

BEHAVIORS OF CLINICAL INSTRUCTORS
WHICH FACILITATE LEARNING AS PERCEIVED BY
SECOND YEAR ASSOCIATE DEGREE NURSING STUDENTS

by

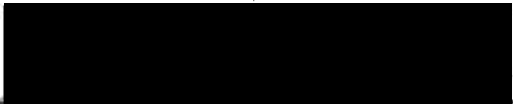
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CHAPTER I

INTRODUCTION

Education is in a constant state of change. It is now recognized that different teaching-learning principles apply to various age groups (Knowles, 1978). Because nurse educators generally deal with adult learners, an awareness of the principles of learning unique to adults is crucial.

Nursing education has changed a great deal in the past two decades (Stafford & Graves, 1978). Nursing students used to average many more hours per week in the clinical setting than they do in the majority of programs today. The reduction in time spent in the clinical area makes the quality of time spent there of prime importance. Because clinical experience is an opportunity for the integration of theory and supervised application of skills and decision making, it is essential preparation for later "solo" performance. Also the inability to replicate many clinical experiences in the classroom makes it important to maximize the teaching-learning experience in the clinical area (Jacobsen, 1966).

Palmer (1970) states that nursing faculty are the "critical variable" in the effective clinical experience. The clinical instructor plays a major role in influencing the quality of the learning experiences of students in the clinical setting. "It takes knowledge, skill, breadth and many other qualities - great and small - to be a good teacher of nurses in the fast paced educational world of today" (Hassenplug, 1965, p. 24). More effort needs to be made to identify what the qualities of a good

nursing instructor are, and, to pinpoint those behaviors which promote learning. This knowledge then can provide a basis for designing methodology courses for students who will become the future nurse educators (Jacobsen, 1966; Wong, 1978). It can also provide a basis for designing self-improvement strategies for clinical teachers as well as aid curriculum planning and provide a basis for academic promotions (Irby, 1978).

Student evaluation is one method of determining effective teacher behavior. The major purposes for evaluating teaching effectiveness are to enhance learning through the improvement of instruction and to add to the personal growth of the instructors (Stone, 1977). That feedback or knowledge of results aids student's learning is a psychological principle of long standing. Feedback from a variety of sources may be of equal value to instructors (Stone, 1977).

This study will explore those specific clinical instructor behaviors which students perceive as facilitative to their learning. In addition, the study will attempt to explore relationships between second year Associate Degree Nursing (ADN) student characteristics such as age, sex, grade point average (GPA) and/or length of time since high school graduation and the student's perception of facilitative behaviors of the clinical instructor.

Conceptual Framework

Adult learning theory, the conceptual framework for this study, describes adult teaching as unique and different from the art and science of teaching children (Knowles, 1978). Knowles

defines an adult learner as someone who has become self-directed and states that entering a professional school or job is a major step toward self-direction and identification with an adult role. Knowles also states that the adult learner is one who has been out of high school some time and chooses to re-enter later to pursue a profession or job field. One of the chief distinctions between "conventional" education (pedagogy) and adult education (andragogy) is found in the learning process itself. Adult education is a mutual learning process where the influence of the teacher and student is a reciprocal process to a greater degree than it is with pedagogy. Knowles further stresses the concept of self-direction, which implies that the teacher needs to recognize the adult learner as a self-directing individual and allow them to plan and guide many of their learning experiences (Knowles, 1978). The notion of the unique characteristics of adult learners has evolved into a comprehensive theory in the last two decades. The adult education movement is emphasizing recognition of the value and importance of education as a life-long process (Knowles, 1978).

In the present study, it is assumed that ADN students are adult learners. Collecting data on each student's age and length of time since high school graduation will help establish this assumption. Consistent with Knowles' assumptions of adult learning, a measurement tool for this study reflecting some of these assumptions was chosen. The tool used, the Clinical Instructor Characteristic Ranking Scale, includes four behaviors strongly reflecting assumptions of adult learning. These behaviors are: 1) "is available

for help when I need guidance," 2) "suggests helpful resources when I have questions," 3) "encourages me to think for myself," and 4) "encourages me to be open, thereby respecting my opinions and feelings." The first three of these behaviors reflect Knowles' strong focus on the adult learner's need to be self-directing. The fourth behavior reflects the assumption that adults are individuals with many life experiences and should be respected and treated as persons with something to offer. It is expected that the characteristics students identify as facilitative to their learning will correspond to the assumptions of adult learning as identified by Knowles.

Review of the Literature

Consistent with the focus of the study, the review of literature covers the following areas: 1) the concept of adult education, 2) combined classroom and clinical studies of teacher effectiveness, 3) studies conducted on clinical instructor effectiveness, and 4) studies done on clinical instructor teaching effectiveness involving ADN students.

Adult Education

Malcolm Knowles (1978) defines an adult learner as a self-directed person. Entry into an ADN school is congruent with the assumption that the ADN student is an adult learner, and, in deed, ADN students are recognized by many leaders in the ADN movement as adult learner (Montag, 1959; Waters, 1978). In order to facilitate adult learning, the instructor needs to be familiar with and use adult education principles (Gessner, 1956). From the instructor's

own theory of learning comes his or her theory of teaching, which is basically the way that an instructor influences students to learn (Gage, 1972).

Malcolm Knowles (1978) identified five key assumptions developed from Lindeman's early work as those which constitute the foundation of modern adult learning theory:

- a. Adults are motivated to learn as they experience needs and interests that learning will satisfy.
- b. Adults' orientation to learning is life centered.
- c. Experience is the richest resource for adults' learning.
- d. Adults have a deep need to be self-directing.
- e. Individual differences among people increase with age.

These assumptions can be expected to characterize the behaviors of effective clinical teachers who subscribe to the theory of adult education. Such an instructor would direct her teaching methods to each individual student's needs and past experiences as much as possible. He/she would also encourage self-direction and independent learning and recognize the student as an adult from whom knowledge might be gained. It should also be noted here that adult education theorists don't usually dichotomize adult vs. youth education, but rather adult vs. "conventional" education, thus implying that youth might also learn better when the above five assumptions are utilized (Knowles, 1978).

Clinical and Classroom Studies on Teacher Effectiveness

There have been a total of over 10,000 published studies on teacher effectiveness. The majority of these studies have been done on primary and secondary educators, although some have focused

on classroom and clinical teacher effectiveness in post-secondary institutions. Comparatively few studies have examined effective teaching specifically in the clinical area (Irby, 1978; Stritter, Hain, & Grimes, 1975).

There have been a number of studies in nursing and medicine focusing on combined classroom and clinical teacher effectiveness (Barham, 1965; Butler & Geitgey, 1970; Cotanch, 1980; Jacobsen, 1966; Kiker, 1973; Stuebbe, 1980). In nursing studies, populations have varied and consist of all levels of students, including graduate students, baccalaureate students, diploma students, and associate degree students. At times, the instructors were also included in the studies as comparison groups. The instruments used to describe effectiveness have also varied. Examples of the types of instruments used are the critical incident technique (Jacobsen, 1966; Wong, 1978), rank-order tools (Kiker, 1973; Rauen, 1974; Stuebbe, 1980), rating scales (Butler & Geitgey, 1970), and open-ended questionnaires (O'Shea, 1979).

Jacobsen (1966) conducted one of the original studies in nursing to determine what constituted effective and ineffective behaviors of nursing instructors. She conducted her study on 961 undergraduates in five baccalaureate programs. The participation was on a voluntary basis and included 85% of the student population in all five schools. Jacobsen utilized the critical incident technique to gather data. The critical incident technique is an instrument that can be either a questionnaire or interview. Essentially, it asks the subject to recall and describe in detail

an incident that best represents an answer to the question being asked. Jacobsen's study resulted in a list of 58 behaviors considered to be either effective or ineffective teacher behavior. She also found that the educational preparation level of the teachers was not related to how students classified them in respect to effectiveness.

Another early study of both classroom and clinical teacher effectiveness was conducted by Barham (1965). Her goal was to differentiate between effective and ineffective nursing instructor behaviors. Barham also utilized the critical incident technique with 178 subjects consisting of students, instructors, and directors in thirteen ADN programs. Two-thirds of the critical incidents occurred in the clinical setting as opposed to the classroom. She identified the two most critical behaviors of instructors as 1) "showing restraint so that own anxiety doesn't influence the situation" and 2) "explaining for understanding". No comparison was presented between students', directors', and instructors' perceptions.

In contrast to Barham's study stating that 80% of the incidents cited some aspect of "feeling or relationship" as most important, Kiker (1973) conducted a study showing that none of the students ranked teacher relationships with students to be as important as professional competency of faculty. Kiker's diverse sample consisted of junior education students, junior nursing students, and graduate nursing students in the educational tract, totaling 107 students. The significant difference between undergraduate and graduate students was that the undergraduates ranked professional

competency as highest while the graduate students ranked creativity as first. The education students ranked encouragement of independent thinking along with confidence in self as the most essential quality of an effective teacher. All students ranked the category of personal attributes as least important. Many students indicated the need for a teacher who could be a role model. This corroborates other studies that report role modeling to be an extremely important facet of clinical instruction (Malasanos, 1977; McCafferty, 1968; Rauen, 1974; Stuebbe, 1980).

A study by O'Shea (1979) presents an interesting discrepancy between faculty and students' perceptions of the importance of role modeling. She found that faculty believe role modeling is five times more important than students do. In contrast to O'Shea's (1979) results, Stuebbe (1980) points out that the instructors she studied ranked teacher characteristics (e.g. providing guidance, resources, and evaluations) much higher than nurse characteristics (e.g. demonstrating nursing skills, scientific knowledge, and positive attitudes toward nursing).

