursing Practice, Excluding Years of Employment in Nursing Education
 - F. Number of Years in Nursing Education, Excluding Years of Employment in Nursing Practice
 - G. Geographic Location of Basic Nursing Education
 - H. Current Appointment
 - I. Subject Matter
 - J. Preparation of Syllabus
 - K. Instructional Setting

- L. Continuing Education Courses Taught
- M. Attitude Toward Mandatory Continuing Education for Relicensure
- N. Pursing Advanced Degree

A partial description of the study participants was achieved by use of the Supplemental Data Sheet.

The number of years in nursing practice, excluding years employed in nursing education, was reported by 155 nurse educators as ranging from less than one year to thirty-four years with the median 6.89 years as shown in Table 1.

The number of years in nursing education, excluding years employed in nursing practice, is shown in Table 2. The number of years in education ranged from less than one year to thirty-three years with a median 6.225 years.

The respondents indicated a diversity of geographical areas, as shown in Table 3, for the locations of the schools where their basic nursing education was received. For purposes of this study, the division of the United States into four geographic areas and a foreign classification may be seen in Appendix G. The majority of respondents, seventy-five, attended schools in the Southeastern region with the second largest group forty-one, in the Northeast, followed by the Southwest, Northwest and Foreign regions. Because twenty-nine did not report name of school but only the type of program, the geographic location could not be ascertained.

The educational background of the nurse educators varied as shown in Table 4. The various educational preparations were: diploma; associate degree, bachelor's degree, nursing; bachelor's degree, non-

Table 1
Distribution of Respondents by Years in Nursing Practice,
Excluding Years Employed in
Nursing Education

YEARS IN NURSING PRACTICE	Respondents	Percentage
0 *	2	1.3
1	8	5.2
2	16	10.3
3	10	6.5
4	17	11.0
5	12	7.7
6	9	5.8
7	9	5.8
8	5	3.2
9	9	5.8
10	14	9.0
11	5	3.2
12	4	2.6
13	5	3.2
14	4	2.6
15	4	2.6
16	3	1.9
18	7	4.5
19	1	0.6
20	3	1.9
22	1	0.6
23	1	0.6
25	2	1.3
26	1	0.6
30	1	0.6
31	1	0.6
34	1	0.6
	N=155	100.0

mean 8.574 years

mode 4.000 years

median 6.889 years

* Any reported numbers of months less than twelve is reported as 0 years.

Table 2
Distribution of Respondents by Years in Nursing Education,
Excluding Years Employed in
Nursing Education

YEARS IN NURSING EDUCATION	Respondents	Percentage
0 *	2	1.3
1	8	5.2
2	19	12.3
3	5	3.2
4	17	11.0
5	12	7.7
6	20	12.9
7	6	3.9
8	8	5.2
9	7	4.5
10	8	5.2
11	6	3.9
12	6	3.9
13	4	2.6
14	3	1.9
15	5	3.2
16	6	3.9
18	1	0.6
19	1	0.6
20	4	2.6
21	2	1.3
22	2	1.3
23	2	1.3
33	1	0.6
	N=155	100.0

mean 8.019 years

mode 6.000 years

median 6.225 years

* Any reported numbers of months less than twelve is reported as 0 years.

Table 3

**Distribution of Respondents by Geographic Location
of Basic Educational Preparation**

GEOGRAPHIC AREA OF UNITED STATES	Respondents	Percentages
Southeast	78	48.38
Northeast	41	26.45
Northwest	7	4.52
Southwest	2	12.9
Foreign	1	.65
Blank	<u>29</u>	<u>18.70</u>
	N=155	100.00

Table 4
Distribution of Respondents by
Educational Background

EDUCATIONAL PREPARATION	Credential Held Number	Highest Degree	Percentages by by Highest Degree
Diploma	67	6	3.87
Associate Degree	12	1	0.65
Bachelors - Nursing	132	44	28.39
Bachelors - Non-Nursing	11	4	2.58
Masters - Nursing	79	72	46.45
Masters - Non-Nursing	21	20	12.90
Doctorate - Nursing	-	-	-
Doctorate - Non-Nursing	8	<u>8</u>	<u>5.16</u>
		N=155	100.00

nursing; doctorate, nursing; and doctorate, non-nursing. Some respondents reported holding several credentials. The diploma was reported by sixty-seven and the associate degree reported by twelve as the first credential earned in nursing. One hundred and thirty-two of the 155 educators reported holding a bachelor's degree in nursing. Of 100 educators holding master's degrees, eight had also earned a doctorate in a non-nursing field. There were no doctorates in nursing. The master's degree in nursing was the highest degree held by seventy-two (46.45%) respondents followed by the bachelor's degree in nursing held by forty-four (28.39%).

Forty-two educators were pursuing an advanced degree in nursing, thirty-three were pursuing an advanced degree in a non-nursing field, and seventy-nine were not currently seeking an advanced degree. The numbers of those not currently seeking an advanced degree included those educators already holding doctorates.

Types of employing institutions are shown in Table 5. Hospitals, two-year colleges, and four-year colleges were reported as public or private institutions. For the purposes of this study those faculty employed by a four-year college to teach in an associate degree program were counted with the two-year institutions.

There were 299 responses to subject matter currently taught. Several educators checked all items as being currently taught. Table 6 shows that the largest number, eighty-five, reported teaching medical-surgical nursing, followed by obstetrical nursing, forty-one; leadership/management, thirty-three; pediatrics, thirty-one. Professionalism/ethics, mental health, community health and others completed

Table 5
Distribution of Respondents by Type of
Employing Institution

TYPE OF INSTITUTION	Public	Private	Total
Hospital	25	37	62
Two-year College	44	7	51
Four-year College	33	6	<u>39</u>
			N=152

Table 6
Distribution of Subject Matter as
Currently Taught

SUBJECT MATTER *	Respondents
Medical-Surgical	85
Mental Health	22
Obstetrics	41
Community Health	16
Leadership/Management	33
Pediatrics	31
Professional/Ethics	29
Other	42

* Some respondents reported all subjects being taught currently. This was assumed to mean an integrated curriculum was in use.

the categories.

The syllabi for courses were reported by ninety-nine as written by self, six by the institution, and forty-eight by others which was usually indicated as a combination effort of the teacher and someone else or by a coordinator.

Fifteen respondents taught in the classroom only, twelve in clinical laboratory only and one hundred twenty-five both in classroom and clinical laboratory.

The distribution of respondents by level of position is shown in Table 7. The largest proportion, 47.74 percent, indicated the position of "instructor" which is the common position title used in hospital schools of nursing for all teaching faculty. The designation "instructor" is used for the lowest rank in academia. The position of "professor" and "dean" are usually found in colleges, although one hospital school used the term "professor" for teaching faculty. The term "director" is found in hospital schools of nursing. "Co-ordinator" is a position level found in all nursing schools.

