Original Research Article

The Variance of Professional Attitude in Nursing Students: The Role of Nursing Education in This Variance

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ABSTRACT

Background: The present study aims to review the variance in professional attitudes of nursing students during their education and to evaluate the role of undergraduate education in this variance.
Methodology: A number of 251 students (160 were at first grade and 91 were at second grade) studying at Nursing Department in Sakarya University School of Health, who were voluntary to participate in the study comprised the sample of this research conducted on a descriptive and sectional pattern. Data were collected using the student-description form and the Professional Attitude Scale for Nursing Students developed by Hisar et al., (2010) in our country. The analysis of data included the number, percentage, standard deviation, significance test for difference between two averages and Pearson's correlation analysis.
Results: The total mean score of the students was 105.58 ± 12.20, with those studying at the first grade and the fourth grade of 102.27 ± 12.55 and 108.32 ± 11.70, respectively. There was a significant difference between the total mean score according to the level of grade and "autonomy", "competence and continuing education" and "codes of ethics and theory" subscales ($p > 0.05$). The students who were consent to have chosen the profession of nursing showed significantly higher levels of professional attitudes compared to those without consent ($p > 0.05$). According to the study results, it can be said that the professional attitudes of nursing students increased in the final grade students with differentiating based on their occupational satisfaction levels.
Conclusions: These findings demonstrate the importance of the educational process in the school in developing professional identity.

Keywords: Nursing students, professional attitude, graduate education.

INTRODUCTION

The development of professional identity of nurses starts with the onset of nursing education and mostly finalizes by the end of school education. [1,2] Members of nursing profession can only be reinforced during a period starting from school education to developing professional identities in nurses. Therefore, the education system has an important and efficient role in developing professional identity. [3]

Nursing education differs in the Europe; however, the European Parliament has recently set the minimum requirements for nursing education. [4] The nursing schools complying with these standards in Turkey include in their curriculum of some lessons intended for developing occupational knowledge, values and behaviors as well. In addition, although the main purpose of undergraduate programs is concerned with nursing such as medical and surgical care, it also focuses on many

aspects of professionalism such as autonomy. [5,6] Thanks to these lessons, it is believed to provide students with cognitive, emotional and practical knowledge and skills, thus increasing the status of nursing as an occupation. [7,8] However, as shown in many studies, the profession of nursing does not provide all the criteria particularly in the context of educational status, professionalism, knowledge and occupational autonomy. Thus, it is not an easy task to reach the objective of increasing the status of the profession. [5,6 ,9 ,10] Besides, the results of limited studies suggest that the professional levels of nursing students are fairly low. [11,12] One reason to these low levels is considered to be not only the poor quality of education level, but also the educational programs prepared unsatisfactorily. [13] On the other hand, professional values are not sufficiently addressed in undergraduate-level education. [6,11,12]

Although undergraduate programs have begun in 1955, and master's and doctoral programs in 1965 for nursing education in Turkey, nursing education is still not entirely limited to the universities. [14] Nurses are graduated either from medical career colleges, or two-year associate degree programs, or four-year undergraduate programs. Unfortunately, there had been no distinction about the duties and responsibilities of nurses graduated from these schools until 2007. [9] However, with the regulations issued in 2007, the primary education for nursing was moved up undergraduate level, and all medical career colleges related to nursing education were decided to be closed down by the year 2015. [15] The minimum standards for nursing education in Turkey were set in compliance with the EU Legislation in 2005. [13] Accordingly, the theoretical content of about 4600 hours in the curriculum for nursing education directly serves for supporting the professional knowledge and approach. The primary curriculum and the subjects that should be included were also established in nursing education. Besides, efforts have recently been made by preparing the core nursing curriculum for the purpose of standardizing the education in national nursing schools in Turkey. [16]

The main point for developing professionalism in nursing is the internalization process. [9] The professional attitudes of students will positively be affected by training and guiding them towards professionalism throughout their nursing education. [11,12,17] Developing professional approaches would enhance the psychomotor skills and professional knowledge of students. Therefore, a professional approach has a significant effect on the development of nursing students and the future of nursing care quality. [9,11] Professionalism is of great importance in establishing the related standards of the occupation and the quality of patient care. [18] Hence, professionalism leads to improved patient care and increased occupational satisfaction among nurses. [19]

