APPRAISAL OF CLINICAL TEACHING BEHAVIOURS BY DIPLOMA NURSING STUDENTS AND THEIR INSTRUCTORS

DOROTHY (STURGE) ANDREWS

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APPRAISAL OF CLINICAL TEACHING BEHAVIOURS BY DIPLOMA NURSING STUDENTS AND THEIR INSTRUCTORS

by

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ABSTRACT

Appraisal Of Clinical Teaching Behaviours By

Diploma Nursing Students And Their Instructors

There is a paucity of research involving diploma nursing students' and their clinical instructors' appraisal of the importance of clinical teaching behaviours. Most of the previous studies have focused on baccalaureate nursing students and their clinical instructors. In this study, a descriptive, comparative design was used to compare (a) the appraisal of clinical teaching behaviours by diploma nursing students and clinical instructors; (b) the appraisals by students of different ages, gender, and years in the program; (c) the appraisals by instructors with various years of clinical teaching experience; and (d) the appraisals by instructors teaching in different levels of the nursing program.

Four hundred and forty-one diploma nursing students and 58 clinical instructors from three Hospital Schools of Nursing in Newfoundland completed the Nursing Clinical Teaching Effectiveness Inventory (NCTEI) which measured important clinical teaching characteristics. In this study, the instrument had a reliability coefficient alpha of .95. All 48 items of the NCTEI were rated highly by the students and their instructors. Students as a group and their instructors had significant differences ($p \leq .05$) in19 of the 48 items and four categories (teaching ability, interpersonal relationships, personality traits, and nursing

competency). The students' ages had little influence on their ratings of the behaviours. Male students appraised 23 behaviours and four categories significantly lower than their female counterparts. The students in the various levels of the nursing program differed significantly in their appraisal of seven behaviours. The instructors' various lengths of clinical teaching experience and teaching in different years of the program did not influence significantly their appraisals of the behaviours. Implications for nursing education, practice and research are discussed.

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Chapter 1

Introduction

Clinical education is considered to be a critical component of any nursing program. It has been frequently noted that clinical education provides students the opportunities for building and consolidating knowledge, socializing into the nurse's roles, and acquiring professional values (Carpenito & Duespohl, 1985; McCabe, 1985; Morgan, 1991; Wong & Wong, 1987). It has been suggested that learning in the clinical setting is the most influential factor in the development of nursing students (French, 1992).

In the clinical settings, students learn a variety of beginning cognitive, affective, and psychomotor competencies to prepare them for nursing practice. Society, the nursing profession and employers of new nursing graduates expect them to have mastered a variety of these beginning competencies. The primary responsibility for teaching these clinical competencies and evaluating the students' ability to provide safe and competent care rests with the instructors. Some authors have expressed the opinion that the instructors are expected to play a major role in creating a supportive, learning environment (McCabe, 1985; Reilly & Oermann, 1992). In order to meet these expectations, it is important for the instructors to know which clinical teaching behaviours or role characteristics

best facilitate learning (Horst, 1988).

The instructors and students spend many hours and work very closely together in the clinical setting, frequently in one-on-one interactions. Although the presence of a third person (client, staff nurse or physician) often adds to the complexity of the student-instructor relationship, it is the instructor who serves as the role model for appropriate behaviour and decision making in many of these interactions.

The importance of the clinical instructor has also been supported by several empirical findings. In some studies, the instructors have been identified as the most influential force in the students' learning in the clinical setting (Campbell, Larrivee, Field, Day, & Reutter, 1994; Kelly, 1992). Elsewhere, the characteristics or behaviours of the nursing instructor have been reported as one of the factors which affect the quality of students' learning (Hughes, 1992; Windsor, 1987).

In another study, senior nursing students have reported that faculty attitudes and behaviours toward students need to be changed in order to help increase students' self-confidence (Morinzo, Thomas, & Brooks, 1995). Knowing which clinical teaching behaviours enhance nursing student's learning can help the instructor to revise her approach to clinical teaching and thus, create a more conducive learning environment (Pugh, 1988).

The research conducted to date provides substantial information about

clinical instruction in baccalaureate nursing education programs; however, there is a paucity of similar information for diploma nursing education programs. Only a few published research studies pertain to teaching diploma nursing students (Li, 1997; Rauen, 1974; Wong, 1978). Despite the movement in Canada to replace diploma education with baccalaureate education, the fact remains that a vast number of nursing students are enrolled in diploma nursing programs. According to Canadian Nurses Association (1998), in Canada, there were 14,518 students enrolled in diploma nursing schools compared to 9,214 in basic baccalaureate nursing studies in 1997 (15 diploma schools did not report).

A second reason for conducting this study is that the influence of demographic factors on the ratings of the teaching behaviours has only been examined in a few studies involving students and instructors from associate degree and baccalaureate nursing programs. However, in studies based on samples from diploma programs, the only factor explored was the influence of the students' year in the program on the rating of the behaviours. Research completed to-date has focused mainly on identifying effective and ineffective clinical teaching behaviours and comparing nursing students' and their instructors' ratings of those behaviours. Thus, the purpose of this study was to compare the appraisals of clinical teaching behaviours by diploma nursing students and their clinical instructors and to assess factors affecting their ratings.

The findings will contribute further to the existing body of knowledge about

clinical teaching behaviours. This information could then be used to enhance the quality of teaching, improve instructor-student interactions and relationships, orientate new instructors, help identify the content of graduate clinical teaching courses, update instructors and preceptors, and help develop teacher evaluation tools. Finally, this study will provide knowledge specifically related to clinical teaching at the diploma nursing educational level and lead to a better understanding of the teaching behaviours needed by clinical instructors who teach in these settings.

1.2 Summary

It has been identified that the clinical teaching behaviours of the clinical instructors in baccalaureate nursing programs have a major influence on the nursing students' learning. Although most nursing students continue to be enrolled in the diploma level programs, only one recent study has been found which focused on this group of students and their clinical instructors. This study, therefore, compares the appraisal of clinical teaching behaviours by diploma nursing students and their instructors, and assesses factors that influence their ratings.

The literature review, research questions, conceptual framework, and definition of terms are presented in the following chapter.

Chapter 2

Literature Review

Since the concept of clinical teaching was first discussed by Brown (1949), numerous books and articles have been written on issues related to clinical teaching. Two scientific studies on clinical teaching published before the 1970s were by Barham (1965) and Jacobson (1966). Since then, several others studies (which will be cited in subsequent sections) have focused on the identification and comparison of effective and ineffective clinical teaching behaviours as perceived by baccalaureate nursing students and their clinical instructors. There was a paucity of similar studies involving nursing students and clinical instructors from the diploma and associate degree programs.

This review concentrated on studies which (1) described students' perceptions of effective and ineffective clinical teaching behaviours; (2) compared students' and instructors' appraisals of those behaviours; (3) assessed students' and instructors' factors influencing the ratings of teaching behaviours. A few studies explored all aspects, therefore, repeating relevant information was necessary in the second and third sections of this chapter.

2.1 Students' Perceptions of Effective and Ineffective Teaching Behaviours

Early studies which identified effective and ineffective teaching behaviours involved students from one diploma and several baccalaureate nursing education programs. The studies are discussed separately.

In Wong's (1978) qualitative study, eight first year and six second year diploma nursing students described behaviours of their clinical teachers that facilitated or hindered learning. A modified form of the critical incident technique was used to collect the data. The nine teaching behaviours reported as helpful by the students were: (1) demonstrating a willingness to answer questions and offer explanations; (2) being interested in students and respectful to them; (3) giving students encouragement; (4) informing students of their progress; (5) displaying a sense of humour; (6) having a pleasant voice; (7) being available to students when needed; (8) giving an appropriate amount of supervision; and (9) displaying confidence in themselves and in the students. Other teaching behaviours described as hindering learning were: (1) posing a threat; (2) being sarcastic; (3) acting in a superior manner; (4) belittling students; (5) correcting students in the presence of others; (6) supervising too closely; and (7) laying emphasis only on correcting the students' mistakes or pointing out their weaknesses. Some of the teaching behaviours cited above were similar to those mentioned in studies involving baccalaureate students described in the next few paragraphs (Jacobson, 1966; Mogan & Knox, 1983; Windsor, 1987).

The baccalaureate nursing students were the main focus of study by Jacobson (1966), Mogan and Knox (1983), and Windsor (1987). Jacobson was a pioneer in nursing education whose findings provided valuable information and background research on clinical teaching behaviours. In her work, a modified form of the critical incident technique was used in 21 group interviews, and 1182 effective and ineffective critical incidents were collected from 961 undergraduate nursing students. From these incidents, Jacobson identified 58 effective teaching behaviours and placed them into six categories: (1) availability to students; (2) apparent general knowledge and professional competence; (3) interpersonal relations with students and others; (4) teaching practices; (5) personal characteristics; and (6) evaluation practices. The six categories and 58 specific behaviours identified in Jacobson's study formed the basis for item construction and the development of instruments which were used in subsequent research on effective and ineffective teaching behaviours.

Similar categories were identified by Mogan and Knox (1983). In this study, 435 baccalaureate nursing students rated the effectiveness of their instructor, provided data on the most effective aspects of instruction, and gave suggestions on how the instructor's effectiveness could be improved. Five categories of important clinical teaching behaviours/characteristics identified were: teaching ability, nursing competence, ability to evaluate, interpersonal relationships, and personality. All students desired an instructor who was

available, organized, provided clear instructions and explanations, and provided guidance and/or supervision as necessary. Mogan and Knox reported that students valued an instructor who was an expert clinician and a good role model. Teachers who set high and clear standards were more appreciated than those who were inconsistent and unreasonable. Instructors who gave negative feedback in front of others, and gave unfair evaluations were criticized.

Similar findings of effective clinical teaching behaviours were also found in Windsor's (1987) qualitative study. She interviewed nine university nursing students who were in their final semester to obtain their perceptions of their clinical experiences. Thirty percent of the total responses were about the clinical instructor. The students expressed the need for knowledgeable instructors who were willing to share their knowledge and experience; instructors who gave positive and negative feedback, at frequent intervals and in private; instructors who had high expectations, assigned challenging patients and asked questions; instructors who demonstrated professional behaviours such as confidence, respect and supportiveness; and those who possessed personality characteristics such as, honesty, humour, warmth, respect and enthusiasm.

In another study, Flagler, Loper-Powers and Spitzer (1988) reported the findings from a convenience sample of 139 baccalaureate nursing students' ratings of 16 teaching behaviours on a five-point scale. The scale was designed to measure the degree to which each behaviour promoted or hindered the

students' self-confidence. The behaviours were based on findings from the literature and the authors' own experiences. Reliability of the instrument was not presented. Content validity was determined by the faculty members involved in clinical teaching. Another limitation of this study was that the data collection occurred at the same time that course evaluation forms were given to students. The evaluation items may have influenced what the students wrote for the open-ended question. The authors reported that the students rated teaching behaviours related to giving positive feedback, accepting of students' questions and encouraging students to ask questions as the top three most helpful behaviours; whereas, behaviours related to giving mostly negative feedback and being intimidating were rated as hindering self-confidence.

On the basis of these studies, several effective and ineffective clinical teaching behaviours and categories emerged. The findings, however, were preliminary in nature and provided beginning insights to the importance of the clinical teaching behaviours. Additional research was required to substantiate and increase the generalizability of the findings; develop valid and reliable instruments; and determine which behaviours are important to students and instructors in various types of nursing programs.

2.2 Students' and Clinical Instructors' Ratings of Teaching Behaviours

Most of the research that compared the ratings of teaching behaviours by

nursing students and their faculty members involved baccalaureate nursing programs. Only a few studies included students and faculty from associate degree programs and diploma programs. The findings from these studies will be discussed under the type of program.

2.2.1 Baccalaureate nursing programs.

In general, studies found that baccalaureate students rated highly behaviours relating to evaluation, teacher's teaching ability, and interpersonal relationships of the instructors; while faculty members rated behaviours in nursing competence more highly than those in the teaching ability categories. In the studies reviewed, the baccalaureate students and their faculty members differed in their perception of the importance of specific clinical teaching behaviours and/or categories. Selected studies are described below.

In O'Shea and Parsons' study (1979), a convenience sample of 205 baccalaureate nursing students and 24 faculty members identified teacher behaviours which facilitated and hindered learning in the clinical area. The investigators arranged the responses into three broad categories of teacher behaviours labelled as evaluative, instructive/assistive, and personal characteristics. Faculty members and students agreed that instructor availability and positive feedback promoted learning while insufficient feedback or negative feedback inhibited learning. Students and faculty members identified supportiveness, understanding and friendliness as personal characteristics which

facilitated learning. The greatest difference in opinions between students and faculty members was in relation to role modelling. Seventy percent of the faculty viewed role modelling as a facilitative behaviour; whereas, only 18% of junior and 5% of senior students held the same view.