College credits earned in the field of adult education were reported by 148 respondents as follows: sixty had earned no credits, forty-seven had earned one to six credits, and forty-four had earned seven or more credits.

Sixty respondents reported having taught continuing education courses or workshops during the past year.

A slim majority (50.98%) of the respondents believed that continuing education should be mandatory for relicensure to practice nursing while 26.14 percent were undecided. The opinions were divided: seventy-eight (50.98%) responded yes; thirty-five (22.88%)

Table 7
Distribution of Respondents by
Level of Position

LEVEL OF POSITION	Respondents	Percentages
Instructor	74	47.74
Co-ordinator	9	5.80
Assistant Professor	34	21.94
Associate Professor	23	14.84
Professor	4	2.58
Assistant Dean/ Assistant Director	4	2.58
Dean/Director	4	2.58
Other	<u>3</u>	<u>1.94</u>
	N=155	100.00

responded no; and forty (26.14) were undecided.

Primary Analysis

For the purposes of this study consideration was given to five hypotheses for primary analysis. These hypotheses were related to the questions: (1) What are the mean EQO scores for nurse educators as compared to the mean EQO scores obtained by Hadley? and (2) Are there differences in the mean EQO scores when nurse educators are classified by: Educational background, types of employing institution, level of position, and number of college courses completed in the field of adult education?

To test the significance of the differences between the mean EQO scores for the levels of the independent variables, it was necessary to regroup the levels of certain variables in an effort to equalize the cell frequencies. The regrouping is described in the discussion of each independent variable and shown in the related table.

Hypothesis 1

H_0 : The nurse educators' mean educational orientation scores do not differ from the mean educational orientation scores of other adult educators as measured by Hadley (1975:157).

The t-test for independent samples was used to find the significance of the difference between the mean score of the nurse educators and the mean score of adult educators as reported by

Hadley. The mean scores by sex, as reported by Hadley (1975:157, Table 13), were weighted according to Respondents by Sex (Hadley 1975:150, Table 1) to compute a total mean score of 213.09.

There were 155 nurse educators with a mean score of 194.7 and sum of squares 46972. Hadley's adult educators numbered 395 with a mean score of 213.09 and sum of squares 266891.

A t-test yielded a ratio of 8.137 which, with 548 degrees of freedom, included a mean difference highly significant ($p \leq 0.001$) and therefore the null hypothesis is rejected.

This finding lends support to the notion that nurse educators, as a group, are pedagogically oriented toward education.

Comments by a few of the respondents indicated that they felt the instrument to be unrelated to nursing education since the term "student" as used in the questionnaire referred to "adult student" and therefore "teacher" referred to a teacher of adult students. These comments may verify the opinion that some nurse educators do not regard nursing students as adults.

One respondent commented that the questionnaire was unfair because the respondent had "never had any education courses" and, therefore, did not have a basis for "answering the questions." This comment supports Fitzpatrick and Heller's (1980) statement that colleges are employing faculty who are clinically expert but lack preparation in education which may result in their inability to assume professional responsibility for teaching.

Ten of the respondents also, when unsure of how to respond to a statement, qualified the statement by writing comments related to their own teaching experience or rewrote the statement before

marking the scale. Several of the ten respondents commented that the questionnaire was too vague or too general.

Two respondents commented that their reactions to the questions were related to their own experiences as adult learners as much as their attitudes toward teaching.

Three respondents stated that the preparation of nurses for licensure as professionals does not allow for leeway in the variety of learning experiences for students. These statements support the findings of Kohnke (1972) that curricular practice is not in line with that described in the literature. A lack of understanding of the andragogical approach to education may be indicated.

In summary, written comments by 9% of the respondents indicated influences in operation at the time the questionnaires were completed. These comments indicated a lack of understanding of andragogical technology, lack of preparation for the teaching experience, disagreement with questionnaire items, and personal experiences as students. Despite the influences operating, the nurse educators as a group tend to fall toward the pedagogical end of the pedagogical-andragogical continuum as measured by Hadley's EQQ.

Hypothesis 2

H₀: The nurse educators' mean education orientation scores do not differ when respondents are classified according to educational background.

The educational backgrounds ranged from the diploma to the

doctorate - non-nursing. There was an overlapping noted in Table 4 because educators had moved through various educational programs earning one or more credentials. For the purpose of this study two groups were devised to assist in equalizing cell frequencies. Group 1 included those who indicated the diploma, associate degree, or bachelor's degree as the highest credential held. Group 2 included those who indicated the master's or doctoral degrees as the highest credential held.

A ONEWAY analysis of variance (Table 8) of the mean scores of the groups yielded an F ratio of 0.912 and a chance probability of 0.3411 which was not significant. The null hypothesis is retained.

This finding was somewhat unexpected because according to the literature it is the diploma programs which are likely to foster a pedagogical approach to education (Curran 1979). Those educators who have either progressed beyond the hospital school setting or have never been exposed to these programs were thought to be more likely to hold andragogical attitudes toward education. In Crosby's study (1977) of 3,042 nurses in Virginia, a majority had received instruction in teaching skills. The results of the analyses, Table 8, appears to indicate that a pedagogical approach is used in teaching nurses how to teach whether at the undergraduate or graduate level.

Hypothesis 3

H_0 : The nurse educators' mean education orientation scores do not differ when respondents are classified according to type of employing institution.

Table 8
Significance of Educational Background
On Total Scores

ONEWAY						
<u>Analysis of Variance</u>						
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio	F Prob	
Between Groups	1	276.4940	276.4939	0.912	0.3411	
Within Groups	153	46393.2969	303.2241			
Total Groups	154	46669.7891				

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
01	55	192.9091	16.2586	2.1923	159.0000	234.0000
02	100	195.7000	18.0120	1.8012	158.0000	241.0000
Total	155	194.7097	17.4083	1.3983	158.0000	241.0000

Three types of employing institutions - hospital, two-year college, four-year college - were categorized as public or private as previously shown in Table 5. For the purpose of analysis the three groups were utilized without consideration of the categories, public or private.

A ONEWAY analysis of variance (Table 9) of the mean EOQ scores produced an F-ratio 5.216 which was significant at the 0.0065 level and the null hypothesis is rejected.

The Tukey post-hoc comparison showed that the mean score of Group 2, faculty in two-year colleges, differed significantly at the at the 0.050 level from Group 3, faculty in four-year colleges.

This finding agreed with Hadley's (1975) finding that the EOQ discriminated among adult educators' educational orientation based on type of employing institution. However, since all of the institutions are schools of nursing, the differences may lie in the philosophies of the different types of institutions. The faculty of the baccalaureate programs may feel more inclined to adopt the andragogical technology with students who have already experienced two to four years of liberal education. This attitude would not be, however, congruent with McKenna's (1978:18) statement that "We do not usually have adult learners as students in institutions of higher learning at the baccalaureate level."