Stuebbe (1980) has published one of the most recent studies on nursing instructor effectiveness. She compared the view of students and instructors in a diploma program about the role of instructors. Her total sample of 80 persons consisted of 29 freshmen, 21 juniors, 18 seniors, and 12 instructors. The eighteen characteristics identified were divided into three categories: 1) nurse characteristics (e.g. nursing skills and attitudes), 2) person characteristics (e.g. empathy and fairness toward others),

and 3) teacher characteristics (e.g. providing guidance, resources, and evaluation).

Of interest are the discrepancies between faculty and students in their relative ranking of the importance of these three categories of characteristics: 1) instructors ranked teacher characteristics as the most important, 2) overall, the students ranked nurse characteristics the highest, 3) freshmen students ranked nurse characteristics highest, 4) seniors ranked person characteristics the highest, and 5) there was a statistically significant difference between students and instructors ranking of the characteristics. These findings are consistent with Rauen's (1974) findings as far as the students' overall ranking of nurse characteristics as the highest. Rauen's (1974) study showed that the seniors ranked nurse characteristics and person characteristics as equally important, while Stuebbe (1980) found that seniors felt person characteristics were most important. Comparison of findings was possible between Stuebbe's and Rauen's studies because both utilized the same tool, the Clinical Instructor Characteristic Ranking Scale (CICRS), and both studied diploma students.

One final study investigated the relationship of student and instructor personalities to the student's success in the clinical area (Cotanch, 1980). Her results showed that the greater the differences between the student's and instructor's personalities, the worse the student performed in the clinical area. This has definite implications for further study in terms of student placement with instructors.

Studies of Clinical Teacher Effectiveness

There is some evidence that an increased rate of attrition of

nursing students is directly correlated with a high rate of dissatisfaction with clinical experience (Haggarty, 1969). The clinical learning experience is unique because there is a certain amount of anxiety in both the learner and teacher related to the risk of dealing with real clients (O'Shea, 1979; Fox, 1963). It is essential to identify those factors which will increase the satisfaction of clinical experience for students as well as reducing their anxiety to a level where learning can occur. The effective clinical instructor is able to accomplish both goals.

Few studies have been done specifically on effective behaviors of clinical nursing instructors (O'Shea, 1979; Rauen, 1974; Wong, 1978). Rauen (1974), using the conceptual framework of role modeling, created a measurement tool called the Clinical Instructor Characteristic Ranking Scale (CICRS) which divides eighteen behaviors into three categories (Person, Teacher, and Nurse behaviors). She studies freshmen and senior students in three diploma programs with a total sample of 84 students. As mentioned earlier, her results were consistent with Stuebbe's (1980) finding that nurse characteristics were consistently ranked the highest. This was predictable within the conceptual framework and provided some support of role modeling as an important element in clinical instruction.

In contrast to Rauen's study, O'Shea (1979) found less consistency in student rating of the importance of role modeling. She conducted a study using a simple two-item questionnaire asking students to list three to five behaviors under "facilitated learning" and under "interfered with learning". O'Shea's three categories of behavior differed somewhat in terminology: 1) Personal, 2) Instructive/

Assistive, and 3) Evaluative. Her sample consisted of juniors, seniors, and faculty in a baccalaureate program. She found that students and faculty sharply disagreed on the value of role modeling, faculty citing that it was facilitative of learning almost five times as often as students did. O'Shea does comment here, though, that this discrepancy may lie in the fact that the term "role model" is less familiar to students. However, the discrepancy between what students and faculty deem important should be noted. O'Shea found that all three groups, juniors, seniors, and faculty found faculty availability to be the behavior most facilitative of learning in the instructive/assistive category. She also found that the majority of subjects agreed that feedback (evaluative category) facilitated learning, especially in seniors. O'Shea commented that the study did define behaviors but statistically didn't show as much significance as it might have if different statistical tests had been applied.

There have also been some studies done on medical students focusing solely on effective clinical instructor behaviors (Stritter, et al., 1975; Irby, 1978; Cotsonas, 1963). Similar to the nursing studies, behaviors rated as very important in these studies were: 1) instructor availability, 2) support and encouragement, 3) feedback, 4) encouragement of problem-solving, 5) structure and guidance, and 6) clinical competence.

Clinical Study on ADN Students

The number of ADN programs has increased rapidly in the last ten years, influenced partially by the shortage of practicing registered nurses and by the closure of many diploma programs. Because of the influx of ADN students and also because of the limited amount

of time they have to learn nursing, it is important to put more emphasis on instructor behaviors the ADN student perceives to facilitate his/her learning. It is recognized that student evaluation of teachers is a valid method of assessing teacher effectiveness (Butler & Geitgey, 1970).

There has been only one study conducted about what ADN students perceive as effective clinical instructor behavior. This study by Wong (1978) surveyed a small sample consisting of eight first year and six second year ADN students at one college. She found that: 1) first year students were particularly sensitive to how the teachers made them feel and 2) second year students were more concerned with the teacher's competency. The finding regarding the first year students is not consistent with Rauen's (1974) or Stuebbe's (1980) findings in similar comparisons of levels of students (see Table 1, p.16). Because the sample size in this study was small and because there may be significant differences in what ADN students perceive to be important clinical instructor behavior, further studies should be conducted on ADN students.

Summary

The general topic of student evaluation of teachers has been examined, ranging from a very general overview of education to a specific presentation of results of studies which examined nursing students' perceptions of clinical instructor attributes. A concise summary of the studies is presented in Table 1.

In the studies presented comparing what teachers and students perceived as effective instructor behavior, there were significant

differences between the two groups (O'Shea, 1979; Stuebbe, 1980). This has important implications for teachers, especially if they consider student evaluation as a useful measure of instructor effectiveness. Student evaluation has been said by many to be a useful means of determining what an effective teacher is (Butler & Geitgey, 1970; Dixon, 1976; Frey, 1973; Jacobsen, 1966; Mims, 1970; Stone, 1977; Stritter et al., 1975; Wong, 1978).

There are some consistencies in the results of the studies presented, but also many inconsistencies. The inconsistency in the results of the studies of clinical teacher effectiveness is clearly illustrated in Table 1. These inconsistencies make generalizability virtually impossible at this point. Further studies need to be conducted in order to resolve the inconsistencies and contribute to generalizability of the knowledge about which clinical instructor behaviors are perceived by students to facilitate learning. This study will add to the amount of information available on the subject and hopefully contribute to the consistency of results.

To date, only one study has been conducted on ADN students and their perceptions of facilitative clinical instructor behaviors. ADN students constitute a large portion of basic nursing students; therefore, it is important to determine what instructor behaviors they perceive as facilitative to their learning.

It is assumed in this study that ADN students are adult learners. Consistent with Knowles' assumption that individual differences increase with age, it is also assumed that the sample population will be a very heterogeneous group. An attempt to account for the

heterogeneity and individual differences of adult learners will be made in this study by analyzing the relationship of personal variables to student perception of facilitative clinical instructor behaviors.

The review of literature revealed that no nursing studies have examined relationships between student characteristics and perception of effective clinical teaching. Four variables were selected for this study. Age and length of time since high school graduation were chosen because they are factors which help validate the assumption that ADN students are adult learners. It was recognized that age and length of time since high school graduation would probably yield the same data, but many students in the community college setting are ones who left high school before graduating and later obtained a General Education Development (GED) Certificate. Because of the increasing number of males entering nursing schools, sex was selected as another variable. It's important to determine if significant differences exist between male and female student's perceptions of effective clinical instructor behaviors. GPA was the last variable chosen to be included in this study. GPA has long been thought to influence how a student perceives faculty effectiveness. To date, previous studies conducted have analyzed GPA in terms of the student's perception of the effectiveness of specific instructors. This study will attempt to identify if students with varied levels of GPA perceive different clinical behaviors as facilitative to their learning.

Purpose

This descriptive correlational study had two purposes. The first purpose was to identify clinical instructor behaviors which

second year ADN students perceive as facilitative to their learning. The second purpose of this study was to determine if there was a difference in student perception of facilitative instructor behavior based on the student's age, sex, GPA, or length of time since high school graduation.

Research Questions

Which clinical instructor behaviors do second year ADN students perceive as facilitative to their learning?

Is there a significant relationship between a second year ADN student's age, sex, GPA, or length of time since high school graduation and what he/she perceives to be facilitative clinical instructor behavior?

TABLE 1

SUMMARY OF STUDIES RELATED TO EVALUATION OF TEACHER EFFECTIVENESS (1966-1980)^a

Author, Year	Size and Type of Population Studied	Type of Tool	Characteristics Examined	Results
Jacobson, 1966	All levels of undergraduate students at five baccalaureate programs (N = 961)	Critical incident technique	Studied baccalaureate students to determine what constituted effective and ineffective <u>classroom</u> and <u>clinical</u> behaviors of their nursing instructors.	<ol style="list-style-type: none"> 1. Provided a list of 58 behaviors considered to be effective or ineffective teacher behaviors. 2. The proportion of negative critical incidents was inversely related to an increase in student:faculty ratio. 3. The preparation level of teachers was not related to their effectiveness classification. 4. The education level of students was related to the proportion of negative critical incidents.
Barham, 1965	178 subjects consisting of students, instructors and directors from 13 ADN programs	Critical incident technique	Collected data on what students, instructors, and directors felt were effective and ineffective <u>classroom</u> and <u>clinical</u> teacher behaviors.	<ol style="list-style-type: none"> 1. No comparisons between students', instructors', and directors' opinions were made. 2. Identified the two most critical behaviors as "showing restraint so that own anxiety does not influence the situation" and "explaining for understanding." 3. 80% of all incidents cited some aspect of "feeling or relationship."

