

**CHARACTERISTICS OF EFFECTIVE AND
INEFFECTIVE CLINICAL TEACHERS IN NURSING
AS PERCEIVED BY STUDENTS AND FACULTY**

by

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ABSTRACT

The purposes of this study were to investigate the characteristics of effective and ineffective clinical teachers in nursing as perceived by diploma school students and faculty, to compare the two groups in their perceptions, and to determine the influence, if any, that selected student and teacher variables have on these perceptions. The sample included 149 nursing students who had been supervised by at least 3 clinical teachers during their nursing education and 24 faculty.

A descriptive survey approach was utilized for this study. Data were gathered using a background information questionnaire, an adapted form of the Nursing Clinical Teacher Effectiveness Inventory (NCTEI), and a Summary form. The NCTEI, developed by Knox and Mogan (1985), contains 48 clinical teacher characteristics grouped into five categories. Subjects were asked to rate an effective and ineffective clinical teacher from their past observations using the NCTEI. They were then requested to list the three characteristics they considered to be most important for clinical teacher effectiveness.

Data were analyzed using a variety of statistical procedures. Results showed that students and faculty did describe effective and ineffective clinical teachers in nursing differently. Students emphasized characteristics related to Personality Traits, Interpersonal Relationships, and Evaluation categories while faculty focused on Teaching Ability, Nursing Competence and Evaluation characteristics. The three characteristics selected as most important for clinical teacher effectiveness were also found to differ between the two groups. The student variable of class level influenced the ratings of effective clinical teachers while age influenced the ratings of ineffective clinical teachers. These variables did not affect the three characteristics selected as most important for clinical teacher effectiveness. The faculty variable,

number of years of teaching experience, affected ratings of both effective and ineffective clinical teachers. However, the variables of teaching level, employment status, and educational preparation did not. No significant differences were found in the characteristics chosen as the three most important for a clinical teacher to possess across faculty variables.

Conclusions and implications of this study are addressed and suggestions for further research are presented.

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CHAPTER ONE

INTRODUCTION

Background to the Study

In all types of educational endeavors, the problem of defining and evaluating faculty effectiveness is everpresent. The practical issues of faculty retention, promotion, tenure, and salary have demanded some means for evaluating teacher performance. In addition, an intensified focus on student consumer rights and increasing demands for financial accountability have created an impetus in the search for objective evaluation measures. Perhaps a more significant evaluative concern is that of the faculty member who is interested in whether his or her teaching is effective and who is committed to improving instructional behaviors.

As a result of these concerns and developments, numerous classroom rating forms have been developed and used. These forms generally require the student to rate the course or the professor on a number of dimensions, such as rapport, punctuality, and accessibility. Considerable controversy exists among faculty regarding the use of students' opinions or subjective perceptions as a means to evaluate teaching. Some faculty question whether students have the knowledge or experience to evaluate an instructor with accuracy and fairness (Mims, 1970; Norman and Haumann, 1978). Others argue that student evaluations are akin to popularity polls (MacKay, 1974; Bronstein, 1979; Krutzen, 1979). Still others are concerned that the use of specific behaviors as the basis for evaluating teachers encourages teacher conformity around established behavioral norms (Patterson and Keel, 1976).

However, proponents of faculty evaluation by students stress that students' opinions are a pertinent measure of the teacher's effectiveness because students are

the recipients of the teacher's effort (Jacobson, 1966). Secondly, several studies have shown that student rating scales can be considered valid measures in the assessment of teaching ability (Hildebrand et al., 1971; McKeachie et al., 1971; Thorne, 1980). Furthermore, faculty in favour of student evaluation claim that such appraisals initiate "teacher self-improvement which leads to greater commitment to teaching, improvement in teaching strategies, and better implementation of course objectives" (Schweer, 1972, p. 259). In addition, "by giving the student the opportunity to help the teacher improve his or her teaching, the faculty member demonstrates respect for the student and a desire to meet the student's learning needs" (Butler and Geitgey, 1970, p.56). This author supports those arguments which contend that students are important and valid data sources for evaluating faculty.

The controversy surrounding the inclusion of students in the evaluation process is not unfamiliar to nurse educators nor are the problems of teacher evaluation. Indeed, the applied nature of the profession and its clinical component creates perhaps even more concern for faculty evaluation. Clinical instruction is both a significant and essential component of professional nursing education. Clinical teaching takes place in a variety of settings, for example, hospitals, community health centers, schools, clinics, and homes. In these settings students learn the professional practice of nursing by actually delivering nursing care to real clients. "The learning situation is often one that cannot be repeated and the clinical milieu is not usually controlled specifically for the teaching of the nursing student only" (Jacobson, 1966, p. 218).

The nurse educator is the primary link between the student who is acquiring skills and the setting in which that learning takes place. Effective or ineffective teacher behaviors can facilitate or impede learning in the clinical setting. However,

because the clinical setting is a unique learning environment, the teaching skills used in clinical instruction are different from those used in the traditional classroom setting. "Clinical teachers, in addition to possessing appropriate lecturing skills, are required to be effective in communication, learner assessment in small groups and one-to-one conferences with students" (Meleca et al., 1981, p.33). Clinical teachers must also possess effective supervisory skills, such as, selecting appropriate clients for students to care for, observing and evaluating student progress, ensuring client safety as well as ensuring that the standards of the profession and the policies of the clinical agency are maintained.

Unfortunately, the nurse educator generally has little formal preparation for the teacher's role. Left "to do his or her own thing," the new nurse teacher typically relies on practical nursing experience and/or tends to teach as she or he was taught in nursing school (Meleca et al., 1981). However, clinical expertise and role modeling do not necessarily guarantee effectiveness as a clinical teacher (Stafford and Graves, 1978). Thus, it would seem that "... nurse educators have a responsibility to their students, the profession, and clients to identify and use the qualities of effective clinical teaching" (Zimmerman, 1986, p.31).

Since clinical teaching is different from classroom teaching, the use of classroom rating scales for evaluation of nursing faculty is inappropriate. Stafford and Graves (1978) state that "too often nursing educators have borrowed instruments from psychology or education without evaluating their appropriateness to nursing" (p. 497). Therefore, it would appear that nurse educators need to develop their own instruments for assessing teacher effectiveness. However, useful evaluation instruments require clear descriptions of behaviors to be measured. Unfortunately, relatively few studies have been conducted describing behaviors of the effective and ineffective clinical teacher, although they are needed to help faculty improve their

teaching (McCabe, 1985).

The purposes of this study were to investigate the behaviors of effective and ineffective clinical teachers in nursing as perceived by diploma school students and faculty, to compare the two groups in their perceptions, and to determine the influence, if any, that selected teacher and student variables have on these perceptions. The identification of behaviors perceived to enhance or interfere with student learning may provide faculty with a list of clinical teaching behaviors to be incorporated into their repertoire or to be avoided. This may help faculty improve their clinical teaching and promote student learning. The identification of similarities and differences in the perceptions of effective and ineffective clinical teacher behaviors by students and faculty may suggest actions to be taken by faculty. In addition, the identification of effective clinical teacher behaviors may help curriculum and in-service planners of schools of nursing to better prepare teachers of nursing and to better assist new instructors, respectively. Finally, administrators in nursing education may consider utilization of these clinical teacher behaviors for faculty evaluation purposes.

Problem Statement

Effective and ineffective clinical teacher behaviors were investigated in this study by addressing the following questions:

1. How do nursing students and faculty describe, and compare in their descriptions of:
 - (a) an effective and an ineffective clinical teacher?
 - (b) the most important characteristics of an effective clinical teacher?
2. Are the descriptions of effective and ineffective clinical teachers by nursing

students influenced by the following variables:

- (a) age?
- (b) class level?
- (c) received or anticipated grade for the course?

3. Are the descriptions of effective and ineffective clinical teachers by nursing faculty influenced by the following variables:

- (a) teaching level in the program?
- (b) employment status?
- (c) instructional specialty?
- (d) number of years teaching experience?
- (e) educational preparation?

Definition of Terms

In this study, the following definitions applied:

1. Clinical teaching - learning through supervised experience with patients; a process of pacing students to professional competency (Irby, 1977). Clinical teaching takes place in practice settings such as hospitals, clinics, schools, and homes.

2. Clinical teacher - one who instructs nursing students in the practice setting.

3. Diploma nursing student - one who is enrolled for the study of nursing in a community college and will receive a diploma in nursing upon graduation.

4. Effective and ineffective clinical teachers - those identified as such by respondents to the questionnaire.

5. Characteristics of clinical teachers - a list of specific clinical teacher behaviors grouped into five categories as contained in the Nursing Clinical Teacher Effectiveness Inventory developed by Knox and Mogan (1985).

6. Teaching level - the semester in which the teacher instructs.

7. Employment status - whether the teacher is employed full- time or part-time.

8. Instructional specialty - the area of nursing in which the teacher instructs, such as, geriatrics, medical-surgical, psychiatry, obstetrics, and pediatrics.

Assumptions

This study was based on the following assumptions:

(1) Nursing students will have enough experience with a variety of clinical teachers to be able to provide opinions about behaviors of an effective and ineffective clinical teacher.

(2) Different clinical settings provide comparable opportunity for clinical teachers to demonstrate their teacher behavior.

(3) Clinical teaching effectiveness can be defined as the degree to which actual and/or perceived learning takes place.

Limitations

Limitations of this study relate to the following:

(1) The study sought to identify and validate behaviors descriptive of an effective and ineffective clinical teacher as perceived by nursing students and faculty. The investigation was not designed to assess the process nor the learning outcomes of clinical teaching.

(2) The study sample, obtained from two diploma schools of nursing, represents a specified group of the total population of nursing students and faculty from schools of nursing.

(3) The Nursing Clinical Teacher Effectiveness Inventory may not include all clinical teacher behaviors salient to the subjects' perceptions.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

Behaviors characteristic of effective and ineffective clinical teachers have been identified from a review of the literature on teaching effectiveness in both the classroom and clinical setting. The majority of studies reviewed were based on students' identification of teacher behaviors, although some of the studies were concerned with both student and faculty perceptions. Other studies reviewed relate to variables influencing teacher effectiveness.

This chapter is divided into three major sections. The first section presents research related to teaching effectiveness in the classroom and clinical setting. Studies from general education literature on classroom teaching are discussed first, followed by studies from the health sciences literature (excluding nursing) on clinical teaching. Nursing research on teaching effectiveness comprises the second major section. Studies regarding the nursing instructor in general, and the clinical nursing instructor specifically are presented. Finally, the third section addresses a selection of teacher and student variables that might influence the perceptions and ratings of clinical teacher effectiveness.

General Research on Teaching Effectiveness

In the Classroom Setting

Although the teaching of nursing in the clinical area does require many different teaching methods and skills than does classroom teaching, some are common

to both settings. For example, client-oriented conferences, topic-oriented seminars, and nursing rounds are all based upon the lecture-discussion method frequently used in the traditional classroom. Therefore, it is relevant, for purposes of discussing effective clinical teaching, to examine the literature from general education on effective classroom teaching.

In the field of education, thousands of studies have been published on effective teaching (Durkin and Biddle, 1974). Descriptions of instructional behaviors which are reported to make a difference in student learning have been identified. The studies to be presented here are concerned with student ratings of classroom teachers.

Effective teachers appear to be able to present material in an organized fashion, to explain content clearly and accurately, and to identify important points. Several investigators have identified these specific teacher behaviors (Issacson et al., 1964; Deshpande et al., 1970; Turner, 1970; Polhmann, 1975). Hildebrand, Wilson and Dienst (1971), who conducted one of the most thorough and large scale studies of university teaching, organized these effective teacher behaviors under the dimension "organization and clarity" (p.23). The importance of organization and clarity of presentation was emphasized in a study by Solomon et al. (1964). Student gains in factual information were shown to correlate significantly with these teacher behaviors.

Effective teachers appear to use interactional skills such as establishing rapport with students, creating a climate of mutual respect, and being sensitive to students (Issacson et al., 1964; Solomon, 1966; Hildebrand et al., 1971; McKeachie and Lin, 1973; Rugg and Norris, 1975). Through a number of studies, Aspy and Roebuck (1976) showed that the use of empathy, congruence or genuineness, and positive regard by the teacher enhanced the learning process. A positive and significant

correlation was found between these three interpersonal skills used by the teacher and students' attendance, IQ increase, cognitive growth, and enhanced self-concept.

Research indicates that effective teachers possess such qualities as enthusiasm, charisma, a sense of humor, and self-confidence (Solomon et al., 1964; Turner, 1970; Deshpande et al., 1970; Hildebrand et al., 1971) The effects of faculty enthusiasm on student learning were demonstrated by another group of studies. Mastin (1963) reported that high school students who heard lectures by enthusiastic teachers learned more and had more favorable course attitudes than did students of less enthusiastic teachers. Student gains in comprehension and a desire to learn were reported to relate significantly to teacher energy, flamboyance, and enthusiasm by Solomon et al. (1964) and Thistlewaite (1962). In addition, Coats and Snidehens (1966) showed that dynamic lectures result in higher student achievement than do less dynamic lectures.

Finally, faculty who demonstrate a thorough knowledge of the subject matter, can use knowledge effectively, and are current in their field are usually rated effective by students (Blazek, 1974; Rugg and Norris, 1975).

From the review of literature on classroom teaching, there appear to be a number of behaviors that characterize the effective teacher. He or she is one who demonstrates an ability to teach clearly and systematically, uses interpersonal skills effectively, shows energy and enthusiasm, and is knowledgeable about the subject.

In the Clinical Setting

The research on clinical teaching effectiveness is limited when compared to educational literature on classroom teaching effectiveness. However, studies which describe effective behaviors of the clinical teacher have been done. Drawn from the health sciences literature, the studies presented here are again concerned with

the students' point of view. The reader is reminded that nursing literature related specifically to the topic under study is not included here, but is addressed in the next section of the literature review.

In addition to the behaviors of effective classroom teachers identified in the previously mentioned studies, Irby (1977) claims that effective clinical teachers also possess unique characteristics. For example, it is particularly important that teachers in the clinical setting be available to and approachable by students (Walker, 1971; Stritter et al., 1975; Irby, 1977; Mayberry, 1978). Effective clinical teachers also observe student performance frequently, evaluate it fairly, and provide feedback constructively (Bolender and Guild, 1971; Greenwood, 1974; Scully, 1974-):

In a study by Stritter et al. (1975), medical students perceived the following as being related to effective clinical instruction: requesting that students employ concepts to demonstrate comprehension, emphasizing problem-solving approaches, and involving every student in practice opportunities (p. 880). The teacher's ability to demonstrate the application of theory and skills to a specific client also increased student ratings of clinical teachers (Goin and Kline, 1974; Stritter et al., 1975).