Brown (1981) also identified differences in opinions of important clinical teacher characteristics by 82 senior baccalaureate nursing students and 42 teachers. The instrument consisted of 20 items found in the literature and a rating code ranging from a = of most importance to e = of no importance. Reliability of the instrument was not discussed. However, content validity was established in a graduate level research course consisting of graduate nursing students and faculty. Participants rated the items and identified the five most important characteristics in order of importance. Brown found that the groups differed significantly ($p < .05$) in their responses for 4 of the 20 items. The student group ranked the following significantly more important than the faculty group: *supervises and helps in new experiences without taking over; is self-controlled, cooperative, and patient; permits freedom of discussion and venting of feelings*. The faculty group ranked one item, *relates underlying theory to practice,* significantly more important than the students. Both groups agreed on the importance of the following two characteristics which were ranked in the top five: *provides useful feedback on student progress*, and *is objective and fair in evaluation of the student*. When the items were classified in three categories:

professional competence, relationship with students, and personal attributes, there was no significant difference in their rankings. The students, however, ranked the relationship with students category the highest; whereas, the faculty ranked professional competence the highest. Brown concluded that faculty and students did not have similar perspectives on the description of the effective teacher.

Using Brown's instrument, Bergman and Gaitskill (1990) found that 23 faculty members and 134 baccalaureate nursing students agreed on the ranking of the three categories mentioned above: relationship with students, professional competence, and personal attributes. However, when responses were compared on an item-by-item basis, a significant level ($p < .01$) of disagreement between the two groups was identified for 7 of the 20 items, such as, *supervising and helping in new experiences without taking over; encouraging students to ask questions or ask for help*. The researchers concluded that the findings of their study showed a high degree of congruency with those of Brown's study. It is worthy to note that the student sample and the significant level in both studies was different. Brown's study consisted of only senior students; whereas, sophomores, juniors and seniors students were used by Bergman and Gaitskill. The significant level used by Brown was $p < .05$; however, Bergman and Gaitskll used $p < .01$. Although three levels of students were used by Bergman and Gaitskill, the differences in responses among the three groups of students and

their faculty members were not identified.

Knox and Mogan (1985) compared ratings of 47 clinical teaching characteristics made by three groups: 45 faculty, 393 baccalaureate nursing students, and 45 practising graduates. The characteristics were grouped into five categories: teaching ability, interpersonal relationships, personality trait, nursing competence, and evaluation. The instrument was tested for content validity by the faculty and students. Reliability for the five categories and the 47 items ranged from alpha = 0.79 to alpha =0.89. Test-retest reliability was stated as substantial, but not specified. Knox and Mogan reported that all three groups agreed that the behaviours in the evaluation category was the highest in importance and those in the personality trait category the lowest. On the other hand, the three groups differed significantly in their rating of the nursing competence category. It was, however, not reported which group(s) rated this category significantly different. On further analysis, the responses of the six groups (faculty, first, second, third and fourth year students, and practising graduates) showed a significant difference ($p < .01$) for all five categories. This finding implied that students in various years of the program may expect nursing faculty to exhibit different clinical teaching behaviours.

In Knox and Mogan's (1985) study, data were compared for each category, not for the individual items. It would be worthwhile to know how students and faculty in different years of the nursing program rated each of the

47 items. In addition, knowing the rating of specific items rather than the categories would be more helpful in improving the quality of clinical teaching. Faculty members would know which behaviours to change in order to better meet the learning needs of their students.

Two years later, Mogan and Knox (1987) identified specific characteristics of 'best' and 'worst' clinical teachers, and differences between ratings of the five categories of teacher characteristics by 173 baccalaureate nursing students and 28 faculty members. The instrument used was the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) developed by the same authors (Knox & Mogan; 1985) with the addition of one item. The psychometric properties of this instrument will be reported in the next chapter.

Mogan's and Knox's (1987) findings revealed that although both groups agreed fairly well on the characteristics of 'best' clinical teacher, the student group rated three categories (personality trait, interpersonal relationships, and evaluation) significantly higher than the faculty group. Both groups perceived the 'best' clinical teachers as ones who are good role models , enjoy nursing and teaching, demonstrate clinical skills and judgment, take responsibility for their own actions, are approachable, foster mutual respect, and are prepared for teaching. It should be noted the differences in the responses by the groups for the individual items were not identified. Although there was less agreement between faculty and students on the specific characteristics of 'worst' clinical

teachers, no significant differences were found between their scores for the five categories.

Some similar and dissimilar findings were found when Nehring (1990) replicated the study of Mogan and Knox (1987). In Nehring's study, for the 'best' teacher characteristics, the students rated the personality and teaching ability categories significantly higher than the faculty group. Mogan and Knox, however, reported that the students rated the personality trait, interpersonal relationships, and evaluation categories significantly higher than the faculty. Nevertheless, in both studies, faculty and students perceived similar characteristics for the 'best' clinical teachers. For the 'worst' teacher characteristics, the students in Nehring's study rated all five categories significantly higher than the faculty group; whereas, Mogan and Knox reported no significant difference between the groups. In both studies, faculty members and students perceived the 'worst' clinical teachers as rarely having the characteristics of being a good role model, using self-criticism constructively, encouraging mutual respect, and providing support and encouragement. However, the sample in both studies was different in size and composition and may have influenced the findings. Mogan's and Knox's study included 28 clinical teachers and 142 students of second, third and fourth year. Whereas, 121 senior-level students and 63 faculty members participated in Nehring's study.

Differing opinions between students and faculty were also reported by

Pugh (1988) when she compared 50 faculty members' and their 358 baccalaureate students' ratings of 20 clinical teaching behaviours on a 7-point Likert scale. Content validity of the questionnaire was done by a panel of 17 faculty members. Six students who did not participate in the study reviewed the student questionnaire for clarity, readability and ease of use. Information on the reliability of the instrument was not reported. Both groups agreed on the importance of only one of the five most highly rated teaching behaviours, *correcting and commenting on written assignments*. Although the students and faculty members agreed on four of the five lowest rated behaviours, in general, there were no significant correlations between faculty and students ratings (r = 0.24 to 0.30). Although the student sample was large, a clear description of student characteristics was missing. Also, secondary analysis may reveal significant differences in the mean ratings of some behaviours between the subgroups of students and faculty groups.

Contrasting findings were revealed by Sellick and Kanitsaki (1991), when they used Pugh's instrument. The data analysis, however, was not similar in these studies. Sellick and Kanitsaki used t-tests to compare the ratings of the behaviours by the student and faculty groups; whereas, Pugh used Pearson's r correlation procedure. Furthermore, Pugh compared the ratings of the individual items for differences; while Sellick and Kanitsaki compared the ratings of the five categories (teaching, nursing, evaluation, guidance, and application) and found

that the teachers rated all five categories significantly higher than did the students. Once again, although the student sample was large, no comparisons of ratings were reported between subgroups of the student sample and the clinical teachers.

2.2.2 Associate degree nursing programs.

In the two studies involving associate degree programs, results were difficult to compare because different instruments and data analysis were used. McFadyen (1991) compared the responses of 25 faculty members and 123 students from four associate degree nursing programs to items on an instrument consisting of 56 teaching behaviours, identified from a review of the literature. Faculty members and students disagreed on the importance of the identified behaviours, the frequency of use, and how effectively the behaviours were used in the clinical setting. Students rated five behaviours significantly more important than the faculty. These were: *maintaining confidentiality; following through on commitments; seeking new knowledge, skills; accurate records of progress; working relationship with agency staff.* The small faculty sample size (25) may have influenced the results.

Some similar and dissimilar findings to that of other studies were reported by Sieh and Bell (1994). They used the NCTEI to identify and compare the important clinical teaching characteristics as perceived by nursing students and faculty in an associate degree program. Both students and faculty in the study by

Sieh and Bell rated all 48 items highly and agreed on 5 of the top 10 most important characteristics. Similar findings were found in previous cited studies involving baccalaureate nursing programs (Mogan & Knox, 1987; Nehring, 1990). Sieh and Bell, however, reported that the students' and faculty's perceptions of the five categories were not significantly different. These findings were incongruent with those in other studies (Mogan & Knox, 1987; Nehring, 1990) that used the same instrument.

2.2.3 Diploma nursing programs.

Although some studies involving diploma programs were done in the 1970s, only one recent study was found which involved this type of nursing students and their teachers (Li,1997). Li used the NCTEI to compare the perceptions of effective clinical teaching behaviours among 39 junior students, 42 senior (second and third year) students, and 10 nurse educators in a hospital-based nursing program in Hong Kong. The results indicated that the students and educators agreed on 6 of the 10 most important behaviours. The diploma students' rating of the behaviour, *is a good role model,* was similar to the associate degree students' rating in the study by Sieh and Bell (1994). However, this item was more highly rated by baccalaureate nursing students (Mogan & Knox, 1987; Nehring, 1990). Li speculated that the type of program may account for the lower rating of this behaviour.

Li found there was agreement between students and educators in the

ratings for only 3 of the 10 least important behaviours and in their perceptions of the five categories of teaching behaviours. These findings must be interpreted cautiously because the nurse educator sample size was small (10), parametric tests were used, and the senior group of students consisted of both second and third year students. Li did not report the differences in ratings for the 48 individual behaviours. This study was done in a different cultural context from North America. In Asia, student-faculty relationship and expectations may be very different from that of the West.

From this section of the literature review, one can conclude that more research studies involving diploma nursing students are needed; however, some reliable instruments measuring clinical teaching behaviours were developed. Formulating definite conclusions is somewhat difficult because different instruments were often used in many of the studies that were reviewed. Furthermore, in studies which used the same instruments, different data analyses were done. In some studies, findings were described for individual items; while, others reported findings for the categories. Student and faculty in all types of programs differed in their opinions of the importance of some items and/or categories and agreed in their perceptions of other items or categories. Furthermore, diploma and associate degree students (Li,1997; Sieh & Bell,1994) rated some items on the NCTEI, such as role modelling, less important than baccalaureate nursing students (Mogan & Knox, 1987; Nehring, 1990).

2.3 Factors Influencing Ratings by Students and Instructors

Some studies discussed in the two previous sections and two other studies (Kanitsaki & Sellick, 1989; Rauen,1974) examined the influence of specific student and/or instructor factors on the ratings of the clinical teaching behaviours.

2.3.1 Students' level in the program.

A few studies were located that examined the influence of students' level in the program on their ratings of clinical teaching behaviours. Generally, in most studies the junior students valued some behaviours and categories significantly different than the senior ones.

In the studies involving baccalaureate nursing students, there was little consensus on the influence of the students' level in the program on their ratings of clinical teaching behaviours. This may be due to the different instruments and data analysis. Mogan and Knox (1983) found that first year students appreciated an instructor who allowed independence at the level of their ability; whereas, fourth year students wanted an instructor who encouraged independent thinking. In the later study by the same researchers (Knox & Mogan, 1985), the evaluation category was rated the highest by all levels of nursing students except the first year. Similarly, all levels of students rated the personality category the lowest.

In Pugh's study (1988), senior baccalaureate students rated 2 of 20 teaching behaviours significantly different than the other students. The senior

students rated *observe me during actual care* significantly lower than the junior and sophomore students. The seniors also valued teachers who interacted with the students assigned patients and families significantly lower than the junior students.

Using Pugh's instrument, Kanitsaki and Sellick (1989) surveyed 402 undergraduate baccalaureate nursing students from three institutions to determine their opinion regarding the importance of the 20 clinical teaching behaviours. The findings were reported for the five categories rather than the individual items. First and second year students rated the evaluation category significantly more important than the third year students. Examples of these behaviours were shares anecdotal notes with me and uses them as basis for evaluation. Comparing the findings with those in Pugh's study was difficult because Kanitsaki and Sellick did not report the ratings for specific behaviours.

Bergman and Gaitskill (1990) found no significant differences among the three levels of baccalaureate students, but they did report two trends. First, as the level of student increased, their ratings of some behaviours, *showing genuine interest in patient care and providing useful feedback*, increased in importance. Their ratings of other behaviours, *conveying confidence in and respect for students*, decreased in importance. Second, sophomores were very concerned with the instructor being realistic in their expectations of students.

As with the baccalaureate studies, findings were inconsistent in studies

involving associate degree nursing students. McFayden (1991) did not find any significant differences between the first and second year students in ratings of 58 clinical teaching behaviours. However, Sieh and Bell (1994) reported that associate degree nursing students in different levels of the program rated the nursing competence and the teaching ability categories of the NCTEI significantly different. Also, the researchers did not report the differences in the ratings of the individual items.

Similarly, in the studies involving diploma nursing students (Li, 1997; Rauen, 1974; Wong, 1978), there was no consensus regarding the influence of the students' level in the program on the ratings of clinical teaching behaviours. Again, this may be due to the limited number of studies, and the use of different instruments, samples and data analysis.

Rauen (1974) considered the three main roles of the clinical instructor to be: person, nurse, and teacher. She developed and administered an 18 item Clinical Instructor Characteristics Ranking Scale to a random sample of 84 freshmen and senior diploma nursing students. Test-retest reliability of the instrument was reported as Spearman-Brown = .75. Content validity was established by a panel of 25 experts. The items were listed arbitrarily in three groups and participants ranked the order of importance of items from 1 to 6 in each group. Students in different levels of the diploma nursing program ranked the roles differently. Senior students ranked the person role equally as important

as the nurse role; whereas, freshmen students rated the nurse role significantly more important than either person or teacher role.

In Wong's (1978) qualitative study, the critical incidents revealed that first year diploma nursing students were particularly sensitive to how the teacher made them feel; whereas, second year students were more concerned with the teachers' competency in teaching. Further study with a larger sample was recommended.