^aCo-authored by Susan Ulrich and Suzanne Canale, 1981.

Author, Year	Size and Type of Population Studied	Type of Tool	Characteristics Examined	Results
Kiker, 1973	107 students (jun- ior education stu- dents, junior nursing students and graduate nurs- ing students) in educational tract. Students were from two universities.	Rank order tool listing 12 teacher character- istics	Comparison of teacher char- acteristics considered most essential by the three groups. There was no division of <u>classroom</u> and <u>clinical</u> behaviors.	<ol style="list-style-type: none"> 1. Education students ranked instructor confidence and encourage- ment of independent thinking as most essential. 2. Undergraduate nursing students ranked professional competency as most important. 3. Graduate nursing students ranked creativity as first. 4. All students ranked personal attributes as least essential.
Stuebbe, 1980	80 persons (29 freshmen, 21 juniors, 18 sen- iors, 12 instruc- tors) in a <u>diploma</u> program.	CICRS (Clinical instructor character- istic rank- ing scale)	Comparison of student and instructor views about the <u>role</u> of nursing instructors	<ol style="list-style-type: none"> 1. Instructors ranked teacher characteristics as most important role. 2. Students ranked nurse character- istics highest. 3. Freshmen students ranked nurse characteristics highest. 4. Seniors ranked person character- istics highest. 5. There was a statistically signi- ficant difference in how students and instructors ranked characteristics.
Rauen, 1974	84 diploma nurs- ing students (fresh- men and seniors)	CICRS	Specific focus on <u>clinical</u> instructor behaviors which students feel helps them to become the type of nurse they wish to become.	<ol style="list-style-type: none"> 1. Overall, students ranked nurse characteristics as most important. 2. There was no significant differ- ence between rankings by freshmen and seniors. 3. There was a significant differ- ence in the scores of the three categories (person, nurse, and teacher)

Author, Year	Size and Type of Population Studied	Type of Tool	Characteristics Examined	Results
Rauen, 1974, continued				
O'Shea, 1979	Juniors and seniors and faculty in a baccalaureate nursing program	Two question- naire ("facilitated learning" and "Inter- ferred with learning"	Comparison of effective and ineffective <u>clinical</u> teach- ing behaviors as described by students and faculty.	<p>4. There was a significant difference among the subject's scores of identical class levels.</p> <p>1. Faculty cited role modeling to be important five times as often as students did.</p> <p>2. Behavior noted by all groups to be most facilitative was faculty availability.</p> <p>3. Found a significant difference in what students and faculty deemed important.</p>
Wong, 1978	14 students in an ADN program (8 first year and 6 second year stu- dents)	Critical incident	Purpose was to identify stu- dents' perceptions of teacher behaviors which facilitate or hinder students' learn- ing in <u>clinical</u> area and to determine if first and second year ADN students had different perceptions.	<p>1. Found that first year students were particularly sensitive to how the teachers make them feel.</p> <p>2. Found second year students more concerned with teacher competency.</p>

CHAPTER II

METHODS

With increasing focus on student rights, the last fifteen years have become a period in education called by many writers the evaluation movement (Wallace, 1978). Attempts to identify characteristics of effective teaching are valid only if they are designed in relation to the specific purposes of instruction and the context in which the instruction takes place (Wallace, 1978). A review of the literature revealed that a multitude of studies have been done on identification of effective classroom teaching behaviors; few, however, have focused specifically on nursing and the effective clinical instructor.

In this descriptive correlational study, an attempt was made to add to current knowledge about what nursing instructor behaviors are believed to facilitate learning in the clinical area. A rank-order tool, the CICRS, developed specifically for student evaluation of clinical instructor behaviors, was used to identify the instructor behaviors that students perceived to facilitate their learning. The other goal of the study was to explore possible relationships between the independent variables of age, sex, GPA, and/or length of time since high school graduation and the dependent variable of clinical instructor behaviors perceived as facilitative to learning.

In the sections to follow, the method of selection of subjects, the setting of the study, the data collection procedure, and the research design are described. The data collection instrument and method of scoring are also discussed.

Subjects and Setting

Sixty-five subjects comprising the entire second year class in the only ADN program in Eugene, Oregon were asked to participate in this study. Forty-four students actually participated in the study.

The 1981 NLN Accreditation Report, prepared by the school, presented some pertinent data on this graduating class of students. Approximately half of these students were married, and 45% had children living with them in the home. Most of the students shared accommodations with other people; 13% lived alone. More than half of these students maintained a part-time job while enrolled in the program, the majority worked 8-24 hours per week. Approximately 80% of these students had had previous community college or baccalaureate work. Note that the subject group in the current study consisted of 44 students or 71% of the group described in the NLN Report.

Data collected specifically on the subjects in this study show that 14% of the sample were males. All of the subjects were Caucasian. The average age of the subjects was 27.6 years, and only one of these students had entered the program immediately following high school. Thus the sample was representative of Knowles' definition of adult learners as persons who are older and have been out of high school for some time and later return to the educational setting.

The data were collected during Spring Term of 1981 just prior to graduation. Students were divided into two groups, one group completing a pediatric-obstetric rotation, and the other group completing an advanced medical-surgical nursing rotation. At this

point in the program, the students had completed five to six terms of medical-surgical nursing and either had or were in the process of completing a term of pediatric and obstetrical nursing. Integration of mental health nursing is done throughout the program.

At the time the questionnaire was administered, all the subjects were having clinical experiences in acute care hospital settings. Students select their clinical areas each term with knowledge of who the clinical instructors are in each area. Because registration is based on social security numbers, however, some students may get their preference of clinical areas and instructors; other students may not get their preference. The instructor:student ratio is 1:9. The clinical instructor spends the entire clinical time (16 hours/week for the full term) in the clinical area working with her group of students. During this time, the instructor assists the students with procedures, supervises their patient care, and helps them apply theory to practice. Much of the latter is done during group pre and post conferences.

Subjects were included in the study based on the following criteria:

1. Expressed a willingness to participate in the study by informed consent (Appendix A).
2. Were in the process of completing their final term in the program.

Data Collection Instrument

The students' perceptions of what instructor behaviors facilitated their learning in the clinical area was measured by the CICRS (see Appendix B), a rank-order instrument developed by Rauen (1974). Rauen reports that 25 judges were initially used to

determine placement of behaviors into the three categories of nurse, teacher, and person behaviors. Behaviors were placed in one of the three categories only if 80% agreement of the 25 judges was obtained. The instrument then has a relatively high degree of content validity. She also tested the tool for reliability using the Spearman-Brown prophecy formula and found a .75 reliability coefficient, which is considered adequate for group measures. The tool was used later by Stuebbe (1980) with no reported data on reliability and validity. No further tests for validity or reliability were conducted for the present study.

The CICRS (Clinical Instructor Characteristic Ranking Scale) is a rank-order measurement tool which divides eighteen clinical instructor behaviors into three broad categories: 1) Person, 2) Nurse, and 3) Teacher. Person characteristics relate to the instructor's personality and are represented by such behaviors as "avoids embarrassing me" and "demonstrates kindness in daily interactions." Nurse characteristics deal with role modeling behaviors, such as "demonstrates how to function in a real nursing situation" and "demonstrates the ability to perform nursing skills." Behaviors related to instructor-student relations, such as "suggests helpful resources when I have questions" and "encourages me to think for myself" are representative of teacher characteristics. Each of the three groupings of behaviors on the questionnaire contains an equal number of teacher, nurse, and person behaviors.

This instrument was selected because the characteristics are stated in behavioral terms and are specific to the clinical situation. It is also concise yet wide-ranging and thorough. There was no tool

available from the review of literature that contained behaviors exclusively representative of adult learning assumptions. Believing that Malcolm Knowles assumptions of adult learning are important to ADN student learning, however, the CICRS was chosen because it has four behaviors on it that strongly exemplify adult learning principles. The tool also had been shown to have a high reliability and content validity. The researcher and colleague (completing a study using the same tool) had 100% agreement of which behaviors on the questionnaire were congruent with the assumptions of adult learning. No previous efforts had been made to establish content validity on this tool based on behaviors reflective of adult learning theory.

This instrument provides for a numerical ranking of the eighteen characteristics, but with each of the three categories being ranked separately. In each group, the subjects ranked the six characteristics from 1 to 6, with 6 being the most important and 1 being the least important. After rating each group of behaviors separately, the three characteristics ranked most important (6) were ranked against each other using a 1 to 3 ranking system, with 3 being the most important. The same ranking system was used for the three characteristics ranked second most important (5) from each group. Each characteristic was then assigned points equal to the rank number it had been given by students (e.g. 6's were assigned 6 points, etc.). Ranking of the first and second most important (6's and 5's) were assigned additional points. The points were assigned as follows: 18 points for the number 6 ranked 3, 12 points for the number 6 ranked 2, and 6 points for the number 6 ranked 1. The 5's received 15, 10, and 5 points respectively. The points were

totaled for each characteristic. Then the characteristics were ranked by the total number of points, the items receiving the highest number of points considered the most facilitative behaviors by students. A pilot study was done on ten first year ADN students to determine if the rank-ordering on this questionnaire was clear. No expressed or apparent difficulties were evident from the pilot study.

Procedure

Permission was obtained from the Chairman of the Health Occupations Department at the community college to invite students to participate in this study. Informed consent was obtained from each subject after a brief explanation of the study. The questionnaires were then administered to the two halves of the second year ADN class on the same morning but at different times. It was made clear to the students that this was an optional activity and that only the investigator would be analyzing the data using code numbers for each subject. It was also explained that all questionnaires would be coded and locked up and not reviewed by even the investigator until after graduation. These precautions were taken to minimize any concerns the students might have had about their instructors knowing their comments prior to graduation. Questions were entertained when the study and questionnaire were being explained. The investigator administered the questionnaire to both groups. Each group was given twenty minutes to complete the questionnaire. Code numbers were assigned to each subject to insure anonymity.

