# Comparing the Relationship between Iranian Clinical Educators' Teaching Behaviors and Undergraduate Nursing Students' Professional Behaviors

#### Abstract

Background: The effectiveness and efficacy of teaching behaviors by clinical educators need to be determined and applied in caring environments, wherein students' seminal Professional Behaviors (PBs) are being shaped. Here, we endeavor to compare the relationship between Iranian clinical educators' teaching behaviors and undergraduate nursing students' PBs. Materials and Methods: This descriptive correlational study was conducted on 189 students enrolled in the second, third, and fourth academic years at Urmia University of Medical Science in 2019. The instruments were the Nursing Students' PBs Scale (NSPBS) and the Nursing Clinical Teacher Effectiveness Inventory (NCTEI). Data were analyzed by Pearson correlations test and linear regression model. Results: A significant positive correlation between the NSPB and NCTE in the fourth year (r = 0.42, p = 0.001) was about twice as much as the second (r = 0.28, p = 0.017) and third ones (r = 0.28, p = 0.033). Nursing competency, teaching skills, and communication domains were respectively the most effective ones related to the second- (r = 0.35, p = 0.003), third- (r = 0.32, p = 0.015), and fourth-year NSPBs (r = 0.46, p < 0.001). Teaching skills and nursing competency domains had the lowest significant relationships with the second- (r = 0.25, p = 0.034) third-(r = 0.30, p = 0.023) and fourth-year NSPBs (r = 0.35, p = 0.006), respectively. Conclusions: The comparison between the two mentioned variables in the academic year can provide appropriate information about potential problems of clinical education to develop clinical facilitation models.

Keywords: Behavior, Iran, nursing faculty practice, students, professionalism

### Introduction

With respect to the scientific nature of nursing, special emphasis is typically placed on clinical learning in a well-designed format.[1] The effectiveness of clinical education for nursing students in all countries, matching the characteristics of each community, also requires fundamental changes enhance management status and to create opportunities for a platform-standardized evaluation.[2] After the Islamic Revolution of 1979, nursing education in Iran shifted from an internship model to an academic model. The progress in training nurses demanded the establishment of better principles to ensure that competent nurses would continue to improve their professional performances.[3] Thus, the proper training of nursing students in clinical environments, where they can acquire their significant clinical experiences, is a critical component of nursing educational curriculums. Clinical

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education should thus help nursing students attain the necessary professional skills during their training.[4] In this regard, nursing educators play a crucial role in the successful clinical education of students as they link theory and practice along with their educational, scientific, and accountability experiences.<sup>[5]</sup> In this process, various sociocultural, political, scientific, and technological factors may impede professional development and even behaviors in nursing students.<sup>[6]</sup> Recent studies have shown that educators' characteristics are one of the most important barriers to clinical education<sup>[7]</sup> and that the current clinical education fails to provide adequate flexibility for students' clinical competence.[8]

Competence as a behavioral characteristic can be developed based on individual interests and experiences affected by students' motivation and attitudes in clinical and educational settings. In addition, the

How to cite this article: Shafig A, Pourteimour S, Mazloumi A. Comparing the relationship between Iranian clinical educators' teaching behaviors and undergraduate nursing students' professional behaviors. Iran J Nurs Midwifery Res 2022;27:54-9.

Submitted: 25-Jul-2020. Revised: 26-Aug-2020. Accepted: 20-Jun-2021. Published: 25-Jan-2022.

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## Access this article online

Website: www.ijnmrjournal.net

DOI: 10.4103/ijnmr.IJNMR 117 20 **Quick Response Code:** 



main impacts of the mentioned parameter reflected in the principal skills of a person are professional responsibilities, autonomy, awareness of limits, explanation of nursing care standards to patients, respect for patients' rights, promotion of life-long learning, and maintenance of up-to-date knowledge and skills.[9] According to Yamani et al., teaching the principles of Professional Behaviors (PBs) by the relevant educators during educational programs has led to the great success of students in various areas of vocational education.[10] Research has also revealed that ignoring students' non-PBs is likely to create a culture of acceptable behaviors and cause inefficient communication in clinical environments.[11] In this sense, both students and educators were blamed for devaluating these professional principles<sup>[12]</sup> due to the failure of ethical codes related to clinical nursing education.[13]