Li (1997) reported that the junior and senior students in a hospital-based nursing program agreed on 8 of the 10 most important behaviours and 4 of the 10 least important behaviours. Both groups of students rated the evaluation category the highest. This finding was consistent with those of Knox and Mogan (1985), and Sieh and Bell (1994). Li found no significant difference between the perceptions of junior and senior students for the five categories of the NCTEI; whereas, Knox and Mogan (1985) and Sieh and Bell (1994) reported significant differences between the students' groups. The composition of the students' groups was different in these three studies; thus making the comparison of findings questionable.

Although several studies examined nursing students' level in the nursing programs as a factor affecting the responses, the findings were inconsistent and comparison of findings was questionable. Some studies revealed significant differences between the ratings of specific categories, such as, teaching ability,

nursing competence, and evaluation categories. Only one study identified specific teaching behaviours which senior students rated significantly lower than junior and sophomore students. More research exploring the ratings among different levels of nursing students is required to extend the nursing knowledge about clinical teaching behaviours.

2.3.2 Age of the student.

In two studies that considered the student's age as a variable, the findings were inconsistent. Kanitsaki and Sellick (1989) found that baccalaureate students over 25 years old rated the application category of behaviours significantly more important than those under 25 years. On the other hand, McFayden (1991) discovered no significant differences when the age of associate degree nursing students was considered.

In the studies involving diploma nursing students, age was not investigated as a factor. In addition, the age of the student has not been considered as a variable in the ratings of NCTEI. More research is warranted before there can be any definite conclusions about the influence of age on the ratings of clinical teaching behaviours .

2.3.3 Gender of the student.

In studies which examined the influence of gender on the ratings of clinical teaching behaviours, the findings were also inconclusive. Two studies found significant differences between males and females in the ratings of

teaching behaviours. Sieh and Bell (1994) documented that female associate degree students' ratings were significantly higher than male students in the teaching ability and nursing competence categories of the NCTEI. Similarly, Kanitsaki and Sellick (1989) found that female baccalaureate students rated the nurse teaching category significantly higher than the male nursing students. No significant differences, however, were found by McFadyen (1991) with associate degree nursing students. The limited number of studies and the findings justify the need for more research in this area. Furthermore, the differences between male and female diploma nursing students are yet to be known.

2.3.4 Status of the student.

The influence of the student's status (part-time or full-time) on the ratings of clinical teaching behaviours was investigated in only one study. Kanitsaki and Sellick (1989) reported that part-time students rated the evaluation and guidance categories on Pugh's instrument significantly more important than full-time students. More research is required to explore the influence of this variable.

2.3.5 Clinical area.

The influence of the clinical area on the ratings of clinical teaching behaviours was explored by Pugh (1988). The baccalaureate faculty members in pediatrics and medical-surgical settings rated the item, *observes students while giving actual patient care,* significantly more important than faculty members in psychiatric areas. The item, *make specific suggestions for improvement*, was

rated significantly more important by faculty members in obstetrics than faculty in public health. Faculty members in psychiatric settings rated the item, *offer opportunity to practice,* significantly lower than faculty in public health.

Pugh also found that the students' ratings of clinical teaching behaviours was influenced by their clinical area. Students in public health nursing areas rated two teaching behaviours, *demonstrate how to function as a nurse* and *observe me during my actual care of patients*, significantly lower than students in obstetrics. Students in obstetrics ascribed significantly higher ratings to the behaviour, *interact with my patients and families,* than those in psychiatric areas. In addition, having a teacher who encourages self-evaluation was significantly more important to students in public health nursing than to those in pediatric settings.

Conversely, McFadyen (1991) found no significant differences in the ratings of clinical teaching behaviours by associate degree faculty members teaching in different clinical areas. The small faculty sample size (25) may have influenced the results.

2.3.6 Level of student taught.

No significant differences were disclosed in the two studies reviewed which considered the level of the program in which the instructor taught as a variable (Pugh, 1988; McFayden, 1991). However, Bergman and Gaitskill (1990) recommended replication and/or extension studies in other schools to validate

their findings, and to determine whether faculty responses vary according to level of the program in which the instructor taught.

2.4 Summary of Literature Review

Although this review of the literature revealed important clinical teaching behaviours to students and faculty members in all types of nursing programs, the findings were inconsistent. In the three studies (Knox & Mogan,1985; Mogan & Knox, 1987; Nehring,1990) which used the NCTEI and involved baccalaureate students and faculty, there were significant differences reported in at least one of the five categories of the NCTEI. However, there were no significant differences found in studies involving diploma (Li,1997) or associate degree (Sieh & Bell,1994) nursing students and their faculty members. Further research is warranted to determine which items on the NCTEI, if any, would be rated significantly different between students and their instructors.

In the studies which examined factors influencing the ratings of clinical teaching behaviours, inconclusive findings emerged. The baccalaureate students' gender, age and level in the nursing program influenced their ratings of behaviours in some studies. The associate degree nursing students' gender and level in the program influenced their ratings of the categories on the NCTEI. The influence of their ages has yet to be explored. The effect of diploma nursing students' ages on the ratings of teaching behaviours was not considered and the

level in the program had no significance in their ratings on the NCTEI in one study. In one study, the faculty members' ratings were influenced by the clinical area; whereas, the level of program in which the instructor taught did not affect their ratings.

Findings of these studies cannot be generalized to diploma nursing students and faculties for two reasons: (1) only three studies involved diploma nursing students (Li, 1997; Rauen, 1974; Wong, 1978), and (2) only one study was found involving diploma nursing faculty members (Li, 1997). Literature related specifically to clinical teaching at the diploma level was very limited. Thus, the focus of this proposed study will be on the comparison of diploma nursing students' and faculty members' appraisal of clinical teaching behaviours and the influence of specific factors on the students' and clinical instructors' ratings of the behaviours.

2.5 Research Questions

This research study proposes to address the following questions:

1. Do diploma nursing students and their clinical instructors differ significantly in their appraisals of clinical teaching behaviours?
2. Do first, second and third year diploma nursing students differ significantly in their appraisal of clinical teaching behaviours?
3. Do male and female nursing students differ significantly in the appraisal of

clinical teaching behaviours?

4. Do nursing students of different ages differ significantly in the appraisal of clinical teaching behaviours?
5. Do instructors with various lengths of clinical teaching experience differ significantly in their appraisal of clinical teaching behaviours?
6. Do instructors teaching first, second, and third year students differ significantly in their appraisal of clinical teaching behaviours?

2.6 Conceptual Framework

The teaching behaviours displayed by clinical instructors are important to their nursing students. The findings from the literature review provided the basis for the conceptual framework guiding this study. According to researchers, important clinical teaching behaviours were placed in five categories: (1) teaching ability, (2) interpersonal relationships, (3) personality traits, (4) nursing competence, and (5) evaluation (Jacobson, 1966; Knox & Mogan, 1985; Li,1997; Mogan & Knox,1987; Nehring,1990; Sieh & Bell,1994). The categories are presented in Figure 1.

Although the research findings were inconclusive due to the limited number of studies, students' appraisals of certain clinical teaching behaviours seemed to differ depending on their year in the program, age, gender, status (full-time or part-time), and/or clinical area (Bergman & Gaitskill, 1990; Kanitsaki

& Sellick, 1989; Knox & Mogan, 1985; Li, 1997; Pugh, 1988; Rauen, 1974; Sieh & Bell, 1994).

Instructors' appraisals of clinical teaching behaviours varied according to the clinical area (Pugh, 1988). The level of the program in which instructors taught did not influence significantly their ratings in the two studies which considered this factor. Based on the fact that students in different years of the program seemed to rate the behaviours differently, it would seem logical to expect the instructors' teaching in various levels of the program would also rate certain behaviours differently. The length of working experience has been thought to affect nurses' level of competence in nursing practice (Benner, 1984); thus the length of the instructors' clinical teaching experience may also influence how important clinical teaching behaviours are appraised.

The significant differences between students' and instructors' appraisal of clinical teaching behaviours may result in misunderstandings and possible conflicts between the two groups. The tensions created by the differences may influence the learning relationships between them and affect the clinical learning environment which in turn impact on students' outcomes and instructors' professional growth and development.

The various factors discussed above are graphically depicted in Figure 1.

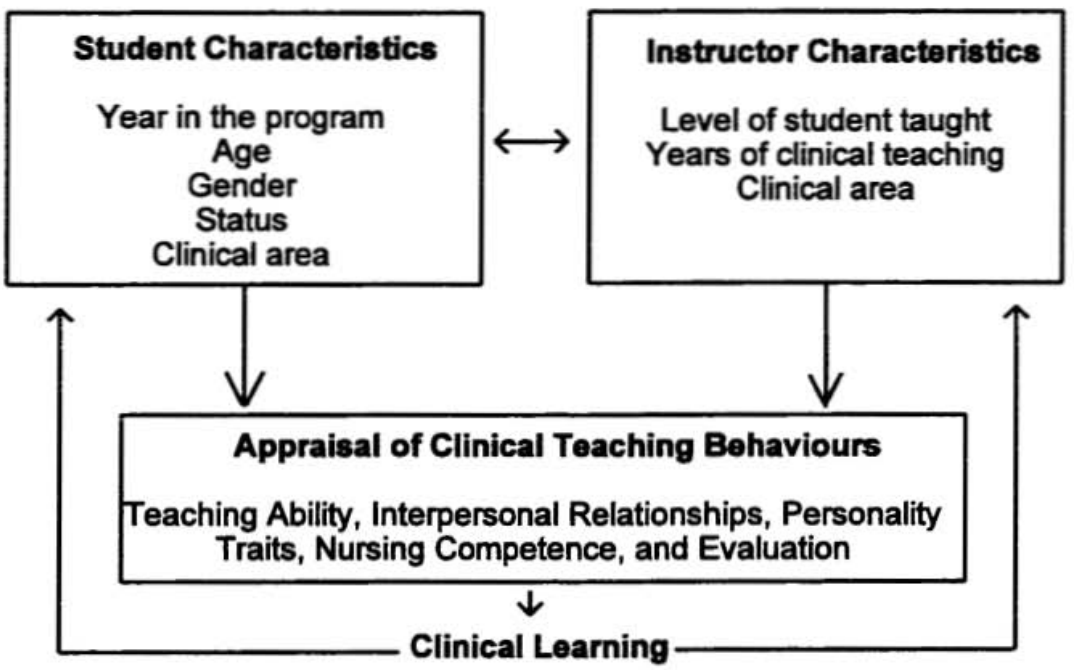

Figure 1 - Factors affecting the appraisal of clinical teaching behaviours

Due to the paucity of research exploring the factors affecting appraisal of clinical teaching behaviours, this study was conducted to add more knowledge to this area. In this study, the students' ratings of the clinical teaching behaviours in the teaching ability, interpersonal relationships, personality traits, nursing competence, and evaluation categories were compared with their instructors' ratings. Furthermore, the students' year in the program, age and gender were examined for their influence on the students' ratings of the behaviours. All

students had full-time status, thus this characteristic was not investigated. The influence of the clinical area was not explored. The two instructor characteristics examined for their influence on their ratings of the behaviours were the level of student taught and years of clinical teaching.

2.7 Definition of Terms

The following terms and their definitions were adopted from Mogan and Knox (1987, p. 332) for the purposes of this study.

Teaching ability: the process of transmission of skills and attitudes and the creation of an atmosphere in which this is done.

Interpersonal relationships: a state of reciprocal interest or communication between two or more people excluding specific therapeutic communication nurse and patient.

Personality traits: the totality of the individual's attitudes, emotional tendencies and character traits, which are not specifically related to teaching, nursing or interpersonal relationship but may affect all three.

Nursing competence: the clinical teacher's theoretical and clinical knowledge used in the practice of nursing as well as the teacher's attitude toward the profession.

Evaluation: the type and amount of feedback the student received from the teacher regarding the clinical performance and written clinical assignments.

In addition, the following definitions were utilized in this study.

Clinical teaching behaviours: actions, activities, and verbalizations of the clinical instructor which facilitate student learning in the clinical area (O'Shea & Parsons, 1979).

Clinical instructor: a registered nurse, employed by a hospital school of nursing, who is responsible for assessing, planning, implementing, and evaluating the learning experiences of diploma nursing students in the clinical area. In this study, the terms clinical instructor and instructor are used interchangeably.

Diploma nursing school: a hospital school which offers a three year program of study leading to a diploma in nursing.

Diploma nursing student: a student enrolled in a three year nursing program at a hospital school of nursing.

2.8 Summary

The literature review revealed effective and important clinical teaching behaviours which have been identified by students and faculty members in baccalaureate degree and associate degree nursing programs. The behaviours were consistently rated highly by both students and faculty members. However, there were significant differences reported between students and faculty members, among students of different levels in the program, ages, gender and

status (full-time, part-time). The most significant findings from the literature review were: (1) a paucity of research involving students and clinical instructors in diploma nursing programs; (2) the fact that most of the studies reported the results using the categories of clinical teaching behaviours rather than the individual items; and (3) the limited number of studies that considered the influence of students' and clinical instructors' demographic and personal factors.

Findings from the literature review formed the basis for the conceptual framework guiding this study and stimulated the formation of the research questions. The design and method used to conduct the study are discussed in the next chapter.