Effective clinical instructors must not only be knowledgeable but clinically competent as well. Behavioral descriptions of clinical competence include, for example, concern for patients, acceptance of responsibility, and a high level of self-criticism (Liske et al., 1964; Bolender and Guild, 1971). In addition, other characteristics of clinical competence such as performing clinical procedures skillfully, working effectively with the health care team, establishing rapport with patients, and demonstrating clinical judgement have been identified as key aspects of effective clinical teaching (Irby, 1977, p. 41).

Lastly, effective clinical teachers are good role models (Walker, 1971; Muslin and Thurnbald, 1974; Irby, 1977). In the clinical setting, students are able to

observe their instructors and experienced staff making decisions, performing skills, and interacting with patients and other workers. This provides students with ample observations upon which to imitate behaviors reflective of the profession's standards and values. Some teacher behaviors to be modeled include self-confidence, taking responsibility, recognizing one's limitations, being ethical, and showing respect for others(Irby, 1977, p. 42).

In summary, recent health sciences literature identifies important behaviors of effective clinical teachers as: accessibility; observation, evaluation, and feedback; guidance, practice, and problem-solving; concrete application of knowledge; clinical competence and role modeling.

Nursing Research on Teaching Effectiveness

In the Classroom and Clinical Setting

In this section, a more in-depth review of the nursing literature as it relates to effective teaching is presented. All of the following studies are based on student ratings of the nursing instructor in general. That is, nurse teacher behaviors found to be effective in both the classroom and clinical area are described.

Using the critical incident technique, Barham (1965) studied behaviors of effective nursing teachers as perceived by students in 13 community college programs in California. The critical incident technique is a procedure whereby participants are asked to describe in writing an actual incident which illustrates effective or ineffective teaching behaviors. The study identified 19 effective teaching behaviors, most of which were interpersonal in nature, for example, accepting students as individuals, demonstrating confidence in the student, recognizing individual needs, and demonstrating understanding in working with the student (p. 67).

Jacobson (1966), also using the critical incident technique, studied a large sample of students in five university schools of nursing and found the data revealed six major behavioral categories for effective teachers of nursing. These were as follows: Availability to Students, General Knowledge and Professional Competence, Interpersonal Relations with Students and Others, Teaching Practices in Classroom and Clinical Areas, Personal Characteristics, and Evaluation Practices (pp. 221-222). In addition, 58 specific behaviors for the teaching of nursing were identified and placed into the six major categories.

Unlike Barham and Jacobson who used the critical incident technique, Mims (1970) obtained her data by using a questionnaire developed by faculty and students of the College of Nursing and Health, University of Cincinnati. The questionnaire, containing a list of 17 items, was distributed to 129 nursing students. Using a Likert scale, students rated the behaviors they considered most important for effective instruction. The following five behaviors were identified as most important: fairness in making and grading tests, ability to interest students in the subject, systematic organization of subject matter, ability to explain clearly, and availability of the instructor (p. 54).

Similarly, Armington et al. (1972) used a questionnaire which was developed by the University of Wisconsin-Milwaukee student government. It consisted of 20 items to be rated on a Likert scale. Students identified effective instructors as enthusiastic about their work, experts in their field, encouraging students to think, and accessible (p. 791).

Kiker (1973) compared three different groups of students in two Texas universities on their perceptions of effective teachers. Undergraduate nursing students, undergraduate education students, and graduate nursing students rank ordered the importance of 12 teacher characteristics classified under three categories. The cat-

egories were titled Professional Competence, Relationships with Students, and Personal Attributes. All groups of students valued Professional Competence as most important. In this category, the specific teacher behavior "demonstrates skills, attitudes, and values that are to be developed by the student" was most highly valued (p.722). The two groups of undergraduate students ranked Relationships with Students higher than did the graduate students. The Personal Attributes category was ranked as least essential for the good teacher by all groups of students.

Kiker's identification of the importance of role modeling was supported, in separate studies, by Rauen (1974) and Stuebbe (1981). Both researchers concluded that a large part of nursing skill and behavior learned by students is directly related to the behavior they observe in nursing instructors.

In summary, the nursing research on teaching effectiveness describes the effective instructor in general as knowledgeable, available, organized and clear in presenting content, enthusiastic, and humanistic. Other characteristics include being objective in evaluation practices, clinically competent, and an effective role model.

In the Clinical Setting

The nursing literature does contain several studies which focus exclusively on effective clinical teaching. Some of the studies to be cited here are based on student ratings of clinical teachers. However, the majority are based on both student and faculty perceptions.

Meredith (1978) studied 561 University of Hawaii nursing students' perceptions of effective clinical teaching using an 18-item questionnaire. Results revealed some effective clinical teacher behaviors which had not been identified in the previously cited studies. These behaviors included utilization of pre- and post-conferences, working with agency staff in a manner which created an atmosphere conducive to

learning, providing support in crisis situations, encouraging independent thinking, and guiding the student to develop the ability to evaluate his or her personal capabilities and limitations (p. 69).

Fourteen nursing students of a college diploma program in Ontario participated in a study by Wong (1978). Using a modified form of the critical incident technique, participants were asked to identify clinical teacher behaviors which either enhanced or hindered learning. Wong also examined the possibility of differences in perceptions between levels of students. The following behaviors were reported as helpful to students' learning: an interest in and respect for students, provision of encouragement to students, availability, and provision of an appropriate amount of supervision (p.371). Faculty behaviors identified as hindering learning included posing a threat, belittling students, correcting students in front of others, and laying emphasis only on correcting student mistakes or pointing out their weaknesses (p.372). Data also revealed that first year students were particularly sensitive as to how teachers made them feel whereas students in the second year seemed more concerned with teachers' competency in teaching.

A small group of university nursing students identified effective clinical teacher behaviors under the three behavioral categories of Empathy, Congruence, and Positive Regard in a study by Karns and Schwab (1982). Karns and Schwab's approach was different from those of other researchers in that their aim was to determine only those specific teacher behaviors which promoted positive relationships between students and faculty.

The investigation of effective clinical teaching was expanded to include both student and faculty perceptions in a study by O'Shea and Parsons (1979). Participants in a university setting were asked to list five behaviors which facilitated learning and five behaviors which interfered with learning. The responses were sorted into three

broad categories designated as Evaluative Behaviors, Instructive/Assistive Behaviors, and Personal Characteristics. Many behaviors identified were similar to those reported in the studies mentioned earlier. This study differed from others in that both students and faculty identified ineffective behaviors. Some of these were: authoritarian approach, intimidating, criticizes in the presence of others, takes over assignments, provides insufficient feedback, and fails to clearly define expectations (pp. 314-315). Data also revealed disagreement among levels of students and between students and faculty in their perceptions of effective and ineffective teacher behavior.

Brown (1981) designed a tool listing 20 specific clinical teacher characteristics and compared the perceptions of 82 baccalaureate nursing students and 42 faculty. Students and faculty rated the importance of each characteristic and then selected the five most important ones a clinical teacher should possess. The results showed that both groups rated all 20 behaviors as important. However, students regarded an instructor's relationships with students as more important than professional competence. The reverse was indicated by faculty. The items that both groups ranked among the top five characteristics of an effective clinical teacher were provision of useful feedback on student progress and objectivity and fairness in the evaluation of the student (p.11). The faculty and student groups differed in their responses for the remaining three characteristics they considered most important.

Wiley (1984), who replicated Brown's study in a college setting, obtained differing results on the importance of several characteristics. However, the results of this study supported Brown's findings that faculty and student perceptions of the importance of clinical teacher characteristics are different.

Finally, in a series of studies, Knox and Mogan (1983, 1985, 1986) investigated clinical teaching effectiveness. In 1983, they examined 435 University of British

Columbia (U.B.C.) nursing student evaluations of clinical teachers and factor analyzed the students' comments into 5 categories of teacher behavior: Teaching Ability, Interpersonal Relationships, Personality Traits, Nursing Competence, and Evaluation. Results indicated that the most frequent student comments referred to the instructor's ability to teach. All students wanted the instructor to be available, organized, to give clear instructions and explanations, and to give guidance and/or supervision as necessary. Students appeared to value an instructor who was an expert clinician and good role model. Students also appreciated the instructor's theoretical knowledge and therapeutic communication skills. The teacher's ability to set clear standards, provide constructive feedback, and evaluate students fairly were identified as important. Finally, the instructor's personality seemed to help or hinder students' learning. Students valued an enthusiastic, flexible, supportive, and approachable teacher. From the findings of this study, Knox and Mogan (1985) designed a clinical teacher evaluation tool - - the Nursing Clinical Teacher Effectiveness Inventory (NCTEI). It contained 48 specific clinical teacher behaviors grouped under the five major categories as described above. When comparing all the authors cited earlier, it would appear that Knox and Mogan's categories and list of specific behaviors include most of the behaviors described by others.

The NCTEI was then used to conduct a study in which the importance ratings of the five categories of clinical teacher behaviors as perceived by U.B.C. nursing faculty, students, and practising graduates of the program were compared (Knox and Mogan, 1985). Respondents were asked to rate each item on a seven-point Likert scale according to the perceived importance of each of the clinical teacher characteristics. The results showed that overall the 48 items were highly rated as important. Highest importance scores were assigned to Evaluation by all three groups while Personality Traits was rated as least important. No significant differ-

ence in the rated importance of the five categories (with the exception of Nursing Competence) was found among the three groups. However, when students were grouped according to the four years in the program, there were significant differences in the perceived importance of clinical teacher behaviors among each of the six groups - - students in the different years, faculty, and practising graduates. For example, faculty rated Nursing Competence as second highest in importance. However, first and third year students rated this category lowest, while second and fourth year students perceived this category as second lowest. All students rated Interpersonal Relationships as more important than Nursing Competence with first and third year students rating this category second highest. Faculty perceived this category as third lowest.

In a third study, Knox and Mogan (1986) sought to identify whether the 48 specific teacher characteristics distinguished between best and worst clinical teachers. Using the NCTEI, faculty and students from U.B.C. and seven American university schools of nursing were asked to complete two identical questionnaires. Respondents were asked to think of their best clinical teacher and to indicate on a seven-point Likert scale how descriptive each of the 48 teacher characteristics was of this teacher. They were then requested to do the same for their worst clinical teacher. Results indicated that students and faculty do describe best and worst clinical teachers differently. Items from the categories Nursing Competence and Teaching Ability were listed by faculty as important discriminating characteristics between best and worst clinical teachers. Students attached more importance to items related to the categories Interpersonal Relationships, Evaluation, and Personality Traits. However, both groups agreed that being or not being a good role model was the most critical characteristic differentiating the good from the less desirable clinical teacher.

It is clear that the review of nursing literature focusing solely on the clinical

teacher identifies similar effective teaching behaviors as described by the literature on the nursing instructor in general. Indeed, many commonalities exist with those teacher behaviors identified as effective in the review of general education and health sciences literature. The apparent similarities which describe effective clinical teaching include specific teacher behaviors which may be categorized under the five dimensions as identified by Knox and Mogan (1983). The five dimensions are Teaching Ability, Interpersonal Relationships, Personality Traits, Nursing Competence, and Evaluation. These dimensions and the list of specific behaviors provide useful insight into what constitutes an effective clinical teacher.

Variables Influencing Teacher Effectiveness Ratings

Any tool designed to evaluate the teaching effectiveness of nursing faculty in the clinical setting should be constructed so as to minimize the impact of variations in ratings due to extraneous factors. Limited evidence in the literature suggests that several student and teacher variables may influence the perceptions and ratings of clinical teaching effectiveness.

One student variable may be class level. Several studies report that differences in perceptions exist among students of varying years of a nursing program (Kiker, 1973; Wong, 1978; Knox and Mogan, 1985). Wong, for example, compared the perceptions of first and second year diploma nursing students and found that first year students were sensitive to how clinical teachers made them feel. However, students in the second year seemed more concerned with teachers' competency in teaching.

Studies also suggest that students' ratings of instructors are influenced by the grade received or expected. Kooker (1968) produced data to show that final grades

do directly affect subsequent teacher evaluation with "A" students uniformly giving higher teacher ratings than "C" students. Similarly, Crawford and Bradshaw (1968) found significant variation in the relative value placed on different teacher characteristics by students with different grade averages. Quereski and Widlak (1973) propose that a rater's achievement level must be considered when reviewing student evaluations of an instructor. Consequently, the grade received or anticipated for a course may be a significant variable in the perceptions and ratings of clinical teaching in nursing.

Teacher variables that influence perceptions of clinical teacher effectiveness include the faculty member's clinical specialty or teaching area and number of years of teaching experience. Jason (1962) noted significant differences in the use of questioning between medical faculty in internal medicine, obstetrics - gynecology, psychiatry, and the basic sciences. In addition, Collins and Roessler (1975) found that teaching effectiveness ratings for family practice residents were significantly different from those for residents in internal medicine, surgery, obstetrics - gynecology, and pediatrics. Consequently, within nursing education the affiliation of faculty to a particular nursing specialty may be a significant variable.

Indirect support for the impact of number of years of teaching experience on faculty perceptions of effectiveness derives from studies examining its relationship with students' ratings of effective teachers. For example, Gage (1961) and Walker (1969) reported a tendency for student ratings to improve with teaching experience. On the other hand, Rayder (1968) found student ratings correlating negatively with teacher experience. These studies suggest that behavioral changes within the teacher may occur as teaching experience is gained.

Summary

In reviewing current literature which focuses on both classroom and clinical teaching, a variety of behaviors that describe the effective clinical teacher have been identified. Based on student and/or faculty perceptions, the effective clinical teacher was described as one who demonstrates an ability to teach clearly and systematically, is knowledgeable about the subject matter, uses interpersonal skills effectively, provides frequent and constructive feedback, and shows energy and enthusiasm. In addition, he or she must be accessible, approachable, fair in evaluation practices, clinically competent, and a good role model. While some researchers developed major categories of behaviors, others developed a list of specific behaviors for evaluating instruction. However, most of the teacher behaviors described were similar.

Several researchers also identified behaviors describing the ineffective clinical teacher. These behaviors included correcting students in front of others, emphasizing students' weaknesses, using an authoritarian approach, taking over student assignments, providing insufficient feedback, and failing to define expectations clearly.

Finally, the importance given to teacher characteristics by different groups has been studied by several investigators. For example, the perceptions of students in different class levels have been compared (Wong, 1978; O'Shea and Parsons, 1979; Knox and Mogan, 1983, 1985) and students' perceptions have also been compared with those of nursing faculty (O'Shea and Parsons, 1979; Meleca et al. 1981; Brown 1981; Wiley, 1984; and Knox and Mogan, 1985). Results of these studies indicate that a discrepancy exists between those characteristics identified as effective by students at different levels and by students and teachers.

Although the literature identifies certain teacher characteristics as critical to

effective clinical instruction, few studies have examined factors which might influence the perceptions of clinical teacher effectiveness. The literature suggests that a student's class level and grade received or anticipated for a course and a faculty member's instructional specialty and number of years of teaching experience might have an impact.