The faculties in associate degree programs may feel that because of the concentrated effort required to prepare students to write the licensing examinations there is not time to involve these students in determining objectives or selecting learning activities.

Table 9
Significance of Type of Employing Institution
On Total Scores

ONEWAY						
<u>Analysis of Variance</u>						
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio	F Prob	
Between Groups	2	3037.6874	1518.8435	5.216	0.0065	
Within Groups	149	43383.4414	291.1638			
Total	151	46421.1250				

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Hospital	62	193.5806	16.4780	2.0927	159.0000	241.0000
2-year college	51	190.2745	17.1056	2.3953	158.0000	228.0000
4-year college	39	201.7949	17.9108	2.8680	161.0000	233.0000
Total	152*	194.5789	17.5335	1.4222	158.0000	241.0000

* Three cases marked "parochial" were not included in count.

This is in accord with subject based education spoken to by Sheahan (1978). King (1978), a teacher in a community college nursing program, found that in order to "humanize" her teaching she had to change her teaching approach from "directive, didactic and definitely in control of the situation (King 1978:21)" to one of involving students in theirs.

It must be remembered, however, that although the means differed significantly, the mean scores of both groups were toward the pedagogical end of the continuum.

Hypothesis 4

H_0 : The nurse educators' mean educational orientation scores do not differ when respondents are classified according to level of position.

The levels of position ranged from instructor, a general term used for all teaching personnel in hospitals schools of nursing, to deans and directors of schools of nursing as previously shown in Table 7.

Three groups were devised for the purpose of analysis. The first group included only those in the position of instructor, the second group included co-ordinators and assistant professors, and the third group included associate professors, professors, assistant deans and directors, deans and directors and others.

A ONEWAY analysis of variance of the mean EQQ scores (Table 10) produced an F ratio of 0.073 and a chance probability of 0.9300 which was not significant. The null hypothesis is retained.

This result did not support Hadley's finding that the EQQ

Table 10
Significance of Level of Position
On Total Scores

ONEWAY						
Analysis of Variance						
Source of Variation	Degrees of Freedom		Sum of Squares	Mean Squares	F Ratio	F Prob
Between Groups	2		44.5390	22.2695	0.073	0.9300
Within Groups	152		26625.2617	306.7471		
Total	154		46669.7969			

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
01	74	194.8108	16.4755	1.9152	161.0000	234.0000
02	43	195.3023	17.4826	2.6661	159.0000	233.0000
03	38	193.8421	19.4332	3.1525	158.0000	241.0000
Total	155	194.7097	17.4083	1.3983	158.0000	241.0000

discriminated among adult educators' educational orientations related to level of position.

It was thought that those educators who had been in the field of nursing education long enough to gain the higher positions in schools of nursing would hold different attitudes toward education than those teachers holding lower level positions. The finding that there is no significant difference in the attitudes of the groups and that of the total group or between the groups may be a reflection of the mix of titles used and the educational backgrounds. For example, an instructor in a diploma program may hold a master's degree in nursing and have fifteen years teaching experience. The same education and experience may be true for an associate professor or dean in the two-year college setting. The finding seems to indicate that as level of position changes in schools of nursing, the attitudes toward the education of nurses do not change.

Hypothesis 5

H_0 : The nurse educators' mean educational orientation scores do not differ when respondents are classified according to the number of college courses completed in the field of adult education.

Three groups were utilized for analysis: none, 1 - 6 credits, and 7 or more credits.

A ONEWAY analysis of variance (Table 11) of the mean EQQ scores produced an F ratio of 0.884 which was not significant at a 0.4151 level of probability and the null hypothesis is retained.

It had been expected that those educators who had completed graduate courses in adult education would hold attitudes congruent

Table 11
 Significance of College Credits Earned in Field of Adult
 Education on Total Scores

ONEWAY						
Analysis of Variation						
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio	F Prob	
Between Groups	2	537.2026	268.6013	0.884	0.4151	
Within Groups	148	44946.3203	303.6912			
Total	150	45483.5195				

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
None	60	195.3333	18.6925	2.4132	158.0000	241.0000
1-6 Credits	47	197.3191	17.4693	2.5482	162.0000	234.0000
7 or more Credits	44	192.4773	15.4716	2.3324	159.0000	225.0000
Total	151	195.1192	17.4133	1.4171	158.0000	241.0000

with andragogical principles and therefore the EOQ scores would tend toward the andragogical end of the continuum.

The results of the analysis may have been confounded by a misunderstanding of the term "adult education." One respondent commented that adult education referred to courses in automobile mechanics and, therefore, the item on the supplemental data sheet and the questionnaire were unsuited to nurse faculty. Another responded as having been involved with "many, many" adult education courses. These comments seemed to indicate a lack of recognition of adult education as a discipline. Although the question, which asked for the number of college credits, apparently guided the thinking of two-thirds of the respondents there was a sufficient number who did not understand the question to cast doubt on the results. In view of the comments about the question, further inquiry into the effect of the study of adult education principles on attitudes toward education seems warranted.

Secondary Analysis

Ten other variables which were thought to be related to the attitudes which teachers of nurses hold toward education were considered via a ONEWAY analysis of variance. The analyses of these variables revealed that the nurse educators' mean educational scores did not differ significantly when the respondents were classified according to: number of years in nursing practice, nursing of years in nursing education, geographic location of basic nursing education, preparation

of syllabus, continuing education courses taught, attitude toward mandatory continuing education for relicensure, and pursuing advanced degree. The results of these analyses are shown in Table 12.

ONEWAY analyses of variance revealed that the nurse educators' mean educational orientation scores differed significantly ($p \leq 0.05$ or less) when the respondents were classified according to: current appointment, instructional setting, and subject matter. The discussion of the findings for each variable is presented and the analysis shown in Tables 13 - 15.

The finding that the nurse educators mean educational orientation scores differed significantly when respondents were classified according to full-time and part-time appointments, as shown in Table 13, was not unexpected. The analysis revealed an F ratio of 5.977 with a chance probability of 0.0156. The mean score of 184.6000 for the part-time educators indicated a position farther toward the pedagogical end of the continuum than the mean score for those employed full-time. The range of scores (162.000 - 218.000) for the part-time educators also did not reflect the extremes of scores as did those for full-time educators. Part-time faculty are often employed for clinical laboratory instruction only and therefore are not involved with the students in the planning, classroom teaching and evaluative processes. It is conjecture that these people may also be less exposed to inservice and continuing education programs dealing with newer learning theories and teaching strategies. The small number of respondents in this category would make drawing any conclusions extremely hazardous.