Despite the delineation of perceptible features of an effective clinical educator, there are some performance gaps related to the inadequate professional preparedness of nursing graduates, [8,14] which may, over time, result in negative consequences, such as their burnout, reduction or loss of motivation and satisfaction toward their profession, and threats for nursing community and clients.[15] On the contrary, students should be endowed with enough capacities to develop proper behaviors during educational processes. Based on documented evidence, limited studies have been conducted in Iran till date, wherein the mentioned variables have been examined and described separately.[10,16] As a result, comparing the relationship between educators' clinical teaching behaviors and professional behaviors demonstrated by undergraduate nursing students in different academic years can help professional values and practices in clinical environments and, consequently, provide an efficient platform for planning future goals. Hence, this study was conducted to compare the relationships between Iranian clinical educators' effective teaching behaviors and undergraduate nursing students' PBs.

### **Materials and Methods**

This descriptive correlational study was conducted at Urmia University of Medical Sciences, Iran between October and December 2019. In total, 189 nursing students enrolled in the second (3<sup>rd</sup> and 4<sup>th</sup> semesters of study), third (5<sup>th</sup> and 6<sup>th</sup> semesters of study), and fourth academic years (7<sup>th</sup> and 8<sup>th</sup> semesters of study) were investigated through the census sampling method.

Based on the literature published in the English language for bachelor nursing students' perception toward effective clinical instructor's characteristics in the different regions, [5,17] the main criteria for inclusion were as follows. A minimum of two successful clinical internship credits (55-h credit over 3 weeks for each clinical internship of the curriculum) with the care of one patient under the direct supervision of expert clinical educators, and exposure with at least five clinical educators to gain

experience in hospital settings. The first clinical internship, entitled Medical-Surgical I, was conducted with a care plan and management of 1-2 patients per week, (including medical history, physical assessments, and specific nursing skills). The internship of Medical-Surgical II was completed by the theory of the same name in different units of the hospital (obstetrics, emergency, critical care, mental health, and community health clinical) based on the clinical rotation of the curriculum. First-year students were excluded due to the lack of hospital training experience to assess clinical instructor behaviors in the clinical environment. The unwillingness of the students to remain in the research and the incomplete questionnaires were considered as exclusion criteria. Among 200 eligible nursing students, 11 refused to fill out the relevant questionnaires for personal reasons. Of these 189 participants, 70, 58, and 61 students were from the second year, third year, and fourth year, respectively. After the agreement and consent of the faculty members. the data were collected face-to-face during the last day of the internship in 20 min in a quiet educational setting of the hospitals working second, third and fourth-year students. Moreover, due to the length of the questionnaires, they were able to individually deliver the questionnaires on the first day of the next internship to the project researchers.

Data collection tools administered in this study included the Demographic Characteristics Information Sheet (DCIS), the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) by Knox and Mogan (1985),<sup>[17]</sup> and the Nursing Students' Professional Behavior Scale (NSPBS) by Goz and Geckil (2010).<sup>[18]</sup> The DCIS contained the parameters of age, the overall Grade Point Average (GPA), gender, marital status, clinical work experience, residential status, having a nurse in one of their relatives, as well as interest in the nursing profession.

The NCTEI was also a self-administered research instrument consisting of 47 items, scored based on a seven-point Likert-type scale (never using = 1 to always using = 7). There are five subscales in this scale: teaching ability (17 items), nursing competence (nine items), evaluation (eight items), personality (seven items), and interpersonal relations (six items). The highest and lowest scores in the questionnaire were equal to 329 and 47, respectively. The results were additionally reported based on the mean score of each sub-scale. The Content Validity Index (CVI) and the Content Validity Ratio of the NCTEI were respectively confirmed to be over 0.70 and 0.99 by 20 faculty members of Shiraz Nursing and Midwifery School. Cronbach's alpha coefficient was additionally used to determine the reliability of the entire scale, as well as the subscales of teaching ability, nursing competence, evaluation, personality, and interpersonal relations, and the obtained values were in the range of 0.87–0.95.[2]