An analysis of the nursing literature raises several concerns about studies of effective clinical teachers. First, there are vast differences in the sample sizes used. Another observation is that, with the exception of Wiley (1984), who replicated Brown's (1981) study, and studies by Knox and Mogan (1985, 1986), each researcher used a different approach to data collection. These factors may influence the generalizability of the studies' findings and the validity of descriptions of effective clinical teacher behaviors. Thirdly, most of the studies included students and/or faculty of university nursing programs; few were conducted in diploma nursing programs. Since many bedside nurses are still prepared in diploma schools, a study examining clinical teaching effectiveness in this setting seems justified. Finally, with the exception of class level, no prior nursing research has investigated the influence of other possible factors on perceptions of clinical teacher effectiveness.

This study was designed to extend Knox and Mogan's (1986) investigation into the characteristics of effective and ineffective clinical teachers in nursing in several ways. First, the perceptions of students and faculty in diploma school programs, as opposed to university programs, were studied. The use of data from this different population may help to establish validity of the descriptions of effective clinical teacher behaviors and improve the generalizability of Knox and Mogan's findings and those of other studies. Perceptions were measured using an adapted form of the NCTEI (Knox and Mogan, 1985). The NCTEI was selected because it is a comprehensive tool. The five categories and list of specific clinical teacher

behaviors comprising the tool appear to include most of the behaviors described by other researchers. It is also one of the few valid and reliable instruments available to study perceptions of effective clinical instruction in nursing.

Secondly, respondents were asked to list the three characteristics they deemed most important for clinical teacher effectiveness. In this way, the characteristics which best distinguish the effective clinical teacher could be identified and further understood. Thirdly, this study examined the influence of several student and teacher variables on perceptions of clinical teacher effectiveness. As suggested by the literature, these variables included a student's class level and grade received or anticipated for a course, and a faculty member's instructional specialty and number of years of teaching experience. However, beliefs held by the author led to the inclusion of several other student and teacher variables. These were the student's age and the faculty's teaching level in a nursing program, employment status, and educational preparation.

The author believes that the age of a student may have an impact on the perceptions and ratings of clinical teacher effectiveness. As a result of more life experience and often different personal pressures, the older student may have different attitudes about teaching effectiveness when compared to the younger student out of high school.

With regard to faculty, the author believes that the level of the program in which the faculty member teaches may influence perceptions and ratings of clinical teacher effectiveness. Teaching behaviors appropriate for the clinical instruction of students just entering the nursing program may be quite different from those used with students preparing for imminent entry into practice. For instance, changes produced by growth in clinical competence, and independence of students in their final semester of the nursing program would appear to necessitate different teach-

ing behaviors by faculty. This may translate into differing perceptions about the effectiveness of teaching behaviors in the clinical area between levels of teachers in the nursing program.

Another influencing variable may be the employment status of the faculty member. The teacher who is employed full-time in the nursing program may have a more complete picture of the educational objectives, learning needs, and progress of the students than does the part-time teacher. Thus, the descriptions of clinical teacher effectiveness provided by full-time and part-time teachers may be different.

Finally, perceptions of clinical teacher effectiveness may be influenced by the teacher's educational preparation. An instructor possessing a baccalaureate degree in nursing may have had little education theory or practical teaching experience during his or her education. A teacher with graduate preparation, on the other hand, may have had the opportunity to study and practice the teaching of nursing in depth. Thus, the educational background of faculty may alter the perceptions and ratings of clinical teacher effectiveness.

In summary, then, this study was designed to extend the work of Knox and Mogan (1986) by studying students and faculty in diploma programs. In addition, the researcher sought to determine the most important characteristics of clinical teacher effectiveness and to examine the influence of selected variables on perceptions of clinical teacher effectiveness.

CHAPTER THREE

METHODOLOGY

Introduction

A descriptive research approach was used for this study. To answer the research questions, data were gathered using a background information questionnaire, an adapted Nursing Clinical Teacher Effectiveness Inventory (NCTEI) and a Clinical Teacher Effectiveness Summary. In this chapter, these instruments are described, as is the sample and method of data collection.

Instruments

Background Information Questionnaire

This questionnaire was designed by the investigator to collect background information about the students and faculty in the study. Students were asked to provide information about age, class level, and grade received or anticipated for a course. Faculty were requested to supply information concerning teaching level in the program, employment status, number of years of teaching experience, educational preparation, and instructional specialty (see Appendix A).

Nursing Clinical Teacher Effectiveness Inventory

An adapted form of the NCTEI (see Appendix B) was selected for measurement of the perceptions of clinical teacher effectiveness. The NCTEI, developed by Knox and Mogan (1985), consists of 48 items, each describing a clinical teacher characteristic or behavior. Subjects indicate how well the item describes a particular clinical teacher by circling the number (1 through 7) that is printed next

to each item. The seven responses range from not at all descriptive (1) to very descriptive (7). In this study, the seven-point rating scale used in the original instrument was changed to a five-point scale in the hope of obtaining sharper or more focused responses. This alteration does not affect the reliability or validity of the instrument (Nunnally, 1967, p. 209). In addition, two columns of the five-point rating scale designating the effective and ineffective teacher were included on the one instrument so that subjects were not required to complete two.

The NCTEI is also a reliable and valid tool. The clinical teacher characteristics comprising the instrument were derived from university students' perceptions of effective and ineffective clinical teaching (Knox and Mogan, 1983). Content analysis of students' evaluations of clinical teachers resulted in 48 specific characteristics grouped into five major categories. The five categories are:

1. Teaching Ability - the process of transmission of knowledge, skills and attitudes, and the creation of an atmosphere in which this is done.
2. Interpersonal Relationship - a state of reciprocal interest or communication between two or more people excluding specific therapeutic communications between nurse and patient.
3. Personality Traits - the totality of the individual's attitudes, emotional tendencies, and character traits which are not specifically related to teaching, nursing, or interpersonal relationships but may affect all three.
4. Nursing Competence - the instructor's theoretical and clinical nursing knowledge, and attitude toward the nursing profession.
5. Evaluation - the type and amount of feedback the student receives from the teacher regarding clinical performance and written clinical assignments (p. 9).

Students' descriptions of effective and ineffective clinical teacher behaviors were compared with those found in the literature. Only those items found common to both the literature and students' evaluations were included in the tool.

To test for content validity, the NCTEI was submitted to U.B.C. faculty, students, and practicing graduates with a request to rate each item for its importance (Knox and Mogan, 1985). Comments were also sought regarding the clarity of items and possible additions, and the tool was revised accordingly. Using the coefficient alpha, reliability estimates ranging from $\alpha = 0.79$ to 0.88 were established for each of the five major categories of teacher behaviors and for each of the 48 items. Polit and Hungler (1983) recommend a coefficient of 0.60 to 0.70 as acceptable for group-level comparisons (p.393). All items were judged important by faculty, students, and graduates (mean importance ratings 84 to 93 percent). The instrument was again submitted to nursing faculty and students of U.B.C. and seven American university nursing schools (Knox and Mogan, May 29, 1986), and participants were asked to rate their best and worst clinical teacher. These data showed that the instrument did discriminate between effective and ineffective clinical teachers. Reliability data were collected for each of the five categories of teacher characteristics for best and for worst clinical teachers. Reliability coefficients varied from $\alpha = 0.79$ to 0.92 . Test-retest scores at 4 week intervals ranged from $r = 0.76$ to 0.93 .

Clinical Teacher Effectiveness Summary

A summary question was developed by the investigator to further refine the perceptions of clinical teacher effectiveness. Subjects were asked to choose three characteristics from the 48 items of the NCTEI which they considered most important for the clinical teacher to possess (see Appendix C).

Setting and Sample Selection

This study was conducted at two community college schools of nursing in Vancouver, British Columbia. Both colleges provide a six-semester nursing program which leads to a diploma in nursing. Courses in nursing and practical experience in a wide variety of clinical settings are offered.

From both colleges, all nursing faculty ($N = 50$) who were teaching at the time the study was conducted were asked to participate in the study. Similarly, all nursing students ($N = 202$) who were attending school and not on scheduled semester breaks were asked to volunteer. The only selection criterion for the study applied to students. They were required to have been supervised by at least three clinical teachers during their nursing education. Thus, students in the first semester of one college program and students in the first and second semester of the other college program were excluded from participating.

Procedure of Data Collection

A letter of explanation (see Appendix D) and consent form (see Appendix E) were sent to each school of nursing director requesting approval to approach students and faculty seeking their participation. With consent granted, the investigator provided a verbal description of the study to students during class time and to faculty during faculty meetings. During these times, subjects were asked to participate in the study and were reassured as to the confidentiality and anonymity of their responses. A packet including a background questionnaire, an NCTEI, and a Summary form together with an information letter (see Appendix F) and sealable envelopes were then made available. A total of 252 packets were distributed, 202 to students and 50 to faculty. Completed questionnaires and forms indicated con-

sent by participants. Students of one college program were allowed class time to complete the questionnaires and forms. These were then collected by the investigator. Replies from the students of the other college and from both groups of faculty were collected by the investigator at the office of each school of nursing. The data collection period encompassed approximately six weeks.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

Introduction

The purposes of this study were to investigate the characteristics of effective and ineffective clinical teachers in nursing as perceived by diploma school nursing students and faculty, to compare the two groups in their perceptions, and to determine whether these perceptions were influenced by specified variables or attributes.

This chapter presents the results of this research concurrent with a discussion of the findings in four major sections. In the first section, the response rates for students and faculty are reported. This is followed by an analysis of the results obtained from the background information questionnaire. This analysis provides a description of the student and faculty sample. The third section presents an analysis of the responses to the NCTEI and the Clinical Teacher Effectiveness Summary. Here the characteristics of effective and ineffective clinical teachers in nursing as perceived by students and faculty are described and compared. The fourth section presents an examination of the influence, if any, of the specified student and teacher variables on responses to the NCTEI and Clinical Teacher Effectiveness Summary. Following, in the fifth section, is a summary of the findings.

Response Rates

A total of 252 questionnaires, NCTEI, and Summary forms were distributed, 202 to students and 50 to faculty. Of these, 176 were returned, a total return rate of 70%. Students returned a total of 152, three of which were incomplete. Thus, the total for students was 149 (a 74% response rate) and for faculty, 24 (a 48%

response rate).

Analysis of Background Information

Characteristics of the Student Sample

The characteristics of the student sample are described in relation to age and class level. Data on the student attribute, grade received or anticipated for the course, are not included because all responses were positively recorded in a variety of ways, such as satisfactory and mastery.

The ages represented in the student sample are presented in Table I. The respondents ranged in age from 18 to 45 years with a mean of 26.5 years. The majority of participants (70.8%) were in the age group 18 to 29 years.

Table I

Frequencies by Age

Age	Sample	
	Number	Percentage
18 - 23 yrs.	62	42.6%
24 - 29 yrs.	42	28.2%
30 - 35 yrs.	28	12.8%
over 35 yrs.	17	11.4%

Note. Based on a sample of 149 nursing students.

The class levels represented in the student group are shown in Table II. The

number of students from Semester 2 who participated in the study was lower than that from the other semesters because students in the second semester of one college program failed to meet the criterion that they be taught by at least three clinical teachers before participating. Students in Semester 6 of both colleges were unable to participate because of program scheduling.

Table II

Frequencies by Class Level

Class Level	Sample	
	Number	Percentage
Semester 2	15	10.1%
Semester 3	47	31.5%
Semester 4	46	30.9%
Semester 5	41	27.5%

Note. Based on a sample of 149 nursing students.

Characteristics of the Faculty Sample

The characteristics of the faculty sample are described in terms of teaching level, employment status, number of years of teaching experience, educational preparation, and teaching specialty.

A summary of the teaching levels of faculty is shown in Table III. Semesters one through five were represented by the respondents.

The background information indicating the employment status of faculty is

summarized in Table IV. The majority of the respondents (79.2%) were employed full time.

Table III

Frequencies by Teaching Level

Teaching Level	Number	Sample	
		Percentage	
Semester 1	3	12.5%	
Semester 2	5	20.8%	
Semester 3	8	33.3%	
Semester 4	3	12.5%	
Semester 5	5	20.8%	

Note. Based on a sample of 24 nursing faculty.

Table IV

Frequencies by Employment Status

Employment Status	Number	Sample	
		Percentage	
Full Time	19	79.2%	
Part Time	5	20.8%	

Note. Based on a sample of 24 nursing faculty.

Reports of the number of years of teaching experience are presented in Table V. Eighteen (75%) of the respondents had had more than 5 years of teaching experience and 12 (50%) had had more than 10 years of teaching experience.

Table V

Frequencies by Number of Years of Teaching Experience

Experience	Number	Sample	
		Percentage	
< 1 yr	4	16.6%	
1 - 3 yrs.	1	4.2%	
3 - 5 yrs.	1	4.2%	
5 - 10 yrs.	6	25.0%	
> 10 yrs.	12	50.0%	

Note. Based on a sample of 24 nursing faculty.

The highest level of educational preparation completed by faculty is summarized in Table VI. The majority of teachers (58.2%) had a baccalaureate degree in nursing as their highest level of educational preparation. The second largest percentage (29.2%) of the sample had attained a master's degree in education.

The clinical specialties taught by faculty are presented in Table VII. Medical-surgical nursing represented the instructional specialty of the majority (56.7%) of the respondents.

Table VI

Frequencies by Highest Level of Educational Preparation

Educational Preparation	Number	Sample	
		Percentage	
Baccalaureate in Nursing	14	58.2%	
Master's in Nursing	1	4.2%	
Master's in Education	7	29.2%	
Doctoral Degree	1	4.2%	
Bachelor of Education	1	4.2%	

Note. Based on a sample of 24 nursing faculty.

Table VII

Frequencies by Clinical Nursing Specialty

Specialty	Number	Sample	
		Percentage	
Geriatrics	4	13.3%	
Medical-Surgical	17	56.7%	
Obstetrics	3	10.0%	
Pediatrics	2	6.7%	
Psychiatry	4	13.3%	

Note. Based on a sample of 24 nursing faculty. Six respondents reported two teaching specialties thus accounting for the increased total sample number.

Analysis of the Nursing Clinical Teacher Effectiveness Inventory
and Clinical Teacher Effectiveness Summary

Characteristics of Effective and Ineffective Clinical Teachers in Nursing

Perceptions of the characteristics of effective and ineffective clinical teachers in nursing were elicited through the subjects' responses to the NCTEI, the Clinical Teacher Effectiveness Summary, and from the comment sections provided in each of the tools. First, students and faculty rated how descriptive a list of 48 teacher characteristics was of a particular effective and ineffective clinical teacher using the NCTEI. The means and standard deviations for all 48 items (characteristics) for both effective and ineffective clinical teachers as perceived by the student group are presented in Table VIII. Table IX presents analogous results based on the perceptions of the faculty group.

Data indicate that all characteristics for effective clinical teachers were rated highly and almost identically by the two groups, with means ranging from 4.05 to 4.79 for the student responses and from 4.04 to 4.79 for faculty responses. The mean ratings for all characteristics for ineffective teachers are considerably lower, with the means of the student responses ranging from 1.91 to 3.54 while those for the faculty responses range from 1.67 to 2.43. Why are faculty ratings lower than student ratings of ineffective clinical teachers?