The distribution of the subject matter taught was shown in

Table 12

Significance of Years in Practice, Years in Education, Geographical Location of Basic Program, Preparation of Syllabus, Continuing Education Courses Taught, Attitude Toward Mandatory Continuing Education for Relicensure and Pursuing Advanced Degree on Total Score

ONEWAY

Analysis of Variance

Variable	Count	F Ratio	F Prob
Years in Practice	153	1.149	0.3197
Years in Education	153	0.274	0.7609
Geographical Location	155	1.468	0.2337
Preparation of Syllabus	148	0.548	0.4601
Continuing Education Courses Taught	153	0.829	0.3641
Attitude Toward Mandatory Continuing Education for Relicensure	153	0.202	0.8174
Pursuing Advanced Degree	154	2.240	.1100

Minimum - Maximum range for all groups 158.0000 - 241.0000

Table 13
Significance of Current Appointment
On Total Scores

ONEWAY						
Analysis of Variance						
Source of Variation	Degree of Freedom	Sum of Squares	Mean Square	F Ratio	F Prob	
Between Groups	1	1763.9314	1763.9312	5.977	0.0156	
Within Groups	150	44264.3018	295.0952			
Total	151	46028.2305				

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Full-time	137	196.0219	17.3804	1.4848	158.0000	241.0000
Part-time	15	184.6000	15.0750	3.8924	162.0000	218.0000
Total	152	194.8947	17.4592	1.4161	158.0000	241.0000

Table 14
Significance of Subject Matter
On Total Scores

ONEWAY						
Analysis of Variance						
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio	F Prob	
Between Groups	1	1196.6782	1196.6780	4.026	0.0466	
Within Groups	153	45473.0977	297.2097			
Total	154	46669.7734				

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
All Others	70	197.7714	17.2871	2.0662	159.0000	251.0000
Medical-Surgical	85	192.1882	17.2008	1.8657	158.0000	228.0000
Total	155	194.7097	17.4083	1.3983	158.0000	241.0000

Table 15
Significance of Instructional Setting
On Total Scores

ONEWAY						
Analysis of Variance						
Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio	F Prob	
Between Groups	2	1808.0135	904.0066	3.017	0.0519	
Within Groups	149	44643.6460	299.6216			
Total	151	46451.6563				

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Classroom only	15	193.2000	23.1461	5.9763	159.0000	241.0000
Clinical only	12	183.3333	18.0974	5.2243	162.0000	228.0000
Combined	125	196.0400	16.4465	1.4710	158.0000	234.0000
Total	152	194.7566	17.5393	1.4226	158.0000	241.0000

Table 6. The ONEWAY analysis of variance resulted in an F ratio of 4.026 with a chance probability of 0.0466. For the purposes of achieving more nearly equal cell frequencies the subject matter was divided in two groups: (1) Medical-Surgical and (2) All Others. As may be seen in Table 14 the nurse educators' mean educational orientation scores differed significantly when respondents were classified by subject matter. This finding was supported by Hadley's (1975) finding that the EOQ discriminated among the adult educators educational orientations as determined by subject matter. In the case of the nurse educators, those who teach medical-surgical nursing were more pedagogically oriented toward education than those teaching other subjects. It may be that those who teach medical-surgical nursing content view it as the teaching of facts and principles with little leeway for student decision-making and involvement. This content often deals with tests and procedures which must follow a set protocol. The content of courses dealing with community health or management may be regarded as less rigid and allow for involvement of students in decision-making within the courses. Once again it must be remembered that all of the mean scores are toward pedagogical end of the continuum.

A ONEWAY analysis of variance (Table 15) of the nurse educators' mean EOQ scores classified by instructional setting produced an F ratio of 3.017 and a chance probability of 0.0519. This finding was expected in light of the findings for full and part-time appointments as shown in Table 13. Those persons employed part-time in schools of nursing are generally those employed for clinical laboratory instruction

only and are less likely to be involved in the planning and evaluative processes of courses. Those faculty members who have classroom responsibilities only are generally full-time faculty with administrative responsibilities who teach non-clinical courses or who serve as resource lecturers in the clinical courses.

Regression Analysis

Of importance to the study was the question, what proportion of EOQ score variance is predictable using the independent variables that showed a relationship to educational orientation?

Those independent variables selected for regression analysis were those that showed a relationship to educational orientation via the ONEWAY analysis of variance. These variables were: type of employing institution, instructional setting, current appointment, and subject matter.

Each category of the nominal variables - type of employing institution, instructional setting and subject matter - was treated as a separate variable and assigned "dummy" scores depending on their presence or absence in each of the categories. The variable, current appointment, required no coding. The dummy coded variables associated with a particular nominal variable were entered into the regression equation on a single step in the following order: type of employing institution, instructional setting, current appointment, and subject matter. It was thought that this order would yield the best evaluation of the relative contributions of each variable in explaining the variance of the Educational orientation of the nurse educators. The results of the analysis are presented in Table 16.

Table 16

Multiple Regression

The Relative Contributions of Type of Employing Institution, Instructional Setting, Current Appointment and Subject Matter to Educational Orientation

DEPENDENT VARIABLE... EDUCATIONAL ORIENTATION	MULTIPLE R	R SQUARE	RSQ CHANGE	SIMPLE R	B	BETA
Type of Employing Institution	0.26082	0.06803	0.06435	-0.17574	-11.70385	-0.31908
Instructional Setting	0.33289	0.11082	0.03879	-0.19451	-9.153583	-0.14184
Current Appointment	0.35267	0.12438	0.01356	-0.19575	-6.904064	-0.11833
Subject Matter	0.38445	0.14780	0.00126	-0.16274	-1.387068	-0.03973
(Constant)					211.3883	

The combined R^2 for the four variables of 0.14780 indicated that about 14% of the EQO score variance is predictable using these variables. The amount of variance determined by type of employing institution, instructional setting, current appointment and subject matter would make them poor choices as predictors for the educational orientation of individuals.

Each variable is discussed in relation to its contribution to the combined R^2 . As shown in Table 16, the predictive power of instructional setting, current appointment and subject matter decreased as part of their predictive power was already possessed by the variable, type of employing institution, which was introduced on the first step.

The F ratio of 5.4378 with 2 and 149 df of the regression of educational orientation on type of employing institution is statistically significant at the .01 level. The R^2 of 0.0682 indicates, however, that only 6.8% of the variance is accounted for by type of employing institution.

The addition of the variable, instructional setting, yields an F ratio of 4.58009 with 4 and 147 df which is statistically significant at the .01 level. The R^2 of .11082 indicates that instructional setting adds a small 4.8% of the variance for a total contribution of about 11%.

The variable, current appointment, added to the regression yielded an F ratio of 4.14776 with 5 and 146 df which is statistically significant at the .01 level. The R^2 of .12438 shows that current appointment increased the variance of educational orientation

accounted for by type of employing institution, instructional setting and current appointment together by about 1% to a total of 12%.

The addition of subject matter to the regression produced an F ratio of 2.00895 with 12 and 139 df which was statistically significant at the .05 level. The R^2 of .14780 shows that subject matter added approximately 2% to the amount of variance of educational orientation explained by type of employing institution, instructional setting, and current appointment for a total of about 14% shared by the four variables.