The NSPBS developed by Goz and Geckil (2010)<sup>[18]</sup> comprised 27 items with a five-point Likert-type

scale (never true = 1, always true = 5), wherein the lowest and the highest possible scores would be 27 and 135, respectively. In general, the stratified levels of professional behavior for nursing students could be designated as low (27–44.99), medium (45–89.99), and high (over 90). The content validity of the English versions of the NSPBS had been assessed in the preceding Iranian study. Face validity of Persian versions was tested during the translation process in the cognitive interviews. Therefore, the CVI of this scale (~0.81) was confirmed by 12 faculty members of Tarbiat Modarres University. Its reliability rate was calculated to be 76% according to Cronbach's alpha.<sup>[19]</sup>

Data were analyzed by SPSS software (version 16.0, SPSS Inc., Chicago, IL, USA) using descriptive statistics (frequency, percent, mean, and Standard Deviation (SD)) to determine the NCTE and the NSPB, the Kolmogorov–Smirnov test for normality, the statistic tests of one-way ANOVA, Chi-square test, Fisher's exact test, and Linear regression model with the significance level of p < 0.05.

#### **Ethical considerations**

After obtaining approval of the Ethics and Student Research Committee of Urmia University of Medical Sciences (Approval code: IR.UMSU.REC.1398.196), written informed consent was obtained from the participants before participating in the study. Additionally, research aims and procedures were thoroughly explicated to the participants while they were allowed to withdraw from the study at any possible stage. Next, all nursing students filled and signed informed consent.

# Results

Among 200 students, 11 nursing students refused to take part in this research for personal reasons. Finally, 189 participants (94.5% response rate) completed the

questionnaires; 70, 58, and 61 nursing students were enrolled in the second, third, and fourth academic year, respectively. The mean (SD) scores of students' age and overall grade point averages were 22.59 (1.75) and 15.93 (1.44), respectively. The majority of participants in the third and fourth year except for the second ones were male (55.22% and 57.40% vs. 41.40%). There were statistically significant differences between the groups in terms of age (p < 0.001), interest in the nursing profession (p = 0.001), and residential status (p = 0.005) [Table 1].

The mean score of the NCTEI in third-year students was higher than that for the second- and fourth-year students; however, the mean score of the NSPB in the fourth academic year was higher than that for the other years. In addition, the PB levels of the groups were high. Nevertheless, there were no statistically significant differences in the abovementioned variables among the groups (p > 0.05) [Table 2].

Regarding the results presented in Table 3, the positive correlation coefficient (r) between the NCTE and NSPB is statistically significant in the three groups (r = 0.42, p = 0.001). The higher and lower mean scores of PBs in the second academic year were respectively related to nursing competence (r = 0.33, p = 0.003) and teaching ability subscales (r = 0.25, p = 0.034), whereas these relationships were reversed in the third year (r = 0.30, p = 0.023 and r = 0.32, p = 0.015). Moreover, the domains of communication and professional competence respectively had higher and lower relationships with the NSPBs in the fourth year (r = 0.46, p > 0.001 and r = 0.35, p = 0.006) [Table 3].

According to Figure 1, the correlation coefficient of fourth-year students PB with NCTE was 0.194 ( $r^2 = 0.28$ ) and 0.176 ( $r^2 = 0.08$ ), respectively. These findings indicate that more than twice the PB of fourth-year

Table 1: Comparison of demographic characteristics of nursing students in three academic years (n=189)
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Variables		Year of study			Statistics	df	p		
		Two (n=70)	Three ( <i>n</i> =58)	Four (n=61)	of test				
Age, mean (SD*)		21.81 (1.37)	22.56 (1.21)	23.52 (2.11)	F=18.41	2	< 0.001		
GPA**, mean (SD)		16.07 (1.10)	15.91 (0.98)	15.78 (2.05)	F=0.64	2	0.529		
Gender, $n (\%)^{***}$	Female	41 (58.60%)	26 (44.80%)	26 (42.60%)	$\chi^2 = 3.96$	2	0.138		
	Male	29 (41.40%)	32 (55.20%)	35 (57.40%)					
Marital status, $n$ (%)	Single	63 (90%)	56 (96.70%)	55 (89.10%)	$\chi^2 = 4.46$	2	0.245****		
	Married	7 (10%)	2 (3.40%)	6 (9.80%)					
Clinical Work	Yes	13 (18.65%)	5 (8.60%)	11 (18.03%)	$\chi^2 = 2.92$	2	0.232		
Experience, $n$ (%)	No	57 (81.45%)	53 (91.40%)	50 (81.96%)					
Interest in the nursing	Yes	20 (28.60%)	34 (58.60%)	25 (40.98%)	$\chi^2 = 14.92$	2	0.001		
field, <i>n</i> (%)	No	50 (71.40%)	24 (41.40%)	36 (59.02%)					
Being a nurse in their	Yes	20 (28.60%)	16 (27.60%)	16 (26.65%)	$\chi^2 = 0.09$	2	0.956		
relatives, n (%)	No	50 (71.40%)	42 (72.40%)	45 (73.85%)					
Residential status, $n$ (%)	At home	31 (44.28%)	12 (20.68%)	14 (22.95%)	$\chi^2 = 10.61$	2	0.005		
	In dorm	39 (55.72%)	46 (79.32%)	47 (77.05%)					

