

CHARACTERISTICS OF CLINICAL FACULTY PERCEIVED BY NURSING STUDENTS AND ALUMNI IN KARACHI

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ABSTRACT

The objective of the present study was to identify and explore the perceptions of characteristics of the Clinical Faculty among nursing students and alumni of private university and determining significantly differences in the group of nursing students and Alumni by using NCTEI questionnaire. Nursing students were those students who are currently enrolled in a diploma or BScN or Post RN BScN Programme of School of Nursing (SON) in private university of Karachi. The alumni are those registered nurses who have had Diploma; Baccalaureate or Post RN degrees in nursing from this selected SON, and have been working in the Medical and Surgical unit of selected university, hospital for more than six months. A sample of 154 was randomly chosen from the group of nursing students and Alumni to participate in this study. The results indicated that the category of "teaching ability" was the most highly valued category and "interpersonal relationship" as the lowest amongst the five categories from the NCTEI questionnaire. This study concludes that the respondents' gave great emphasis to teaching ability of the Clinical Faculty and it needs to be examined closely so that the students can view the Clinical Faculty as supportive member and their learning could be encouraged.

Keywords: Clinical teaching, clinical teachers, NCTEI questionnaire, perception of the clinical faculty.

INTRODUCTION

Nursing is a practice discipline whose curriculum is based on a theoretical framework that allows students to develop clinical skills essential to care for a patient in a clinical settings. Nahas *et al.* (1999) and Morgan (1991) wrote that clinical teaching is the essence of all nursing education because clinical education is the way by which nursing faculty facilitates nursing students to acquire knowledge and skills in the real practical setting to become competent and skilled nurses. There is little doubt that the clinical experience is a multifaceted teaching/learning experience. Clinical teaching, however, differs from traditional didactic instruction and requires a separate set of skills; skills that may not be automatically ensured by competencies in one's area of clinical specialization.

The goals of clinical education in nursing are to assist students to acquire technical skills, develop professional responsibility, and move from dependent, supervised practice to independent practice (Iwasiw and Goldenberg, 1993). Clinical Faculty is more directly and personally involved with students in the clinical setting than is possible in other types of nursing courses. Clinical Faculty plays an important role because they provide students with the opportunity to achieve competency, self-confidence, professional identity, professional attitudes, and proficiency in their profession. Responsibilities of clinical instructors are highly diverse. Clinical instructors need to anticipate potential learning opportunities, recognize unanticipated learning situations when they arise, and design instruction that amplifies the positive learning events which are critically important to students' professional development. In order for effective learning to occur, the Clinical Faculty should have sound knowledge, clinical competence, excellent teaching skills,

and positive relationships with students (DeYoung, 1990; Sieh and Bell, 1994).

Researches have been conducted on Faculty and students' perception on the characteristics of faculty that have been effective in classroom settings. However, researches on perceptions regarding student and Alumni perceptions of the faculty characteristics that are effective in the clinical setting are very limited (Brown, 1981; Ripley, 1986; Gignac-Caille and Oermann, 2001).

Mogan and Knox (1987) replicated their own study in 1987 from seven University Schools of Nursing situated in the western part of the USA and Canada. The aim of the study was to again identify and compare the characteristics attributed to the best and the worst clinical teachers by students. The respondents included undergraduate nursing students (N= 173). For the study they utilized their own tool that is "The Nursing Clinical Teacher Effectiveness Inventory" (NCTEI) developed in 1983. The results of this study demonstrated a good Clinical Faculty should be a role model. The result also identified that personality trait, evaluation, and interpersonal relationships are important.

A comprehensive study undertaken by Kanitasaki and Sellick (1989) in Australia explored baccalaureate nursing student's (N = 402) perceptions on the characteristics of effective Clinical Faculty. The study also aimed to identify whether these perceptions were influenced by: the year of study; educational institution; status of the students; or demographic characteristics. The respondents were to rate 20 clinical teaching behaviors using a seven point Likert scale. This study revealed that there is a difference between the perceptions of students studying in the different years, from different institutions, having different status, and belonging to different age and with different genders.

Most studies have focused on the characteristics of the Clinical Faculty's as perceived by students, with few studies examining alumni's opinion about clinical effectiveness or the extent to which students and educators agree on attributes such as effective behavior. This study's result would identify characteristics which are important for Clinical Faculty, could help the students achieve their desired goals. It is, therefore, important that the Clinical Faculty identify and incorporate effective teaching characteristics in their clinical teaching and thus potentially enhance student learning in clinical settings.