Chapter 3

Method

This chapter presents the method used to conduct the study. The psychometric properties of the instrument are reported. Ethical considerations are discussed and the data analysis is described.

3.1 Design

This descriptive, comparative study was designed to compare (a) the appraisals of clinical teaching behaviours by diploma nursing students and clinical instructors; (b) the appraisals by students of different ages, gender, and years in the program; and (c) the appraisals by instructors with various years of clinical teaching experience, and teaching in specific years of the nursing program.

3.2 Sample

The total population consisted of 580 diploma nursing students and 65 clinical instructors from three diploma nursing programs. To be eligible for inclusion in the study, the students had to be at least 18 years old and completed a minimum of two clinical rotations. The only criterion for the clinical instructors

was that they were involved in clinical teaching at the time of data collection, either full-time or part-time. Participation of the students and clinical instructors was voluntary.

3.3 Instrument

The research instrument consisted of the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) designed by Knox and Mogan (1985) to measure teaching behaviours, and questionnaires developed by the investigator to gather demographic information (Appendices A, B, and C). The NCTEI is a 48 item checklist of important teacher characteristics clustered into five categories: teaching ability (items 1-16), interpersonal relationships (items 17-22), personality traits (items 23-29), nursing competence (items 30-39), and evaluation (items 40-48). Each item was rated on a 7-point Likert scale (1 = not at all important, 7 = very important). Space was provided for participants to write comments or add additional clinical teaching behaviours considered important or both.

The 48 items were identified from students' perceptions of effective and ineffective clinical teaching (Mogan & Knox, 1983), and from the review of the literature by the same authors. Reliability coefficient alpha for each of the five categories ranged from 0.79 to 0.89. Test-retest scores at four week intervals showed no significant difference (Knox & Mogan, 1985). Psychometric testing of

this instrument was again done in a later study (Mogan & Knox, 1987). In 1987, internal consistency, reliability coefficient alpha ranged from 0.79 to 0.92. Test-retest reliability ranged from r = 0.76 to r = 0.93. In this study, the reliability coefficient alpha for the instrument was .95.

Validity of the instrument was determined by establishing content and face validity. Content validity was assumed to be met in two ways. First, the items of the instrument were derived from students descriptions of effective and ineffective teaching behaviours and from the literature (Knox & Mogan, 1985). Second, the importance of the items was determined by all parties involved in teacher evaluations. Students, faculty, and graduates highly rated all items (Knox & Mogan, 1985). Using Nunnally's 1978 view of face validity as attraction of the instrument to possible users, one can assume that face validity of the instrument was established based on the positive comments received from participants. Written permission to use the instrument was given by its authors via facsimile (Appendix D).

The two questionnaires developed by the investigator collected demographic information about the nursing students and their clinical instructors. The items were factors identified from the literature review. For the nursing students, these were year in the nursing program, age, gender, and clinical area. For the clinical instructors, they included employment status, clinical teaching area, year teaching in the program, length of clinical teaching experience, and

educational qualifications. The information related to instructor's employment status and educational qualifications was used to describe the instructor population.

3.4 Setting

The setting for data collection was the three diploma nursing schools in St. John's, Newfoundland. Written permission was obtained from the schools' administrators (Appendix E). At the time of the study, the three schools had an enrolment of 580 nursing students, and 65 clinical instructors. All three diploma nursing programs offered similar academic content, clinical experiences, and teacher-student ratio.

3.5 Data Collection Procedure

Data collection was done by the investigator, at a time convenient for the schools of nursing involved in the study. All potential participants were informed about the purpose of the study, the location, and time of meeting with the investigator (Appendix F) . Approximately two to three days later, the investigator met with either the students or the clinical instructors in the designated area (classroom), and answered any questions concerning the research study. Clinical instructors were not present when the investigator met with the students. Those who were willing to participate signed a consent form before data were

collected (Appendix G). To ensure anonymity, no names were used. The questionnaires were completed individually and returned to the investigator before the participants left the room. A similar process was followed for the clinical instructors.

The data were collected over a three month period. The data collecting process involved nine scheduled meetings with the nursing students, one with each of the three levels in the three diploma schools, and six scheduled meetings with the clinical instructors at the same schools. It was difficult scheduling a meeting when all the clinical instructors could be present because of their varied work schedules and responsibilities. Some instructors who were employed part-time could not attend the scheduled meeting. Although this procedure was time consuming, it maximized the response rate, and allowed the investigator the opportunity to clarify any possible concerns about the study and misunderstandings about the instrument. This process of data collection is supported by Polit and Hungler (1995). Due to the difficulty of meeting three or four part-time instructors, the questionnaires were left for them to complete, if they wanted to participate in the study.

3.6 Ethical Considerations

Following approval by the Human Investigation Committee of Memorial University of Newfoundland and the Administration of the diploma nursing

schools, the potential participants were invited to take part in the study by means of a letter from the investigator. Information about the study and the consent form were distributed to all eligible students and clinical instructors in their individual school mailbox or in the classroom, thus allowing them adequate time to consider whether or not to participate. Informed consent was obtained from each participant prior to data collection. Participants were informed about the voluntary nature of participation, means of ensuring confidentiality (a numeric identification code was assigned to each completed questionnaire; no clinical instructors were present at the meeting with the students). Participants were informed of their right to withdraw from the study at any time if they so wished. There were no anticipated risks associated with the study.

The completed questionnaires and signed consents were kept on file and were accessible only to the investigator and thesis supervisor. All data were reported as group data and neither the nursing school nor the participants were identified. The data will only be used for research and teaching purposes.

3.7 Data Analysis

The data were analyzed using the Statistical Package for Social Sciences (Norusis, 1992). Descriptive statistics were used to describe the response rate and sample's characteristics. Mean scores and standard deviations of the ratings of clinical teacher behaviours were computed. Although the dependent variable

(ratings given to the 48 clinical teaching behaviours) showed some skewness in distribution and the homogeneity of variance requirement was not met for all 48 items, parametric tests were used to measure for rating differences among the subgroups for four reasons. First, the level of measurement for the dependent variable was at the interval-level. According to Nieswiadomy (1998) some researchers use parametric tests with interval or ratio level data. Second, the sample size was large. Third, parametric tests are more powerful, flexible, robust, and thus are not influenced by violations of the assumptions (Nieswiadomy, 1998). Fourth, parametric tests were done by past studies which used the NCTEI; thus, comparison of findings would be facilitated.

The analysis of variance (ANOVA) was used to measure for significant differences in mean ratings among more than two groups and the t-test was used to compare the differences between mean ratings of two independent groups. The results were considered significant when p values were equal to or less than .05. The Scheffé test was used for post-hoc comparisons of the ANOVA findings in order to identify where the differences were among the groups. This test is quite stringent and can be used with groups of equal and unequal size (Munro & Page, 1993). According to Holm and Christman (1985), this test does not assume equal group size and offers great protection against Type I error because the alpha is divided among all the comparisons.

3.8 Limitations

This study was limited by using a convenience sample, consisting of nursing students and clinical instructors from three diploma schools in St. John's, Newfoundland. Therefore, the findings may not be generalized beyond these three institutions.

The data collected were based on the subjects' perceptions and were limited to their insight, honesty, and willingness to contribute. The instructors' ratings of the clinical teaching behaviours may have been based on information obtained from articles, books or nurse educators' conferences. The instructors may have identified the ideal teaching behaviours and thus, the findings are not representative of their actual practice.

3.9 Summary

In this chapter, the study design, sample, process of data collection, and the setting for data collection were described. The research instrument and its psychometric properties were reported. Ethical considerations such as seeking approval for the study, providing participants information about the study, obtaining informed consent, ensuring confidentiality and the voluntary nature of participation were presented. The demographic questionnaires and the data analysis were discussed.

Chapter 4

Results

In this chapter, sample characteristics and findings for each research question are presented. Whenever applicable, brief discussions of findings are included. A more in-depth discussion is presented in the next chapter.

4.1 Sample Characteristics

4.1.1 Response rates.

Response rates are contained in Table 1. The overall response rate of nursing students was 76.03% and ranged from 87.5% for first year students to 68.7% for third year students. Two possible reasons for the lower response rate of the third year students could be that, at one school, the meeting with the third year students was scheduled in the late afternoon; and, at another, it was scheduled after an exam. In both cases, the students may have been too tired to participate or had other commitments. The overall response rate of clinical instructors was 89.23% and ranged from 100% for instructors teaching first year students to 78.6% for those teaching second year students. Most of the instructors who did not participate were part-time and were not working on the day of data collection. Other instructors were lecturing or attending a meeting on

the days which the data were collected. According to Polit and Hungler (1995), a response rate greater than 60% is high and probably sufficient to reduce the risk of serious response bias.

Table 1

Sample's Response Rates

Participants	Potential	Actual	Response Rate (%)
Students			
First year	200	175	87.50
Second year	198	141	71.21
Third year	182	125	68.68
Total	580	441	76.03
Clinical Instructors			
First year	26	26	100.00
Second year	28	22	78.57
Third year	11	10	90.91
Total	65	58	89.23

4.1.2 Students' characteristics.

Students' ages ranged from 18 to 45 years (Table 2). The median age was 22 years. The majority were females (87.8%). Having a higher percentage of females than males was consistent with the enrolment in diploma nursing programs in Canada at the time of data collection (Canadian Nurses Association, 1995).

Table 2

Students' Characteristics (n = 441)

Characteristic	Frequency n	Percentage %
Year in the nursing program		
First year	175	39.68
Second year	141	32.97
Third year	125	28.35
Total	441	100.00
Age category*		
18 to 20 years	91	20.63
21 to 25 years	274	62.13
26 to 45 years	72	16.33
Missing	4	0.91
Total	441	100.00
Gender		
Female	387	87.76
Male	51	11.56
Missing	3	0.68
Total	441	100.00

* $\bar{x}$ = 23.1 years, sd = 3.9

4.1.3 Clinical instructors' characteristics.

The clinical instructors' demographic information, presented in Table 3, revealed that the majority were employed full-time (70.69%), had 5 to 28 years of teaching experience (65.52%), and had a bachelor of nursing degree (77.59%).

Table 3

Clinical Instructors' Characteristics (n = 58)

Characteristic	Frequency n = 58	Percentage %
Employment Status		
Full-time	41	70.69
Part-time	17	29.31
Year Teaching in the Nursing Program		
First year students	26	44.83
Second year students	22	37.93
Third year students	10	17.24
Length of Clinical Teaching Experience (Years)		
Less than 5 years	20	34.48
5.0 - 11.0 years	19	32.76
12.0 - 28.0 years	19	32.76
Highest Educational Degree obtained		
Bachelor of Nursing	45	77.59
Bachelor of Vocational Education	1	1.72
Bachelor of Education	1	1.72
Masters in Nursing	3	5.17
Masters in Education	3	5.17
Masters in Community Health Medicine	1	1.72
Combination of Bachelor Degrees	1	1.72
Other	3	5.17

Further examination of the data revealed that 12 of the 17 part-time instructors were teaching first year students and 5 were teaching the second year groups. Most part-time instructors were employed for the clinical component of the nursing program. Hence, it was not surprising that more instructors were teaching first year nursing students who require more supervision and guidance as they begin to learn the needed skills. The highest level of education obtained by the majority of instructors was a baccalaureate degree (82.75%). A smaller number of them (n = 7, 12.06%) were prepared at the masters level.

4.2 Research Questions

For each research question, the findings are first reported based on the participants' appraisal of the 48 individual items of the NCTEI. Secondly, the findings are grouped according to the five categories of the 48 items above, i.e., teaching ability, interpersonal relationships, personality trait, nursing competence, and evaluation.

4.2.1 Differences in appraisals by students and instructors.

The results showed that the 48 clinical teaching behaviours were highly rated by both the students and their clinical teachers. Their mean ratings of the 16 items in the **teaching ability category** are presented in Table 4. The students' mean rating of the category as a whole was significantly lower than that of the instructors reflecting a difference in both groups' overall perceptions of the

behaviours importance ($p \leq .05$). However, further examination of ratings for the individual items revealed significant differences in eight items, although not in the same direction (Table 4). Students rated behaviours #3, #8, #9, #10, #14 and #15 significantly lower than the instructors, but they rated items #2 and #5 significantly higher than their teachers.

In order to identify which level of students rated most differently from their instructors, the ANOVA test was used. The eight behaviours which were rated significantly differently between the three groups of students and the instructors are presented in Table 5. The post-hoc comparisons, using the Scheffé test, revealed that all three groups of students rated behaviours #2 and #5 significantly higher than their instructors denoting their stronger desire for having more teacher guidance in selecting important information to study and in demonstrating clinical procedures.

All three groups of students rated behaviours #8, #10 and #14 significantly lower than did their instructors reflecting differing opinions of the teaching role of their instructors. First and second year students rated item #9 significantly lower than the instructors. Furthermore, third year students rated behaviours #6 and #15 significantly lower than the instructors. An interesting observation was that as students progressed in the program their ratings of most items decreased except for item # 9. This suggests that as students mature and become self-directed, independent, and confident in their decision making skills,

they become less dependent on the instructors for guidance.