Data on age, sex, GPA, and length of time since high school graduation were then obtained from the school records. Age was rounded off to the nearest year. GPA was calculated on courses

taken at the community college since entry into the nursing program and did not include the final term grade. GPA was based on a 4.00 scale. Length of time since high school graduation was rounded off to the nearest year. No manipulation of the described variables was performed.

Analysis of Data

Consistent with the purpose of the study, analysis of data was descriptive and inferential. Measures of central tendency, namely mean, and frequency distributions, expressed in terms of percentages, were utilized to describe the sample.

The Kruskal-Wallis test was used to describe and analyze the relationships between the independent variables of age, sex, GPA, length of time since high school graduation and the dependent variable of facilitative clinical instructor behavior. The Kruskal-Wallis test is a non-parametric one-way analysis of variance. The level of significance was set at .05 (Polit & Hungler, 1978). If there are more than five cases in each group, as there were in this study, the distribution of H is approximate to chi square (Blalock, 1972). If the value of H is equal to or greater than the value of chi square for the set level of significance, then the null hypothesis may be rejected (Seigel, 1956).

CHAPTER III

RESULTS

A great deal of learning in nursing takes place in the clinical setting where students apply theory to actual patient care. The clinical instructor plays a major role in facilitating student learning. Because the ADN student's clinical time is limited, it is essential that the instructor maximize the clinical learning experiences as much as possible. A review of literature revealed that few attempts to date have been made to identify the clinical instructor behaviors which students perceive to facilitate their learning.

The purpose of this study was to determine what clinical instructor behaviors second year ADN students perceived as facilitative to their learning and to test for significant relationships between student perceptions of facilitative behaviors and their age, sex, GPA, and/or length of time since high school graduation. The Clinical Instructor Characteristic Ranking Scale, which specifically identifies clinical behaviors, was used as a measurement tool because it was more representative of the assumptions of adult learning than other available tools and has a high reliability and content validity.

Characteristics of Subjects

A total of 46 subjects (71% of the second year ADN class at a community college in Oregon) participated in this study. Participation entailed filling out a questionnaire ranking clinical instructor behaviors perceived as facilitative. Two of the 46

questionnaires were filled out incompletely, making the total number of useable questionnaires 44. Table 2 and Figure 1 summarize data about sex, age, GPA, and length of time since high school graduation for these 44 subjects.

Table 2

DISTRIBUTION OF SUBJECTS

Sex, Age, GPA, and Length of Time
Since High School Graduation By
Numbers and Percentages

Characteristic	Number	%
Sex		
Male	6	14%
Female	<u>38</u>	<u>86%</u>
Total	44	100%
Age		
20 - 24 years	13	29%
25 - 29 years	17	39%
30 and over	<u>14</u>	<u>32%</u>
Total	44	100%
GPA		
2.00 - 2.99	9	20%
3.00 - 3.59	18	41%
3.60 - 4.00	<u>17</u>	<u>39%</u>
Total	44	100%
Years Since High School Grad.		
2 - 7 years	16	36%
8 - 13 years	18	41%
More than 14 years	<u>10</u>	<u>23%</u>
Total	44	100%

Sex

From Table 2, it may be seen that the majority (86%) of the subjects were female. Six subjects (14%) were male. The age range of the males was 23 - 30 years, so they were not represented

strongly (7%) in the older age group. The range of GPA's of the males was 2.71 - 3.71, and two males fell into each GPA subgroup.

Age

The ages of the subjects ranged from 20 - 47, with a mean age of 27.6 years. The median age was 28. The majority of these subjects fit into the category of adults according to chronological age, which is one definition of adulthood and generally accepted in the social and legal sense.

GPA

The range of GPA's was from 2.23 - 4.00, with 80% of the subjects having a cumulative GPA of 3.00 or above on courses taken since entering the community college. Two of the subjects with GPA's below a 3.00 were males. It's also interesting to note that 82% of the 17 students having GPA's above 3.60 were 28 years of age or older. It can be seen from the scatter gram in Figure 2, however, that there was only a weak positive correlation between the student's age and GPA.

Years Since High School Graduation

One subject entered this program immediately after graduating from high school. The remaining 43 subjects had been out of high school from two to twenty-nine years. The average number of years since high school graduation was 10.3 years. Figure 1 shows that age and length of time since high school are strongly correlated in a positive direction.

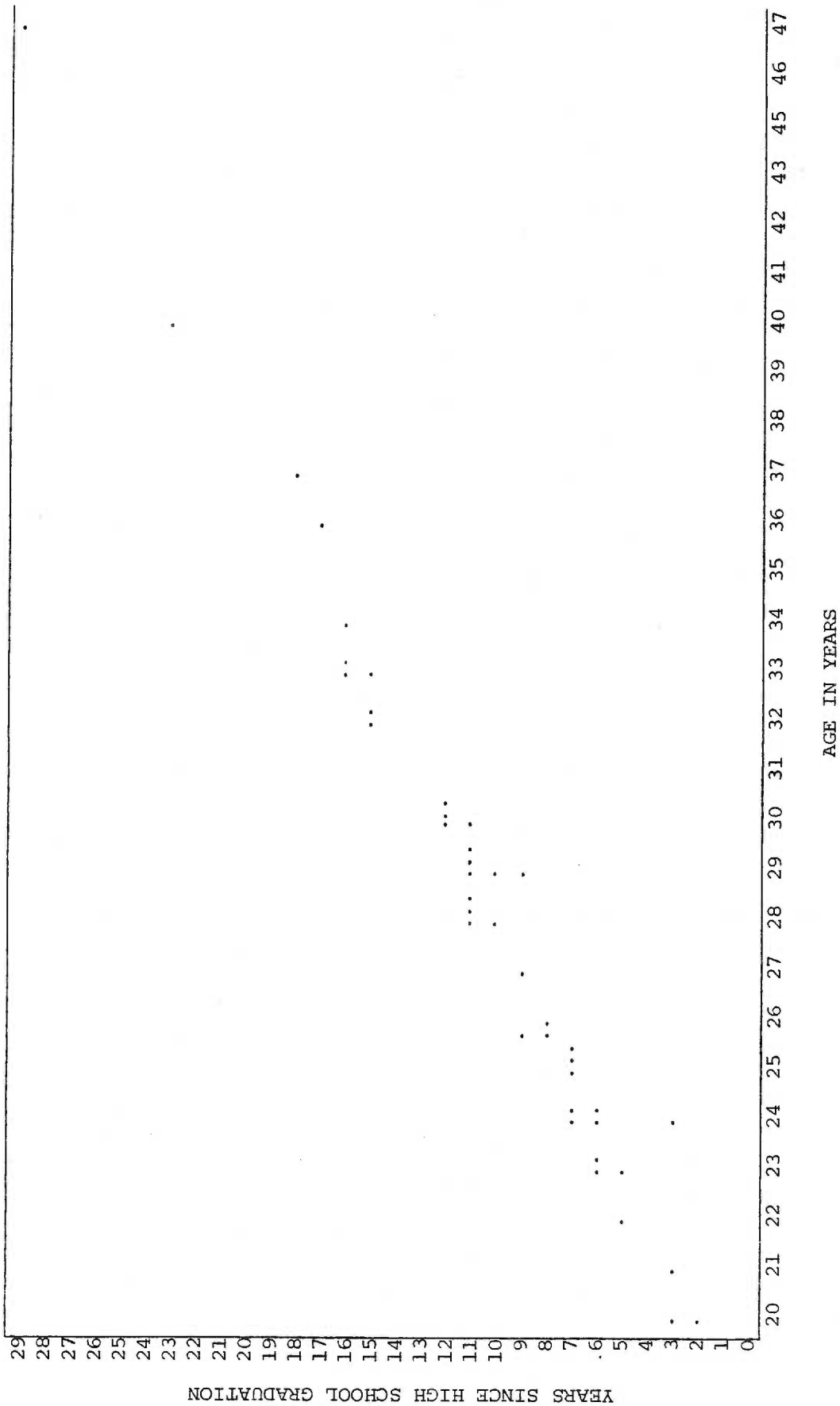


Figure 1
Correlation between student's age and
length of time since high school graduation a