<sup>\*</sup>SD: Standard deviation, \*\*GPA: The overall grade point average, \*\*\*n (%): Number (percentage), \*\*\*\*Fisher's exact test

Table 2: Comparison of the mean (SD) scores of the Nursing Clinical Teacher Effectiveness (NCTE) and the Nursing Students' Professional Behavior (NSPB) among the groups

Variables		Year of study	F	df		
	Two	Three	Four			
The NCTE, Mean (SD)	209.65 (58)	214.16 (38.84)	203.16 (50.32)	0.72	2	0.484*
The NSPB, Mean (SD)	109.04 (14.04)	108.65 (12.66)	110.80 (16.12)	0.387	2	0.680*

<sup>\*</sup>One-way ANOVA

Table 3: Comparison of correlation between the subgroups of the Nursing Clinical Teacher Effectiveness (NCTE) and the Nursing Students' Professional Behavior (NSPB) in the three groups

The subscales of the NCTE	Year of study								
	Two			Three			Four		
	Mean (SD)	r*	p	Mean (SD)	r*	p	Mean (SD)	r*	p
Teaching Ability	84.24 (20.30)	0.25	0.034	84.37 (13.07)	0.32	0.015	81.27 (19.69)	0.39	0.002
Nursing Competence	37.81 (11.08)	0.33	0.003	39.40 (6.91)	0.30	0.023	37 (9.51)	0.35	0.006
Evaluation	33.08 (11.08)	0.35	0.007	34.03 (7.52)	0.22	0.093	31.27 (9.54)	0.37	0.003
Interpersonal Relations	25.18 (8.98)	0.21	0.077	25.96 (5.43)	0.23	0.080	25.31 (7.62)	0.46	p<0.001
Personality	29.32 (10.11)	0.18	0.140	30.20 (6.24)	0.09	0.458	28.29 (8.36)	0.37	0.004
Total	209.65 (58.00)	0.28	0.017	214 (34.84)	0.28	0.033	203.16 (50.32)	0.42	0.001

<sup>\*</sup>Pearson Correlation test

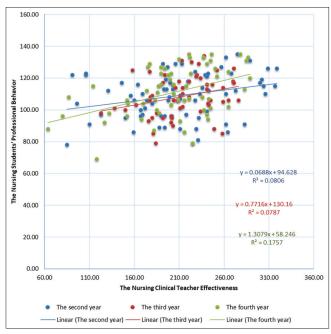


Figure 1: Comparing the scatterplot figure of the correlation between the Nursing Clinical Teacher Effectiveness (NCTE) and the Nursing Students' Professional Behavior (NSPB) in the second, third, and fourth academic years

nursing students (17.61%) compared to second-year students (8.10%) can be explained using the instructors' influential behaviors variable [Figure 1].

The results of the analysis of variance have been presented to validate the regression analysis. Considering the F values and the presented significance level, it could be stated that the results of the regression analysis are valid and significant ( $R^2 = 0.38$ ,  $F_{188} = 21.61$ , p < 0.001).