It has been noted by several authors (O'Shea and Parsons, 1979; Knox and Mogan, 1983) that students are often reluctant to comment on their clinical teachers' weaknesses, perhaps because of possible negative consequences. Thus, despite feeling strongly about the ineffectiveness of a particular instructor, students may rate such a teacher less harshly. Another explanation for these results might be students' difficulty in judging clinical teachers on certain characteristics because of

Table VIII

Summary Statistics for Student Rating of Effective and Ineffective Clinical Teachers

Item	Effective		Ineffective	
	Mean	Std Dev	Mean	Std Dev
1	4.48	0.66	2.67	1.14
2	4.56	0.57	2.84	1.18
3	4.44	0.63	2.31	1.04
4	4.48	0.67	2.51	1.15
5	4.44	0.64	2.58	1.18
6	4.47	0.71	2.63	1.14
7	4.64	0.54	2.40	1.17
8	4.58	0.65	2.88	1.27
9	4.66	0.57	2.69	1.11
10	4.41	0.68	2.82	1.13
11	4.36	0.69	2.45	1.10
12	4.34	0.78	2.39	1.10
13	4.39	0.65	2.32	1.10
14	4.37	0.74	2.90	1.28
15	4.50	0.63	2.42	1.05
16	4.54	0.67	3.05	1.25
17	4.73	0.58	1.97	1.00
18	4.78	0.51	2.36	1.25
19	4.66	0.62	2.08	1.01
20	4.63	0.62	2.64	1.15
21	4.53	0.74	2.33	1.15
22	4.54	0.78	2.04	1.07
23	4.57	0.62	2.71	1.10
24	4.48	0.68	2.74	1.19
25	4.65	0.71	3.54	1.35
26	4.26	0.91	2.12	1.12
27	4.46	0.80	2.09	1.09
28	4.60	0.69	2.53	1.39
29	4.66	0.58	2.97	1.44
30	4.69	0.57	3.46	1.21
31	4.58	0.61	2.67	1.10
32	4.27	0.88	3.32	1.31
33	4.16	1.01	3.04	1.34
34	4.05	1.01	2.87	1.32
35	4.50	0.74	3.38	1.26
36	4.38	0.78	2.71	1.31
37	4.67	0.56	3.18	1.32
38	4.74	0.51	2.01	1.04

Table VIII (Cont)

Summary Statistics for Student Ratings of Effective and Ineffective Clinical Teachers

Item	Effective		Ineffective	
	Mean	Std Dev	Mean	Std Dev
39	4.79	0.50	2.93	1.23
40	4.53	0.60	3.09	1.24
41	4.54	0.69	2.81	1.33
42	4.53	0.59	2.54	1.21
43	4.35	0.73	2.93	1.32
44	4.61	0.61	2.67	1.36
45	4.61	0.62	2.37	1.25
46	4.64	0.68	2.13	1.15
47	4.60	0.72	1.91	1.17
48	4.64	0.77	2.29	1.39

Note. Based on a sample of 149 nursing students.

insufficient experience, knowledge, or opportunity. For example, students may be unable to assess their teachers' breadth of knowledge in nursing because of their own lack of knowledge in the field. Students may be hindered in judging their instructor's clinical skill and judgement since they seldom see their teachers actually delivering nursing care to clients (Knox and Mogan, 1985). These findings may also reflect faculty's knowledge of teaching/learning theory, their experience, and their skill in evaluation of others. Because they are more definitive about the characteristics of ineffective teachers, they may have rated them lower.

The 10 characteristics most descriptive (highest rated including ties) of effective clinical teachers and analogous characteristics for ineffective clinical teachers (lowest rated including ties) were identified to enrich the description of effective and ineffective clinical teachers and to facilitate a comparison with the work of other

Table IX

Summary Statistics for Faculty Ratings of Effective and Ineffective Clinical Teachers

Item	Effective		Ineffective	
	Mean	Std Dev	Mean	Std Dev
1	4.58	0.58	1.95	0.86
2	4.50	0.72	1.86	0.91
3	4.33	0.70	1.71	0.72
4	4.17	0.87	2.05	0.92
5	4.21	0.78	2.05	0.92
6	4.25	0.68	1.90	0.77
7	4.29	0.81	1.90	0.70
8	4.58	0.58	2.00	1.00
9	4.54	0.59	2.05	0.80
10	4.33	0.64	1.91	0.83
11	4.21	0.66	2.05	0.86
12	4.04	0.75	2.19	0.87
13	4.29	0.55	1.76	0.77
14	4.50	0.66	1.81	0.93
15	4.42	0.65	1.67	0.66
16	4.25	0.79	2.43	1.25
17	4.46	0.59	2.19	0.98
18	4.71	0.69	1.90	1.09
19	4.79	0.41	1.86	0.91
20	4.58	0.58	2.00	1.00
21	4.17	1.09	2.10	1.22
22	4.29	0.86	1.95	1.12
23	4.46	0.59	1.86	1.01
24	4.33	0.64	1.71	1.01
25	4.58	0.58	2.38	1.40
26	4.29	0.62	1.67	0.73
27	4.50	0.66	1.76	1.04
28	4.17	0.82	2.24	1.18
29	4.42	0.83	2.24	1.34
30	4.54	0.51	2.24	1.22
31	4.50	0.59	1.81	0.75
32	4.42	0.65	2.19	1.21
33	4.12	1.74	2.19	1.17
34	4.17	1.87	2.33	1.11
35	4.37	0.71	2.38	1.20
36	4.46	0.59	1.81	0.98
37	4.79	0.41	2.24	1.18
38	4.75	0.53	1.71	1.06

Table IX (Cont)

Summary Statistics for Faculty Ratings of Effective and Ineffective Clinical Teachers

Item	Effective		Ineffective	
	Mean	Std Dev	Mean	Std Dev
39	4.46	0.88	2.24	1.04
40	4.67	0.48	2.14	1.20
41	4.50	0.78	2.14	1.11
42	4.50	0.59	2.00	0.89
43	4.17	0.87	2.00	0.89
44	4.50	0.59	1.71	0.84
45	4.37	0.71	1.86	0.96
46	4.54	0.59	2.10	1.04
47	4.75	0.44	1.86	1.01
48	4.75	0.53	2.14	1.27

Note. Based on a sample of 24 nursing faculty.

researchers, particularly that of Knox and Mogan (1986). The data are presented in Tables X and XI, respectively.

Student and faculty perceptions of effective clinical teachers were fairly similar, with five of the ten items rated highest by students among those rated highest by faculty. These were: is approachable, is self-confident, is a good role model, takes responsibility for own actions, and encourages a climate of mutual respect. Five characteristics described were not shared by the two groups. Students perceived effective clinical teachers as those who enjoy nursing and teaching, provide support and encouragement, demonstrate clinical skill and judgement, and are organized. Faculty, on the other hand, perceived effective clinical teachers as those who explain clearly, are well prepared for teaching, and listen attentively. In addition, these teachers were seen by faculty as making specific suggestions for improvement,

Table X

Ten Most Descriptive Characteristics of Effective Clinical Teachers (Highest Rated)

Item	Mean	Characteristic
Student Responses		
39*	4.79	Enjoys nursing (N)
18**	4.78	Is approachable (R)
38**	4.73	Is a good role model (N)
17	4.73	Provides support and encouragement (T)
30*	4.69	Demonstrates clinical skill and judgement (N)
37**	4.67	Takes responsibility for own actions (N)
29	4.66	Is organized (P)
9*	4.66	Enjoys teaching (T)
19+	4.65	Encourages a climate of mutual respect (R)
25**	4.65	Is self-confident (P)
Faculty Responses		
19+	4.79	Encourages a climate of mutual respect (R)
37**	4.79	Takes responsibility for own actions (N)
38**	4.75	Is a good role model (N)
47	4.75	Corrects students' mistakes without belittling them (E)
48	4.75	Does not criticize students in front of others (E)
18**	4.70	Is approachable (R)
40	4.66	Makes specific suggestions for improvements (E)
1*	4.58	Explains clearly (T)
8*	4.58	Is well prepared for teaching (T)
20	4.58	Listens attentively (R)
25**	4.58	Is self-confident (P)

Note. Based on a sample of 149 nursing students and 24 nursing faculty

+ Appears in top ten for both faculty and students

* Appears in Knox and Mogan's (1986) list of top ten

Categories: (T) Teaching Ability (N) Nursing Competence
(R) Interpersonal Relationships (E) Evaluation
(P) Personality

correcting student mistakes without belittling them, and avoiding criticism of students in front of others.

These results are similar to those of Knox and Mogan (1986). They found that eight of the ten highest rated items were commonly chosen by both groups of respondents. In comparing the ten characteristics rated highest for effective clinical teachers by participants in this study with those identified as such in Knox and Mogan's (1986) study, it was found that they were very similar (see Table X). Of the student responses, seven appeared in Knox and Mogan's list of top ten characteristics. Of the faculty responses, six items were found common.

These results are also consistent with previous research on teaching effectiveness. For example, based on students' perceptions, Turner (1970) and Hildebrand et al. (1971) found effective teachers were organized and self-confident. Being approachable, supportive, and respectful of students were effective behaviors identified by others (Rugg and Norris, 1975; Aspy and Reebuck, 1976; Mayberry, 1978; Karns and Schwab, 1982). Finally, Rauven (1974), Irby (1977), and Brown (1981) identified clinical competence and role modelling as important for effective instruction. Support for the characteristics of effective teachers as described by faculty in this study is found in research by O'Shea and Parsons (1979) and Brown (1981). In these studies, teachers perceived the following behaviors as effective: being approachable, being a good role model, and providing positive feedback.

There was less agreement between students and faculty when the ten lowest rated characteristics of ineffective clinical teachers were compared. Only four of the ten items rated lowest by students were among those rated lowest by faculty. Both groups agreed that ineffective teachers were not good role models, were not open-minded or non-judgemental, and were not able to use self-criticism constructively or to stimulate student interest in the subject. Students and faculty disagreed in

Table XI

Ten Most Descriptive Characteristics of Ineffective Clinical Teachers (Lowest Rated)

Item	Mean	Characteristic
Student Responses		
47*	1.91	Corrects students' mistakes without belittling them (E)
17*	1.98	Provides support and encouragement to students (T)
38 ⁺	2.01	Is a good role model (N)
22*	2.04	Demonstrates empathy (R)
27 ⁺	2.08	Is open-minded and non-judgemental (P)
19*	2.08	Encourages a climate of mutual respect (R)
26 ⁺	2.11	Uses self-criticism constructively (P)
46	2.12	Gives students positive reinforcement (E)
48	2.28	Does not criticize students in front of others (E)
3 ⁺	2.30	Stimulates student interest in the subject (T)
Faculty Responses		
15*	1.66	Helps students organize their thoughts about patient problems (T)
26 ⁺	1.66	Uses self-criticism constructively (P)
3 ⁺	1.71	Stimulates student interest in the subject (T)
24	1.71	Is a dynamic, energetic person (P)
38 ⁺	1.71	Is a good role model (N)
44	1.71	Communicates clearly expectations of students (E)
13	1.76	Answers carefully and precisely questions raised by students (T)
27 ⁺	1.76	Is open-minded and nonjudgmental (P)
14	1.80	Questions students to elicit underlying reason (T)
31*	1.80	Demonstrates communication skills (N)
36*	1.80	Recognizes own limitations (N)

note. Based on a sample of 149 nursing students and 24 nursing faculty.

+ Average rating in top ten for both faculty and students

* Appears in Knox and Mogan's(1986) list of top ten

Categories: (T) Teaching Ability (N) Nursing Competence
(R) Interpersonal Relationships (E) Evaluation
(P) Personality

their perceptions of ineffective clinical teachers with regard to other characteristics. Students described these teachers as being unable to provide support and encouragement to students, to create a climate of mutual respect, or to demonstrate empathy. Students also believed that ineffective clinical teachers belittle students when correcting their mistakes and criticize students in front of others. Faculty perceived ineffective clinical teachers as unable to help students organize their thoughts about patient problems, to answer students' questions carefully and precisely, to recognize their own limitations or to question students to elicit underlying reasoning. From faculty's perspective, these teachers were also not dynamic, energetic persons nor were they able to demonstrate communication skills.

Again, these results are similar to those described by Knox and Mogan (1986) who found six of the ten lowest rated characteristics included by both students and faculty. Furthermore, seven of the ten lowest rated characteristics of ineffective clinical teachers by both groups of respondents in this study were the same as those identified in Knox and Mogan's (1986) study (see Table XI).

Although the literature specifically describing teaching ineffectiveness is limited, findings of a few studies are consistent with the findings presented here. For example, Wong (1978) found that students identified the following ineffective teacher behaviors: belittles students, and corrects students in front of others. O'Shea and Parsons (1979) found that students viewed teachers who demonstrated unsupportive, authoritative, and judgemental behaviors as unhelpful. Although O'Shea and Parsons (1979) also studied faculty perceptions of ineffective teachers, none of the characteristics described were the same as or similar to those identified by the faculty in this study. However, in a study by Irby (1977), faculty identified ineffective teachers as dull, unstimulating, opinionated, and as unable to establish rapport with students.

To extend the descriptive analysis of how students and faculty perceived effective and ineffective clinical teachers, the most descriptive characteristics (10 highest and 10 lowest rated) were examined in terms of the categories they come from (see Tables X and XI). For effective clinical teachers, students identified more Personality (2 versus 1) and Nursing Competence (4 versus 2) characteristics than did faculty. Faculty, on the other hand, placed more emphasis on Evaluation characteristics (3 versus 0). Perhaps more interesting are the results for ineffective clinical teachers. Students stressed more Interpersonal Relationships (2 versus 0) and Evaluation (3 versus 1) behaviors than did faculty. Faculty tended to select more items from the categories Teaching ability (4 versus 2) and Nursing Competence (3 versus 1). The categories with the greatest differences in emphasis are Teaching Ability and Interpersonal Relationships. Overall, faculty stressed more Teaching Ability characteristics (6 versus 4) and students stressed more Interpersonal Relationships characteristics (4 versus 2).

In part, Knox and Mogan (1986) report similar findings. In determining the major differences between best and worst clinical teacher characteristics, they found that students tended to emphasize Personality, Interpersonal Relationships, and Evaluation characteristics while faculty focused on Teaching Ability and Nursing Competence characteristics.

The next step in the data analysis was to test for significant differences between the two groups' responses. The statistical tests were directed towards the five categories into which the list of 48 clinical teacher characteristics were grouped: Teaching Ability, Interpersonal Relationships, Personality, Nursing Competence, and Evaluation. Since each category contains at least five characteristics or items, the increased sample size associated with this aggregation should enhance the ability or power of the tests to detect a significant difference, if present.