To summarize, a primary analysis testing five hypotheses showed that nurse educators as a group fall toward the consistently pedagogically oriented end of the pedagogical/andragogical continuum as measured by Hadley's EQO. ONEWAY analysis of variance demonstrated that the nurse educators' mean scores for educational orientation do not differ when respondents are classified according to educational background, level of position and number of college courses completed in the field of adult education. The mean scores for educational orientation do differ significantly ($p \leq 0.0065$) when respondents are classified by type of employing institution.

A secondary analysis of the variables which were thought affect the nurse educators' educational orientation revealed that the mean scores differed significantly ($p \leq .05$ or less) when respondents were classified according to current appointment, instructional setting, and subject matter. The mean scores did not differ in nursing practice, number of years in nursing education, geographic location of basic nursing education, preparation of syllabus, continuing education

courses taught, attitude toward mandatory continuing education for re-licensure, and pursuing advanced degree.

By regression analysis it was determined that about 14% of the EOQ score variance is predictable using the independent variables that showed a relationship to the educational orientation.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

This chapter presents a summary of the background, problem, objectives and findings of the study. Also presented are the conclusions drawn from the study and recommendations for further study.

Summary

The study evolved from the recognition that, historically, nursing has been a highly directed and tightly controlled process. This process resulted in the practice of nursing developing as task oriented rather than as intellectually oriented. The image was created of the nurse as caring, dedicated and a handmaiden of the physician. Today's nurse, in contrast, is expected to carry out nursing practice by being accountable to the consumer, to make decisions regarding the consumer's health care, think critically, act as patient advocate, and to continue learning. The literature points out that nursing education programs are falling short of preparing nurses who meet these expectations conveying the idea that a new approach to nursing education is needed. Based on the literature the andragogical approach to nursing education would offer the theories and technology needed to produce the nurse prepared to meet the challenges of nursing practice. The statements of expected

competencies in all programs leading to licensure state that the nurse is prepared to be self-directed and a continuing learner. Studies have shown that not only is there a blurring between the statements of the different types of programs, diploma, associate degree and baccalaureate, but that curricular practice is not in line with that described in the literature. The literature also points out that students in generic nursing programs are generally not regarded as adults. These statements support the ideas that nurse educators are pedagogically oriented toward education.

The study was an assessment of the andragogical-pedagogical orientation of nurse educators in associate degree, diploma, and baccalaureate schools of nursing. The assessment was carried out with respect to the educational orientation of other adult educators as determined by Hadley's EQQ (1975). Two research questions were posed.

1. What is the andragogical-pedagogical orientation of nurse faculty in associate degree, diploma, and baccalaureate schools of nursing with respect to the andragogical-pedagogical orientation of other adult educators as assessed by Hadley (1975) using the Educational Orientation Questionnaire.

2. What is the relationship between dependent variable, educational orientation, and the independent variables: level of education, geographic location of basic nursing education, type of employing institution, subject matter taught, preparation of syllabus, level of position, current appointment, pursuing advanced degree, length of time in nursing, length of time in nursing education, number

of adult education courses completed, continuing education courses taught, attitude toward mandatory continuing education for relicensure.

The objectives were to: (1) obtain valid data about nurse educators' attitudes toward adult education; (2) to determine if the educational orientations of nurse educators differed from the educational orientation of other adult educators as assessed by the EOQ and, if so, how; and, (3) to determine if the nurse educators' educational orientation was affected significantly by certain background variables. Other objectives were to ascertain if continuing education programs were needed to acquaint nurse faculty with theories of adult learning, and to determine if theories of adult learning should be included in the curricula offerings for the preparation of teachers of nursing.

The study was based on the theory that a teacher's orientation to education will fall somewhere along a continuum from a consistently pedagogical to a consistently andragogical orientation. The attitudes of the teachers toward education will cause them to be either pedagogically or andragogically oriented. Based on philosophies of education and theories of adult learning, a dichotomy in the constructs of pedagogy and andragogy exists.

The study was a survey of 210 nurse educators in diploma, associate degree and baccalaureate schools of nursing in Virginia utilizing a Supplemental Data Sheet to gather data on fourteen background variables which were thought to affect educational orientation and the Educational Orientation Questionnaire developed by

Hadley (1975). The total response rate for the mail survey was 171 (81.4%). Of the total return there were 155 usable questionnaires and data sheets.

Consideration was given to five hypotheses for primary analysis. Null hypotheses were stated related to the questions: (1) What are the mean EOQ scores for nurse educators as compared to the mean EOQ scores for adult educators as obtained by Hadley? and (2) Are there differences in the mean EOQ scores when nurse educators are classified by educational background, type of employing institutions, level of position, and number of college courses completed in the field of adult education?

A t-test for independent samples revealed that the difference between the mean score of the nurse educators (194.7) and the mean score of adult educators (213.09), as reported by Hadley, was significant, and the null hypothesis is rejected. This finding indicated that nurse educators, as a group, are more pedagogically oriented toward education than Hadley's sample of adult educators.

A primary ONEWAY analysis of variance showed that the nurse educators' mean educational orientation scores do not differ when classified by educational background, level of position or number of college courses completed in the field of adult education, thereby retaining the null hypotheses.

It was found that the nurse educators' mean educational orientation scores differed significantly ($p \leq 0.006$) when classified by type of employing institution and the null hypothesis is rejected. The Tukey post-hoc comparison showed that the mean score of faculty

in associate degree programs (190.2745) differed significantly from the mean score of faculty in four-year colleges (201.7949).

A secondary analysis of ten other variables thought to affect the attitudes which nurses hold toward education revealed that the nurse educators' mean educational scores did not differ significantly when the respondents were classified according to: number of years in nursing practice, number of years in nursing education, geographic location of basic nursing education, preparation of syllabus, continuing education courses taught, attitude toward mandatory continuing education for relicensure, or pursuing advanced degree. The secondary analysis showed that the nurse educators' mean educational scores differed significantly ($p \leq 0.05$ or less) when classified according to: current appointment, instructional setting, or subject matter. Current appointment and instructional setting were thought to be related to the extent that those faculty members holding part-time positions were usually instructing in the clinical area only and were more pedagogically oriented for that reason. Those who taught medical-surgical nursing content were also more pedagogically oriented than those who taught other subjects.

A regression analysis to determine what proportion of the EOQ score variance is predictable using the independent variables that showed a relationship to the educational orientation revealed that about 14% of the total variance is predictable. The amount of predictable variance (14%) is too small to be useful in explaining the educational orientation of the nurse educators.