Table 4

Mean Ratings of Teaching Ability Behaviours by students and instructors

Clinical Teaching Behaviour (Teaching Ability)	Mean Ratings		
	Student (n=441)	Instructor (n=58)	t-value
1. Explains clearly	6.87	6.93(n=57)	-0.97
2. Emphasizes what is important	6.73	6.40	3.61***
3. Stimulates student interest in the subject	6.40	6.66	-2.18*
4. Is accessible to students	6.38	6.55	-1.31
5. Demonstrates clinical procedures & technique	6.67(n=439)	6.12	6.02***
6. Helps students identify & make use of practic	6.29	6.41(n=56)	-0.98
7. Offers special help when difficulties arise	6.59(n=439)	6.61(n=56)	-0.26
8. Is well-prepared for teaching	6.68(n=439)	6.98	-3.66***
9. Enjoys teaching	6.34(n=440)	6.79	-3.50***
10. Encourages active participation in discussion	5.81	6.59	-5.05***
11. Gears instruction to students' level of readine	6.35	6.57	-1.82
12. Understands what students are asking/telling	6.53(n=439)	6.71	-1.72
13. Answers carefully and precisely questions	6.60(n=440)	6.48	1.20
14. Questions students to elicit underlying reason	5.91(n=439)	6.60	-4.58***
15. Helps students to organize their thoughts	6.23	6.57	-2.52*
16. Promotes students independence	6.52	6.69	-1.51
Teaching Ability category	***6.44(n=430)***	***6.61(n=55)***	***-2.37****

*p < .05. **p < .01. ***p < .001.

Table 5

Ratings of Teaching Ability Behaviours by three groups of students and the instructors' group (ANOVA)

Clinical Teaching Behaviour	Mean Ratings				F
	First (n=175)	Second (n=141)	Third (n=125)	Instr (n=58)	Ratio
2. Emphasizes what is important	6.70	6.78	6.69	6.40	4.82**
5. Demonstrates clinical procedures and techniques	6.77	6.75	6.44	6.12	20.08***
6. Helps students identify and make use of practice opportunities	6.47	6.33	5.98	6.41	8.24*** (3rd only)
8. Is well-prepared for teaching	6.70	6.68	6.65	6.98	4.59**
9. Enjoys teaching	6.22	6.38	6.46	6.79	5.80*** (1st & 2nd)
10. Encourages active participation in discussions	5.86	5.72	5.83	6.59	8.92***
14. Questions students to elicit underlying reasoning	6.00	5.96	5.73	6.60	8.79***
15. Helps students organize thoughts about patient problems	6.37	6.30	5.96	6.57	6.92*** (3rd only)

*p < .05. **p < .01. ***p < .001.

In Table 6, the ratings of the six behaviours in the **interpersonal relationships category** are displayed. All the behaviours were rated lower by the students than by the instructors. Although the students as a group rated items #20 *listens attentively,* and #22 *demonstrates empathy* significantly lower than the instructors, further analysis using the ANOVA and the Scheffé

procedure revealed no significant differences in ratings between each of the three groups of students and the instructors indicating that each group of students agreed with the instructors on the importance of items 20 and 22 in this category.

Table 6

Mean Ratings of Interpersonal Relationships Behaviours by students and instructors

Clinical Teaching Behaviour (Interpersonal Relationships)	**Mean Ratings**		
	Student (n=441)	**Instructor** (n=58)	**t-value**
17. Provides support & encouragement to student	6.69	6.81	-1.35
18. Is approachable	6.81	6.90	-1.19
19. Encourages a climate of mutual respect	6.76	6.85	-1.05
20. Listens attentively	6.70	6.88	-2.26*
21. Shows a personal interest in students	6.17	6.33	-0.98
22. Demonstrates empathy	6.43	6.72	-2.44*
Interpersonal Relationships Category	***6.59***	***6.74***	***-2.40****

*$p < .05$.

Similarly, Table 7 shows that students rated the **personality traits category** and all of its seven items lower than the instructors. The differences in their ratings were significant for items #23 and #24, and for the category as a whole. Further analysis revealed that the significant lower ratings of item 23,

demonstrates enthusiasm, were made by second and third year students, and that of item 24, *is a dynamic, energetic person*, by third year students. For the category as a whole, only third year students rated it significantly lower than the instructors.

Table 7

Mean Ratings of the Personality Traits Behaviours by students and instructors

Clinical Teaching Behaviour (Personality Traits)	Mean Ratings		t-value
	Student (n=441)	Instructor (n=58)	
23. Demonstrates enthusiasm	6.16	6.60	-3.47***
24. Is a dynamic, energetic person	5.86	6.23	-2.91**
25. Is self-confident	6.41	6.60	-1.81
26. Uses self-criticism constructively	6.36	6.48	-1.05
27. Is open-minded and non-judgmental	6.71	6.85	-1.54
28. Has a good sense of humor	5.98	6.02	-0.22
29. Is organized	6.67	6.69	-0.18
Personality Traits Category	***6.31***	***6.50***	***-2.40****

*p < .05. **p < .01. ***p < .001.

Table 8 indicates that the students as a group rated all 10 behaviours in the **nursing competence category** lower than their instructors and the differences were significant for the category and all of its items except items #30, #35 and #39.

Comparison among the three student groups' and the instructors' ratings revealed that only five items were rated significantly lower by the students (Table 9). While second and third year students rated items #31,32 and 33 significantly

Table 8

Mean Ratings of the Nursing Competence Behaviours by students and instructors

Clinical Teaching Behaviour (Nursing Competence)	Mean Ratings		t-value
	Student (n=441)	Instructor (n=58)	
30. Demonstrates clinical skill & judgment	6.76	6.79(n=57)	-0.43
31. Demonstrates communication skills	6.60	6.86	-2.96**
32. Reveals broad reading in his/her area of interest	5.70	6.28(n=57)	-3.72***
33. Discusses current developments in his/her field	5.77	6.36	-3.82***
34. Directs students to useful literature	5.83	6.32(n=57)	-3.26***
35. Demonstrates a breadth of knowledge in nursing	6.34	6.47	-1.13
36. Recognizes own limitations	6.33	6.74	-3.39***
37. Takes responsibility for own actions	6.68(n=440)	6.88	-2.27*
38. Is a good role model	6.71(n=440)	6.90	-2.05*
39. Enjoys nursing	6.68	6.71	-0.26
Nursing Competence Category	***6.34(n=439)***	***6.64(n=56)***	***-3.95****

*p .05. **p < .01. ***p < .001.

lower than the instructors, first and third year students rated item #34 in the same way. For the first year students, the lower rating than that of their teachers may reflect their stronger reliance on the instructors to provide the necessary information instead of referring them to the literature. The third year group's lower rating of item 34 may be an assertion of independence and suggests they are more capable of referring to the literature for information than the teachers perceived. It should be noted that the first year students consistently rated all items in Table 9 higher than the more senior students, indicating their need for

Table 9

Ratings of Nursing Competence Behaviours by three groups of students and the instructors' group (ANOVA)

Clinical Teaching Behaviour	Mean Ratings				F
	First (n=175)	Second (n=141)	Third (n=125)	Instr (n=58)	Ratio
31. Demonstrates communication skills	6.67	6.58	6.54	6.86	4.11** (2nd & 3rd)
32. Reveals broad reading in his/her area of interest	5.81	5.62	5.64	6.28	5.59*** (2nd & 3rd)
33. Discusses current developments in his/her field	5.94	5.70	5.60	6.36	7.40*** (2nd & 3rd)
34. Directs students to useful literature	5.81	5.87	5.79	6.32	3.66** (1st & 3rd)
36. Recognizes own limitations	6.37	6.32	6.29	6.74	3.99**
Nursing Competence Category	***6.39***	***6.32***	***6.29***	***6.64***	***6.10****

**p < .01. ***p < .001.

more guidance from their instructors than the upper level students.

In the **evaluation category** (Table 10), the students' ratings for five of the nine items were higher than the instructors' ratings, but the differences were not significant.

Table 10

Mean Ratings of the Evaluation Behaviours by students and instructors

Clinical Teaching Behaviour (Evaluation)	Mean Ratings		t-value
	Student (n=441)	Instructor (n=58)	
40. Makes specific suggestions for improvement	6.57	6.45	1.23
41. Provides frequent feedback on students' performance	6.79	6.67	1.55
42. Identifies students' strengths & limitations	6.73	6.69	0.49
43. Observes students' performance frequently	6.27(n=440)	6.24	0.19
44. Communicates clearly expectations of students	6.67(n=437)	6.78	-1.17
45. Has realistic expectations of students	6.74(n=439)	6.68(n=57)	0.58
46. Gives positive reinforcement for good, contributions, observations & performance	6.74	6.85	-1.26
47. Corrects students mistakes without belittling	6.85	6.93	-1.09
48. Does not criticize students in front of others	6.84(n=440)	6.91	-0.87
Evaluation Category	***6.69(n=433)***	***6.69(n=57)***	***0.06***

In summary, the results for the first research question showed that generally, students as a whole group rated 40 of the 48 clinical teaching behaviours lower than their instructors. Although both instructors and students rated all five categories high, students rated the evaluation category higher than the others. Thus, they indicated that the evaluation behaviours are more important to them. Students as a group rated 17 of the 48 behaviours and four of the five categories (teaching ability, interpersonal relationships, personality traits, and nursing competence) significantly lower than the instructors. In addition, they rated two behaviours, item #3, *emphasizes what is important,* and item #5, *demonstrates clinical procedures and techniques,* significantly higher than their instructors.

4.2.2 Differences in appraisals by first, second, and third year students.

As the students progressed in the program, their mean rating decreased from 5.81 - 6.88 for first year students, to 5.62 - 6.89 for second year students, and 5.60 - 6.90 for third year students. The highest rated item for the first and second year students was item # 1, *explains clearly*. This item was fourth highest for the third year students.

The mean rating difference among the three levels of students was significant in 7 of the 48 clinical teaching behaviours (Table 11). The first year students rated these behaviours significantly higher than the third year students.

The second year students also rated three of the seven behaviours (#5, #6, and #15) significantly higher than the third year students, implying these teaching behaviours may be less important as the students progress in the program. The senior students work more closely with the staff nurses than their instructors and may not see the importance of the teacher role in their evaluations as much as the junior students. For the senior students, it is the staff nurses who are with

Table 11

Ratings of Clinical Teaching Behaviours by the three levels of students (ANOVA)

Clinical Teaching Behaviour	Mean Ratings			F Ratio
	First (n=175)	Second (n=141)	Third (n=125)	
5. Demonstrates clinical procedures and techniques	6.77	6.75	6.44	12.26***
6. Helps students identify & make use of practice opportunities	6.47	6.33	5.98	11. 49***
15. Helps students to organize thoughts about patient problems	6.37	6.30	5.96	6.63**
33. Discusses current developments in his/her field	5.94	5.70	5.60	3.44*
40. Makes specific suggestions for improvement	6.68	6.55	6.46	3.67*
43. Observes students' performance frequently	6.51	6.21	6.00	9.29***
44. Communicates clearly expectations of students	6.76	6.69	6.51	5.45**

*p < .05. **p < .01. ***p < .001.

them during their actual clinical experiences, who guide and give them feedback, whereas the instructors are more directly responsible for the evaluations of the first and second year students. The findings showed that the students' ratings for some items usually decreased as they progressed in the nursing program.

4.2.3 Differences in appraisals between male and female students.

The female students generally rated the clinical teaching behaviours higher than their male classmates (Table 12). The difference was significant for 23 items, most of which were from the teaching ability (7) and evaluation categories (8), suggesting the male students perceived that they did not rely on their instructors as much for guidance, supervision, direction and evaluation as did the female group. The results must be interpreted with caution; the group sizes were unequal and thus Type I error may have been a reason for some differences. Furthermore, the fact that all the instructors were female may have influenced the ratings of the male students who may be more reluctant to rely on female instructors for guidance.

Based on these findings, the gender of the students significantly influenced their appraisal of the items. One should also consider that some of the differences found in question #1, between the students' and the instructors' ratings, may have been due to gender of the students rather than the role of the instructor.