The statistical test employed was the Kruskal-Wallis test. The use of this non-parametric test of equality of mean rankings is appropriate because the response data are ordinally measured (Siegel, 1956, p. 174). With ordinal data, the ordering or rank of the response numbers is relevant but their relative magnitude is not. In this study, while the response data range from not at all descriptive (1) to very descriptive (5), there is no reason to believe that successive intervals (distances between numbers) were perceived as being equal by the respondents. As noted by Siegel, when parametric techniques are used and only the rank order of the response data is known, "any decisions about hypotheses are doubtful." Since the typical parametric technique for testing several independent samples, the one-way ANOVA or F-test, requires that the response data must reach at least the interval scale, its nonparametric analogue, the Kruskal-Wallis test, was utilized.

The Kruskal-Wallis technique tests the hypothesis that all samples are drawn from identical populations with respect to means. To compute the test statistic, the observations from the independent samples are pooled and then ranked in ascending order. Next, the mean rank for each of the independent samples is calculated. The Kruskal-Wallis test then determines if the mean ranks are so disparate that they are not likely to have come from identical populations. For large sample sizes ($N > 5$), the Kruskal-Wallis test is distributed as chi-square with degrees of freedom equal to $k - 1$, where k is the number of independent samples (Siegel, 1956, p. 185).

The mean rankings employed in the test for differences between student and faculty responses are presented in Table XII and the results of the tests are presented in Table XIII. General agreement between students and faculty was found when ratings of the five categories of behaviors for effective clinical teachers were compared. In only two categories, Personality Traits and Teaching Ability ($p < 0.01$), were there statistically significant differences with higher ratings by students accounting

Table XII

Mean Rankings For Student and Faculty Responses

Category	Status	
	Student	Faculty
Effective		
Teaching Ability	1495	1322
Interpersonal Relationships	437	407
Personality Traits	617	537
Nursing Competence	871	826
Evaluation	784	750
Ineffective		
Teaching Ability	1481	1061
Interpersonal Relationships	429	360
Personality Traits	610	434
Nursing Competence	879	573
Evaluation	777	611

Note. Based on a sample of 149 nursing students and 24 nursing faculty.

for the differences. Consistently high ratings afforded each characteristic by both groups is one possible explanation for the lack of significant differences in other categories. Another possible explanation may stem from problems associated with placing items in distinct categories. For example, item 17, provides support and encouragement to students, may as easily be considered an Interpersonal Relationships characteristic as a Teaching Ability characteristic. This finding differs from those of Knox and Mogan (1986). They found significant differences in three behavioral categories - - Personality Traits, Interpersonal Relationships, and Evaluation.

Table XIII

Test for Differences Between Student and Faculty Responses

Category	K-W*	P-Value
Effective		
Teaching Ability	14.52	0.0001
Interpersonal Relationships	1.46	0.2264
Personality Traits	7.49	0.0062
Nursing Competence	1.75	0.1863
Evaluation	1.06	0.3030
Ineffective		
Teaching Ability	81.16	0.0000
Interpersonal Relationships	7.40	0.0065
Personality Traits	34.77	0.0000
Nursing Competence	72.75	0.0000
Evaluation	24.05	0.0000

Note. Based on a sample of 149 nursing students and 24 nursing faculty.

* Kruskal-Wallis test statistic

Higher ratings by students in the Personality Traits category may reflect their anxiety in the clinical area. Often they are in a totally new environment. They fear making mistakes because of potential harm to clients and they worry about looking foolish in front of clients, peers, and the instructor. Thus, students value a teacher who can make them feel at ease; someone who is enthusiastic, open-minded and non-judgemental, and has a good sense of humor. Faculty, less personally affected by the clinical teacher's personality, rated this category lower.

The tendency of students to rate teachers highly on personal qualities has often

been criticized by those who believe student evaluations are a popularity contest (MacKay, 1974; Bronstein, 1979; Krutzen, 1979). Nevertheless, other studies have shown that students perceive personality characteristics as important to teaching effectiveness (O'Shea and Parsons, 1979; Brown, 1981; Knox and Mogan, 1983).

Higher ratings by students in the Teaching Ability category may be a further expression of student anxiety in the clinical setting, but may also indicate their interest in learning nursing. They value a clinical teacher who teaches well; someone who fosters their interest in nursing, can explain the content clearly and systematically, and can help them develop clinical judgement and skills. Lower ratings by faculty in this category may be a reflection of their concern in other areas, perhaps Nursing Competence. For example, O'Shea and Parsons (1979) and Knox and Mogan (1985) suggest that clinical teachers in nursing experience role conflict as a result of being educated as nurses before becoming teachers. Presumably, faculty values are challenged in the clinical area because of their inability to participate fully in the care of clients. Thus, priorities of concern by faculty in this study may lie more with clients than is the case with students and thus account for the reduced emphasis on Teaching Ability behaviors.

In contrast to the relative agreement between students and faculty with regard to the categorical behaviors of the effective clinical teacher, divergence between the two groups was found when the ratings in all five categories for ineffective clinical teachers were compared (see Table XIII). Statistically significant differences were found in all five categories ($p < 0.01$ in all cases), with faculty ratings being lower in all cases. Again, this result is consistent with Knox and Mogan (1986) who also found differences between respondents when ratings of behavioral categories for worst clinical teachers were compared. However, their findings did not reach statistical significance.

The description of the characteristics of effective clinical teachers was further refined by asking respondents to list the three most important characteristics that a clinical teacher should possess using the Clinical Teacher Effectiveness Summary. The relative frequency distributions for characteristics selected by both students and faculty are presented in Table XIV.

The three characteristics listed by students as most important for a clinical teacher to possess were: is approachable (item 18), gives students positive reinforcement for good contributions, observations, and performance (item 46), and corrects student mistakes without belittling them (item 47). Comparing these characteristics to the ten most descriptive characteristics of effective clinical teachers by students, it is interesting to note that only one characteristic, is approachable, is common to both lists. It comes from the category Interpersonal Relationships. Furthermore, in the three most important list, two Evaluation items (46 and 47) were selected whereas in the most descriptive list, none were selected.

Because of ties in the frequency distribution of those characteristics chosen by faculty as most important, eight characteristics actually occupied the top three positions. These were: demonstrates clinical skill and judgement (item 30), stimulates student interest in the subject (item 3), is a good role model (item 38), communicates clearly expectations of students (item 44), is well prepared for teaching (item 8), promotes student independence (item 16), is approachable (item 18), and has realistic expectations of students (item 45). A comparison of these characteristics with the ten most descriptive characteristics of effective clinical teachers by faculty shows three common items. These are: is a good role model (from the category Nursing Competence), is well prepared for teaching (Teaching Ability), and is approachable (Interpersonal Relationships). The other most important characteristics selected came from the categories Teaching Ability (3 and 16),

Table XIV

Relative Frequency Distribution for Characteristics Selected
as the Three Most Important for Effective Clinical Teachers

Item	Student Response		Faculty Response	
	Number	Percentage	Number	Percentage
1	5	1.3	1	1.6
2	9	2.4	0	0.0
3	1	0.3	4	6.3
4	3	0.8	0	0.0
5	3	0.8	0	0.0
6	2	0.5	1	1.6
7	3	0.8	0	0.0
8	5	1.3	3	4.7
9	9	2.4	1	1.6
10	1	0.3	2	3.1
11	3	0.8	1	1.6
12	3	0.8	0	0.0
13	2	0.5	0	0.0
14	2	0.5	1	1.6
15	4	1.1	0	0.0
16	8	2.1	3	4.7
17	22	5.9	1	1.6
18	36	9.6	3	4.7
19	17	4.5	2	3.1
20	0	0.0	0	0.0
21	5	1.3	1	1.6
22	8	2.1	0	0.0
23	5	1.3	1	1.6
24	2	0.5	0	0.0
25	3	0.8	0	0.0
26	6	1.6	0	0.0
27	16	4.3	0	0.0
28	9	2.4	0	0.0
29	8	2.1	2	3.1
30	14	3.7	12	18.8
31	1	0.3	2	3.1
32	2	0.5	0	0.0
33	0	0.0	0	0.0
34	0	0.0	0	0.0
35	11	2.9	1	1.6
36	3	0.8	2	3.1
37	0	0.0	1	1.6

Table XIV (Cont)

Relative Frequency Distribution for Characteristics Selected
as the Three Most Important for Effective Clinical Teachers

Item	Student Response		Faculty Response	
	Number	Percentage	Number	Percentage
38	22	5.9	4	6.3
39	5	1.3	2	3.1
40	4	1.1	0	0.0
41	20	5.3	2	3.1
42	11	2.9	2	3.1
43	0	0.0	0	0.0
44	9	2.4	4	6.3
45	11	2.9	3	4.7
46	34	9.0	2	3.1
47	24	6.4	0	0.0
48	5	1.3	0	0.0

Note. Based on a sample of 149 nursing students and 24 nursing faculty.

Nursing Competence (30), and Evaluation (44 and 45). These data support the previous finding that faculty emphasize Teaching Ability, Nursing Competence, and Evaluation characteristics when describing effective clinical teachers.

Thus, the results show that students and faculty differ in their perceptions of effective clinical teachers since only one characteristic, is approachable, was described as most important by both groups. Mutual acknowledgement of the importance of this characteristic suggests it to be an essential aspect of effective clinical teaching. In addition, differences among students' and faculty perceptions were demonstrated when the three most important characteristics were compared with the ten most descriptive characteristics. These differences may be a reflection of how the study questions were asked. In the one instance (most descriptive characteristics), par-

ticipants were required to base their response on past experience with an effective clinical teacher while in the other instance (most important characteristics), they were not. Perhaps there would have been fewer differences in these perceptions if the subjects were asked on the Clinical Teacher Effectiveness Summary: "What were the three most important characteristics that made the effective clinical teacher stand out in your mind?" On the other hand, they might have been asked on the NCTEI to picture an effective clinical teacher within their current experience.

The picture of the most important characteristics was broadened, for interest sake, by identifying the ten most important characteristics (most frequently selected including ties) as perceived by respondents. These data are presented in Table XV.

In contrast to the apparent differences between students and faculty regarding the three most important characteristics, when the ten most important characteristics were compared, the perceptions of the two groups became less divergent. Indeed, data seem to suggest similar views since nine of the most important characteristics of an effective clinical teacher were commonly described. Perhaps subjects had difficulty in choosing only three characteristics as most important.

This listing of the ten most important characteristics also facilitates a comparison with the ten most descriptive (highest mean ratings) characteristics of effective clinical teachers as presented in Table X. As noted earlier in relation to the three most important characteristics, the characteristics receiving the highest emphasis in the importance listing differ considerably from the characteristics in the most descriptive listing as is shown in Table XV. However, the characteristics common to both listings signify their importance in the clinical teaching-learning environment. The common characteristics of the student responses were: is approachable, provides support and encouragement to students, is a good role model, encourages a climate of mutual respect, and demonstrates clinical skill and judgement. Of

Table XV

Ten Most Important Characteristics For Effective Clinical Teaching (Most Frequently Selected)

Item	Number	Characteristic
Student Responses		
18 ⁺ *	36	Is approachable (R)
46 ⁺	34	Gives students positive reinforcement (E)
47	24	Corrects students mistakes without belittling them (E)
17 [*]	22	Provides support and encouragement to students (T)
38 ⁺ *	22	Is a good role model (N)
41 ⁺	20	Provides frequent feedback on students' performance (E)
19 ⁺ *	17	Encourages a climate of mutual respect (R)
27	16	Is open-minded and non-judgemental (P)
30 ⁺ *	14	Demonstrates clinical skill and judgement (N)
35	11	Recognizes own limitations (N)
42 ⁺	11	Identifies students' strengths and limitations objectively (E)
45 ⁺	11	Has realistic expectations of students (E)
Faculty Responses		
30 ⁺	12	Demonstrates clinical skill and judgement (N)
3	4	Stimulates student interest in the subject (T)
38 ⁺ *	4	Is a good role model (N)
44	4	Communicates clearly expectations of students (E)
8 [*]	3	Is well prepared for teaching (T)
16	3	Promotes student independence (T)
18 ⁺ *	3	Is approachable (R)
45 ⁺	3	Has realistic expectations of students (E)
10	2	Encourages active participation in discussion (T)
19 ⁺ *	2	Encourages a climate of mutual respect (R)
29	2	Is organized (P)
31	2	Demonstrates communication skills (N)
36	2	Recognizes own limitations (N)
39	2	Enjoys nursing (N)
41 ⁺	2	Provides frequent feedback on students' performance (E)
42 ⁺	2	Identifies students' strengths and limitations objectively (E)
46 ⁺	2	Gives students positive reinforcement (E)

Note. Based on a sample of 149 nursing students and 24 nursing faculty.

+ Among the ten most frequently listed by both faculty and students

* Appears in top ten rated effective characteristics in Table X

Categories: (T) Teaching Ability (N) Nursing Competence
(R) Interpersonal Relationships (E) Evaluation
(P) Personality

the faculty ratings, the common characteristics were: is a good role model, is well prepared for teaching, is approachable, and encourages a climate of mutual respect.

To determine if the characteristics selected as most important were independent of the group (student or faculty) making the selection, a Chi-Square test of independence was used with $p < 0.05$ as the accepted significance level. The Chi-Square test statistic was 96.42 with $p < 0.001$. Thus, the differences in perceptions of the most important characteristics of the effective clinical teacher between the two groups were statistically significant. This finding contradicts the relative agreement found between students and faculty with regard to both specific and categorical characteristics of effective clinical teachers as described earlier. One explanation of these seemingly contradictory findings is that tests for differences in ratings (the nonparametric Kruskal-Wallis test employed in this study) may lack sufficient power because of the consistently high ratings given all characteristics by both groups and also the restricted sample size. Thus, the results of the test for differences in the characteristics selected as most important for effective clinical teachers may be a more accurate measure of relative beliefs. Therefore, it would also be important to know what characteristics were volunteered by respondents in the comment sections provided.

The final method, then, of characterizing effective and ineffective clinical teachers was to ask participants to comment on the characteristics listed or described. Data were analyzed by reading all of the comments by the two groups and by judging their frequency and the nature of their content. Less than one-half of the subjects in both groups made comments.

An analysis of the students' comments suggested that they used the free response sections to emphasize the characteristics they liked or disliked about their clinical instructors. Although there were many positive comments referring to the effective

teacher, the majority were negative remarks about the ineffective teacher.

The most frequent comments about effective clinical teachers referred to the instructor's ability to relate interpersonally. For example, students expressed appreciation for a teacher who was approachable and who demonstrated mutual respect and personal interest. The effective teacher was described as "caring, willing to help, and able to relate on a person-to-person level." Many comments were also made regarding the importance of the instructor's personal qualities such as enthusiasm, open-mindedness, and a sense of humor. In relation to evaluation, students remarked that an instructor who provided "positive and frequent feedback" was particularly effective. Judging from the numerous comments, a teacher who "clearly and consistently defined expectations" was also greatly valued. Fewer comments related to the clinical competence and teaching ability of the instructor. However, some students expressed an appreciation for an "excellent role model - someone they could emulate." Others commented that they liked a teacher who enjoyed nursing and promoted independence. These data are consistent with both the description of effective clinical teachers (see Table X) and the most important characteristics of clinical teacher effectiveness (see Table XV) by students as presented earlier. In addition, the instructor's ability to use effective interpersonal skills within the student-teacher relationship seems to be the major concern.