Purpose and Significance of the Study

The purpose of this study was to identify and compare the perceptions of the characteristics of Clinical Faculty as perceived by nursing students, and the alumni of private University (Diploma students, BScN students, Post RN BScN students). In addition, this study also aims at identifying the differences in the perception of the characteristics of clinical faculty as identified by alumni, and students. Including alumni as a separate group offers a unique perspective on clinical teaching based on their experiences.

In addition, this study aimed to develop a list of the most important characteristics and the least important characteristics as perceived by these two groups. Overall, the data from this study will provide the basis for recommendations for teaching nursing students in the clinical settings and will help in the development of current faculty, as well prepare them as future clinical nurse faculty which eventually will improve the quality of their own clinical education

Conceptual Framework

According to LoBiondo and Haber (1994), "A theoretical framework provides a context for examining a problem, that is, the theoretical rationale for developing hypothesis" (LoBiondo & Haber, 1994). This study reviewed the literature to identify the studies conducted that explore the characteristics of clinical faculty by looking at the perceptions from the alumni and the students. For the purpose of this study NCTEI tool was utilized to explore this perception in the selected school of nursing in Pakistan. The purpose of using this tool was that the results from various studies have consistently demonstrated the effectiveness of the tool in terms of identifying faculty characteristics such as professional competence, strong teaching ability, superior evaluation practices, good interpersonal relationships and effective personality trait that ought to be present in an effective Clinical Faculty (Knox and Mogan, 1985). The conceptual framework which guided this research was based on the available literature.

To achieve the purpose of the study, the NCTEI was adapted from Mogan and Knox (1987) in measuring

alumni and students perceptions regarding the characteristics of the Clinical Faculty. The NCTEI consists of 48 items divided into five categories considered important by other researchers (Knox and Mogan, 1985; Mogan and Knox, 1987; Kanitasaki and Sellick, 1989; Nehring 1990; Sieh and Bell, 1994, Kotzabassaki *et al.*, 1997; Li, 1997; Benor and Leviyof, 1997; Gignac-Caille and Oermann, 2001; Lee *et al.*, 2002) in identifying the characteristics of a clinical faculty. These categories include: teaching ability, nursing competence, evaluation, interpersonal relationship, and personality traits.

METHODOLOGY

A descriptive comparative study design was conducted at private School of Nursing located in University at Karachi. This School of Nursing offers four academic programs: three- year registered nursing (RN) diploma program; a four-year Bachelors of Science in Nursing (BScN) Degree program; a two year Post Registered nursing (Post –RN BScN) degree program; and a two year Masters Program. The objective of the diploma program is to prepare nurses to deliver safe and competent care to patients in hospitals and in communities. The BScN program prepares Nurses to be clinically competent and who demonstrate responsibility and accountability towards nursing profession. Whereas, the Post RN BScN program purpose is to provide experienced nurses to acquire in-depth knowledge and skills so they can utilize effective critical thinking and problem solving skills and can bring change in nursing profession.

This School of Nursing faculty provides nursing students with instruction in classroom and clinical settings that teach courses in nursing practice, research, education, and management. Clinical learning is an important part of the nursing curriculum of all three programs, and constitutes the major portion of the nursing curriculum for pre qualifying nursing programs in Pakistan. Clinical practicum prepares the nursing students for their professional role; it also enables them to apply knowledge, skills and concepts introduced in the classroom, and in the clinical settings (Billings and Halstead, 1998). Hence, nursing students are influenced and shaped significantly by the clinical faculty's teaching style and characteristics.

Study Population

The study population comprised nursing alumni and nursing students. Diploma nursing students were those students who are currently enrolled in a diploma program in School of Nursing (SON) and are either in year 1, year 2, or year 3 of the program. BScN program students are those students who are currently enrolled in the BScN program and are respectively in year 1, year 2, year 3, or year 4 of the program. Post RN BScN nursing students

are currently enrolled in the Post RN BScN of SON and are either in year 1 or year 2 of the program. The alumni are those registered nurses who have had Diploma, Baccalaureate or Post RN degrees in nursing from this selected SON, and have been working in the Medical and Surgical units of selected university, hospital for more than six months. The reasons for choosing the Medical / Surgical area was because all the students had finished the rotation of pediatrics and were currently enrolled in adult health nursing course.