Table 12

Students' Ratings of Clinical Teaching Behaviours by Gender

Clinical Teaching Behaviour	Mean Rating		t-value
	Female (n=387)	Male (n=51)	
1. Explains clearly	6.89	6.68	3.11**
2. Emphasizes what is important	6.75	6.54	2.10*
3. Stimulates students interest in the subject	6.45	5.94	4.01**
4. Is accessible to students	6.43	5.96	3.30***
6. Helps student identify & make use of practice opportunities	6.34	5.86	3.50***
9. Enjoys teaching	6.40	5.84	3.89***
11. Gears instruction to students' level of readiness	6.37	6.08	2.18*
Teaching Ability Category	***6.47***	***6.21***	***3.29******
18. Is approachable	6.83	6.63	2.42*
19. Encourages a climate of mutual respect	6.78	6.57	2.20*
22. Demonstrates empathy	6.48	6.04	3.35*
Interpersonal Relationships Category	***6.62***	***6.38***	***2.70****
29. Is organized	6.71	6.35	3.84***
30. Demonstrates clinical skill & judgment	6.78	6.63	2.00*
31. Demonstrates communication skills	6.64	6.31	3.40***
35. Demonstrates a breath of knowledge in nursing	6.37	6.08	2.32*

Table 12 continued on page 60

Table 12 (Continued)

Students' Ratings of Clinical Teaching Behaviours by Gender

Clinical Teaching Behaviour	Mean Rating		t-value
	Female (n=387)	Male (n=51)	
39. Enjoys nursing	6.72	6.35	3.74**
Nursing Competence Category	***6.36***	***6.19***	***2.18****
40. Makes specific suggestions for improvement	6.60	6.37	2.10*
41. Provides frequent feedback on students' performance	6.81	6.61	2.59**
42. Identifies students' strengths & limitations	6.76	6.53	2.46*
43. Observes students' performance frequently	6.31	5.96	2.22*
44. Communicates clearly expectations of students	6.70	6.40	3.05**
45. Has realistic expectations of students	6.77	6.45	3.23***
47. Corrects students' mistakes without belittling	6.87	6.67	2.39*
48. Does not criticize students in front of others	6.89	6.41	5.13***
Evaluation Category	***6.72***	***6.23***	***3.92****

* p<.05; ** p<.01; *** p<.001

4.2.4 Differences in appraisals among students of different age groups.

The appraisal of the behaviours were similar for the three age groups of students (18 - 20 years, 21-25 years, and 26 - 45 years), except for item #5

which was noted significantly higher by the youngest group suggesting that younger students placed more value on their instructors' demonstration of clinical procedures and techniques than did the oldest ones. Having a higher percentage of the younger group (61.5%) in the first year of program may account for this significant difference. In this study, the first year students had only completed two clinical rotations and may have had limited opportunity to practice clinical procedures and techniques without the presence of their instructors.

Thus, from the findings, one can imply that the age of the student, unlike level in the program and gender, may have had very little influence on the ratings of the clinical teaching behaviours. The younger students considered only one behaviour significantly different than the older students.

4.2.5 Differences among instructors with various lengths of clinical teaching experience.

Instructors with various lengths of clinical teaching experience consistently rated highly the 48 clinical teaching behaviours, ranging from a mean of 5.79 to 7.00. The ratings of the behaviours by the three groups of instructors (less than 5, 5 to 11, and 12 to 28 years of teaching experience) revealed no significant differences.

4.2.6 Differences in appraisals among clinical instructors teaching first, second and third year students.

There was no significant difference among the ratings of instructors

teaching the various levels of students.

4.3 Summary

In this study, the overall response rate was sufficiently high (76.0% for the students and 89.2% for their instructors). The student sample was mainly female (87.8%), with an age range of 18-45 years. All instructors were female and most were employed full-time, had 5 to 28 years of clinical teaching experience and a bachelor of nursing degree.

The instructors rated most items (40 out of 48) higher than the students. The students scored some items in the evaluation category higher than their teachers. The diploma nursing students as a group and their clinical instructors appraised 19 of the 48 items and four of the five categories (teaching ability, interpersonal relationships, personality traits, and nursing competence) significantly different.

When comparisons were made between instructors' ratings and that of each level of student, the results were significantly different for 15 behaviours and two categories. As students progressed in the program, their ratings of most items decreased, suggesting their dependence on their instructor's guidance may lessen as they matured.

Similarly, when ratings among the diploma nursing students in different years of their program were examined, there were significant differences in

appraisals of seven behaviours. Again, first year students generally rated more items higher than the second year group; the second year students, in turn, rated higher than the senior students.

There were significant differences between male and female students' ratings. Female students rated 23 of the 48 behaviours, and four of the five categories (teaching ability, interpersonal relationships, nursing competence, and the evaluation) significantly higher than their male counterparts. When the age of the diploma nursing students was considered, significant difference was found for only one clinical teaching behaviour.

There were also no significant differences in the appraisals of the behaviours by diploma clinical instructors with various lengths of clinical teaching experience or by instructors teaching in various years of the program.

Chapter 5

Discussion

In this chapter, the findings for each of the five questions are discussed and compared to previous research. This study was designed to compare (a) the appraisals of clinical teaching behaviours by diploma nursing students and clinical instructors; (b) the appraisals by students of different ages, gender, and years in the program; (c) the appraisals by instructors with various years of clinical teaching experience, and with different levels of students taught in the program. Comparing the findings with results from other studies is somewhat difficult because of the different methods used, various sample sizes, different instruments used, and differences in data analysis.

5.1 Comparison of Students' and Clinical Instructors' Appraisals

Although 441 diploma nursing students and 58 clinical instructors appraised all clinical teaching behaviours as important, the instructors rated most items (40 out of 48) higher than the students. Furthermore, the students as a group and their instructors differed significantly in their ratings of 19 items and four of the five categories (teaching ability, interpersonal relationships, personality traits, and nursing competence). These findings were inconsistent

with those of other studies (Li, 1997; Sieh & Bell, 1994). In Li's study, diploma nursing students' and nurse educators' ratings showed no significant differences for the five categories. Similarly, Sieh & Bell (1994) found no significant differences between associate degree nursing students' and their faculty's ratings of the five categories. However, findings in this study partially agree with that of studies involving baccalaureate nursing students (Knox & Mogan, 1985; Mogan & Knox, 1987; Nehring, 1990). In Knox and Mogan's study (1985), the three groups (baccalaureate nursing students, faculty, and practising graduates) differed significantly on their responses for the nursing competence category. However, they did not report which groups were significantly different. In 1987, Mogan and Knox reported that baccalaureate students' and faculty's responses for 'best' teachers differed significantly for three of the five categories: interpersonal relationships, personality traits, and evaluation; but the two groups showed no significant differences for 'worst' teachers. Furthermore, in Nehring's study, baccalaureate nursing students' and faculty's ratings differed significantly on the teaching ability and personality trait categories for 'best' teachers and on all five categories for the 'worst' teachers. Comparing the significant findings for the individual items was not possible because the data was not described in these studies.

In this study, the three groups of students (first, second, and third years) and their instructors differed significantly in their ratings for 15 items, the

personality traits category, and the nursing competence category (Tables 5, 6, 7, 8, and 9). The findings partially agree with those reported by Knox and Mogan (1985) where all five categories were rated significantly different by six groups (four levels of baccalaureate nursing students, faculty, and graduates). However, they did not identify which groups were significantly different in their ratings of the categories. Once again, comparing the significant findings for the individual items was not possible because no such data were provided in either of these studies.

In the present study, the teaching ability category has the greatest number of behaviours (8 out of 16) rated significantly different by the three student groups and instructors (Tables 5). Each of these 8 items will be discussed in the subsequent section. Item #2, *emphasizes what is important*, was rated significantly higher by the students than the instructors. This observation supports Li's finding (1997), but contradicts those reported in studies based on samples of associate degree and baccalaureate nursing students and their instructors (Mogan & Knox,1987; Nehring, 1990; Sieh & Bell, 1994). This could mean that the diploma nursing students preferred having more guidance in knowing what is important and what is not important.

A possible reason for the significant difference between students' and instructors' ratings of item #2 is that the clinical environments have become so fast-paced and complex. As a result, there is not enough time to allow the

student to determine what is important or unimportant. Students may be feeling overwhelmed with the amount of written and verbal information; they need guidance in identifying what is important. Another possible explanation, suggested by Diekelmann (1992), is that students are also focused on the concerns and priorities of instructors, instead of learning and thinking about what is meaningful for them. The students' stage of skill development may be another reason why students feel the instructor should emphasize what is important. At the time of data collection, some students may have been beginning another rotation in a new clinical area. According to Benner (1984), nursing students are at the novice stage of skill development in a new clinical area and, consequently, may need their instructors to emphasize what is important to ensure successful performance in actual clinical situations.

It should be noted that students as a group and all three levels of students rated the importance of item #5, *demonstrates clinical procedures and techniques*, significantly higher than the instructors. The difference in ratings of this item are in agreement with other research. In Li's (1997) study, the diploma nursing students rated it the most important, whereas, the instructors rated it the least important of the 48 behaviours. Similarly, baccalaureate nursing students in Pugh's (1988) research rated a comparable item, *demonstrate nursing care in a real situation*, the highest while their faculty rated it 11th of 20 behaviours.

The importance of item #5 also supports the findings of other researchers.

Kleehammer, Hart, and Keck (1990) reported that students are anxious about performing nursing procedures in the clinical setting. Students are frustrated over what they perceived as inadequate skill practice (Wilson, 1994). Most students say they learn best when permitted to observe a procedure before being asked to perform it (Infante, 1975). Jones (1985) reported that the tutors rated the teaching of practical skills as stressful and very hard to find time to perform. Inadequate time in the clinical settings may be a possible explanation for the finding in this study. Depending on the level of students, the teacher/student ratio in a clinical group could range from 8 to 20. Thus, most of the instructors' time would be spent supervising and guiding the students rather than demonstrating clinical procedures. Nevertheless, the finding that all three levels of students rated this behaviour significantly higher than the instructors warrants more exploration.

The significantly lower ratings of items #8, *is well prepared for teaching*, and item #9, *enjoys teaching,* by the nursing students may imply that although the items are important to them, they are of higher interest for their clinical instructors. The primary focus of the instructor is the teaching of nursing to the students, whereas, the students are more interested in knowing what is important and how to give nursing care to their patients.

The significantly lower appraisals of items #10 and #14, *encourages active participation in discussion; questions students to elicit underlying*

reasoning, by all three years of nursing students than their clinical instructors might be an expression of anxiety about responding 'incorrectly' and thus not looking 'good' as a student. It may also indicate their lack of understanding of the purpose of these two behaviours. To these students, questioning by the teacher may be threatening, anxiety provoking, and interpreted as being evaluative.

It was not surprising that only third year nursing students rated items #6, *helps students identify and make use of practice opportunities,* and #15, *helps students organize their thoughts about patient problems,* significantly lower than the clinical instructors. One explanation is that the third year students were in their last three months of their nursing education program. Their instructors visited them only periodically in the clinical setting. Thus, these senior students were more independent and did not feel the need for their instructors to help them organize their patients' problems or avail of practice opportunities.

Students as a group rated the interpersonal relationships (Table 6) category significantly lower than the instructors. These findings are different than those found in other studies. Li (1997), Nehring (1990) and Sieh and Bell (1994) reported no significantly difference between the nursing students and their faculty for this category. In Mogan's and Knox's (1987) study, the baccalaureate nursing students rated the category significantly higher than the faculty did for best clinical teachers.

Students as a group rated items # 23 *demonstrates enthusiasm*, and #24

is a dynamic, energetic person, and the personality traits category (Table 7) significantly lower than their instructors. These findings partially support those in other studies. Li (1997) reported that diploma students rated these two items in the10 least important behaviours, however, the students and faculty did not differ significantly in their ratings of this category. Sieh and Bell (1994) also reported no significantly difference between the associate degree nursing students and their faculty for the personality category. Nehring (1990) and Mogan and Knox (1987) found that the baccalaureate nursing students rated the category significantly higher than the faculty did for best clinical teachers. In the present study, this category was also rated the lowest by the students and the instructors. Similar findings were found by others (Brown, 1981; Irby, 1978; Jarski, Kulig, & Olson, 1990; Knox & Mogan, 1985; Mogan & Knox, 1987; Li, 1997; Nehring, 1990; Sieh & Bell, 1994; Wolf & Turner, 1989).

All three levels of nursing students rated the nursing competence category significantly lower than the instructors (Table 9). A possible explanation for this finding could be that the major focus of the clinical experience in the diploma nursing programs is 'hands on' or direct care types of learning opportunities. Becoming proficient in the psychomotor competencies and in the coordination of care for a group of patients are the primary objectives of the clinical experience. Thus, students may not value the behaviours described in item # 32, *reveals broad reading in area of interest*; item # 33, *discusses current developments in*

her field; and item #34, *directs students to useful literature,* as much as their instructors. Comparable findings were reported by Li (1997), and Sieh and Bell (1994). Junior and senior diploma nursing students in Li's study rated items #32 and #34 in the 10 least important behaviours. Associate degree students rated item #34 the lowest (Sieh & Bell, 1994). However, in these latter two studies, differences between the students' and instructors' ratings of the individual items were not reported.

Although the students rated five of the nine behaviours in the evaluation category higher than the instructors, the differences were not significant (Table 10). These findings support those found in studies by Li (1997), Sieh and Bell (1994), and Knox and Mogan (1985), thus indicating that nursing students in all types of nursing programs and instructors may have comparable opinions on the importance of the evaluation category. In the study by Kleehammer et al (1990), evaluation and observation by nursing faculty were expressed as anxiety-producing situations for nursing students. The high ratings for these behaviours may reflect a high level of anxiety experienced by students and instructors (Knox & Mogan, 1985). The results in this study may imply similar perceptions of anxiety among the students and clinical instructors with evaluation.