The characteristics of ineffective clinical teachers were described extensively by students in the free response sections. The most vehement criticism related to the area of evaluation and was directed against the teacher who gave "negative feedback in front of others." Frequent comments were also made about the teacher who belittles students when correcting their mistakes and "who fails to give adequate amounts of positive feedback." There were many comments regarding the personality traits of ineffective clinical teachers. Students described them as "bor-

ing, arrogant, and judgemental." Other comments seemed to specifically describe the instructor's inability to relate effectively. "Intimidating, nonsupportive, and insensitive" behavior was criticized often. In addition, students were critical of the teacher who "appeared to dislike teaching and nursing," and who "asked too many questions during the clinical experience." These findings also seem to support the previous descriptions of the characteristics of ineffective clinical teachers (see Table XI) by students even though many of the characteristics were stated in negative or opposite form to the positively stated behaviors on the NCTEI. Moreover, the comments appear to emphasize, once again, students' regard for interpersonal and evaluative characteristics.

Other comments made by students referred to how ineffective clinical teachers made them feel. For example, one student remarked: "We were all afraid we would fail clinical." Another subject said: "She completely destroyed my confidence. I felt stupid all the time." Still another wrote: "She turned me off nursing almost to the point of dropping out." These data illustrate very strongly the personal effect clinical teacher behaviors may have on students. These feelings of stress and inadequacy may be exacerbated by faculty's apparent failure to interrelate effectively. This observation is supported by Karns and Schwab (1982) who suggest that faculty's knowledge of therapeutic communication with clients does not guarantee a transfer of those skills to a teaching-learning interaction (p. 41). These data point out the need for instructor evaluation and improvement, particularly in the domain of interpersonal relationships.

While the students' comments seemed to reaffirm the description of the characteristics of both effective and ineffective clinical teachers, the faculty's comments seemed to extend the description of effective clinical teachers only. Almost all of the remarks were suggestions of additional effective clinical teacher behaviors. For

example, in relation to the category Teaching Ability, one instructor wrote

Add - encourages self-directed learning; selects appropriate learning experiences to meet the objectives of the course and the students' learning needs; identifies resources for student learning; encourages the use of the expertise of clinical area staff.

About Interpersonal Relationships, another teacher remarked,

I think effectiveness goes beyond 'demonstrates empathy' to using all facilitative communication techniques such as warmth, genuineness, respect, concreteness, and so forth.

Other comments, directed toward restating the listed characteristics, suggested dissatisfaction with the instrument (NCTEI). Several teachers suggested item 16 be changed to read: "Promotes student independence within the level of capability." Another subject commented that item 21 should be restated as: "Shows a genuine interest in students." The faculty comments suggest that the NCTEI may not have included all of the behaviors salient to the faculty's perceptions and that other characteristics may indeed have described the characteristics of effective and ineffective clinical teachers more accurately.

Finally, both students and faculty commented frequently that all of the characteristics on the NCTEI were important to effective clinical teaching and that it was extremely difficult to select only three as most important for a clinical teacher to possess. This may be interpreted to imply that the NCTEI does, in fact, describe valid and useful clinical teacher behaviors. It may also serve to support the previous discussion regarding the differences between students and faculty in their selection of most important characteristics.

Analysis of Variables in Relation to Ratings of Effective and Ineffective Clinical Teachers

The Influence of Student Variables

For the purpose of analyzing whether student perceptions of effective and inef-

fective clinical teachers were influenced by the variables of age and class level, data were classified as follows. Student responses were divided into four age groups (18 to 23 years, 24 to 29 years, 30 to 35 years, and over 35 years of age) and four class levels (semesters 2 through 5). The influence of the variable, grade received or anticipated for the course, on student perceptions was not examined because all responses were positively recorded in a variety of ways, such as satisfactory and mastery.

To determine whether there were significant differences in student ratings of effective and ineffective clinical teachers across age groups or across class level, the Kruskal-Wallis test was utilized. The mean rankings for the four age groups are presented in Table XVI and the results of the tests for differences in responses across student age groups are presented in Table XVII.

Marginally significant differences were found in two categories of behaviors for effective clinical teachers, Interpersonal Relationships ($p = 0.07$) and Evaluation ($p = 0.06$). Significant differences were found in four of the five categories for ineffective clinical teachers. These were Teaching Ability ($p < 0.001$), Interpersonal Relationships ($p = 0.01$), Nursing Competence ($p < 0.001$), and Evaluation ($p = 0.02$).

The data suggest that age does not seem to influence students' perceptions of effective clinical teachers. It does, however, appear to affect perceptions of ineffective clinical teachers. A possible explanation of these findings may be that older students viewed ineffectiveness differently than did younger students because of the influences of greater life experiences on attitudes. For instance, younger students, perhaps shy and lacking in confidence, may view a clinical teacher who encourages independence and learning through active participation in discussion as ineffective. Older students, perhaps more confident and assured in expressing themselves,

Table XVI

Mean Rankings of Student Responses by Category Across Age Groups

Category	Age Group			
	18 – 23	24 – 29	30 – 35	> 35
Effective				
Teaching Ability	1290	1227	1251	1308
Interpersonal Relationships	396	346	361	375
Personality Traits	522	526	522	513
Nursing Competence	757	722	737	776
Evaluation	696	632	656	700
Ineffective				
Teaching Ability	1328	1180	1230	1176
Interpersonal Relationships	390	371	320	355
Personality Traits	532	516	482	505
Nursing Competence	814	672	698	668
Evaluation	697	619	657	650

Note. Based on a sample of 149 nursing students classified on the basis of age into four categories (18 to 23 years, 24 to 29 years, 30 to 35 years, and over 35 years).

may desire more of these characteristics in their clinical teacher. In relation to Interpersonal Relationships, younger students may like a clinical teacher to be more supportive and empathetic because of feeling anxious about actually providing physical care to real clients. On the other hand, the more experienced older students may desire greater respect and personal interest by their clinical teacher. Another difference in students' perceptions of ineffectiveness according to age was in the category Nursing Competence. Younger students, perhaps in awe of their clinical

Table XVII

Test for Differences in Student Responses by Age

Category	K-W*	P-Value
Effective		
Teaching Ability	4.23	0.237
Interpersonal Relationships	7.06	0.070
Personality Traits	0.16	0.984
Nursing Competence	2.67	0.446
Evaluation	7.55	0.056
Ineffective		
Teaching Ability	22.86	0.000
Interpersonal Relationships	10.50	0.015
Personality Traits	3.78	0.287
Nursing Competence	36.75	0.000
Evaluation	9.55	0.023

Note. Based on a sample of 149 nursing students classified on the basis of age into four categories (18 to 23 years, 24 to 29 years, 30 to 35 years, and over 35 years).

* Kruskal-Wallis test statistic

teachers, may attribute little importance to these instructor characteristics, simply taking their knowledge and skill for granted. Older students may be more critical of the clinical teacher who appears to lack clinical skill or a breadth of knowledge in nursing since maturity often creates a greater awareness of and appreciation for the expertise of others. Finally, with regard to the teacher's ability to evaluate, frequent if not constant feedback from the clinical instructor, close observation of performance, and specific suggestions for improvement may be expected by younger

students who feel insecure in the clinical setting. Older students, more trusting of and accustomed to independent functioning, may view these teacher behaviors as less helpful. Findings of several studies suggest support for these interpretations (Kiker, 1973; Wong, 1978; Irby and Rakestraw, 1981; Knox and Mogan, 1983), although no study specifically examining age as a variable that may influence students' perceptions of effective and ineffective teacher behaviors was found in the literature.

Table XVIII

Mean Rankings of Student Responses by Category Across Class Level

Category	Semester			
	2	3	4	5
Effective				
Teaching Ability	1148	1262	1013	1140
Interpersonal Relationships	332	346	315	346
Personality Traits	472	489	426	496
Nursing Competence	694	733	579	700
Evaluation	620	654	555	600
Ineffective				
Teaching Ability	1125	1119	1093	1161
Interpersonal Relationships	356	349	307	335
Personality Traits	465	458	481	447
Nursing Competence	659	652	660	672
Evaluation	581	577	594	616

Note. Based on a sample of 149 nursing students classified on the basis of class level (semesters 2 through 5).

Table XIX

Test for Differences in Student Responses by Class Level

Category	K-W*	P-Value
Effective		
Teaching Ability	56.83	0.000
Interpersonal Relationships	3.79	0.150
Personality Traits	12.72	0.002
Nursing Competence	40.79	0.000
Evaluation	17.17	0.000
Ineffective		
Teaching Ability	3.91	0.141
Interpersonal Relationships	5.75	0.056
Personality Traits	2.48	0.290
Nursing Competence	0.63	0.730
Evaluation	2.43	0.297

Note. Based on a sample of 149 nursing students classified on the basis of class level (semesters 2 through 5).

* Kruskal-Wallis test statistic

The mean rankings and the results of the tests for differences in ratings of effective and ineffective clinical teachers across student class level are presented in Table XVIII and Table XIX, respectively. Significant differences were found in four categories of behaviors for effective clinical teachers: Teaching Ability ($p < 0.001$), Personality Traits ($p = 0.002$), Nursing Competence ($p < 0.001$), and Evaluation ($p < 0.001$). Only one category, Interpersonal Relationships ($p = 0.06$), was found to be marginally different for ineffective clinical teachers.

The findings indicate that students' perceptions also appear to be influenced by the variable of class level. However, perceptions of effective clinical teachers as opposed to ineffective clinical teachers appear to be affected. These class level results are corroborated by others (Wong, 1978; O'Shea and Parsons, 1979; Knox and Mogan, 1985) who found that students in different class levels perceived the characteristics of clinical teachers differently.

Changes in the learning needs of students as they progress through each semester of their nursing program may account for these results. Also, increasing awareness of the clinical teacher's behavior can lead to an increasing ability to appraise teaching effectiveness as students progress from one semester to another. For example, second semester students, anxious and relatively inexperienced in the clinical setting, may perceive the effective clinical teacher as one who can help them make use of practice opportunities and organize their thoughts about client problems. Fifth semester students, more clinically competent, may appreciate the instructor who promotes student independence by encouraging them to seek their own learning experiences and to think independently (O'Shea and Parsons, 1979).

With regard to Personality Traits, again second semester students might place greater value than do fifth semester students on these instructor characteristics because of the degree of stress and anxiety more junior students perceive in the clinical setting. Fifth semester students, on the other hand, may perceive Nursing Competence characteristics as more important for clinical teacher effectiveness. In anticipation of becoming practicing nurses, these students may have a greater need for clinical teachers who are good role models, who demonstrate responsibility, and who are aware of current developments in nursing.

Finally, in the category Evaluation, second semester students, less experienced with evaluation and less adept at critical self-appraisal than more senior students,

may have more of a need for the clinical teacher to be effective in providing feedback, identifying their strengths and weaknesses, and making suggestions for improvement. These differences in perceptions between students in different semesters suggest that, while a clinical teacher might be quite effective teaching students in one semester, he/she may be less effective when teaching students from another semester. Thus, his/her clinical teaching behaviors may need to be adjusted.

To consider whether the characteristics selected by students as the three most important for clinical teacher effectiveness differed across age groups or across student class level, the Chi-Square test of independence was again employed. For students grouped on the basis of age, the Chi-Square test statistic was 119.26 with $p = 0.652$. Therefore, there was no significant difference in the characteristics chosen as most important across age groups. For students classified on the basis of class level, a Chi-Square statistic of 138.03 with $p = 0.168$ was obtained. Again, there was no significant difference in the characteristics selected as most important across class level groups.

The Influence of Faculty Variables

In determining whether the specified variables of teaching level, employment status, number of years of teaching experience, and educational preparation influenced faculty's perceptions of effective and ineffective clinical teachers, the Kruskal-Wallis test was again employed. The influence of the variable, teaching in nursing specialty, on faculty ratings was not analyzed because the majority of the sample (17 or 56.7%) taught medical-surgical nursing.

In order, Table XX and Table XXI present the mean rankings and the results of the tests for differences in the ratings of effective and ineffective clinical teachers by faculty teaching level.

Table XX

Mean Rankings of Faculty Responses by Category Across Teaching Level

Category	Semester				
	1	2	3	4	5
Effective					
Teaching Ability	234	162	178	201	203
Interpersonal Relationships	62	60	57	39	56
Personality Traits	73	54	91	86	76
Nursing Competence	121	94	111	129	110
Evaluation	114	82	104	112	95
Ineffective					
Teaching Ability	111	141	156	230	198
Interpersonal Relationships	46	45	41	66	58
Personality Traits	78	65	58	79	76
Nursing Competence	80	93	94	114	101
Evaluation	56	81	83	105	108

Note. Based on a sample of 24 nursing faculty classified on the basis of teaching level into five categories (semesters 1 through 5)

Significant differences were found in two categories of teacher behaviors for effective clinical teachers, Teaching Ability ($p = 0.006$) and Personality Traits ($p = 0.003$). For ineffective clinical teachers, significant differences were found in the categories Teaching Ability ($p < 0.001$) and Evaluation ($p = 0.004$), with a marginal difference found in Interpersonal Relationships ($p = 0.06$).

Mean rankings and results by employment status are presented in Table XXII and Table XXIII. No significant differences were found in any of the behavioral

Table XXI

Test for Differences in Faculty Response by Teaching Level

Category	K-W*	P-Value
Effective		
Teaching Ability	14.26	0.006
Interpersonal Relationships	5.04	0.283
Personality Traits	15.94	0.003
Nursing Competence	6.51	0.164
Evaluation	7.14	0.129
Ineffective		
Teaching Ability	40.19	0.000
Interpersonal Relationships	8.98	0.061
Personality Traits	6.34	0.175
Nursing Competence	4.27	0.371
Evaluation	15.31	0.004

Note. Based on a sample of 24 nursing faculty classified on the basis of teaching level into five categories (semesters 1 through 5).

* Kruskal-Wallis test statistic

categories for effective clinical teachers. For ineffective clinical teachers, only one category, Nursing Competence ($p = 0.013$), reached statistical significance.