Definition of Terms

For the purpose of this study, the following definitions were used:

- Perceived as the most important clinical faculty’s characteristics
 “A teacher whose actions and activities facilitate student learning in clinical settings” (O’Shea and Parsons, 1979).
- Perceived the least important clinical faculty’s characteristics
 A teacher, whose actions and activities hinder student learning in clinical settings (O’Shea and Parsons, 1979).
- Characteristics
 A distinguishing trait or quality (The American Heritage Dictionary, 2000).
- Current Diploma nursing student
 Those students who are currently enrolled in a diploma program in nursing in SON (year 1, year 2, year 3) and are getting their experience from medical /surgical area and are enrolled in the Fundamentals of Nursing course.
- BScN nursing students
 Those students who are currently enrolled in the BScN (generic) program in SON (year 1, year 2, year 3, year 4) and are getting their experience from medical/ surgical area and are enrolled in Advanced Nursing course.
- Postgraduate nursing students
 Those students who are currently enrolled in the Post RN (Post graduate program) in SON (year 1 and year 2) and are getting their experience from medical surgical area and are enrolled in Advanced Nursing Course.
- Alumni (former nursing students)
 Those registered nurses who hold a diploma/ Post RN/BScN degree in nursing from SON, and have been working in the medical/surgical unit University Hospital for more than six months. These nurses are full time nurses and are working at hospital in the capacity of a head nurse, staff nurse, clinical nurse specialist.

Questionnaire

To answer the research questions of the study, the researcher utilized Nursing Clinical Teacher Effectiveness

Inventory (NCTEI) questionnaire developed by Knox and Mogan (1985), Mogan and Knox (1987) and revised in 1994 by Mogan and Warbinek was used for data collection after receiving permission from the authors via email. This questionnaire has 48-items which describes the discrete characteristics of clinical faculty. It has five categories which are: teaching ability, nursing competence, personality traits, interpersonal relationship, and evaluation. The study participants were invited to judge on a four point Likert scale (1 = least important to 4 = most important) on descriptive characteristics of the Clinical Faculty.

The study first and second question was about the “most and least important clinical characteristics of clinical faculty” perceived by the alumni and students. To answer the research question, the mean scores and standard deviations (SD) of each item were calculated to determine the most and least important characteristics of Clinical Faculty. The items from each category were computed as follows:

Subcategory Scores

Categories of Characteristics	# of items	Highest Possible Score —Lowest Possible Score
Teaching abilities	16	64-----16
Interpersonal Relationship	6	24-----06
Personality Trait	7	28-----07
Nursing Competence	10	40-----10
Evaluation	9	36-----09
Total	48	192-----48

To determine which item in each category would rank highest to lowest, the mean score of each item was computed. This provided the scores for the least and most important characteristics from each category. The highest score implied the most important characteristics while the lowest provided the least important characteristics. Summing all five category scores provided a total score for the most and least important characteristics of clinical faculty as shown above. A simple comparison of means across scores was used to examine the ranked scores from perceptions of characteristics of each item against the categorized five main categories; teaching ability, interpersonal relationships, personality traits, nursing competence, and evaluation. The lowest important characteristics fall into the category ranged 50 to 100, whereas the moderate important characteristics of clinical faculty fall into the category, within the range of 101 to 150 and the most important characteristics have category within range of 151 to 192. In the mean scores, higher scores implied most important categories and lower scores implied least important categories.

Reliability and Validity of the Instrument

According to Knox and Mogan (1985), Mogan and Knox (1987) and Mogan and Warbinek (1994) tested the instrument for its reliability and validity. The authors have sent the reliability and validity of the test done in 1994. According to the authors (1994), the NCTEI questionnaire's internal consistency ($\alpha = 0.79 - 0.92$) was found to be stable over time (test-retest score at 4 weeks interval ranged from $r = 0.79 - 0.93$ and considered to have content and face validity for countries other than Pakistan.

Therefore, to ascertain the validity and reliability of the questionnaire prior to data collection in the Pakistani settings, the questionnaire was pilot tested in selected University, School of Nursing and Hospital. The subject's parts of the pilot test were excluded from the study subjects.