### Discussion

The aim of this study was to compare the association between effective clinical teaching behaviors and the NSPBs in three academic years. Clinical training categories as practical methods of clinical principles provide a broader perspective on the overall utilization of these behaviors than the exclusive response elements.<sup>[20]</sup> Even with the high levels of PBs in the study groups, the students enrolled in the third academic year reported that clinical educators had exploited more effective teaching behaviors in clinical conditions. However, they were not significant in the present study. These results had been further confirmed by several investigations. [21,22] However, Lovrić et al. (2017)[16] in Croatia found that the mean effectiveness of clinical educators' teaching behaviors in the second and third academic years had been statistically higher than that in the first one. The mentioned studies in different regions produced very different estimates about such behaviors.[16,20-22]

Based on the results of this study, nursing competency, teaching skills, and interpersonal communication by the clinical educators were strongly correlated with the NSPB in the second, third, and fourth academic years, respectively. However, teaching skills, nursing competency, and interpersonal communication domains had the weakest relationships with the PBs in the second-, third-, and fourth-year students, respectively. The students enrolled in the second and fourth academic years also had similar expectations about evaluation. The findings of this study are partly consistent with those of other investigations. [10,23,24] Nevertheless, Lovrić *et al.* [25] found that nursing students enrolled in the first academic year had more emphasized than the second-year counterparts on teaching skills,

evaluation, interactions with patients, personality, and interpersonal communication. In addition, in Jamaica, the second-year nursing students had correspondingly classified interpersonal and teaching skills as the most focal behaviors, while only third-year nursing students had emphasized evaluation practices and professional competence as the most significant behaviors. Personality traits were identified in both groups of nursing students as the least important characteristics among clinical educators. These findings might stem from the fact that the second-year students were at an early stage and their last-year counterparts were at the end of defining their competencies, which would affect their overall perceptions of the importance of educators' competencies.

There were some limitations in the study despite the measures taken to ensure its rigor. First, the current study was conducted with a limited number of nursing students in a small region in Iran. Thus, we should be careful in interpreting and applying the generalization of the findings to nursing programs in other countries. Hence, we suggest that a large-scale repetition study with a large sample size should be conducted to generalize the study results on a standard scale for separate implementation procedures. Second, based on the literature review, the mentioned variables were separately investigated in all nursing groups without comparing students' different academic years. This underlines the need to repeat the study and include alternative nursing programs and different levels of students. Finally, the mental state of the participants might affect their responses while completing the questionnaires. To prevent fatigue and intolerance in this process, the students completed the questionnaires in a quiet class in the hospital setting.

### **Conclusion**

From the conducted research, we conclude that there are specific and clear differences in the correlation between clinical teachers' effective behavior and the PB among second-, third-, and fourth-year undergraduate nursing students. While the nursing teachers should be able to model, teach, and assess effective student behavior, the school may not have the appropriate skills and guidelines to do so. Because of the critical collaboration of the perceived clinical behavior that instructors create in the integrated functions for the competencies of participants, our findings can provide a suitable framework for refining high standards of clinical behavior in the different years of nursing students. Indeed, it can impressively put forward a high satisfaction and constructiveness in nurse programs. To sum up, the current results point to the need for continuous monitoring, evaluation, and training by the clinical faculty to certify that the clinical training process is the most important. Quality education is a precondition for ensuring the quality of clinical practice and patient safety, which are priorities in daily health care.

### Acknowledgments

We would like to express our gratitude to all nursing students who participated in this study. The present study was based on a research project approved by the Ethics and Student Research Committee of Urmia University of Medical Sciences (Approval code: 2679).

### Financial support and sponsorship

Urmia University of Medical Sciences

#### **Conflicts of interest**

Nothing to declare.