Conclusions

From the results of the study it may safely be concluded that the nurse educators surveyed, as a group, tend toward the "consistently pedagogical" end of the pedagogical/andragogical continuum as defined by Hadley (1975). This finding may partially explain Kohnke's finding (1972) that curricular practice, in fact, is not in line with the curricula statements. Nurse educators may be able to state for curricular purposes those ideas which the public, nurse administrators, accreditation bodies, and students want to see, but the personal attitudes of the individual educators cling to the traditional ideas about nursing education. These traditional ideas are pedagogical in nature as pedagogy is characterized by Hadley. The blurring of lines between the curriculums of the different types of programs, as described in the literature, may also be brought about by the nurse educators' pedagogical orientation producing the inability or the unwillingness to identify the approaches and activities necessary to introduce a new approach to nursing education.

It was not possible to determine which nurse educators, according to classification by the background variables examined, were andragogically oriented. The comments by several respondents indicated that many nurse educators do not see themselves as teachers of adults and do not understand that adult education is a distinct field of study.

The significant difference in the mean scores for the teachers in associate degree and baccalaureate programs warrant further study. It may be that nurse educators assume the attitudes that they feel

are appropriate for the philosophy of the institution and the type of student enrolled.

The variables, current appointment and instructional setting may be so closely aligned that the significant differences in the mean scores obtained for these two classifications only indicate that those nurse educators who are part-time clinical or classroom instructors are not involved in the total educational processes of the student. These teachers may see themselves as teaching only to achieve certain instructional objectives which have already been prescribed by others thereby giving them a very narrow perspective of education.

No definite conclusion can be drawn regarding subject matter taught. The finding that the mean score for those teaching medical-surgical nursing material differed significantly from those teaching other material seemed to indicate that nurse educators regard this material as a science to be taught in a prescribed manner, while other material could be taught with a new approach which would more involvement of the student.

It also could not be determined from this study where the nurses' attitudes toward education are formulated. Since the educational background of the nurse educator did not cause a significant difference in mean scores, it may be safe to conclude that the pedagogical approach is self-perpetuated by the educators themselves in all types of nursing schools. This once again points to the need for an andragogical orientation to education by nurse educators.

The implications are that an andragogical orientation to

education would lead educators to regard their students as adults. The nursing student would be helped to make decisions about his learning and to face their consequences, to manage his own life. The student would be accepted by the teacher as a responsible, competent person. The life experiences of the student would be built on and used in his learning process. Immediate application of new skills and knowledge would be recognized as a means of motivating the nursing student, as adults are "here and now" oriented.

The nurse educators should recognize that there is more required of them than a strong subject base. The teacher would be keenly aware of the student's needs, get to know the whole student and make use of a knowledge of the group process. The teacher, acting as facilitator and resource person rather than the didactic director, could better help the student learn content, solve problems, reach decisions and interact more effectively with others and the teacher. The nurse educator would be responsible for knowing and applying different teaching strategies to strengthen individual learning styles.

The andragogical approach to education offers the theories and technologies necessary to produce the desired curriculum changes in nursing education.

Going beyond the implication that a new approach to nursing education is needed are suggestions as to how this change may be accomplished. Attitudes toward education must be changed in those who are in a position to make curricular changes. Those nurses already teaching in schools of nursing should be introduced to theories of adult learning and to strategies for implementing those theories

through a vigorous program of workshops and conferences and the enrollment of more nurse educators in graduate courses in adult education. As a result of this introduction, these faculty members would be able to suggest changes in the curricular offerings for teacher preparation that would include courses related to the education of adults at the graduate level.

Theories of adult learning should be taught in generic nursing programs as students are prepared to teach other team members, patients, and community groups. Gradually the self-perpetuation of pedagogical orientation to education would be corrected.

Recommendations for Further Study

Based on the literature search and results of the study, the following recommendations are suggested for further research:

1. A comparative study among students, faculty and administrators' educational orientations: andragogical or pedagogical. A study of this nature would be helpful in determining the origin of attitudes toward nursing education. Do students come into nursing schools with notions about the teaching/learning process already set? Do inexperienced teachers acquire attitudes about education from the administrators of nursing programs? These are some of the questions that need to be answered if curricular changes are to be made.

2. That each faculty study the overall faculty attitude toward education in relation to the stated philosophy and objectives of the school. In light of Kohnke's finding that curricular practice

is not in line with curricular statements and the finding of this study that nurse educators as group are pedagogically oriented, faculties need to ascertain if they are "practicing what they preach." It may be that faculties are making philosophical statements and writing objectives based on the requirements of an accreditation board, while private attitudes toward the teaching/learning process are quite different. If this is identified, then staff development programs for individual faculties could be directed to introducing andragogical theories and technology in order to change the educational orientation of the faculty.

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A P P E N D I C E S

APPENDIX A: SCHOOLS OF NURSING**Associate Degree**

Virginia Appalachian Tricollege
Northern Virginia Community College
Germanna Community College
Norfolk State College
Tidewater Community College - Frederick Campus
Virginia Western Community College
Shenandoah College
Wytheville Community College

Diploma

Riverside Hospital
Alexandria Hospital
De Paul Hospital
Norfolk General Hospital
Petersburg General Hospital
Portsmouth General Hospital
Richmond Memorial Hospital
Louise Obici Hospital
The Memorial Hospital of Danville
Community Hospital of Roanoke Valley
Virginia Baptist Hospital
Roanoke Memorial Hospitals

Baccalaureate

Marymount College
George Mason University
Hampton Institute
Eastern Menonite College
Old Dominion University
Radford Universtiy
Medical College of Virginia
Universtiy of Virginia

APPENDIX B: REQUEST FOR FACULTY LIST

April 2, 1980

Dear

As part of my doctoral research at Virginia Tech I plan to survey nurse educators representing all schools of nursing in Virginia regarding their educational orientations.

A list of the nurse faculty from your school is needed for this research. A random sample for the survey will be drawn from the names of all faculty in undergraduate programs. All responses from individuals will be confidential.

Your assistance is greatly appreciated and a self-addressed envelope is enclosed for mailing the list. Thank you.

Sincerely,

Mildred Hopkins

APPENDIX C: COVER LETTER

April 29, 1980

Dear

The student population in all nursing programs is changing: the average age of the students is older, college graduates are changing career goals and enrolling in nursing schools, registered nurses and licensed practical nurses are seeking academic degrees, and more students have work and family responsibilities. The new graduates are expected to assume roles of decision-makers in patient care and of continuing learners. My interest and concern is the attitudes that we, as nurse faculty, hold toward the education of these nursing students for today's practice setting. This survey is being conducted to assess the educational orientations of nurse educators: andragogical or pedagogical.

Your name was randomly selected from the names of faculty in the NLN accredited undergraduate nursing programs in Virginia. All information given by you will be confidential with only group statistics reported. The questionnaires are coded for purposes of non-respondent follow-up only.

It should require no more than 15 minutes of your time to complete the data sheet and questionnaire. A stamped, addressed envelope is provided for your use. Please, won't you complete the questionnaire and return it now. All responses must be received by May 15, 1980.