Permission to conduct the study and to approach the participants was obtained from the Dean of SON and Director of Hospital nursing services respectively was obtained via email before the pilot study was conducted. The data collected from 10% of the total sample population including the nursing alumni, and nursing students. After compiling the data for the pilot testing, the questionnaire was tested for its reliability using split half technique and the result obtained for the questionnaire for alpha part 1 and alpha part 2 was 0.80 and 0.90 respectively. A split half technique of 0.0 to 1.00 is considered to be an acceptable value for a well developed measurement instrument. The reliability result for this questionnaire was 0.92 and hence according to Polit and Hungler (1991) is a good value and shows strength of the questionnaire.

The validity of the questionnaire was obtained through face and content related validity by three experts evaluated the questionnaire for clarity of wording and appropriateness of the questionnaire to the phenomena under study. The experts comprised nursing faculty who had masters' degree as well as clinical teaching experience for more than five years in selected SON. After their feedback, revisions were made accordingly. The questionnaire was pilot tested for a second time with a different sample utilizing the same process of analysis. The purpose for conducting pilot testing for the second time was because the expert panel suggested clarity of wording in certain items. After revisiting the items, the validity and reliability of the instrument needed was tested using split half technique. The result indicated alpha for part 1 and part 2 was 0.65 and 0.74 respectively, which is considered acceptable (Polit and Hungler, 1991).

Study Sampling and Data Collection

The data was collected from the study subjects by using probability stratified random sampling method including

the groups of population into alumni and students into subsets. In order to select samples for the study, the names of all the students studying in School of Nursing were obtained and the names of the graduates were obtained from the student affairs of selected University. Therefore, using a process of stratified random sampling method, the number of participants from year of all the program was picked up by using Epi-info program version 6.04.

Consequently, the subjects selected from each group were; 48 subjects were randomly selected from 226 students enrolled in either year 1, year 2 or year 3 of the diploma program; 43 subjects were randomly selected from 140 students enrolled in either year 1, year 2, year 3 or year 4 of the BScN program; 32 subjects were randomly selected from 64 students enrolled in year 1 or year 2 of the Post RN BScN program and 39 subjects belonged to alumni group were randomly selected from 112, who were working in Hospital in medical / surgical wards. Hence, the total sample size of 163 were chosen to meet the study subjects for the study, with a power of 80 % and 5 % chance of error.

In order to meet the study sample of the nursing students, the researcher met with each year program coordinator so as to schedule a time to meet the selected participants. All participants were then contacted at the scheduled time. A packet containing the consent form and the questionnaire were distributed by the investigator in the classroom setting for the study subjects whose names were listed and who had volunteered to participate in the study; whereas, the selected alumni received a hand delivered consent form and questionnaire from the head nurse / researcher in the medical / surgical ward. The response rate for the students was 100 % but for the alumni it was 79.48 %, many of the alumni were not able to response because of busy schedule and were not interested. Therefore total samples of 154 were chosen whose data were analyzed for the study.

Questionnaire editing

The principal investigator and the data entry operator checked the questionnaires for appropriate filling and any missing information.

Data entry

A double data entry was done in Epi- info (version 10). The data entry error rate was less than 1%. Then the data was transferred in the SPSS version 10 and later the data was cleaned for analysis. Form numbers showing the mismatched entries were drawn and correct entry was identified and then both files were synchronized. The processes continued until the validation report showed no mismatched field in any form. All the reports were archived for record.

The entire data entry process was cross checked and supervised by the principle investigator and research lab coordinator for data validation. The edited and corrected forms were handed over to the principle investigator who then kept these forms under lock and key for the purpose of confidentiality.

Data analysis.

Data from the 154 questionnaires was coded and entered into a Statistical Package for Social Sciences (SPSS) version 10 for analysis purpose. Demographic data were recorded into categories to facilitate ease of interpretation. Descriptive statistics including measure of central tendency like mean and measure of dispersion like standard deviation and frequency distribution were used to illustrate the responses for the entire questionnaire including demographic data and other variables. In order to answer the research question about the characteristics that are the least and the most important, the rating scale were kept as 1 to 4 scales.

Ethical Consideration

This study was approved by the Ethical Review Committee of the selected school of nursing and the hospital. The participants were informed of the purpose of the study and written consent was obtained when the questionnaires were distributed to the study samples. Each participant was required to sign the consent form prior to completing the study questionnaire. Participation in the study was voluntary and the opportunity to withdraw from the study at any stage was also guaranteed. The anonymity of the subjects was maintained as the participants were not required to write their names on the questionnaire. The confidentiality of the data was managed as the data of each subject was not shared with others but the study results were presented in an aggregated form. There was no perceived harm to the participants except that they had to give their time to fill out the questionnaire.