The mean rankings for the five classes of teaching experience are presented in Table XXIV and the results of the tests for differences in responses by number of years of teaching experience are presented in Table XXV. For effective clinical teachers, significant differences were found in two categories, Personality Traits ($p = 0.002$) and Evaluation ($p < 0.001$) and marginally significant differences in

Table XXII

Mean Rankings of Faculty Responses by Category Across Employment Status

Category	Status	
	Part-Time	Full-Time
Effective		
Teaching Ability	196	207
Interpersonal Relationships	59	61
Personality Traits	96	81
Nursing Competence	124	120
Evaluation	116	106
Ineffective		
Teaching Ability	192	176
Interpersonal Relationships	55	53
Personality Traits	69	75
Nursing Competence	126	100
Evaluation	107	92

Note. Based on a sample of 24 nursing faculty classified on the basis of employment status into two categories (part-time and full-time).

two additional categories, Teaching Ability ($p = 0.05$) and Nursing Competence ($p = 0.07$). For ineffective clinical teachers, significant differences were found in three of the five categories. These were Teaching Ability ($p < 0.001$), Nursing Competence ($p < 0.001$), and Evaluation ($p < 0.001$).

Finally, mean rankings and results by educational preparation are presented in Table XXVI and Table XXVII, respectively. For this test, data were divided into two groups of educational preparation because of the restrictive sample size. The

Table XXIII

Test for Differences in Faculty Responses by Employment Status

Category	K-W*	P-Value
Effective		
Teaching Ability	0.60	0.440
Interpersonal Relationships	0.04	0.849
Personality Traits	2.65	0.104
Nursing Competence	0.12	0.724
Evaluation	0.86	0.353
Ineffective		
Teaching Ability	1.31	0.253
Interpersonal Relationships	0.11	0.735
Personality Traits	0.43	0.512
Nursing Competence	6.12	0.013
Evaluation	2.41	0.120

Note. Based on a sample of 24 nursing faculty classified on the basis of employment status into two categories (part-time and full-time)

* Kruskal-Wallis test statistic

undergraduate group is composed of faculty with Baccalaureate in Nursing (14) and Bachelor in Education (1) degrees. The graduate group includes respondents with Masters in Nursing (1), Masters in Education (7), and Doctoral (1) degrees. Ratings for effective clinical teachers differed significantly in only one category, Personality Traits ($p = 0.034$). Nursing Competence reached marginal significance ($p = 0.07$) in the ratings of ineffective clinical teachers.

The findings indicate the variable, number of years of teaching experience, did

Table XXIV

Mean Rankings of Faculty Responses by Category Across Number
of Years of Teaching Experience

Category	Years of Experience				
	0 – 1	1 – 3	3 – 5	5 – 10	> 10
Effective					
Teaching Ability	221	142	192	211	205
Interpersonal Relationships	63	46	68	56	62
Personality Traits	110	72	66	87	94
Nursing Competence	143	97	110	121	119
Evaluation	144	61	102	104	97
Ineffective					
Teaching Ability	226	219	158	169	174
Interpersonal Relationships	53	75	44	56	63
Personality Traits	91	64	69	71	65
Nursing Competence	138	136	91	98	107
Evaluation	117	131	83	89	79

Note. Based on a sample of nursing faculty classified on the basis of teaching experience into five categories (< 1 yr, 1-3 yrs, 3-5 yrs, 5-10 yrs and over 10 years).

seem to influence faculty's perceptions of effective and ineffective clinical teachers. This is true because this variable shows more statistically significant differences (5) across the NCTEI categories than do the other variables. This result suggests that, as clinical teachers gain experience, their perceptions of what constitutes an effective and ineffective clinical instructor change. This conclusion finds indirect support from studies by Gage (1961) and Walker (1969) who show that the number

Table XXV

Test for Differences in Faculty Responses by Years of Teaching Experience

Category	K-W*	P-Value
Effective		
Teaching Ability	8.01	0.046
Interpersonal Relationships	3.54	0.316
Personality Traits	15.43	0.002
Nursing Competence	7.22	0.065
Evaluation	18.22	0.000
Ineffective		
Teaching Ability	22.83	0.000
Interpersonal Relationships	6.11	0.106
Personality Traits	6.05	0.109
Nursing Competence	18.40	0.000
Evaluation	13.36	0.004

Note. Based on a sample of 24 nursing faculty classified on the basis of teaching experience into five categories (< 1 yr, 1-3 yrs, 3-5 yrs, 5-10 yrs, and over 10 years)

* Kruskal-Wallis test statistic

of years of teaching experience positively influenced student ratings. What accounts for the influence of this variable on faculty perceptions? Perhaps increased teaching experience provides instructors with a practical knowledge of behaviors that have a positive or negative influence on student learning. This knowledge, in turn, alters or influences faculty attitudes about effective and ineffective teachers. Also, beginning teachers, perhaps not having previously observed the practice of others, lack the skill in evaluating clinical teaching effectiveness and ineffectiveness.

Table XXVI

Mean Rankings of Faculty Responses by Category Across Educational Preparation

Category	Preparation	
	Undergraduate	Graduate
Effective		
Teaching Ability	203	206
Interpersonal Relationships	59	62
Personality Traits	91	75
Nursing Competence	126	111
Evaluation	111	105
Ineffective		
Teaching Ability	184	172
Interpersonal Relationships	51	55
Personality Traits	95	95
Nursing Competence	112	106
Evaluation	112	96

Note. Based on a sample of 24 nursing faculty classified on the basis of educational preparation into two categories (undergraduate and graduate).

On the other hand, the variables of teaching level, employment status, and educational preparation did not affect faculty perceptions of either effective or ineffective clinical teachers in any major way. However, it cannot be concluded that they may not have an effect on how faculty perceive effective and ineffective clinical teachers in nursing. Possible explanations of these findings may include the following.

The variable, teaching level, may not have influenced faculty perceptions be-

Table XXVII

Test for Differences in Faculty Responses by Educational Preparation

Category	K-W*	P-Value
Effective		
Teaching Ability	0.06	0.806
Interpersonal Relationships	0.23	0.630
Personality Traits	4.52	0.034
Nursing Competence	2.60	0.107
Evaluation	0.36	0.546
Ineffective		
Teaching Ability	1.19	0.276
Interpersonal Relationships	0.35	0.551
Personality Traits	0.70	0.403
Nursing Competence	3.23	0.072
Evaluation	0.01	0.950

Note. Based on a sample of 24 nursing faculty classified on the basis of educational preparation into two categories (undergraduate and graduate).

* Kruskal-Wallis test statistic

cause the instructor pictured and rated as effective or ineffective may not necessarily have been someone who taught or teaches in the same semester as the respondent. That is, a faculty member teaching in first semester and a faculty member teaching in the fourth semester may both have pictured and rated the same third semester instructor. The impact of this variable may have been detected had respondents been asked to rate the ideal clinical teacher. Perhaps then, faculty perceptions would have reflected their own teaching level experience and behaviors.

Employment status may not have influenced faculty perceptions because many

of the part-time faculty had been fully employed at one time or another. Also, part-time faculty are often employed for clinical teaching only and therefore might not perceive clinical teacher effectiveness or ineffectiveness differently than full-time teachers.

The finding that educational preparation does not appear to affect faculty perceptions may imply that graduate preparation in education fails to provide nurse educators with the necessary theory on clinical teaching or practical experience with teaching nursing students to establish a conceptualization of clinical teacher effectiveness different from that of faculty with undergraduate preparation in nursing. Thus, even though educational preparation differed among faculty, perceptions by such faculty may not.

Finally, to determine whether the characteristics selected by faculty as the three most important for clinical teacher effectiveness differed across teaching level, employment status, number of years of teaching experience, and educational preparation, the Chi-Square test of independence was employed. For faculty classified on the basis of teaching level, a Chi-Square test statistic of 55.55 with $p = 0.55$ indicated that there was no significant difference. For faculty classified on the basis of employment status, an obtained Chi-Square of 37.42 with $p = 0.11$ was not significant. For faculty grouped according to number of years of teaching experience, no significant difference was found with a Chi-Square of 99.29 and a p-value of 0.12. Finally, classified on the basis of educational preparation, statistical significance was not reached with Chi-Square at 22.31 and $p = 0.77$.

Summary

In this study, the sample consisted of students and faculty from two community

college schools of nursing. The students ranged in age from 18 to 45 years and were enrolled in semesters two through five in their nursing programs. The faculty taught in semesters one through five and the majority were employed full time (79.2%), had had five or more years of teaching experience (75%), held a baccalaureate degree in nursing (58.2%), and taught in the clinical specialty of medical-surgical nursing (56.7%).

The results indicated that, overall, diploma nursing students and faculty differed in their perceptions of effective and ineffective clinical teachers in nursing. While the descriptions of the highest rated characteristics of effective clinical teachers by the two groups were fairly similar, less agreement was noted about the characteristics of ineffective clinical teachers. Students appeared to emphasize characteristics from the categories Personality Traits, Interpersonal Relationships, and Evaluation. Faculty seemed to focus on Teaching Ability, Nursing Competence, and Evaluation characteristics. When the five categories of clinical teacher behaviors were compared, there were significant differences between the ratings of students and faculty for effective and ineffective clinical teachers.

A comparison of these findings with those of other researchers, particularly Knox and Mogan (1986), showed that diploma and university students and faculty view many of the characteristics of effective and ineffective clinical teachers similarly. In addition, the results support the literature which suggests that students' and faculty perceptions of clinical teacher characteristics are different.

The study also found statistically significant differences between students and faculty when the three most important characteristics of clinical teacher effectiveness were compared. The Interpersonal Relationships characteristic, is approachable, was selected by both groups as important for a clinical teacher to possess.

The analysis of the students' comments provided support for both their descrip-

tions of effective and ineffective clinical teachers and their selections of the most important characteristics of clinical teacher effectiveness. The comments seemed to focus on the importance of the instructor's ability to relate interpersonally. Faculty comments seemed to extend the description of effective clinical teachers only, suggesting that other characteristics may have more accurately described their views. Both groups expressed difficulty in choosing the most important characteristics that a clinical teacher should possess. This implies that all characteristics on the NCTEI were considered important and valid.

Lastly, the results showed that perceptions of effective and ineffective clinical teachers in nursing were influenced by two student variables and one faculty variable. The student variables of age and class level appeared to affect the ratings of ineffective and effective clinical teachers, respectively. The faculty variable, number of years of teaching experience, seemed to influence the perceptions of both effective and ineffective clinical teachers. The other variables of teaching level, employment status, and educational preparation did not appear to impact on faculty perceptions. However, it cannot be concluded that they may not have an effect. None of the variables studied was found to influence the perceptions of the most important characteristics of clinical teacher effectiveness.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, IMPLICATIONS FOR NURSING EDUCATION, AND RECOMMENDATIONS FOR FURTHER STUDY

Summary

Evaluation of teacher effectiveness for administrative and faculty improvement purposes is a major concern in nursing education. Teacher effectiveness in nursing has been difficult to evaluate because of its clinical component. Unique aspects of the clinical experience, such as direct client contact and the unpredictable nature of the learning situation, make the use of classroom rating forms inappropriate for evaluation of clinical teachers. In addition, clinical teaching requires special skills which the instructor must effectively employ to promote student learning. Unfortunately, nurse educators generally lack formal preparation in instruction. The paucity of research describing effective and ineffective clinical teacher behaviors provides little direction for the development of clinical evaluation tools and for faculty interested in improving instructional behaviors. Yet, nurse educators have a responsibility to their students, the profession, and clients to identify and use the qualities of effective clinical instruction. All of these considerations provided the rationale for this study.

The purposes of this study were to investigate the behaviors of effective and ineffective clinical teachers in nursing as perceived by diploma school students and faculty, to compare the two groups in their perceptions, and to determine the influence, if any, that selected student and teacher variables may have on these perceptions.

Research on classroom and clinical teaching effectiveness from the fields of gen-

eral education, health sciences, and nursing was used to form the basis for this study. From a review of this literature, a variety of behaviors that describe the effective and ineffective clinical teacher were identified. Some researchers developed major categories of behaviors while others developed a list of specific behaviors for evaluating instruction. However, most of the teacher behaviors described were similar and could be included in the five categories of behaviors identified by Knox and Mogan (1985): Teaching Ability, Interpersonal Relationships, Personality Traits, Nursing Competence, and Evaluation. Variables identified in the literature and believed to be possible influences on student and faculty perceptions of effective and ineffective clinical teachers in nursing also contributed to this study's foundations.

A descriptive survey approach was used for this study and data were gathered using three tools. A background information questionnaire collected data about the specified student and teacher variables. An adapted form of the NCTEI (Knox and Mogan, 1985) measured the perceptions of students and faculty regarding the characteristics of effective and ineffective clinical teachers in nursing. The NCTEI consists of 48 items, each item describing a clinical teacher characteristic or behavior. Subjects indicate how well the item describes a particular effective and ineffective clinical teacher by using a 5-point scale ranging from not at all descriptive (1) to very descriptive (5). Perceptions were further measured using a Clinical Teacher Effectiveness Summary which asked participants to list three characteristics they felt to be most important for clinical teachers to possess.

All faculty teaching in two community college nursing programs at the time the study was conducted and all students in these same programs who had been taught by at least three clinical teachers in their nursing education were asked to participate. Packets including the background information questionnaire, the NCTEI and Summary form, an information letter, and sealable envelopes were

made available. A total of 252 packets were distributed; 202 to students and 50 to faculty. Of these, 173 (69%) were returned useful for data analysis; 149 (a 74% response rate) from the student group, 24 (a 48% response rate) from the faculty group.

The students ranged in age from 18 to 45 years and were enrolled in semesters two through five of their programs. Faculty taught in semesters one through five and the majority were employed full time (79.2%), had had five or more years of teaching experience (75%), held a baccalaureate degree in nursing (58.2%), and taught in the clinical specialty of medical-surgical nursing (56.7%).

Data were analyzed using a variety of statistical procedures. For descriptive measures of the data, means, standard deviations, and frequency distributions were determined for the ratings obtained from the NCTEI and Clinical Teacher Effectiveness Summary. The Kruskal-Wallis test was employed to test for differences between student and faculty ratings, and to test for differences in ratings across students and faculty classified on the basis of specified variables. The use of this nonparametric test was appropriate because the data were ordinally measured. The Chi-Square test of independence was employed to test for differences in the characteristics selected as the three most important for clinical teacher effectiveness between students and faculty, and across students and faculty classified on the basis of specified variables. All results were tested at the 0.05 level of significance.

The results showed that diploma school students and faculty differed in their perceptions of effective and ineffective clinical teachers in nursing. Students emphasized characteristics from the categories Personality Traits, Interpersonal Relationships, and Evaluation while faculty focused on Teaching Ability, Nursing Competence, and Evaluation characteristics. These findings are consistent with prior research, particularly that of Knox and Mogan (1986).

The two groups differed significantly in their perceptions of the three most important characteristics of clinical teacher effectiveness. However, the characteristic, is approachable, was selected by both groups as important for a clinical teacher to possess.

The analysis of students' comments provided support for both the description of effective and ineffective clinical teachers as well as the most important characteristics of clinical teacher effectiveness by students. The comments emphasized the importance of the instructor's ability to relate interpersonally. Faculty comments tended to expand the description of effective clinical teachers only, suggesting that other characteristics may have more accurately described their views.