There are only few studies investigating whether the nursing students bear the features that professional nurses should have. [8,9,13,20] Furthermore, there are limitations resulted from such a smaller size of sampling that is not sufficient to generalize, and from only focusing on same aspects of professionalism. Again, in this study, another remarkable point is that the current study was carried out only in the final grade students. The aim of this study was to comparatively examine any variation in professional attitudes between the first grade and final grade nursing students, and to evaluate the role of undergraduate education in this variation. Any results obtained from the study will suggest the professional attitudes of nursing students in a comparative manner. Therefore, the results will contribute to planning the service delivery of universities including education for nursing, research centers and professional organizations.

MATERIALS AND METHODS
Setting and Sample
A number of 251 students (160 were first grade and 91 were second grade) studying at Nursing Department in Sakarya University School of Health, who were voluntary to participate in the study comprised the sample of this research conducted on a descriptive and sectional pattern.

Instruments
Data were collected using the student-description form and the Professional Attitude Scale for Nursing Students developed by Hisar et al. [9] in Turkey.

Student-Description Form
A descriptive information form was composed by researcher for the purpose of obtaining socio-demographic features of the participants.

Inventory to Measure Professional Attitudes in Student Nurses (IPASN)
This scale was a 5 point Likert-type self-assessment scale with 28 items, each of which was required to be evaluated by the participants according to the options of "5-I agree completely", "4-I agree partly", "3-I am not certain", "2-I do not agree", and "1-I do not agree at all". The ratings of each item were included in the calculation. However, the items 10, 11, 12, 13, 14, and 20 were scored in a reverse direction. The scale was stratified into 8 sub-groups including "contributing to the enhancement of scientific information", "autonomy", "cooperation", "competence and continuing education", "participating in professional organizations and professional development", "working in community service", "social service", and "codes of ethics and theory". Increased total score was an indication of good professional attitudes.

Ethical Issues
First of all, permission was received from the author via sending an e-mail in order to use the scale in this study. To initialize the research, written permissions from the related institutions (in accordance with the law no. *2016-34671234/044*) and verbal approvals from the students were obtained providing information about the current research and data collection tools.

Data Analysis
The data were evaluated using the SPSS version 16.0 program (SPSS Inc., Chicago, IL, USA). Numbers, percentage, mean, Standard deviation and Cronbach's alpha reliability coefficient were calculated in the analysis of data. The total mean score was calculated from the scale, with data being applied the test of normality to determine the conformance of scale scores to normal distribution. According to this analysis, as the scale scores were found to have a normal distribution (Kolmogorov-Smirnov Z=2.304, p>0.05), the Independent t test and Pearson's correlation analysis were performed in order to examine the difference between the independent variables, and the total and subscale scores during the analysis of data. P < 0.05 was considered as statistically significant.

RESULTS
Some descriptive characteristics of the students participated in the study were given in Table 1.

Table 1: Distribution of some descriptive characteristics related to the students participated in the study

Characteristics	N	%
Academic average=2.79±0.63		
Gender		
Female	191	76.1
Male	60	23.9
Class levels		
Class I	160	63.7
Class IV	91	36.3
Occupational status as a nurse		
Yes	14	5.6
No	237	94.4
Satisfied with being a nurse		
Yes	178	70.9
No	73	29.1
Reasons for choosing the nursing profession *		
Ease of finding a job	131	52.2
With the request of my family and friends	73	29.1
Voluntarily	136	54.2
Participating in professional activities related to nursing		
Yes	100	39.8
No	151	60.2
Participating in social activities related to nursing		
Yes	36	14.3
No	215	85.7
TOTAL	**251**	**100.0**

The respondents gave more than one answer.

The academic grade point average of the students enrolled in the study was 2.09 ± 0.63, and it was found that 63.7% were first grade, whereas 36.6% were fourth grade students, 76.1% were female, 5.6% were currently working as nurses, and 70.9% were content with being nurse. It was also suggested that 52.2% of the students preferred the nursing profession due to ease of finding job, 39.8% participated to a professional activity related to nursing (scientific meetings, etc.), and 14.3% participated to a social activity.