RESULTS

Demographic Data

The respondents of the study comprised 154 alumni and students from the selected school of nursing and Hospital located in Karachi, Pakistan. The demographic characteristics of the respondents are summarized in Table 1.

Most Important Characteristics as Perceived by Alumni

The alumni rating of categories on 48 items of NCTEI scale had the mean scores that ranged from 56.00 to 20.74 and the SD ranged from 7.59 to 3.13. From Table 2, it was observed that alumni also rated the category of *teaching ability* (mean = 56.00, SD = 7.59) as the most important category.

This finding concluded that at the time of the study these groups were not directly involved in the teaching learning process and had been out of school of nursing for more than six months and had no interaction with the faculty. Hence, for them the personality trait of the head nurse could have more value than the interaction with the faculty. Also evaluation possibly was not ranked in the top most categories, because they had no anxiety or fear regarding their performance as a student in clinical settings; hence, did not consider it as a category to be rated as important.

Most Important Characteristics as Perceived by Students

Overall, the student ranking the categories from the NCTEI scale had the same ranking order that of the alumni. The students' mean score on NCTEI scale ranged from 54.42 to 19.48 with SD of 5.30 to 2.88. The student also preferred clinical faculty to have the characteristics of *teaching ability* as the most important category (mean score = 54.42, SD = 5.30).

The most important clinical faculty characteristics chosen under the 48 items on NCTEI from Table 3 were: explains clearly (*teaching ability*), does not criticize students in front of others (*evaluation*), is self confident (*personality trait*), provides support and encouragement to students (*interpersonal relationship*) and demonstrates clinical procedures and techniques well (*teaching ability*).

The 10 most important characteristics ranked by the students showed that 3 items were from *teaching ability*, 2 from *interpersonal relationship*, 3 from *evaluation* and 1 from *personality trait* and *nursing competence*. It was also observed from Table 3 that the students had fewer ties among their rankings as compared to faculty and alumni.

Least Important Characteristics as Perceived by Alumni

According to the alumni's perception, the least important characteristics as identified by this group belong to the category of *interpersonal relationship* as the mean score showed 21.2000 with SD of 1.6562. From the study findings it was observed that the results of this characteristic were not different from the findings of faculty's perception as they also considered this characteristic as the least important. The results can be seen in Table 4.

The least important characteristics that were ranked by the alumni on the 48 items of NCTEI were: has good sense of humor (*personality trait*), enjoys clinical teaching (*teaching ability*), uses self criticism constructively (*personality trait*), shows a personal interest in students (*interpersonal relationship*) and is a dynamic energetic person (*interpersonal relationship*). The items that were ranked by the alumni were from the category of *personality trait* (3 items), *interpersonal relationship* (2 items) *teaching ability* (3 items), *nursing competence* (1

item) categories and *evaluation* trait (1 item). There was a *competence* (3 items). The students did not rank any item

Table 1. Demographic Profile of Respondents.

	Alumni <i>f</i> (31)	Students <i>f</i> (122)	Total (154)
Gender			
Female	30	114	159
Male	1	8	9
Total	31	122	168
Age (years)	20 - 36	15 - 36	
Mean age	24.10	23.58	23.58
SD	3.41	3.59	4.61
Educational level			
Diploma	16	48	64
BScN	12	42	54
Post RN BScN	3	32	49
Total	31	122	154
Years of experience (yrs)	1-3	0	

Table 2. Perceptions of the Characteristics of alumni and students, Mean Standard Deviation and ranking of each over all categories.

#	Category	Alumni			Students		
		Mean	SD	Rank	Mean	SD	Rank
1	Teaching ability	56.00	7.59	1	54.42	5.30	1
2	Interpersonal relationship	20.74	3.13	5	19.48	2.88	5
3	Personality trait	24.00	3.97	4	23.06	3.29	4
4	Nursing competence	35.39	4.28	2	32.58	4.68	2
5	Evaluation	28.84	3.53	3	28.12	3.10	3

significant difference in the ranking of the items from the five categories that were identified by the faculty and the alumni, and also there were fewer ties between items as compared to faculty and alumni's ranking (Table 4).