5.2 Differences in Appraisals by Students in Different Years of the Program

In this study, first, second, and third year diploma nursing students gave

similar high ratings to all the clinical teaching behaviours. The students' ratings for several items, however, decreased as they progressed in the nursing program (Table 11). Comparing these findings with other studies which used the same instrument is difficult because the ratings for the individual items were not reported. Nevertheless, there were no significant difference in the ratings for the five categories by the three groups of diploma students in this study and by the two students' groups in Li's research (1997). The findings are in disagreement with those of Sieh and Bell (1994). In the latter study, the associate degree nursing students in junior level rated the teaching ability category significantly higher than those in senior level. The lack of clinical experience may also explain the higher rating by first and second students in this study to items # 5, *demonstrates clinical procedures and techniques;* # 6, *helps students identify and make use of practice opportunities;* and #15, *helps students organize their thoughts about patient problems (Table 11).*

In this study, most of the rating differences were between the first and third year students reflecting the differences in the organization of clinical experiences for the first, second and third year programs, and the increased level of knowledge, skills and maturity of the third year students. The first year students rated item *#43, observes students' performance frequently,* significantly higher in importance than the second and third year students. Similar differences between junior and senior baccalaureate students were also found by Pugh

(1988), where the senior baccalaureate nursing students rated 'observe me during my actual care of patients' significantly lower than either sophomores or juniors. Pagana (1988) reported that although 26% of the students identified the clinical instructor as a threat, other students wanted the instructors to spend more time with them. This finding also support Windsor's (1987) description of the first stage of professional development where first year students are very nervous, and everything is new and anxiety-provoking in the clinical setting. The study by Abbott, Carswell, McGuire, and Best (1988) indicated that senior diploma nursing students were more likely and able to practice self-evaluation indicating their maturity.

In this study, the results indicated that the items in the evaluation category were the most important for all three years of diploma nursing students. These results correspond with those reported in other studies (Brown, 1981; Kanitsaki & Sellick ,1989; Knox & Mogan, 1985; Li, 1997; O'Shea & Parsons, 1979; Pugh,1988; Sieh & Bell, 1994; Wilson, 1994).

5.3 Differences in Appraisals by Gender of Students

Although both genders consistently rated all the clinical teaching behaviours high, the female students rated several items (23 out of 48) and four of the five categories significantly higher than their male classmates (Table 12). Comparison of the results for the individual items with other research studies is

not feasible due to the lack of similar data analysis.

The findings for the categories, however, partially agree with those found by Sieh and Bell (1994) where female associate degree nursing students rated the teaching ability and the nursing competence categories significantly higher than the male students. Gender was not explored in other studies which used the same instrument. The findings, however, provide support for another study which used a different instrument. Kanitsaki and Sellick (1989) reported a significant difference in the ratings of the Nurse scale clinical teaching behaviours between male and female undergraduate nursing students. However, McFadyen (1991) found no significant differences when the gender of the associate degree students was examined.

A possible explanation for these findings is that the male students are not as anxious about the clinical experience as the female students, thus, they do not require as much guidance and supervision from their instructors. Streubert (1994) reported that the male nursing students described the clinical experience with feelings of excitement, confidence, and success, while Streubert (1989) found that the prevalent feelings among the female nursing students were anxiety, frustration, insignificance, ambivalence, inadequacy, and fear.

Based on the findings in this study, future research needs to explore why male nursing students have different perceptions of the role of clinical instructors than their female counterparts. This is particularly important since the number of

male nursing students is increasing. In addition, instructors need to know the expectations of male students in order to enhance the quality of teaching and learning in the clinical setting, and improve instructor-student interactions and relationships.

5.4 Differences in Appraisals by Age of Students

The students' ages did not influence significantly the ratings of teaching behaviours, except in one item. The younger students (18 to 20 years) rated item #5, *demonstrate clinical procedures and techniques*, significantly higher than the older group (26 to 45 years). One possible explanation for the finding is that in this study 61.5% of the 18 to 20 year old group were in their first year of the nursing program. Thus the limited clinical experiences of these students may be the contributing factor. In addition, the older students have more life experiences and opportunities to accept responsibility for own learning and are more self-directed. Alspach (1991) reported that the baccalaureate nursing students' age was positively associated with their self-directed readiness scale score.

Comparing these findings with past research is somewhat difficult because different instruments were used. The influence of age was not explored in studies which used the same instrument. Those that used a different instrument such as McFadyen (1991) reported no significant differences when age of associate degree nursing students was considered. Kanitsaki and Sellick

(1989) who also used a different instrument related that mature-aged students (over 25 years of age) rated the clinical teaching behaviours in the application category significantly more important than younger students (up to 25 years of age). Further analysis using various students' age groups of the same level in the program may yield different results.

5.5 Differences in Appraisals by Instructors with Various Lengths of Clinical Teaching Experience

Clinical instructors with various years of clinical teaching experience agreed on the ratings of the 48 clinical teaching behaviours and the five categories. The lack of significant differences found in this study was also reported by McFadyen (1991).

5.6 Differences in Appraisals by Clinical Instructors Teaching in Different Years

Clinical instructors teaching in the three different years of the nursing program agreed on the importance of the 48 items. One possible explanation for this agreement among the instructors' appraisals is that their assignment may change from one year to the next. Some instructors may teach first level nursing students one year, and second level students the next year, thus their ratings of the behaviours may not reflect their appraisal of items based on the level of

student which they are presently teaching.

Instructors teaching first year students rated behaviours #5, *demonstrates clinical procedures and techniques,* and #28, *has a good sense of humor,* the lowest (M = 5.96). One possible explanation for the low rating of #5 is the availability of better audio-visual resources and the shift by the first year instructors to self-directed learning modules in teaching psychomotor skills at the three diploma nursing schools. Procedures and techniques are new to the learners who are eager to learn them. They become repetitive and boring for seasoned instructors and may explain their low rating on this item. More in-depth research is needed to identify the reasoning for the low rating of clinical teaching behaviour #5, considering the importance of this item to first year nursing students (M = 6.77).

5.7 Relevance of the Findings to Conceptual Framework

The conceptual framework for this study included the following three tenets. (1) All clinical teaching behaviours are important to diploma nursing students. (2) Students' appraisal of specific behaviours differ depending upon their year in the program, age, and gender. (3) Instructors' appraisal of certain behaviours are influenced by their lengths of teaching experience and the level of students taught in the diploma nursing program.

The high ratings given to all 48 items support the belief that these items

are important to the diploma nursing students who participated in this study. The development of these behaviours should be fostered by instructors who teach in various clinical settings.

In this study, there were some indications that the students' level in the program and gender influenced the appraisal of specific behaviours. Gender was a major factor and is evidenced by the 23 items and four categories (teaching ability, interpersonal relationships, nursing competence, and evaluation) which female students rated significantly higher than male students. In addition, male students generally rated the behaviours lower than did the female students.

Findings of this study also support the opinion that the students' level in the program influenced their appraisal of clinical teaching behaviours. As students progressed in the program, they rated more behaviours significantly lower than their instructors. Furthermore, the third year students rated more behaviours significantly lower than the first year students. The third year students spend most of their time in the clinical settings with staff nurses. They have much less contact time with their instructors than do the junior students.

The age of the students had very little influence on their ratings. The younger students rated one item significantly higher than the older ones.

The final tenet was the influence of length of clinical teaching experience and level of student taught on rating. The results showed that these two characteristics had no significant influence on their ratings.

In summary, the findings support the following: the 48 clinical teaching behaviours are important to nursing students and their instructors; the students' appraisals of behaviours are different than their instructors; the students' level in the program and gender influence their appraisals of clinical teaching behaviours. However, in the present study, the findings do not support the following tenets: the students' age influence the appraisal of the behaviours; the instructors' appraisal of specific behaviours differ depending upon the number of years of clinical teaching and the level of student taught in the program. Revising the conceptual framework would not be warranted at this time because of the limited number of studies which examined these tenets.

Chapter 6

Summary, Implications, and Conclusion

This chapter summarizes the findings and considers some implications for nursing education, practice, and research.

6.1 Summary of the Study

In this study, 441 diploma nursing students and 58 clinical instructors rated the 48 items on the NCTEI instrument, using a scale of 1 - 7. All items were consistently rated highly by the students and their instructors.

The results for the **first research question** showed that generally the instructors rated most items (40 out of 48) higher than did the students. The students did rate two items, #3, *emphasizes what is important* and #5, *demonstrates clinical procedures and techniques,* significantly higher than their instructors. As compared to the first or second year students, the third year students rated more items significantly lower than their instructors. The three groups of students rated the evaluation category the highest; whereas, the clinical instructors rated the interpersonal relationships category the highest.

Results for the **second research question** revealed that the students' ratings generally decreased as they progressed in the nursing program,

suggesting the senior students' increased level of independence from their instructors in their third year of the nursing program.

Results for the **third research question** disclosed that male and female students appraised the importance of the clinical teaching behaviours differently. The male students rated 23 of the 48 behaviours and four of the five categories significantly lower than their female counterparts.

Findings for the **fourth research question** revealed that students' age did not influence the ratings of the teaching behaviours.

The results for the **fifth research question** showed that there were no significant differences in the appraisal of the teaching behaviours by instructors with various years of clinical teaching experience.

Similarly, results for the **sixth research question** disclosed that irrespective of the level of students they teach, all clinical instructors teaching first, second, and third year diploma nursing students agreed on the importance of the 48 items.

6.2 Implications for Nursing Education, Practice and Research

Several implications for nursing education, nursing practice, and nursing research have emerged from the findings of the study.

6.2.1 Nursing education.

This study identifies clinical teaching behaviours considered important by

diploma nursing students and their clinical teachers. Furthermore, information from this study indicate which teaching behaviours are considered most important by the diploma nursing students in specific levels of the program, and of different gender.

The findings identify some effective teaching behaviours that need to be used in the clinical setting. By having students complete this questionnaire, at various times in their nursing program, the instructors would demonstrate a respect for their students' opinions and the differing learning needs of male and female students. Furthermore, it would promote an equal partnership with the students in an endeavour to promote a humanistic approach to nursing education and therefore improve the quality of nursing education and client care. Finally, the instructors could modify their teaching behaviours and be able to accommodate the specific needs of individual students at different levels.

Clinical instructors need to be aware that teaching behaviours in the evaluation category are more important to diploma nursing students than those in the other four categories (teaching ability, interpersonal relationships, personality traits and nursing competence). First year students feel it is more important for the instructors to observe the students' performance frequently than did the second and third year students. The 'when', 'what', 'where', 'why' and 'how' of evaluation is very important to the students. Thus, clinical instructors should reexamine the meaning of evaluation to the students. This reexamination

of evaluation could be facilitated by a series of student focus groups conducted by the instructors. Likewise, there is a need to explore further why the instructors feel the nursing competence behaviours are so important and why the students rated them lower. Do the instructors perceive these behaviours as the core of nursing? The findings in this study reflect that the students perceive the evaluation behaviours as having greater implications for them and their learning than the nursing competence behaviours.

The clinical instructors should consider how they use certain behaviours in the teaching ability category, specifically the ones referring to emphasizing what is important, questioning the students and encouraging active participation in discussion. Students in all three years disagreed significantly with the instructors on the importance of these teaching behaviours. More discourse should occur between the students and instructors so that the students understand the rationale for using these teaching behaviours. The students preferred having more guidance from their instructor in identifying what is important. The way the instructors ask questions is important in minimizing student anxiety. Furthermore, diploma nursing students in each year, especially first year of the program, expressed the need for their instructors to demonstrate procedures and techniques. Instructors need to reevaluate how best to facilitate the nursing students' acquisition of clinical skills. Findings from this study support the need for instructors to demonstrate the procedures and techniques in the clinical

settings, however, it may not be a realistic expectation in today's health care system. The opportunities and time may not be available during the clinical experiences. There is a need to explore alternatives ways of demonstrating procedures and clinical skills.

Finally, the teacher - student interpersonal relationship is of importance for all nursing students' learning. The students' high ratings of these behaviours indicate that the instructors should continue to practise them in order to create an emotional environment conducive to learning. In particular, the students valued having an instructor who provides support and encouragement, is approachable, encourages a climate of mutual respect and listens attentively.

The instructors' high ratings of all the teaching behaviours may be reflecting a need for more formal educational preparation. A bachelor of nursing was the highest educational degree obtained by the majority of instructors. This degree does not provide information on clinical teaching of nursing students. Similarly, most graduate education programs do not adequately prepare nurses to function as effective clinical teachers (Karuhije, 1986). Key stakeholders in nursing education should hold discussions about the preparation of instructors for their role before they are given teaching responsibilities. Instructors who are currently teaching should identify their needs as part of their faculty development plan. Scheduled workshops and in-service programs could help them increase their teaching effectiveness.

6.2.2 Nursing practice.

Nursing staff have always been involved in the education of nursing students. At times, they fulfil the roles of the clinical instructor in supervising, teaching and evaluating students, especially in the preceptor role with senior students. Staff nurses need to be knowledgeable about clinical teaching behaviours and which ones are considered important by the nursing students. As the students progress in the program, they spend more time with staff nurses and less time with their clinical instructor. It is important for nurses to engage in discussion with students to ascertain their expectations of the staff nurses. Furthermore, staff nurses need to have additional education on teaching strategies and student evaluation in the clinical settings.

Findings from the present study support the need for the demonstration of procedures and techniques in the clinical settings. Staff nurses could play a primary role by encouraging the students to observe and assist them with all aspects of patient care. They can also emphasize what is important for the students to be aware of while in the clinical area. Lee (1996) reported that clinical nursing teachers stressed the importance of maintaining good relationships with staff nurses who will do clinical teaching with the students.

6.2.3 Nursing Research.

A number of implications for future research have also emerged from the findings. The recommendations add to the list of research yet to be conducted in

the area of clinical teaching.

The findings indicate that future research needs to focus on the following questions: Do the clinical instructors display appropriate teaching behaviours? Do the teachers' behaviours affect students' level of competency as a beginning nurse? Which behaviours are used most frequently and effectively?