a Key: each dot represents one subject

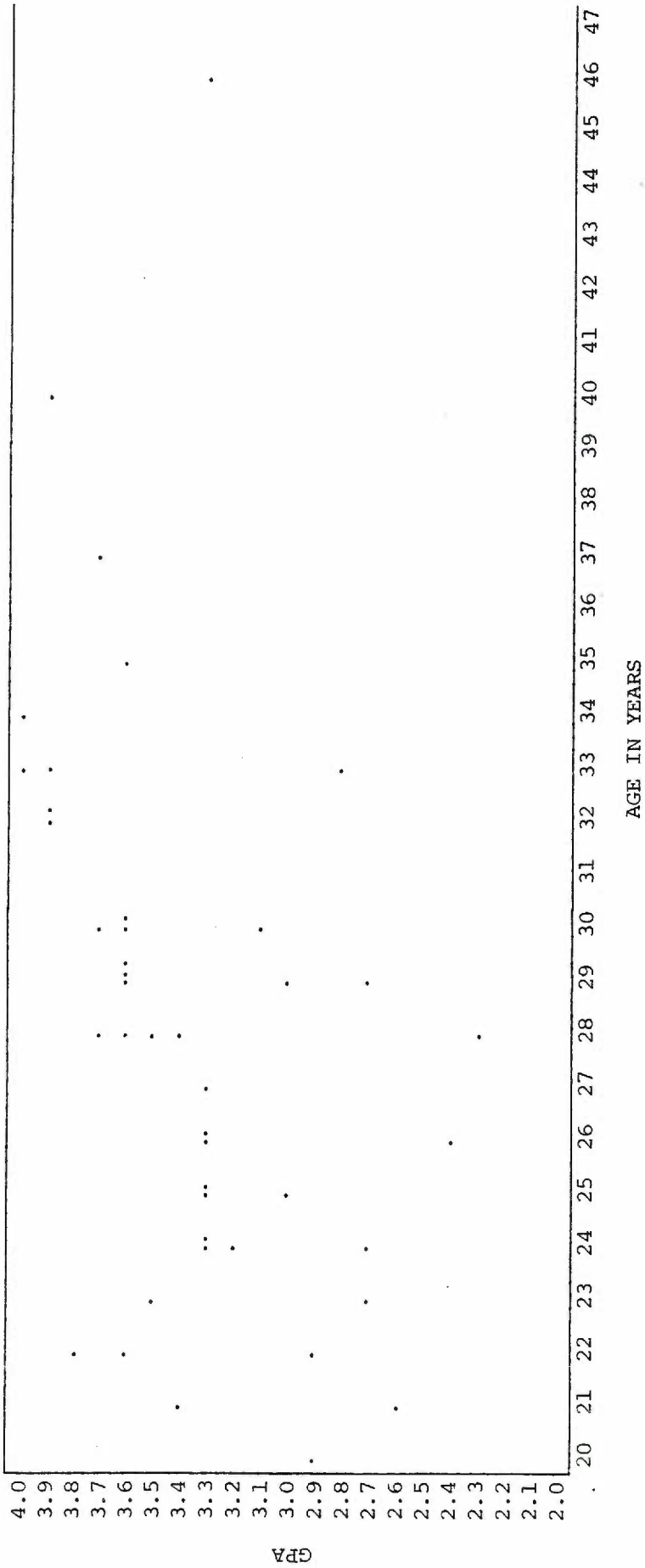


Figure 2

Correlation between student age and GPA ^a

^a Key: each dot represents one subject

Clinical Instructor Behaviors Perceived As Facilitative

The major focus of this study was to determine which clinical instructor behaviors are perceived by students to facilitate their learning. Figure 3 summarizes the categories chosen by the students as facilitative to their learning.

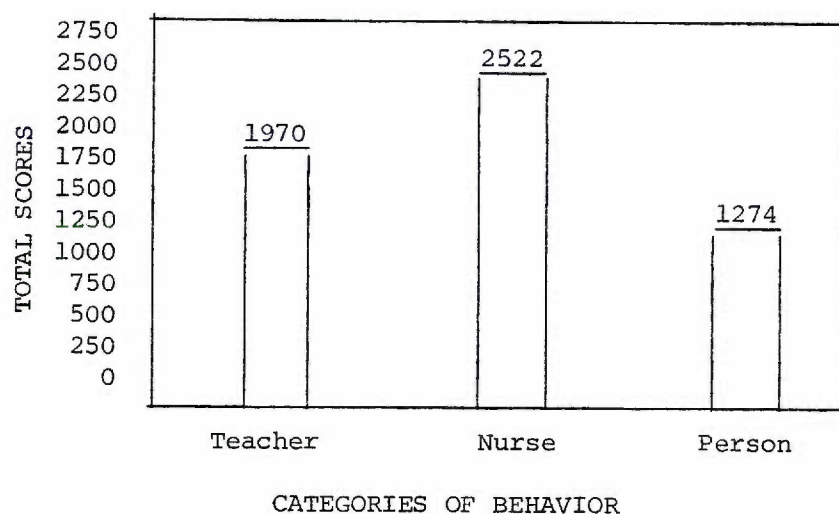


Figure 3

Distribution of total scores for each
category of instructor behaviors

From Figure 3, it may be seen that the majority of students perceived nurse behaviors as most facilitative of their learning. This category received 44% of the total points. Overall, the second most important category was teacher behaviors, which received 34% of the total points, and finally, person behaviors which received only 22% of the total points.

Of interest, also, are the behaviors from each of the three categories that were chosen most often by students as facilitative of their learning. Figure 4 illustrates the number of times that each of the behaviors was chosen as the most facilitative.

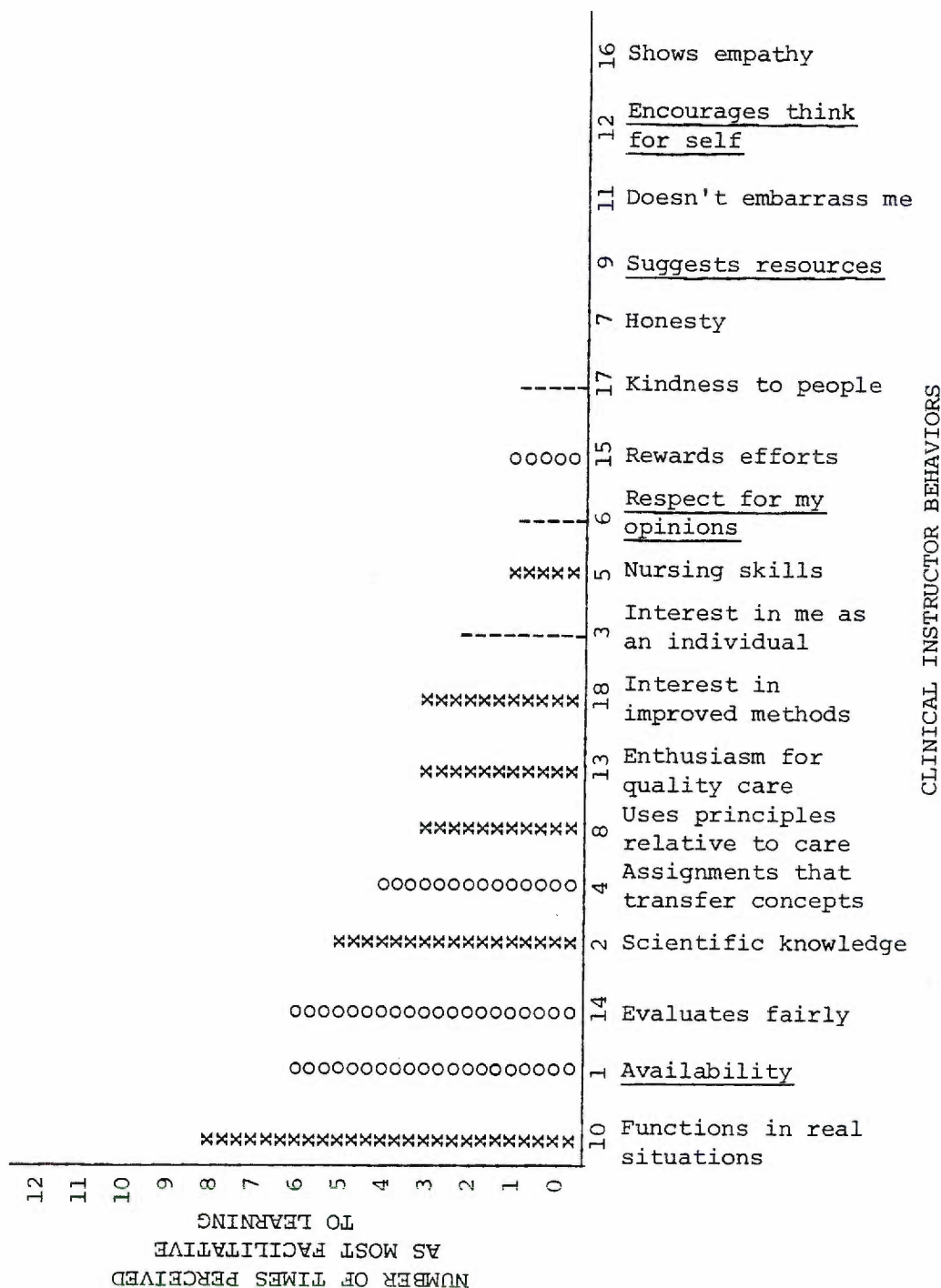


Figure 4

Frequency that behaviors selected as most facilitative a,b,c

a Behaviors numbered according to their placement on CICRC

b Key: Nurse behaviors (xxx)
Teacher behaviors (ooo)
Person behaviors (---)

c Underlined behaviors are reflective of assumptions of adult learning theory.

Figure 4 clearly illustrates that the behavior chosen most often as facilitative to learning was number 10, which is "demonstrates how to function in a real nursing situation." This behavior fits into the nurse category. Behaviors number 1, "is available for help when needed," and number 14, "evaluates my progress in a fair manner" were the second most frequently selected and are teacher characteristics. Behavior number 1 is also one of the examples of adult learning assumptions. Behavior number 2, "demonstrates scientific knowledge of principles relative to patient care" was the third most frequently selected and again is a nurse characteristic.

The following behaviors were never selected by students as the most facilitative to their learning: 1) "demonstrates honesty to me and others," 2) "suggests helpful resources when I have questions," 3) "avoids embarrassing me," 4) "encourages me to think for myself," and 5) "shows empathy to me and others." Of the behaviors selected, the one behavior receiving the fewest points was behavior number 9, "suggests helpful resources when I have questions." Both behavior number 9, "suggests helpful resources" and number 12, "encourages me to think for myself" are representative of the encouragement toward self-directedness which is stressed in adult education. However, the subjects in this study did not find these particular behaviors to be very important. See Appendix E for raw data on the ranking of the perceived importance of clinical instructor behaviors according to Teacher, Nurse, and Person Categories.