Least Important Characteristics as Perceived by Students

The students also identified *interpersonal relationship* (mean = 19.48, SD = 2.88) as the least important characteristics to be present in a clinical faculty from the five categories of NCTEI scale (Table 4). This ranking was not different from the characteristics that were identified by faculty and alumni. The only difference was found in the mean score in that the faculty and alumni mean score was 21.20 and 20.74 respectively and the students mean score was 19.47.

According to the students, the least important characteristic on the 48 items with four point Likert scale was shows personal interest in students (*interpersonal relationship*), has good sense of humor (*personality trait*), recognize own limitation (*nursing competence*), reveals broad reading in his/ her field (*nursing competence*) and enjoys clinical teaching (*teaching ability*). The items that were selected as least important characteristics belong to *teaching ability* (2 items), *interpersonal relationship* (3 items), *personality trait* (2 items), and *nursing*

from the category of *evaluation* in the 10 top, least important characteristics (Table 4).

DISCUSSION

From the NCTEI questionnaire, the category that was rated as the most important by alumni and students was *teaching ability*. This category includes the skills required to transmit knowledge, skills and attitudes from the teacher to the students in an atmosphere that encourages student learning. The results of this study are consistent with the findings of studies conducted by Kanitasaki and Sellick (1989), Sellick and Kanitasaki (1991), Li (1997), Gignac-Caille and Oermann, (2001) and Lee *et al.* (2002). The above mentioned authors reported that teaching ability is considered important both nationally and internationally by faculty and students. The findings of these studies were similar from the above mentioned studies although the above mentioned studies were carried out with baccalaureate students while the samples of this study were chosen from the different programs, that is, Diploma, BScN, Post RN BScN and belonged to one private university in Karachi.

From the NCTEI questionnaire, the item that was considered as the most important characteristic (in different rank order) by all two groups was "explains

Table 3. 10 most important Characteristics of clinical faculty as perceived by Alumni and Students.

ALUMNI				STUDNETS			
Rank	Characteristics	Category	Mean (SD)	Rank	Characteristics	Category	Mean SD)
1	Identifies student's strength & limitation objectively	E	3.71 (0.46)	1	Explains clearly	TA	3.81 (0.41)
1	Observes student's performance	E	3.71 (0.46)	2	Does not criticize students in front of others	E	3.70 (0.65)
1	Is a role model for clinical teaching	NC	3.71 (0.59)	3	Is self confident	PT	3.66 (0.63)
1	Clearly communicates expectations to students	E	3.71 (0.46)	4	Provides support & encouragement to students	IR	3.65 (0.54)
2	Is accessible to students	TA	3.68 (0.54)	4	Demonstrate clinical procedure & technique well		3.65 (
2	Demonstrate clinical skills & judgment	NC	3.68 (0.54)	5	Listens attentively		3.59 (0.60)
2	Has realistic expectations from students	E	3.68 (0.54)	5	Is a good role model for clinical teaching		3.59 (0.65)
3	Explains clearly	TA	3.65 (0.49)	5	Gives student positive reinforcement for good performance		3.59 (0.65)
3	Listens attentively	IR	3.65 (0.61)	6	Answers carefully & precisely questions raised by students		3.57 (0.62)
3	Gives student positive reinforcement for good observations & performance	E	3.65 (0.55)	7	Provides frequent constructive feedback on students performance		3.56 (0.56)

Legend: Teaching ability = TA, Interpersonal relationship = IR, Personality trait = PT, Nursing competence = NC, Evaluation = E

clearly" from the category of teaching ability. This could have been influenced by the Faculty's teaching experience. The finding of this study resembles the findings of Dresler and Kutsche (2001), where participants gave importance to the clinical experience of the clinical faculty in the clinical settings. Krichbaum (1994) stated that teaching ability is related to the performance and knowledge of a clinical teacher in the practical settings which reflects the performance of the student that is associated with cognitive gain. This cognitive gain is directly linked to knowledge gain, which means that the Faculty should be able to impart knowledge to the students in such a manner that will help

the students to perform better in real practical situation. The study findings clearly indicated that all the participants in this study highly recommended that the clinical faculty who takes the students to the clinical settings should possess the teaching ability as this enhances the students' learning in the clinical settings. The *teaching ability* of the Clinical Faculty is very important because the AKUSON students go for their clinical practicum in different settings. When rating the least important characteristics of a clinical faculty, the alumni and students rated the category of *interpersonal relationship* as the least important category. Relationship between Faculty and students are extremely important in