Thank you for your assistance.

Sincerely,

Mildred Hopkins
Graduate Student
Virginia Tech

APPENDIX D: FOLLOW-UP LETTER TO NON-RESPONDENTS

May 28, 1980

Dear

Several weeks ago you received a letter asking your assistance with a doctoral research study concerning the educational orientation of nurse educators. To date your completed questionnaire has not been received. Perhaps it was misplaced on your desk, therefore, I am enclosing another for your use.

Although the response has been good, the study is not complete without your questionnaire and the information given by others is less valuable because your data is missing.

I know how busy you are, but I hope you will complete the questionnaire and return within ten days. Thank you very much for your help.

Sincerely,

Mildred Hopkins, R.N., M.Ed.
Virginia Tech

APPENDIX E: EDUCATIONAL ORIENTATION QUESTIONNAIRE

(ALL RESPONSES ARE COMPLETELY VOLUNTARY)

IDENTIFYING NO. _____

Below are statements about education, teaching, and learning. These have been chosen to express several different viewpoints.

Please Note: In completing this questionnaire keep in mind that the word "student" means adult student, and the word "teacher" means yourself--the person filling out the questionnaire. In other words, your answers indicate your educational orientation in working with adults.

For each statement, please put an "X" in one of the five boxes in front of that statement. Choose the box that indicates your attitudes or position best--how much you agree or disagree with that statement. The five positions from which to choose are:

SA -- I strongly agree with this statement.

A -- I agree with this statement

U -- I'm too uncertain about this statement to agree or disagree.

D -- I disagree with this statement.

SD -- I strongly disagree with this statement.

SA A U D SD
() () () () ()

1. Education should focus on what is sure, reliable and lasting.

() () () () ()

2. Teaching effectiveness should be measured by students' increase in examination of their own feelings, attitudes, and behaviors.

() () () () ()

3. Students need a strong teacher who can direct their learning.

() () () () ()

4. It's hard to keep people from learning.

() () () () ()

5. Learning is an intellectual process of understanding ideas (concepts) and acquiring skills.

SA A U D SD
() () () () ()

6. Effective learning occurs most often when students actively participate in deciding what is to be learned and how.

() () () () ()

7. Giving examinations regularly motivates students to learn.

- SA A U D SD
 8. Organization of the content and sequence of learning activities should grow out of students' needs, with their participation.
9. It should be the teacher's responsibility to evaluate students' achievements and assign grades.
10. The best sources of ideas for improving teaching and education are the students.
11. Competition among students encourages keen learning.
12. A teacher by his behavior should show each student that his abilities and experiences are respected and valued.
13. A teacher should help students accept values of our society.
14. To see education as transmittal of knowledge is obsolete.
- SA A U D SD
 15. Students tend to be much alike.
16. It is a teacher's responsibility to motivate students to learn what they ought to learn.
17. Clear explanation by the teacher is essential for effective learning.
18. A teacher's primary responsibility is helping students choose and develop their own directions for learning.
19. A good teacher makes the decisions about what should be taught, when, and how.
- SA A U D SD
 20. A teacher seldom need to know the average students as separate individuals.
21. A teacher should not change his expressed decisions without unusually good reasons.
22. Emphasizing efficiency in teaching often blocks development of an effective learning climate.

- SA A U D SD
 23. An adult education program should be evaluated by the same standards as other accredited programs of education.
24. Evaluating his achievement should be primarily a responsibility of the student since he has the necessary data.
- SA A U D SD
 25. Competition among students develops conceit, selfishness, and envy.
26. A teacher should discuss his blunders and learnings with students.
27. A teacher should be sure his questions steer students toward truth.
28. Educational objectives should define changes in behavior with the student desires and the teacher helps him undertake.
29. Most students are able to keep their emotions under good control.
- SA A U D SD
 30. Students are quite competent to choose and carry out their own projects for learning.
31. A teacher should help students free themselves of fixed and patterns of thought that block their growth.
32. The major qualifications of a teacher are grasp of subject matter and ability to explain (demonstrate) it clearly and interestingly.
33. It is better for students to create their own learning activities and materials than for the teacher to provide them.
- SA A U D SD
 34. A teacher should require assignments and grade them.
35. Use of a topical outline course plan often blocks a teacher's perception of students' needs.
36. An adult education program should be evaluated only in terms of its own objectives.

- SA A U D SD
 () () () () () 37. Competition among students develops courage, determination, and industry.
- () () () () () 38. A teacher should provide opportunities for warm relationships with students and among students.
- SA A U D SD
 () () () () () 39. Education should lead people to goals that result in orderly, reasonable lives.
- () () () () () 40. Education should increase students' critical evaluation of our society and courage to try new, creative, satisfying behavior.
- () () () () () 41. Often students don't what is best for them.
- () () () () () 42. When a teacher makes a mistake, he is likely to lose students' respect.
- () () () () () 43. Maturity depends more on continuing growth in self-understanding than on growth in knowledge.
- SA A U D SD
 () () () () () 44. Students frequently "get off the subject" either intentionally or unintentionally.
- () () () () () 45. Education programs which tell what should be learned and how, rarely help students learn.
- () () () () () 46. Letting students determine learning objectives wastes too much time in irrelevant discussion.
- SA A U D SD
 () () () () () 47. The primary concern of a teacher should be the immediate needs of the student.
- () () () () () 48. Grades should reflect a students' grasp on the subject or skill taught.
- () () () () () 49. Assignments by a teacher tend to restrict students' significant learnings.
- () () () () () 50. Tests prepared by students are usually just as effective as those prepared by a teacher.
- () () () () () 51. The goals a student sets for himself are the basis of effective learning not the teachers' goals.

- SA A U D SD
 () () () () () 52. A teacher's mission is to help each student learn what he decides will aid him in achieving his personal goals.
- () () () () () 53. If a teacher isn't careful, students take advantage.
- () () () () () 54. Considering the possible effects on students, a teacher should usually play it safe rather than take chances.
- () () () () () 55. Without a cooperative climate encouraging students to risk and experiment, significant learning is unlikely.
- () () () () () 56. A teacher who does not plan the work for a class carefully is taking advantage of the students' ignorance.
- SA A U D SD
 () () () () () 57. To use students' experiences and resources for learning requires group activities rather than such methods as lectures.
- () () () () () 58. It is a good rule in teaching to keep relationships with students impersonal.
- () () () () () 59. Planning units of work should be done by students and teacher together.
- () () () () () 60. Good teaching is systematic--set up a clear plan and schedule and stick to it.

APPENDIX F: SUPPLEMENTAL DATA SHEET

In order that data from the questionnaires may be analyzed by groups of nurse educators, please complete the information below by placing an X by the correct answer or writing the answer as needed.