Relationships Between Variables

Consistent with the purpose of the study, an attempt was made to determine if significant relationships exist between the variables of age, sex, GPA, length of time since high school graduation and the student's perception of instructor behaviors that facilitate their learning.

The Kruskal-Wallis test was used to determine the significance of the relationships between the independent and dependent variables. Tables 3 through 6 illustrate the frequency with which each student sub-group chose the three categories of behavior as most important. This was expressed in terms of a percentage and based on the number of times each category was selected as most facilitative. Each table also presents the significance of the relationship (H value) between the particular independent variable and the category chosen as most facilitative. The level of significance chosen for this study was .05. If the H value is significant at this level, a significant relationship between the independent and dependent variables can be said to exist.

Table 3 presents data on subjects according to age and their perception of facilitative behaviors. Students were divided into three age groups: 20 - 24 year olds, 25 - 29 year olds, and 30 years and over. The total number of students in each group is described.

Table 3

Relationship Between Age And Category Of Behaviors
Perceived As Most Facilitative To Learning

	Age			H value
	n 20-24 years (13)	n 25-29 years (17)	n 30 years + (14)	
	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	
Nurse	54%	65%	57%	1.70
Teacher	35%	17.5%	43%	*6.44
Person	11.5%	17.5%	0%	2.20 signi.

* H significant at or above 5.99, $p = .05$, $df = 2$

Table 3 shows that all age groups felt that nurse behaviors are the most helpful to their learning. It's interesting to note that not one of the fourteen students age 30 and over selected person behaviors as the most facilitative. A significant difference between the three age groups and their perceptions of teacher behaviors was found. The student's age did make a difference in his/her perception of how facilitative teacher behaviors are. Students age 30 and over selected teacher behaviors as most facilitative much more often than students age 25 - 29 did. Age didn't significantly affect the student's ranking of person and nurse behaviors.

Table 4 is designed to present data about the effect of sex on categories of behavior students perceive as most facilitative to learning. The numbers of students in each sub-group are presented.

Table 4

Relationship Between Student's Sex and Category of Behavior Perceived As Most Facilitative To Learning

	Sex		H value
	n Males (6)	n Females (38)	
	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	
Nurse	50%	60.5%	.96
Teacher	33%	31.5%	1.02
Person	17%	8%	*4.85 signi.

* H significant at or above 3.84, $p = .05$, $df = 1$

Table 4 clearly illustrates that both males and females selected nurse behaviors as most facilitative to learning. The majority of females (60.5%) felt that nurse behaviors were the most facilitative, and 50% of the males also selected nurse behaviors as the most facilitative to learning. Both sexes ranked teacher behaviors as second most important to their learning and person behaviors as least important. Even though males and females both ranked person behaviors as least facilitative to learning, males ranked person behaviors significantly higher than females did. There were no significant differences in male and female students' perceptions of the importance of teacher and nurse behaviors.

Table 5 provides descriptive and inferential statistics about students with various GPA's and their perceptions of facilitative clinical instructor behaviors. Students were divided into three sub-groups according to GPA: 2.00 - 2.99, 3.00 - 3.59, 3.60 - 4.00. Numbers of students in each sub-group are indicated.

Table 5

Relationship Between Student's GPA And Category Of Behavior Perceived As Most Facilitative To Learning

	GPA			H value
	n 2.00-2.99 (9)	n 3.00-3.59 (18)	n 3.60-4.00 (17)	
	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	
Nurse	67%	61%	53%	1.00
Teacher	22%	28%	41%	1.00
Person	11%	11%	6%	2.60 signif.

* H significant at or above 5.99, $p = .05$, $df = 2$

Table 5 shows that all three groups of students found nurse behaviors to be most important. There were no significant differences between the three GPA sub-groups and the students' perceptions of the importance of each of the categories of behavior. In effect then, GPA doesn't differentially affect a student's perception of effective clinical instructor behavior.

Table 6 presents data about the length of time since high school graduation and the student's perception of facilitative instructor behaviors. Length of time since graduation was divided into three sub-groups: 2 - 7 years since graduation, 8 - 13 years since graduation, and more than 14 years since high school graduation. Numbers of students in each sub-group is presented.

Table 6

Relationship Between Student's Length Of
Time Since High School Graduation And Category Of
Behavior Perceived As Most Facilitative To Learning

	Time Since High School Graduation			H value
	n 2-7 years (16)	n 8-13 years (18)	n 14 years + (10)	
	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	<u>% times chosen most facilit.</u>	
Nurse	50%	67%	60%	.80
Teacher	38%	22%	40%	3.10
Person	19%	11%	0%	2.10 signif.

* H significant at or above 5.99, $p = .05$, $df = 2$

Again, Table 6 illustrates that all three groups found nurse behaviors to be the most important. Note, that consistent with findings in the 30 years of age and over group, not one student in the group graduating from high school over 14 years ago rated the person behaviors category to be the most important. Referring to Figure 2, however, it can be seen that the data on age and length of time since high school graduation show a highly positive correlation, indicating that the two groups are pretty much one and the same. Again, there were no significant differences between the students' length of time since high school graduation and their perceptions of facilitative clinical instructor behaviors.

CHAPTER IV

DISCUSSION

Student perceptions of teacher effectiveness are now the most common means of measuring teacher effectiveness (Wallace, 1978; Raff, 1977). In accordance with this, but in an attempt to look specifically at student perception of clinical nursing instructor effectiveness, this particular study was undertaken. ADN students were chosen as the study population because only one study to date has looked specifically at ADN students' perceptions of the effective clinical instructor. Since ADN students are a very heterogeneous group, an attempt to isolate certain descriptive variables as significant factors was made in this study. A rank-order tool, the CICRS, was used to gather data on student perception of facilitative clinical instructor behavior. The results were then described and analyzed statistically using the Kruskal-Wallis one-way analysis of variance. This chapter will discuss the limitations of the study, the results, and the implications of these results.

In beginning a discussion of the findings of this study, some observations are in order. Because this is a descriptive correlational study, it lacks the control advantage of true experimental research in terms of the inability to manipulate independent variables and the inability to randomize group assignment. Consequently, the results are more subject to faulty interpretation, making the results of this study more tentative.

Another limitation of the study is the type of tool used to determine student perceptions of facilitative behaviors. The tool used was a closed-ended questionnaire. The content validity of this

questionnaire, when established by Rauen (1974), was an 80% agreement by 25 judges, which is a quite satisfactory level for content validity. However, a major disadvantage of this type of questionnaire is the limitation it imposes by restricting or structuring the subjects' responses. The other major limitation of closed-ended questions is that the responses are often considered too superficial and do not allow explanation or extension of answers. Questionnaires, compared to interviews, have the advantage of anonymity, but the disadvantages of lower response rate, higher possibility of ambiguous choices, and greater possibility of superficial answers. Another limitation of this type of measurement tool is its inability to control for perceptions based on one's most recent clinical experiences. In light of the conceptual framework of this study, an additional limitation of this tool was that it only contained four behaviors strongly representative of adult learning assumptions.

During analysis of the data, it became evident that pinpointing specific instructor behaviors which were perceived as most facilitative was difficult to do with this questionnaire. The intent of the questionnaire is to determine categories of behavior (teacher, nurse, person) that are most facilitative to learning. In order to analyze which specific behaviors are most important, the student would have to be asked to rank all 18 behaviors 1 - 18 in order of importance. Ranking that many items is very confusing and difficult. Also because of the small sample (44 subjects), it was statistically more judicious to deal with categories of behavior as opposed to individual behaviors. The size of the sample population also makes the results less generalizable.

With these limitations in mind, the research problems addressed in this study will be reviewed. Conclusions will be drawn from statistical analysis of the findings.

Discussion of the Findings

When the findings in this study were compared with previous studies done in this area (O'Shea, 1979; Rauen, 1974; Stuebbe, 1980; Wong, 1978), a lack of consistency in results was found. In the current study, faculty availability tied for second in an overall rating by students as the most facilitative clinical instructor behavior (see Figure 4, p. 32). This behavior was classified as a teacher behavior (Rauen, 1974). In O'Shea's (1979) study, the behavior noted by all groups (juniors, seniors, and faculty in a BSN program) to be most representative of effective clinical instructor behavior was "faculty availability." O'Shea did use a different tool (an open-ended questionnaire asking students to list behaviors which facilitated or interfered with learning), but that doesn't detract from these similarities in findings.

The results of this study are consistent with Rauen's (1974) and Stuebbe's (1980) findings that, overall, students found nurse behaviors as most facilitative to their learning. Nurse behaviors received 44% of the total points (as shown in Figure 3 and Appendix E) in a ranking of the three categories of behavior. Consistent with the findings in these previous two studies that students perceive nurse behaviors to be most facilitative to their learning, the subjects in this study chose "demonstrates how to function in a real nursing situation" more often than any other behavior.

This behavior is in the nurse category.

In contrast to findings by Rauen and Stuebbe that seniors found person behaviors to be very important, these second year students consistently found person behaviors to be the least facilitative to their learning. Some of that might be explained on the basis of the "senior" diploma student having had one more year of experience than the second year ADN student. The findings in this study that person behaviors were perceived overall as the least facilitative to learning are consistent with Kiker's (1973) findings that students, overall, perceived person behaviors as least important.

In an attempt to identify significant factors that might affect a student's perception of facilitative teacher behaviors, several academic and personal factors were examined. Because other nursing studies have not included any descriptive factors other than class placement, no comparisons of these results to previous studies are possible.