### References

- Vogel D, Harendza S. Basic practical skills teaching and learning in undergraduate medical education-A review on methodological evidence. GMS J Med Educ 2016;33:Doc64.
- Camilla TZ, Sadat HF, Provane A, Zahra Y. Relationship between behavioral clinical behaviors of coaches with nursing students' learning in Shiraz university of medical sciences 2015. Iran J Nurs 2017;30:10-22.
- Ahmadi Chenari H, Zakerimoghadam M, Baumann SL. Nursing in Iran: Issues and challenges. Nurs Sci Quarterly 2020;33:264-7.
- Papastavrou E, Dimitriadou M, Tsangari H, Andreou C. Nursing students' satisfaction of the clinical learning environment: A research study. BMC Nurs 2016;15:44-54.
- Ismail LM-N, Aboushady RM-N, Eswi A. Clinical instructor's behavior: Nursing student's perception toward effective clinical instructor's characteristics. J Nurs Edu Prac 2016;6:96-105.
- Shohani M, Zamanzadeh V. Nurses' attitude towards professionalization and factors influencing it. J Caring Sci 2017;6:345-57.
- Moridi G, Khaledi S. The survey of facilitating and inhibiting factors of clinical education from the perspective of intern nursing students of faculty of nursing and midwifery. Sci J Nurs Midwifery Paramed Fac 2015;1:10-9.
- Sharghi NR, Alami A, Khosravan S, Mansoorian MR, Ekrami A. Academic training and clinical placement problems to achieve nursing competency. J Adv Med Educ Prof 2015;3:15-20.
- Fukada M. Nursing competency: Definition, structure and development. Yonago Acta Med 2018;61:1-7.
- Yamani N, Changiz T, Hosseiny SS, Hosseiny SS. Comparison of nurses' professional behaviour in the educational settings and the workplaces. Edu Res Med Sci J 2015;4:60-7.
- Raso A, Ligozzi L, Garrino L, Dimonte V. Nursing profession and nurses' contribution to nursing education as seen through students' eyes: A qualitative study. Nurs Forum 2019;54:414-24.
- Yavari N, Asghari F, Shahvari Z, Nedjat S, Larijani B. Obstacles of professional behavior among medical trainees: A qualitative study from Iran (2018). J Edu Health Promotion 2019;8:193.
- Sanner-Stiehr E, Ward-Smith P. Lateral violence in nursing: Implications and strategies for nurse educators. J Prof Nurs 2017;33:113-8.
- Andersen P, McAllister M, Kardong-Edgren S, Miller CW, Churchouse C. Incivility behaviours exhibited by nursing students: Clinical educators' perspectives of challenging teaching and assessment events in clinical practice. Contemp Nurs 2019;55:303-16.
- Khachian A, Farahani MA, Haghani H, Tameh MA. Evaluation nurses' professional behavior and its relationship with organizational culture and commitment in 2015. Int J Med Res

- Health Sci 2016;5:247-52.
- Lovrić R, Prlić N, Barać I, Radić R. Nursing students' expectations and evaluations of mentors' competences and mentors' self-evaluations as indicators of mentoring process quality. Am J Nurs Sci 2017;6:382-6.
- Knox JE, Mogan J. Important clinical teacher behaviours as perceived by university nursing faculty, students and graduates. J Adv Nurs 1985;10:25-30.
- Goz F, Geckil E. Nursing students professional behaviors scale (NSPBS) validity and reliability. Pak J Med Sci 2010;26:938-41.
- Nabavi FH, Rajabpour M, Hoseinpour Z, Maslakpak MH, Hajiabadi F, Mazlom SR, et al. Comparison of nursing students' professional behavior to nurses employed in Mashhad university of medical sciences. Iran J Med Edu 2014;13:809-19.
- Bifftu BB, Dachew BA, Tiruneh BT, Ashenafie TD, Tegegne ET, Worku WZ. Effective clinical teaching behaviors views of nursing students and nurse educators at University of Gondar, Northwest Ethiopia: Cross-sectional institution based study. J Caring Sci 2018;7:119-23.
- Ludin SM, Fathullah NMN. Undergraduate nursing students' perceptions of the effectiveness of clinical teaching behaviours

- in Malaysia: A cross-sectional, correlational survey. Nurse Educ Today 2016;44:79-85.
- Dasila Prabha K, Veer Bharti V, Ponchitra R, Divjya K, Singh J. Perceptions of nursing students on clinical teaching behaviors of teaching faculty: Correlational survey design. J Nurs Health Sci 2016:5:37-41.
- Sabog R, Caranto L, David J. Effective characteristics of a clinical instructor as perceived by BSU student nurses. Int J Nurs Sci 2015;5:5-19.
- Panlican AS, Al Saqri S, Raguindin S, Villacorte L, Pangket P. Students and teachers' perception of an effective clinical nurse teacher characteristics: A comparative study. J Nurs Edu Prac 2020;10:48-53.
- Lovrić R, Prlić N, Barać I, Plužarić J, Pušeljić S, Berecki I, et al. Specificities and differences in nursing students' perceptions of nursing clinical faculties' competences. J Profes Nurs 2014;30:406-17.
- Hewitt-Thompson K, Rae T, Anderson-Johnson P. A descriptive, cross- sectional study analyzing the characteristics of an effective clinical instructor: Perceptions of Baccalaureate nursing students. Inter J Nurs Stud 2016;3:20-9.