1. From which school did you obtain your basic nursing education? _____
2. Indicate number of years in nursing practice (exclude years in education): _____
3. Indicate number of years in nursing education (exclude years in practice): _____
4. Educational background (check all that apply):

1. Diploma	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	
2. Associate Degree	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	
3. Bachelor's Degree	1 <input type="checkbox"/> Yes-Nursing	2 <input type="checkbox"/> Yes-Non-Nursing	3 <input type="checkbox"/> No
4. Master's Degree	1 <input type="checkbox"/> Yes-Nursing	2 <input type="checkbox"/> Yes-Non-Nursing	3 <input type="checkbox"/> No
5. Doctoral Degree	1 <input type="checkbox"/> Yes-Nursing	2 <input type="checkbox"/> Yes-Non-Nursing	3 <input type="checkbox"/> No
5. Your current appointment is: 1 Full-time 2 Part-time
6. Type of institution where you are employed:

1. Hospital school	1 <input type="checkbox"/> Public	2 <input type="checkbox"/> Private	3 <input type="checkbox"/> Parochial
2. Two-year college	1 <input type="checkbox"/> Public	2 <input type="checkbox"/> Private	3 <input type="checkbox"/> Parochial
3. Four-year college or university	1 <input type="checkbox"/> Public	2 <input type="checkbox"/> Private	3 <input type="checkbox"/> Parochial
7. Subject matter that you currently teach (check all that apply):

1 <input type="checkbox"/> Medical-surgical	2 <input type="checkbox"/> Mental Health	3 <input type="checkbox"/> Obstetrics
4 <input type="checkbox"/> Community Health	5 <input type="checkbox"/> Leadership/Management	6 <input type="checkbox"/> Pediatrics
7 <input type="checkbox"/> Professionalism/Ethics	8 <input type="checkbox"/> Other _____	
8. Who writes the syllabus for the course(s) which you teach?

1 <input type="checkbox"/> Self	2 <input type="checkbox"/> Institution	3 <input type="checkbox"/> Other
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9. Type of instructional setting in which you teach:

1 <input type="checkbox"/> Classroom	2 <input type="checkbox"/> Clinical Laboratory
3 <input type="checkbox"/> Combined classroom and clinical laboratory	
10. Level of Position:

1 <input type="checkbox"/> Instructor	2 <input type="checkbox"/> Co-ordinator	3 <input type="checkbox"/> Assis. Prof.
4 <input type="checkbox"/> Associate Prof.	5 <input type="checkbox"/> Professor	6 <input type="checkbox"/> Assis. Dean/
7 <input type="checkbox"/> Dean/Director	8 <input type="checkbox"/> Other _____	Director
11. Number of college credits earned in the field of adult education:

1 <input type="checkbox"/> None	2 <input type="checkbox"/> One to six	3 <input type="checkbox"/> seven or more
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12. Have you taught continuing education courses or workshops during past year?

1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No
--------------------------------	-------------------------------
13. Do you believe that continuing education for nurses should be mandatory for relicensure?

1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No
--------------------------------	-------------------------------
14. Are you currently pursuing advanced degree?

1 <input type="checkbox"/> Yes-nursing	2 <input type="checkbox"/> Yes-Non-Nursing	3 <input type="checkbox"/> No
----------------------------------------	--------------------------------------------	-------------------------------

**APPENDIX G: GEORGRAPHIC REGIONS FOR LOCATION OF
BASIC NURSING PROGRAMS**

Northeast	Southeast	Southwest	Northwest
Connecticut	Alabama	Arizona	Alaska
Delaware	Arkansas	California	Idaho
Illinois	District of Columbia	Colorado	Iowa
Indiana	Florida	Hawaii	Minnesota
Maine	Georgia	Kansas	Montana
Maryland	Kentucky	Nevada	Nebraska
Massachusetts	Louisiana	New Mexico	North Dakota
Michigan	Mississippi	Oklahoma	Oregon
New Hampshire	Missouri	Texas	South Dakota
New Jersey	North Carolina	Utah	Washington
New York	South Carolina		Wyoming
Ohio	Virginia		
Pennsylvania	West Virginia		
Rhode Island			
Vermont			
Wisconsin			
Foreign			

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AN ANALYSIS OF NURSE EDUCATORS' EDUCATIONAL
ORIENTATION: ANDRAGOGICAL OR PEDAGOGICAL

by

Mildred A. Hopkins

(ABSTRACT)

This study was concerned with the assessment of the andragogical-pedagogical orientation of nurse educators in associate degree, diploma, and baccalaureate schools of nursing. The principal objectives were to obtain valid data about nurse educators' attitudes toward adult education, to determine if the educational orientations of nurse educators differed from the educational orientation of other adult educators, and to determine if the nurse educators' educational orientation was affected significantly by certain background variables. Additionally, the study examined whether continuing education programs were needed to acquaint nurse faculty with theories of adult learning and whether theories of adult learning should be included in the curricula offerings for the preparation of teachers of nursing.

The study was a survey of seventy nurse educators from each type of nursing program - associate degree, diploma, and baccalaureate - in Virginia for a total of 210. The instruments used for data collection were a Supplemental Data Sheet to gather information on fourteen background variables which were thought to affect educational orientation and Hadley's Educational Orient-

ation Questionnaire (EQQ). There were 171 responses of which 155 questionnaires and data sheets were useable.

The criterion variable was educational orientation as measured by the Educational Orientation Questionnaire and analyzed as a single mean score. The independent variables were educational background, type of employing institution, level of position, college credits earned in field of adult education, number of years in nursing practice, number of years in nursing education, geographic location of basic nursing program, current appointment, subject matter, preparation of syllabus, instructional setting, continuing education courses taught, attitude toward mandatory continuing education for relicensure, and pursuing advanced degree.

The data were analyzed by t-test and the FREQUENCIES, ONEWAY, and REGRESSION procedures of the Statistical Package for the Social Sciences (SPSS). The data were presented descriptively and statistically.

The most significant finding was that the nurse educators' mean score differed significantly ($p \leq 0.001$) from the mean score of other adult educators as reported by Hadley. The finding indicated that nurse educators, as a group, are pedagogically oriented toward education.

Analysis of variance revealed that the nurse educators' educational orientation was affected significantly at the 0.05 level or better by type of employing institution, current appointment, instructional setting, and subject matter. Regression analysis showed that about 14% of the educational orientation score variance is predictable using the four variables which showed a relationship to educational orientation.

It was recommended that nurse educators adopt an andragogical approach to nursing education rather than pedagogical. In order to accomplish this it was also recommended that theories of adult learning and strategies for implementing those theories be introduced through a vigorous program of workshops and conferences for practicing teachers. Courses in adult education should be included in the curricular offerings for teacher preparation at the graduate level.

Recommendations for further study included a comparative study among students, faculty and administrators' educational orientations: andragogical or pedagogical, and that each faculty study its educational orientation in relation to the stated philosophy and objectives of the school.