clinical teaching practice and has been identified by Brown, (1981); Reeve, (1994) and DeYoung (1990). However, this study found that *interpersonal relationship* was not perceived as the least important, and was ranked as lowest category. In contrast from Table 3 and 4, it was also revealed that the respondent rated the items from this category as the most important category. According to the respondents provides support and encouragement to students and, listens attentively as most important characteristics. The items that were considered least important as perceived by the respondents are: shows a personal interest in the students and demonstrates empathy. One can conclude from these findings that not all the items in this category have been marked as the most or the least important, but the respondents have rated those items as important characteristics from the category which belonged to professional interpersonal relationship, and those items that promote personal interpersonal relationships have also been ranked low.

This could reflect the educational culture of Pakistan, where the student faculty interpersonal relationship is more professional than personal. The student and faculty have a distance between them. The Faculty is viewed as a person who has high status and is more powerful than the students.

The findings of this study reveal that the alumni and students divided this interpersonal relationship as professional and personal relationships. This study clearly indicates that the student and Faculty relationship is more professional than personal. The data also demonstrates that the faculty and the students might want to maintain professional relationship between them and do not want the Faculty to invade students' privacy.

As the findings of this study were different from other studies, in this particular category could be the influence of the factors like previous educational background, the student/ Faculty ratio in the clinical setting, the time faculty can spend with each student in the clinical settings, students' commitment to the profession, and the interest of the students in sharing their problems with the teacher could have an impact the results.

Conclusion and Recommendations

Limitations of the Study

There were several initial limitations to this study. One of them is that the study subjects were from one private university hospital in Karachi. Therefore, the results can be generalized only to the nursing school of this private university only. The study sample, if chosen from various nursing institutions in Pakistan, could give a broader view

Table 4. 10 Least important Characteristics of clinical faculty as perceived by Alumni and Student.

ALUMNI				STUDENTS			
Rank	Characteristics	Category	Mean (SD)	Rank	Characteristics	Category	Mean (SD)
15	Has good sense of humor	PT	3.19 (0.98)	36	Shows a personal interest in students	IR	2.70 (1.12)
14	Enjoys clinical teaching	TA	3.23 (0.72)	35	Has good sense of humor	PT	2.93 (0.98)
13	Uses self criticism constructively	PT	3.26 (0.82)	34	Recognize own limitation	NC	2.98 (0.87)
12	Shows a personal interest in students	IR	3.32 (0.91)	33	Reveals broad reading in his /her field	NC	2.98 (0.74)
12	is a dynamic energetic person	PT	3.32 (0.87)	32	Enjoys clinical teaching	TA	3.02 (0.84)
12	Reveals broad reading in his /her field of interest	NC	3.32 (0.70)	31	Demonstrate enthusiasm	PT	3.04 (0.76)
12	Corrects students mistake without criticizing them	E	3.32 (0.83)	30	Discuss current development in his/her area of interest	NC	3.07 (0.82)
11	Questions students to explain underlying reasoning	TA	3.35 (0.88)	29	Is approachable	IR	3.11 (0.75)
10	Encourages active participation of students in discussions	TA	3.39 (0.76)	29	Demonstrate empathy	IR	3.11 (0.84)
10	Demonstrate empathy	IR	3.39 (0.80)	28	Is accessible to students	TA	3.15 (0.75)

Legend: Teaching ability = TA, Interpersonal relationship = IR, Personality trait = PT, Nursing competence = NC, Evaluation = E

on the perception of characteristics of alumni, and students.

Another limitation includes the use of student and alumni perceptions as a tool to study clinical faculty characteristics. Students may have unsophisticated views of the faculty role. Use of their perceptions might mean that there are responsibilities of clinical faculty that are not addressed in this study. For example, students may not be aware of the clinical faculty members' role in maintaining appropriate relationships within clinical settings. If students were insufficiently aware of faculty members' roles, the results of this study might have been influenced.