Finally, the study indicated that two student variables and one faculty variable influenced perceptions. The student variables of age and class level appeared to affect the ratings of ineffective and effective clinical teachers, respectively. The faculty variable, number of years of teaching experience, seemed to influence the perceptions of both effective and ineffective clinical teachers. None of the variables studied was found to influence the perceptions of the most important characteristics of clinical teacher effectiveness.

Conclusions

The results of this study support the following conclusions:

Teaching in the clinical setting requires a variety of behaviors and personal qualities.

The characteristics of effective and ineffective clinical teachers are fairly well represented by the list of behaviors included in the NCTEI. However, not all characteristics perceived by the respondents to be important to clinical teaching are

included as demonstrated by the student and faculty comments.

Diploma school students and faculty differed in their descriptions of effective and ineffective clinical teachers. These findings were similar to those of other researchers who have investigated university students and faculty. However, since the sample represented a small and specific group of nursing students and faculty, the findings should not be applied too generally.

Students emphasized the characteristics related to Personality Traits, Interpersonal Relationships, and Evaluation in their description of effective and ineffective clinical teachers, the most important characteristics of clinical teacher effectiveness, and in their comments. This emphasis stresses the importance of effective interpersonal skills to clinical instruction.

The selected student and faculty variables had a marginal impact on perceptions of effective and ineffective clinical teachers in nursing.

Implications

The findings of this study have a number of implications for clinical nursing teachers, curriculum and inservice planners of schools of nursing, and nursing education administrators. First, the data indicated that students and faculty differ in their perceptions of effective and ineffective clinical teachers in nursing. This discrepancy in views may suggest that clinical teachers are not as effective as possible and that student learning in the clinical setting may be hindered. This suggests that discussion between students and faculty of issues such as evaluation might be useful. Faculty need to become aware of the perceptions of effective and ineffective clinical teachers by students. If clinical instructors are sensitive to how students perceive them, they have the opportunity to change their teaching behaviors. In

doing so, clinical teacher effectiveness and the students' learning experience may be enhanced.

The results may serve as a guide for faculty improvement. Clinical teachers can start by examining their own instructional behaviors in light of the students' perceptions. They should try to incorporate into their teaching repertoire those behaviors identified as effective and avoid or reduce those behaviors identified as ineffective. At the very least, the list of characteristics can alert clinical teachers to potential problem areas. The focus on Evaluation characteristics by students in this study suggests it to be a problem area.

Student emphasis on characteristics related to Personality Traits, Interpersonal Relationships, and Evaluation imply that clinical teachers must make a conscious effort to employ effective interpersonal skills in their interactions with students. Perhaps this would reduce student stress in the clinical area and enhance cognitive gain and self-confidence in the student. In addition, the application of therapeutic communication with students might increase student satisfaction with nursing and decrease the attrition rate in schools of nursing.

The Teaching Ability, Nursing Competence, and Evaluation characteristics which faculty tended to select provide direction for clinical teachers to take responsibility to keep current with the knowledge and practices in nursing and education in order to meet the needs of students. Participating in faculty seminars and attending conferences are ways faculty could fulfill this responsibility. Another means of self-improvement would be to function as a staff nurse for several weeks each year. What better way is there for an instructor to gain and/or maintain the Nursing Competence behaviors so important to clinical teaching effectiveness and student learning?

The results provide the basis from which in-service planners of schools of nursing

can identify workshop topics and activities designed to help faculty improve their clinical teaching. The use of effective interpersonal skills with students would appear to be an important focus of one such workshop. In the development of orientation programs for new instructors, inservice planners should include information about the characteristics of effective and ineffective clinical teachers.

The identification of these characteristics also has implications for nursing education. At the graduate level, content on effective and ineffective clinical teacher characteristics requires emphasis, as clinical teachers are specifically being prepared in this arena to assume faculty positions. However, because many nurses with baccalaureate nursing education are being employed as clinical teachers, curriculum planners of schools of nursing should also consider incorporating this information at the undergraduate level. Learning activities and practical teaching experience to help prospective nurse teachers develop effective clinical teaching behaviors should be included. In particular, nursing education should focus on teaching potential instructors how to use interpersonal skills as a teaching technique. When graduates assume faculty positions as clinical teachers, their education should have prepared them to take on the responsibility of demonstrating the qualities of effective instruction.

Nursing education administrators should consider these results in developing faculty evaluation programs. Utilizing the list of characteristics most frequently cited by respondents in this study, a short evaluation tool may be designed for student rating of clinical teaching in nursing. Since the NCTEI appeared to be a useful and fairly comprehensive instrument, administrators may find it beneficial to use in their schools. Other implications include the need for administrators to encourage frequent evaluation of clinical teachers by students and peers. Such action would provide faculty with information about their performance that could help

them improve their clinical teaching. In addition, peer evaluation would provide faculty the opportunity to see their colleagues demonstrate effective clinical teacher behaviors or to have their positive behaviors reinforced. Ways to reward excellence in clinical teaching should also be established. This would provide some motivation for faculty to continue to examine and improve their clinical instruction. And finally, nursing education administrators need to provide opportunities for faculty to practice nursing for a period of time each year.

Second, the data indicated that students' perceptions of effective and ineffective clinical teachers were influenced by the variables of age and class level. These findings suggest that clinical teachers should consider these student attributes to help ensure that their teaching behaviors are suitable and effective. Moving from one level of the program to another or substitute teaching in various levels may require that faculty first adjust their behaviors in relation to these student characteristics. Nursing education administrators need to be attentive to this problem and ensure that such faculty have an appropriate orientation. Implications for in-service planners include considering if faculty need information on teaching strategies appropriate to the characteristics of students. Prospective clinical teachers should be helped to see how these characteristics influence the kinds of behaviors to be demonstrated and the strategies to be planned.

Third, the data indicated that faculty perceptions of effective and ineffective clinical teachers change with the number of years of teaching experience. This finding suggests that there may be benefits to be gained by requiring faculty members who are experienced in clinical teaching to assist less experienced or new nurse teachers in developing effective teaching behaviors. The sharing of clinical experiences and strategies between faculty members during seminars or through a mentorship program should, therefore, be encouraged by in-service planners of schools of nurs-

ing and by nursing education administrators. Also, practical experience should be an integral part of any educational program designed to prepare clinical nursing instructors. While there is no substitute for experience, exposure may provide the prospective instructor with a better understanding of the behaviors which constitute effective clinical teaching in nursing.

It is hoped the nursing profession recognizes the importance of the implications discussed above. At the same time, the investigator recommends a cautious approach in the use of faculty evaluation tools. It is apparent that student rating forms may not necessarily reflect that which they were expected to measure because of problems with the questions asked of respondents, the comprehensiveness and/or the construction of the instrument.

In this study, the discrepancy between the ten most descriptive characteristics and the three most important characteristics selected by students and faculty suggests that the phrasing of the instruments' instructions made a difference in the responses. This finding implies that consistent instrument instructions should be used in future studies. Recommendations on how this could be done were offered. It might also be interesting to analyze the NCTEI without the behavioral categorizations. As discussed, the placement of items into distinct categories by the researcher may affect the interpretation of student and faculty perceptions.

Lastly, faculty comments concerning the need for clarification, rewording, and addition of items on the NCTEI have implications for the revision of this instrument. The Clinical Teacher Effectiveness Summary should also be revised in response to the difficulty expressed by both groups in choosing only three most important characteristics that a clinical teacher should possess.

Recommendations for Further Study

Based on the findings of this investigation, the following recommendations for further study are suggested. In relation to the research tools:

1. Respondents should be asked to picture an effective or ineffective clinical teacher within their current experience rather than recall a previous experience.
2. Respondents should be asked to identify the characteristics that made a particular effective or ineffective clinical teacher stand out in their minds.
3. The NCTEI and the list of 48 clinical teacher characteristics should be used with the behavioral categories omitted.
4. The NCTEI should be revised to accommodate respondent recommendations.
5. Respondents should be asked to select five rather than three most important characteristics that a clinical teacher should possess.

In relation to more general research approaches, the following are suggested:

1. Replication of this study in other schools of nursing and other regions of Canada.
2. A study to further examine and determine the basis for the discrepancy between students and faculty regarding the characteristics of effective and ineffective teachers in nursing.
3. An observational study of clinical teaching to validate the teacher behaviors identified as effective and ineffective.
4. A study to assess the impact of effective and ineffective clinical teacher characteristics on student learning.

5. A study to investigate student and faculty perceptions of the behaviors characterizing effective interpersonal skills in clinical teaching.

6. A study using a faculty evaluation tool based on the most frequently cited characteristics of effective and ineffective clinical teachers in nursing.

7. A study to further explore the influence of student and faculty variables or attributes on the perceptions of clinical teaching effectiveness.

8. A study to explore the influence of different clinical settings and client groups as determining factors of perceptions of teaching effectiveness.

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APPENDICES

APPENDIX A

Background Information

Instructions: The following background information is required for statistical analysis only. Please check the response which represents your situation and fill in the blanks.

() Faculty member. Teaching in _____ semester.

Full-time (). Part-time ().

Number of years teaching experience. 0 - 1 yr ()

1 - 3 yrs ()

3 - 5 yrs ()

5 - 10 yrs ()

over 10 yrs ()

Educational preparation. BSN ()

MSN ()

MEd ()

PhD ()

other (specify) _____

Teaching in clinical specialty. Geriatrics()

Medical-Surgical ()

Obstetrics ()

Pediatrics ()

Psychiatry ()

Other (specify) _____

() Student. Age. _____

Class level. _____ semester.

Received grade _____ or anticipated grade _____ for the course.

APPENDIX B

Nursing Clinical Teacher Effectiveness Inventory

Instructions: Please recall an effective and an ineffective clinical teacher you have had or have known. Picture specifically what that person did that made him/her effective or ineffective. The following statements reflect some of the ways clinical teachers can be described. Now for each statement circle the number which indicates how descriptive the behaviour is of each of these instructors.

Rating scale - 1 = not at all descriptive
5 = very descriptive

TEACHER CHARACTERISTICS	EFFECTIVE	INEFFECTIVE
<u>Teaching Ability</u>		
1. Explains clearly	1 2 3 4 5	1 2 3 4 5
2. Emphasizes what is important	1 2 3 4 5	1 2 3 4 5
3. Stimulates student interest in the subject	1 2 3 4 5	1 2 3 4 5
4. Is accessible to students	1 2 3 4 5	1 2 3 4 5
5. Demonstrates clinical procedures and techniques ..	1 2 3 4 5	1 2 3 4 5
6. Helps students identify and make use of practice opportunities	1 2 3 4 5	1 2 3 4 5
7. Offers special help when difficulties arise	1 2 3 4 5	1 2 3 4 5
8. Is well prepared for teaching	1 2 3 4 5	1 2 3 4 5
9. Enjoys teaching	1 2 3 4 5	1 2 3 4 5
10. Encourages active participation in discussion ...	1 2 3 4 5	1 2 3 4 5
11. Gears instruction to students' level of readiness	1 2 3 4 5	1 2 3 4 5
12. Understands what students are asking or telling .	1 2 3 4 5	1 2 3 4 5
13. Answers carefully and precisely questions raised by students	1 2 3 4 5	1 2 3 4 5
14. Questions students to elicit underlying reasoning	1 2 3 4 5	1 2 3 4 5
15. Helps students organize their thoughts about patient problems	1 2 3 4 5	1 2 3 4 5

TEACHER CHARACTERISTICS	EFFECTIVE					INEFFECTIVE				
16. Promotes student independence	1	2	3	4	5	1	2	3	4	5
17. Provides support and encouragement to students ..	1	2	3	4	5	1	2	3	4	5

Comments

Interpersonal Relationships

18. Is approachable	1	2	3	4	5	1	2	3	4	5
19. Encourages a climate of mutual respect	1	2	3	4	5	1	2	3	4	5
20. Listens attentively	1	2	3	4	5	1	2	3	4	5
21. Shows a personal interest in students	1	2	3	4	5	1	2	3	4	5
22. Demonstrates empathy	1	2	3	4	5	1	2	3	4	5

Comments

Personality Traits

23. Demonstrates enthusiasm	1	2	3	4	5	1	2	3	4	5
24. Is a dynamic, energetic person	1	2	3	4	5	1	2	3	4	5
25. Is self-confident	1	2	3	4	5	1	2	3	4	5
26. Uses self-criticism constructively	1	2	3	4	5	1	2	3	4	5
27. Is open-minded and nonjudgemental	1	2	3	4	5	1	2	3	4	5
28. Has a good sense of humour	1	2	3	4	5	1	2	3	4	5
29. Is organized	1	2	3	4	5	1	2	3	4	5

Comments

TEACHER CHARACTERISTICS

EFFECTIVE

INEFFECTIVE

Nursing Competence

30. Demonstrates clinical skill and judgement	1	2	3	4	5	1	2	3	4	5
31. Demonstrates communication skills	1	2	3	4	5	1	2	3	4	5
32. Reveals broad reading in his/her area of interest ..	1	2	3	4	5	1	2	3	4	5
33. Discusses current developments in his/her field ..	1	2	3	4	5	1	2	3	4	5
34. Directs students to useful literature in nursing .	1	2	3	4	5	1	2	3	4	5
35. Demonstrates a breadth of knowledge in nursing ..	1	2	3	4	5	1	2	3	4	5
36. Recognizes own limitations	1	2	3	4	5	1	2	3	4	5
37. Takes responsibility for own actions	1	2	3	4	5	1	2	3	4	5
38. Is a good role model	1	2	3	4	5	1	2	3	4	5
39. Enjoys nursing	1	2	3	4	5	1	2	3	4	5

Comments

Evaluation

40. Makes specific suggestions for improvement	1	2	3	4	5	1	2	3	4	5
41. Provides frequent feedback on students' performance	1	2	3	4	5	1	2	3	4	5
42. Identifies students' strengths and limitations objectively	1	2	3	4	5	1	2	3	4	5
43. Observes students' performance frequently	1	2	3	4	5	1	2	3	4	5
44. Communicates clearly expectations of students ...	1	2	3	4	5	1	2	3	4	5
45. Has realistic expectations of students	1	2	3	4	5	1	2	3	4	5
46. Gives students positive reinforcement for good contributions, observations and performance	1	2	3	4	5	1	2	3	4	5
47. Corrects students' mistakes without belittling them	1	2	3	4	5	1	2	3	4	5
48. Does not criticize students in front of others ..	1	2	3	4	5	1	2	3	4	5

Comments

APPENDIX C

Clinical Teacher Effectiveness Summary

Instructions: Please choose three characteristics from the above items
(1 - 48) which you consider to be the most important for
a clinical teacher to possess.

1. _____
2. _____
3. _____

Comments

APPENDIX E

Agency Consent Form

I, the undersigned, give permission to Christine MacDonald-Clarkson to conduct her study entitled "Characteristics of Effective and Ineffective Clinical Teachers in Nursing as Perceived by Students and Faculty" at this school.

Director's Signature: _____

School of Nursing: _____

Researcher's Signature: _____

Dated at _____, this _____ day of _____, 1986.