The first factor examined was age. The average age of the students was 27.6 which supports the assumption that ADN students are adult learners. The student's age did not significantly affect their ranking of the importance of nurse and person behaviors. Age did make a significant difference, however, in the students' perceptions of the importance of teacher behaviors ($H = 6.44$, $p < .05$). The students age 30 years and over selected teacher behaviors as most important much more often than students age 25 - 29 did, even though both age groups ranked teacher behaviors

as second most important. In trying to analyze why teacher behaviors were significantly more important to students age 30 and over, a review of the raw data was done. This revealed that the behavior in the teacher category given the most points by the older students was "availability for help when guidance is needed." This finding is congruent with the assumption of adult education that older students have the need to be self-directed and allowed to decide when to seek help.

None of the students who selected teacher behaviors as the most facilitative chose either of the teacher behaviors strongly representative of adult learning theory ("encourages me to think for myself" and "suggests helpful resources when I have questions") as most facilitative to learning. A major factor here might be that students often view instructors as the experts, and feel that in stressful times, such as clinical often is, the instructor should act as a quick reference rather than suggesting resources or telling the student to think things out. Specifically referring to students over 30, it might also be that these students were educated differently, have been away from the educational setting for a while, and prefer more conventional behaviors of instructors.

Some points about the findings that students age 30 and over never chose person behaviors as most facilitative should be made. These older students have obviously waited a long time to enter nursing school and have chosen a program which will take them the least amount of time to complete. The researcher's belief is that they want to learn as much as possible in a short time and that personalities are of little importance to them in this process.

Another factor contributing to this finding might be that the older student has had the benefit of more life experiences and can deal more effectively with all types of personalities.

Another variable studied was the sex of the student and the possible relationship to a student's perception of helpful instructor behaviors. The number of males entering nursing programs has been steadily increasing. Because more males are entering nursing schools, it is important to try to determine if there are significant differences in male and female student's perceptions of facilitative clinical instructor behaviors. Males comprised 14% of the sample population in this study.

In a comparison of the sexes, both males and females perceived nurse behaviors as most helpful to their learning, teacher behaviors second, and person behaviors as least helpful. There was a significant difference in their perceptions of the person behaviors, males reporting person behaviors as facilitative to their learning more often than females ($H = 4.85, p < .05$). This was surprising, and might be partially explained on the basis of males being a minority in the profession and appreciating being treated as persons. Many of the male nursing students have come into nursing with experience as Medics in the Service; the stereotype of the Armed Forces is that it is often a very regimented and impersonal atmosphere. This could make an instructor's attention to students as persons seem very refreshing. In reviewing the raw data to see if reasons for the differences in male perceptions were apparent, the researcher found that, in the person category, males gave the most points to "encourages openness thereby respecting my opinions and feelings."

The key word in this behavior seems to be "respect." Respect for him as a unique individual and as a male in a predominantly female environment may have prompted male students to select this person characteristic most often.

GPA was examined in terms of it's effects on the ranking of instructor behaviors. GPA didn't differentially affect any student's perception of effective instructor behavior. All subjects, regardless of GPA, ranked nurse behaviors as most important, teacher behaviors as second most important, and person behaviors as least important. It is interesting to note when discussing GPA, that 82% of the students in this study who are 28 years of age or older have GPA's above 3.60. These data are consistent with a statement by Waters (1978) that the older ADN student is motivated, well organized, and academically able. It's possible that the longer somebody waits to enter job training or a professional school, the more committed they are to meeting their goals. It is also possible that because they are older, they have often had more life experiences which were helpful in the acquisition of skills needed to succeed in the program.

The last factor analyzed in terms of significance as a determinant of perception of instructor behaviors was length of time since high school graduation. This factor was included in the study to again help establish the assumption that ADN students are adult learners. According to Knowles, adult learners have been out of high school a while and then return to school. The mean length of time since high school graduation for these students was 10.3 years. Also, the results of the study conducted for the

NLN Report indicated that 80% of this second year class had previous community college or baccalaureate work. Length of time since high school graduation did not play a significant part in the students' perceptions of facilitative behavior. Consistent with overall results, all subjects, regardless of length of time since high school graduation, found nurse, teacher, and person behaviors to be most important in that order.

In discussing all of these results, some comments also need to be made which reflect the conceptual framework of this study. Adult learning theory was selected as the overall framework of the study primarily because it was felt that ADN students are adult learners. Because they were assumed to be adults, it was felt that their perceptions of facilitative instructor behaviors might differ significantly from results of other studies on diploma and BSN students. Age and length of time since high school graduation were variables chosen to validate the assumption that these students are adult learners.

Other available studies have not looked at student perceptions of instructor behaviors in terms of adult learning theory. In analyzing the results of this study in terms of support of adult learning principles as effective clinical instructor behaviors, there is evidence that students do perceive some of these behaviors as important, but the support for these behaviors is not that great.

The one behavior representative of adult learning assumptions that was selected often by students was behavior number 1, "is available for help when I need guidance," which tied for second in

the frequency of times selected as most facilitative (see Figure 4, p. 32). This behavior is representative of the self-direction assumption of adult learning. The only other behavior reflective of adult learning assumptions that was ever selected as most facilitative was "encourages openness thereby respecting my opinions and feelings," and this behavior was only selected once.

It is most interesting that two behaviors strongly reflecting the adult's need for self-direction and independence, "suggests helpful resources when questions arise" and "encourages me to think for myself" were never selected as the most facilitative instructor behaviors. It is believed that students in the clinical setting often experience a great deal of anxiety regarding patient safety when rapid responses are necessary, and at such times, expect the instructor to act as a quick resource.

The importance of role modeling behaviors rather than behaviors reflective of adult learning principles was the primary finding in this study. The majority of students selected those behaviors that reflected the instructor acting as a knowledgeable, enthusiastic, and skilled nurse as the most facilitative to their learning.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

This study has attempted to add to current knowledge about student perceptions of facilitative clinical instructor behaviors and to determine if there are significant student characteristics that contribute to these perceptions. A review of literature revealed varied results on what nursing students perceived as facilitative instructor behavior. No previous attempt has been made to show correlations between nursing student characteristics and perception of clinical instructor behavior.

A descriptive correlational study was undertaken. Two research questions were posed: 1) which clinical instructor behaviors do second year ADN students perceive as facilitative to their learning, and 2) is there a significant relationship between age, sex, GPA, length of time since high school graduation and the category of behaviors the students perceive as facilitative?

A questionnaire was completed by 44 (71%) second year ADN students ranking 18 clinical instructor behaviors in the order of importance in which they felt the behaviors helped their learning. Data concerning the student's age, sex, GPA, and length of time since high school graduation were obtained from their files. The data, displayed in frequency distributions, were used to describe results. The data were further analyzed using the Kruskal-Wallis test to determine if significant differences existed between each variable and the students' perceptions of facilitative categories of clinical instructor behavior.

Nurse behaviors were perceived as most facilitative to

learning, adding support to findings by Rauen (1974) and Stuebbe (1980). None of the four descriptive variables (age, sex, GPA, and length of time since high school graduation) had any significant influence on the students' rankings of nurse behaviors as most important.

Two significant differences were found to exist when the descriptive variables were analyzed in terms of their effect on students' perceptions of facilitative instructor behaviors. Age made a significant difference in the students' perceptions of the importance of teacher behaviors. Students age 30 and over selected teacher behaviors as most important much more often than younger students did, implying that when instructors are working with the older students, they need to be more conscious of evaluating them fairly, being available for guidance, and giving them assignments that help them transfer concepts. There was also a significant difference between the sexes and their perception of the importance of person behaviors. Males found person behaviors to be more facilitative to their learning than females did, implying that it is especially important for instructors to show genuine interest in males, avoid embarrassing them, and respect their opinions and feelings.

Relationships between behaviors reflective of adult learning principles and the descriptive variables were not statistically analyzed. However, in looking at a frequency distribution of behaviors chosen as most important (depicted in Figure 4, p. 32), it can be seen that students selected only one of the four adult learning behaviors with any frequency, "available for help when

guidance is needed." The strongest conclusions of this study, therefore, are that students feel that their learning to be a good nurse is facilitated most by instructors able to demonstrate or role model good nursing care. Because of the limitations of the study, such as lack of experimental control, sample size, and the measurement tool used, the above findings are only tentative conclusions, each requiring further investigation.

Recommendations

It is recommended that further studies in the area of clinical instructor evaluation be carried out. This type of study may have major implications for nurse educators and schools with programs preparing nurse educators. The finding that students perceive nurse behaviors as most facilitative to their learning in the clinical settings has been supported in a few other studies (Rauen, 1974; Stuebbe, 1980). This finding of role modeling behaviors being most important to student nurses lends credence to the idea that nurse educators need to have recent or continuing clinical experience. Because of the consistence of results in these studies in support of role modeling behaviors, it's recommended that future study in this area extend this concept and examine which nurse behaviors most influence learning and how this occurs. It might also be of benefit to study the influence of role modeling behaviors by examining student perceptions of the effectiveness of staff nurses as learning facilitators.

Because this is the first study of this type in nursing (looking at the relationships between certain student characteristics and perception of effective clinical nursing instructor

behaviors), further study definitely is needed to support or refute these findings. The three independent variables of age, GPA, and sex should be looked at again. Because of the expected finding in this study that students age 30 and over and students out of high school over 14 years were the same students (exception of one student), future study of student characteristics need only include one of the two variables, preferably age.

Some significant differences were found to exist between age groups and perception of teacher behaviors and sex and perception of person behaviors. Because of these findings, it is recommended that future studies test the relationships between these variables on a much larger sample. Knowledge about significant relationships between these variables may someday play a part in student counseling, student placement with instructors, and the educational preparation of future nurse educators.