REFERENCES

- Benor, DE. and Levyof, I. 1997. The development of students' perceptions of effective teaching: The ideal, best and poorest clinical teacher in nursing. *Journal of Nursing Education*. 36(5): 206 - 211.
- Billings, M. and Halstead, JA. 1998. *Teaching in nursing: A guide for faculty*. Philadelphia: W.B. Saunders.
- Brown, ST. 1981. Faculty and student perceptions of effective clinical teachers. *Journal of Nursing Education*. 20: 4 -15.
- DeYoung, S. 1990. *Teaching nursing*. Canada: Addison-Wesley.
- Dresler, GV. and Kutschke, M. 2001. RN students' ratings and opinion related to the importance of certain clinical teacher behaviors. *Journal of Continuing Education*. 32(6), 274-282.
- Gignac-Caille, A. M. and Oermann, MH. 2001. Student and faculty perceptions of effective clinical instructors in ADN programs. *Journal of Nursing Education*. 40(8): 347- 352.
- Iwasiw, CL. and Goldenberg, D. 1993. Peer teaching among nursing students in the clinical area: Effects on student learning. *Journal of Advanced Nursing*. 18 (2): 659-668.
- Kanitasaki, O. and Sellick, K. 1989. Clinical nurse teaching; An investigation of student perceptions of clinical nurse teacher behaviors. *The Australian Journal of Nursing Education*. 34: 37- 41.
- Knox, JE. and Mogan, J. 1985. Important clinical teacher behaviors as perceived by university nursing faculty, students and graduates. *Journal of Advanced Nursing*. 10(1): 25-30.
- Kotzabassaki, S., Panou, M., Dimou, F., Karabagli, A., Koutsopoulou, B. and Ikonou, U. 1997. Nursing students' and faculty's perceptions of the characteristics of 'best' and 'worst' clinical teachers: A replication study. *Journal of Advanced Nursing*. 26: 817-824.
- Krichbaum, K. 1994. Clinical teaching effectiveness described in relation to learning outcomes of baccalaureate nursing students. *Journal of Nursing Education*. 33: 306-314.
- Lee, WS., Cholowski, K. and Williams, AK. 2002. Nursing students' and clinical educators' perception of characteristics of effective clinical educators in an Australian university school of nursing. *Journal of Advanced Nursing*. 39: 412-420.
- Li, MK. 1997. Perceptions of effective clinical teaching behaviors in a hospital-based nurse-training programme. *Journal of Advanced Nursing*. 26: 1252-1261.
- LoBiondo-Wood, G. and Haber, J. 1994. *Nursing research: Methods, critical appraisal, and utilization*. (3rd ed.). Philadelphia: Mosby.
- Mogan, J. and Knox, JE. 1987. Characteristics of 'best' and 'worst' clinical teachers as perceived by university faculty and students. *Journal of Advanced Nursing*. 12(3): 331- 337.
- Mogan, J. and Warbinek, E. 1994. Teaching behaviors of clinical instructors: An audit instrument. *Journal of Advanced Nursing*. 20(1): 160- 166.
- Morgan, SA. 1991. Teaching activities of clinical instructors during the direct client care period: A qualitative investigation. *Journal of Advanced Nursing*. 16: 1238 - 1246.
- Nahas, VL., Nour, V. and AL-Nobani, M. 1999. Jordanian undergraduate nursing students' perceptions of effective clinical teachers. *Nurse Education Today*. 19: 634-648.
- Nehring, V. 1990. Nursing clinical teacher effectiveness inventory: A replication study of the characteristic of "best" and "worst" clinical teachers as perceived by university faculty and students. *Journal of Advanced Nursing*, 15: 934-940.
- O'Shea, HS. Parsons, MK. 1979. Clinical instruction: Effective/ and ineffective teacher behaviors. *Nursing Outlook*. 27: 411- 415.
- Polit, DF. and Hungler, BP. 1991. *Nursing research: Principles and methods*. (4th ed.). Philadelphia: Lippincott.

Reeve, MM. 1994. Development of an instrument to measure effectiveness of clinical instructor. *Journal of Nursing Education*. 33: 15-20.

Ripley, DM. 1986. Invitational teaching behaviors in the associate degree clinical setting. *Journal of Nursing Education*. 25: 240- 246.

Sellick, K. and Kanitasaki, O. 1991. A comparison of faculty and student perceptions of clinical nurse teacher behaviors. *The Journal of Advanced Nursing*. 9: 3-8.

Sieh, S. and Bell, SK. 1994. Perceptions of effective clinical teachers in associated degree programs. *Journal of Advanced Nursing*. 33(9): 389-394.

The American Heritage Dictionary. (2000). *The English language*, (4th ed.). Houghton: Mifflin.