The significant differences between males' and females' ratings in this study indicate that future research studies should further explore clinical teaching from the gender perspective. The male students' perceptions of the role of the clinical instructor needs to be examined as the majority of nursing faculty members continue to be female and there are increasing efforts to recruit men to the profession.

It would be very worthwhile to explore which teaching behaviours nursing students expect from the staff nurses in nursing practice. Are these behaviours different than what they expect from their instructors? Do first, second, and third year students differ in their expectations of the nursing staff? Future studies should consider these questions.

More research needs to be conducted on how best to facilitate the nursing students' learning and mastery of nursing skills. Knowledge related to this issue may be obtained from a qualitative study where nursing graduates are interviewed and asked to reflect upon their acquisition of nursing skills.

The evaluation of nursing students' performance in the clinical setting

warrants in-depth study and examination. Issues relating to the 'when', 'what', 'where', 'why' and 'how' of clinical evaluations are potential research topics. Research studies need to examine whether questioning students and encouraging them to participate in discussions enhances or inhibits learning in the clinical setting.

Since this study deals only with diploma nursing students and their clinical instructors in this province, generalization is limited. More studies are needed in other provinces before the results can be examined with more confidence. Baccalaureate programs are now more common and required, thus future research should include their nursing students and instructors.

6.3 Conclusion

The high participation rate of diploma nursing students and their clinical instructors indicated that the topic of clinical teaching behaviours was important to them. The students as a group rated significantly different than their clinical instructors for 19 of the 48 clinical teaching behaviours and four of the five categories.

Students' level in the program and gender significantly influenced the appraisal of 7 and 23 behaviours respectively. However, the students' age significantly influenced only one behaviour.

When the demographic and personal characteristics of the 58 clinical

instructors were assessed, the appraisal of the behaviours were mostly in agreement. Their various lengths of clinical teaching experience and teaching in different years of the program did not influence the appraisal at a significant level. Further studies are needed before the conceptual framework of this study can be better clarified with more evidences.

The findings in this study add to the body of knowledge related to teaching behaviours of the clinical instructors. Having instructors reflect on the behaviours which were appraised significantly different by nursing students should improve student-instructor interactions, and enhance the quality of clinical nursing education and ultimately client care.

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Appendix A

Nursing Clinical Teaching Effectiveness Inventory (NCTEI)

(Clinical Teaching Behaviour Rating Scale)

Code Number (For investigator use) ____

Directions: The following items reflect some of the ways teachers can be described. Each item is rated on a 7-point Likert scale **(1 = not at all important, 7 = very important)**. Please circle the number which indicates how important each behaviour is to you.

Teaching Behaviours	Not at all Important						Very Important
Teaching Ability							
1. Explains Clearly	1	2	3	4	5	6	7
2. Emphasizes what is important	1	2	3	4	5	6	7
3. Stimulates student interest in the subject	1	2	3	4	5	6	7
4. Is accessible to students	1	2	3	4	5	6	7
5. Demonstrates clinical procedures and techniques	1	2	3	4	5	6	7
6. Helps students identify and make use of practice opportunities	1	2	3	4	5	6	7
7. Offers special help when difficulties arise	1	2	3	4	5	6	7
8. Is well prepared for teaching	1	2	3	4	5	6	7
9. Enjoys teaching	1	2	3	4	5	6	7
10. Encourages active participation in discussion	1	2	3	4	5	6	7
11. Gears instruction to students' level of readiness	1	2	3	4	5	6	7
12. Understands what students are asking or telling	1	2	3	4	5	6	7
13. Answers carefully and precisely questions raised by students	1	2	3	4	5	6	7
14. Questions students to elicit underlying reasoning	1	2	3	4	5	6	7
15. Helps students organize their thoughts about patient problems	1	2	3	4	5	6	7
16. Promotes students independence	1	2	3	4	5	6	7
Interpersonal relationships							
17. Provides support and encouragement to students	1	2	3	4	5	6	7
18. Is approachable	1	2	3	4	5	6	7
19. Encourages a climate of mutual respect	1	2	3	4	5	6	7
20. Listens attentively	1	2	3	4	5	6	7
21. Shows a personal interest in students	1	2	3	4	5	6	7
22. Demonstrates empathy	1	2	3	4	5	6	7

Code Number (For investigator use)_____

Teaching Behaviours	Not at all Important						Very Important
Personality Traits							
23. Demonstrates enthusiasm	1	2	3	4	5	6	7
24. Is a dynamic, energetic person	1	2	3	4	5	6	7
25. Is self-confident	1	2	3	4	5	6	7
26. Uses self-criticism constructively	1	2	3	4	5	6	7
27. Is open-minded and non-judgmental	1	2	3	4	5	6	7
28. Has a good sense of humor	1	2	3	4	5	6	7
29. Is organized	1	2	3	4	5	6	7
Nursing Competence							
30. Demonstrates clinical skill and judgment	1	2	3	4	5	6	7
31. Demonstrates communication skills	1	2	3	4	5	6	7
32. Reveals broad reading in his/her area of interest	1	2	3	4	5	6	7
33. Discusses current developments in his/her field	1	2	3	4	5	6	7
34. Directs students to useful literature in nursing	1	2	3	4	5	6	7
35. Demonstrates a breath of knowledge in nursing	1	2	3	4	5	6	7
36. Recognizes own limitations	1	2	3	4	5	6	7
37. Takes responsibility for own actions	1	2	3	4	5	6	7
38. Is a good role model	1	2	3	4	5	6	7
39. Enjoys nursing	1	2	3	4	5	6	7
Evaluation							
40. Makes specific suggestions for improvement	1	2	3	4	5	6	7
41. Provides frequent feedback on students' performance	1	2	3	4	5	6	7
42. Identifies students' strengths and limitations objectively	1	2	3	4	5	6	7
43. Observes students' performance frequently	1	2	3	4	5	6	7
44. Communicates clearly expectations of students	1	2	3	4	5	6	7
45. Has realistic expectations of students	1	2	3	4	5	6	7
46. Gives positive reinforcement for good contributions, observations, and performance	1	2	3	4	5	6	7
47. Corrects students mistakes without belittling them	1	2	3	4	5	6	7
48. Does not criticize students in front of others	1	2	3	4	5	6	7

Comments or other behaviours (use the back of page if needed)

Thank you for answering this questionnaire, your responses will remain anonymous, and will only be used for research purposes.

Appendix B

Demographic Questionnaire - Student

Code number (For investigator use) ___

Directions: Below are a few questions asking information about yourself. Please select the option appropriate for you and enter the number corresponding to your selection in the space provided.

___ A. Your year in the nursing program (select one)

1. 1st. year 2. 2nd. year 3. 3rd. year

___ B. Your current age is _____(years)

___ C. You are:

1. Female 2. Male

___ D. Your current clinical area is:

1. Surgical 4. Pediatrics 7. Gerontology
2. Medical 5. Psychiatry 8. Other (specify) _____
3. Obstetrics 6. Community

Appendix C

Demographic Questionnaire - Clinical Instructor

Code number(For investigator use) ___

Directions: Below are a few questions asking information about yourself. Please select the option appropriate for you and enter the number corresponding to your selection in the space provided.

___ A. Your employment status is:

1. Full-time 2. Part-time

___ B. Your present area(s) of clinical teaching is/are:

1. Surgical
2. Medical
3. Obstetrics
4. Pediatrics
5. Psychiatry
6. Community
7. Gerontology
8. Other (specify)_____

___ C. You are presently teaching students in:

1. 1st. year 2. 2nd. year 3. 3rd. year

___ D. Number of years of clinical teaching experience is:_____

___ E. Highest educational degree obtained (select one)

1. B. Nursing
2. B. Vocational Education
3. B. Education
4. Masters in Nursing
5. Masters in Education
6. Other (specify) _____

___ F. Educational preparation for teaching clinical nursing (select all that apply)

1. Workshop(s)/conference(s)
2. 1 course
3. 2 to 3 courses
4. 4 or more courses
5. Other(specify) _____

Appendix D

Permission to Use the Instrument (NCTEI)

School of Nursing
University of British Columbia

T.206-2211 Wesbrook Mall
Vancouver, B.C. V6T 2B5

Tel.: (604) 822-7417
FAX: (604) 822-7466
Fax Make: Sharp's FO 420

Date: Nov 22/92 Fax No. 737-7037 (709)

To: Dorothy Andrews From: Judy Hogan

Comments: Here is the requested instrument. As discussed in our phone conversation, you have our permission to use the instrument. We also gladly supply you with further reliability/validity data if you decide to use NCTEI.

JH

Total number of pages including cover sheet: _____

If you have not received this many pages, please call us immediately.

Appendix E

Letter to Nursing Schools' Administrator

Date

Name of the Director
Director
General Hospital School of Nursing
Forest Rd.
St. John's, NF

Dear :

I am a graduate student in the School of Nursing, Memorial University of Newfoundland. A partial requirement for the degree of Masters of Nursing is a research study.

The purpose of my study is to compare the appraisals of clinical teaching behaviours by students and their clinical instructors in diploma nursing schools in St. John's, Newfoundland.

The findings from this study can be used by instructors to enhance the quality of teaching and learning in the clinical setting by improving instructor-student interactions and relationships. Additionally, the information can be used to orientate new clinical instructors, to develop graduate clinical teaching courses, to update clinical instructors, and to develop evaluation tools.

At this time, I am contacting you to obtain permission to (1) conduct this study at your facility, (2) ask all first, second and third year nursing students and clinical instructors to participate in the study. Participation in the study is entirely voluntary. After signing a consent form, students and clinical instructors who agree to participate will be asked to complete a Clinical Teaching Behaviour Rating Scale and a short demographic questionnaire. Completion of the two forms will take approximately 15 minutes.

A copy of the research proposal, consent form, the Clinical Teaching Behaviour Rating Scale and the demographic questionnaire is attached.

After permission is given, separate meetings with the students and the clinical

instructors will need to be arranged, in a classroom, at a time convenient for the school of nursing. At this meeting, I will provide an explanation of the research study and answer any questions concerning the study before consent is obtained, and questionnaires are completed.

All data will be reported as group data and neither the school nor the individuals will be identified. Each subject will be assigned a code number to protect anonymity.

I would like to collect the data near the end of this semester, from the middle to the end of March, 1994. Thus, I would appreciate an answer at your earliest convenience. If possible, please respond by the _____.

If you have any questions, please do not hesitate to call me at _____.

Sincerely yours,

_____
Dorothy Andrews RN, BN, masters candidate
11 Diana Rd.
St. John's, NF
A1B 1H7

Appendix F

Letter to Potential Participants

Dear Student/Clinical Instructor:

I am a graduate student in the School of Nursing, Memorial University of Newfoundland. I am doing a research study to meet part of the requirement for the degree of Masters of Nursing.

At this time, I am contacting you to ask you to participate in my research study. Participation in this study is entirely voluntary. You may decide not to participate or may withdraw from the study at any time.

The purpose of my study is to compare the appraisals of clinical teaching behaviours by students and their clinical instructors in diploma nursing schools in St. John's, Newfoundland.

The findings from this study will extend the body of knowledge regarding clinical teaching behaviours. This knowledge can be used by instructors to enhance the quality of teaching and learning in the clinical setting, to improve instructor - student interactions and relationships, to orientate new clinical instructors, to develop graduate clinical teaching courses, to update clinical instructors, and to develop evaluation tools.

Confidentiality of information concerning participants will be maintained by the investigator.

The investigator will meet the students and the clinical instructors in separate sessions, and will answer any questions concerning the research study. You will be asked to complete a Clinical Teaching Behaviour Rating Scale and a short demographic questionnaire. Completion of the two forms will take approximately 15 - 20 minutes. Names will **not** be used on the questionnaires. Each participant will be assigned a code number, in that way , your identity is protected. Completed questionnaires will be kept in a locked file, and only the investigator and her thesis supervisor from MUN School of Nursing will have access to them. All data will be reported as group data and neither the school nor individuals will be identified.

There are no foreseeable risks, or discomforts in completing the forms. You have a right to refuse to answer any question with which you do not feel comfortable.

If you agree to participate in the study, please sign the enclosed consent form and bring it to the meeting which is scheduled on _____ at _____hours in **classroom**____. At this meeting, I will answer any questions concerning the study before questionnaires are completed. You have the right to leave the classroom and not participate in the study at any time.

If you have any questions concerning the research study, before signing the consent form, please call me at_____ .

Sincerely Yours,

_____

Dorothy Andrews RN, BN, masters candidate

Appendix G

Consent Form

Appraisal of Clinical Teaching Behaviours by Diploma Nursing Students and their Clinical Instructors: A Comparative study

I,_____, the undersigned, agree to my participation in the research study described.

Any questions have been answered and I understand what is involved in the study. I realise that participation is voluntary and that there is no guarantee that I will benefit from my involvement. I acknowledge that a copy of this form has been offered to me.

_____ _____

(Signature of Participant) (Date)

To be signed by investigator:

To the best of my ability I have fully explained to the subject the nature of this research study. I have invited questions and provided answers. I believe that the subject fully understands the implications and voluntary nature of the study.

_____ _____

(Signature of Investigator) (Date)

Phone Number _____