Only one of the four behaviors reflective of adult education principles was found to be very important. Because of this finding, it is recommended that future studies in this area utilize a conceptual framework of role modeling. If the concept of adult learning theory were to be used again, a tool that better reflects those assumptions of adult learning needs to be used. Since there were no such tools available in the literature, a new one would need to be constructed. The best tool for testing assumptions of adult learning that students believe facilitate their learning is an open-ended questionnaire asking them to list clinical instructor behaviors that they believe reflect treatment as adult learners.

It is also recommended that future studies include data on both first and second year students. Such data would make the results more comparable to many other studies, add strength to the results by providing a larger sample, and provide valuable information on significant differences that might exist in first and second year students.

These recommendations are based on the findings of this study. Further research can provide additional information into adult learning and nursing education.

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APPENDICES

APPENDIX A
INFORMED CONSENT

UNIVERSITY OF OREGON HEALTH SCIENCES CENTER
SCHOOL OF NURSING

CONSENT FORM

Behaviors of Clinical Instructors Which Facilitate Learning as
Perceived by Second Year ADN Students

by Sue Ulrich

I, _____, agree to serve as a subject in the study

titled "Behaviors of Clinical Instructors Which Facilitate Learning as Perceived by Second Year ADN Students" by Sue Ulrich, B.S.N., under the supervision of Sandra Stone, B.S.N., M.S.,

The purpose of this study is to determine the instructor behaviors which ADN students perceive as facilitative to their learning in the clinical area and to determine if there are any significant differences in the perceptions based on the student's age, sex, grade point average or length of time since high school.

Participation in the study will include filling out a questionnaire asking me to rank my perceptions of what clinical instructor behaviors facilitate my learning. Further data regarding age, sex, grade point average, and length of time since high school will be collected from my student records.

There will be no benefits to me from this study, but the potential outcome of the study may influence clinical teaching for future students. No risks to me are expected.

The information obtained will not even be reviewed by the investigator until after graduation. The information will be kept confidential. Anonymity will be assured by the use of code numbers. Data will be reported in aggregate form so that no single individual will be identified with specific answers. The data will be destroyed following completion of the study.

Sue Ulrich has offered to answer any questions about participation in this study and can be reached at 747-4501, Ext. 2626 if questions arise.

I understand that I may refuse to participate or withdraw from this study at any time without affecting my student standing.

I have read the foregoing and agree to participate in this study.

Date _____

Signature of Subject _____

APPENDIX B
CLINICAL INSTRUCTOR CHARACTERISTIC
RANKING SCALE

CLINICAL INSTRUCTOR CHARACTERISTICS RANKING SCALE*

Listed below are three groups of characteristics of a clinical instructor. Each group lists six characteristics. In your opinion, which of the listed characteristics are most important to you to help you become the type of nurse that you wish to become?

In the following three groups, please rank each characteristic, giving the number 6 to the most important characteristic and the number 1 to the least important characteristic to you. The other numbers should be given accordingly with 5 the second most important characteristic and so on. There are 3 groups to rank.

GROUP A

- ☐ Is available for help when I need her/his guidance.
- ☐ Demonstrates knowledge of scientific principles relative to patient care.
- ☐ Shows genuine interest in me as an individual.
- ☐ Gives assignments that help me transfer syllabus concepts to actual patient care.
- ☐ Demonstrates ability to do nursing skills (such as nursing procedures).
- ☐ Encourages me to be "open" thereby respecting my opinions and feelings.

GROUP B

- ☐ Demonstrates honesty to me and others.
- ☐ Demonstrates ability to use scientific principles relative to patient care.
- ☐ Suggests helpful resources when I have questions.
- ☐ Demonstrates how to function in a real nursing situation.
- ☐ Avoids embarrassing me.
- ☐ Encourages me to think for myself.

GROUP C

- ☐ Shows a contagious enthusiasm for giving quality patient care.
- ☐ Evaluates my progress in nursing in a fair manner.
- ☐ Rewards my efforts to give quality nursing care.
- ☐ Shows empathy to me and others.
- ☐ Demonstrates kindness during her/his daily interactions with people.
- ☐ Shows a continued interest in applying improved methods of giving nursing care.

You have 3 number 6's. Please rank the 6's in order of their importance to you, giving rank 3 to the most important.

Rank 3: #6 in Group _____. Rank 2: #6 in Group _____. Rank 1: #6 in Group _____.

Now do the same for the characteristics marked with #5's above.

Rank 3: #5 in Group _____. Rank 2: #5 in Group _____. Rank 1: #5 in Group _____.

GOOD LUCK IN YOUR NURSING CAREER!

*Karen C. Rauen: "The clinical Instructor as Role Model," Journal of Nursing Education 13 (August, 1974):36.

APPENDIX C
DATA TABULATION FORM

DATA TABULATION FORM

1. Student code number _____
2. Student age (years) _____
3. Student sex _____
4. Years since high school graduation _____
5. Grade Point Average _____
6. Behavior scores

Teacher behaviors# points

1

4

9

12

14

15

Total points for teacher behaviors _____

Nurse behaviors# points

2

5

8

10

13

18

Total points for nurse behaviors _____

Person behaviors# points

3

6

7

11

16

17

Total points for person behaviors _____

APPENDIX D
CATEGORIZATION OF BEHAVIORS

IDENTIFICATION OF INSTRUCTOR BEHAVIORS COMPRISING
CATEGORIES OF NURSE, PERSON AND TEACHER^{a,c}

Teacher Category

1. Is available for help when I need her/his guidance^b
4. Gives assignments that help me transfer syllabus concepts to actual patient care
9. Suggests helpful resources when I have questions^b
12. Encourages me to think for myself^b
14. Evaluates my progress in nursing in a fair manner
15. Rewards my efforts to give quality nursing care.

Nurse Category

2. Demonstrates knowledge of scientific principles relative to patient care
5. Demonstrates ability to do nursing skills (such as nursing procedures)
8. Demonstrates ability to use scientific principles relative to patient care
10. Demonstrates how to function in a real nursing situation
13. Shows a contagious enthusiasm for giving quality patient care
18. Shows a continued interest in applying improved methods of giving nursing care.

Person Category

3. Shows genuine interest in me as an individual
6. Encourages me to be "open" thereby respecting my opinions and feelings^b
7. Demonstrates honesty to me and others
11. Avoids embarrassing me
16. Shows empathy to me and others
17. Demonstrates kindness during her daily interactions with people.

^aBehaviors and categories from the CICRS (Rauen, 1974). ^bBehaviors consistent with adult learning theory. ^cBehaviors numbered according to order on questionnaire.

APPENDIX E

RAW DATA

RANKING OF PERCEIVED IMPORTANCE OF CLINICAL INSTRUCTOR BEHAVIORS

ACCORDING TO TEACHER, NURSE AND PERSON CATEGORIES^a

Behavior ^b	Total Points	Percent of Category Total.	Percent of Questionnaire Total
Teacher Category			
1	492	25%	8.53%
4	274	14	4.75
9	121	6	2.09
12	279	14	4.83
14	398	20	6.90
15	<u>406</u>	<u>21</u>	<u>7.04</u>
	Total 1,970	Total 100%	Total 34.14%
Nurse Category			
2	469	19%	8.13%
5	308	12	5.34
8	413	16	7.16
10	564	22	9.78
13	447	18	7.75
18	<u>321</u>	<u>13</u>	<u>5.56</u>
	Total 2,522	Total 100%	Total 43.72%
Person Category			
3	199	16%	3.45%
6	180	14	3.12
7	337	26	5.84
11	183	14	3.17
16	173	14	3.00
17	<u>202</u>	<u>16</u>	<u>3.50</u>
	Total 1,274	100%	22.08%

^aN = 44^bRefer to Appendix D for identification of behaviors comprising each category.

AN ABSTRACT OF THE THESES OF

SUSAN K ULRICH

for the Master of Nursing

Date of Receiving this Degree: June 11, 1982

Title: BEHAVIORS OF CLINICAL INSTRUCTORS WHICH FACILITATE LEARNING
AS PERCEIVED BY SECOND YEAR ASSOCIATE DEGREE NURSING STUDENTS

Approved: Sandra Stone, M.S., Associate Professor, Thesis Advisor

This descriptive correlational study was undertaken, using the framework of adult education, to add to current knowledge about clinical nursing instructor behaviors which facilitate student learning. The study investigated the relationships between the independent variables of the student's age, sex, GPA, and/or length of time since high school graduation and what the student perceived as facilitative clinical instructor behavior. A review of the literature revealed that few studies have been done specifically on clinical teaching effectiveness, and that no studies have investigated relationships between student characteristics and perceptions of facilitative clinical instructor behaviors.

Seventy-one percent ($n = 44$) of the second year Associate Degree Nursing students from a Pacific Northwest community college were investigated. Data were gathered by means of a questionnaire, the Clinical Instructor Characteristic Ranking Scale (CICRS), which categorized behaviors into person, nurse, or teacher groupings. Academic and personal data about the students were obtained from the student's files.

Frequency distributions were used to describe the sample on each of the independent variables. The Kruskal-Wallis one-way analysis of variance was used to determine if there was a significant relationship between the student's age, sex, GPA, length of time since high school graduation and perception of facilitative clinical instructor behavior.

The major findings of the study were that:

1. Nurse behaviors were perceived as most facilitative to learning overall.
2. Age made a significant difference in student perception of the importance of teacher behaviors, with students age 30 and over rating teacher behaviors as more facilitative to learning than students younger than 30.
3. Sex made a significant difference in the student's perception of person behaviors, with males selecting person behaviors as more important than females.

These findings strengthen the findings in other studies (Rauen, 1974; Stuebbe, 1980) that role modeling is a very important facilitator of student learning. The findings in this study also suggest that individual differences in students, such as their age and sex, do make significant differences in which clinical instructor behaviors are perceived as facilitative to learning.