The total scale score of the students was 105.58 ± 12.20. When examined the subscales, it was found that "contributing to the enhancement of scientific information" was 21.27 ± 5.40, "autonomy" was 13.92 ± 21.73, "cooperation" was 11.89 ± 4.60, "competence and continuing education" was 13.52 ± 2.38, "participating in professional

organizations and professional development" was 11.89 ± 2.71, "working in community service" was 7.83 ± 1.90, "social service" was 12.39 ± 2.60, and "ethical codes and theory" was 12.85 ± 3.33 (Table 2).

Table 2: Distribution of mean scores obtained from IPASN and Subscales

IPASN and Subscales	Number of items	X±SD
Contributing to the enhancement of scientific information	6	21.27±5.40
Autonomy	3	13.92±21.73
Cooperation	6	11.89±4.60
Competence and continuing education	3	13.52±2.38
Participating in professional organizations and professional development	3	11.89±2.71
Working in community service	3	7.83±1.90
Social service	2	12.39±2.60
Codes of ethics and theory	3	12.85±3.33
IPASN Total	**28**	**105.58±12.20**

IPASN: Inventory to Measure Professional Attitudes in Student Nurses

Table 3: Comparison of mean scores for the students obtained from IPASN Total and Subscales by Class Level

IPASN and Subscales	Contributing to the enhancement of scientific information	Autonomy	Cooperation	Competence and continuing education	Participating in professional organizations and professional development	Working in community service	Social service	Codes of ethics and theory	IPASN Total
Class level	**X±SD**	**X±SD**	**X±SD**	**X±SD**	**X±SD**	**X±SD**	**X±SD**	**X±SD**	**X±SD**
Class I	21.02±5.14	13.37±2.10	11.08±4.74	12.93±2.85	12.02±2.58	7.97±1.82	12.11±2.15	11.21±2.47	102.27±12.55
Class IV	20.79±5.15	15.23±1.40	11.54±5.34	15.05±1.90	11.65±2.93	7.59±2.03	12.03±2.32	13.21±367	108.32±11.70
Statistical analysis[1]	t=0.859 p=0.391	t=3.863 p=0.001*	t=0.859 p=0.374	t=2.993 p=0.003*	t=1.026 p=0.306	t=1.527 p=0.128	t=1.026 p=0.123	t=2.287 p=0.023*	t=3.021 p=0.002*

*IPASN: Inventory to Measure Professional Attitudes in Student Nurses, 1=Independent t test,*p<0.05.*

When examined Table 3, the total mean score of the scale was found 102.27 ± 12.55 in the first grade and 108.32 ± 11.70 in the fourth grade students. Significant differences were found between the total mean score of the students by their class level and some of the subscales such as "autonomy", "competence and continuing education" and "codes of ethics and theory" (p>0.05). Thereby, a positive change in the fourth grade students' professional attitudes was found.

There was no significant difference in IPASN total mean score regarding to the students' gender, currently working as a nurse, and participating to a professional or social activity on nursing. However, those who were satisfied to have chosen nursing

showed significantly higher levels of professional attitude, compared to those without satisfied (p>0.05) (Table 4).

Table 4: Comparisons of IPASN total mean score of the students by some of their descriptive characteristics

Characteristics	N	X±SD	t*	p
Gender				
Female	191	105.95±12.08		
Male	60	104.45±12.62	0.828	0.408
Occupational status as a nurse				
Yes	14	105.29±9.32		
No	237	105.61±12.37	0.096	0.924
Satisfied with being a nurse				
Yes	178	106.71±11.75		
No	73	102.86±12.93	2.285	0.023**
Participating in professional activities related to nursing				
Yes	100	107.01±12.68		
No	51	104.65±11.83	1.504	0.134
Participating in social activities related to nursing				
Yes	36	105.00±14.04		
No	215	105.69±11.90	0.313	0.755

*IPASN: Inventory to Measure Professional Attitudes in Student Nurses, *Independent t test, **p<0.05.*

DISCUSSION

The development of Professional identity in nursing is substantially finalized by the end of school education. [1,2] Therefore, school education is an important factor in positive development of Professional identity, making a contribution to developing positive occupational perceptions and thoughts. [21] In this study that aims to examine the variance in Professional attitudes of nursing students related to the nursing profession during their educational process, the professional attitude levels of the students (105.58±12.20) were found to be above the medium-level, when considered the highest possible total score of 140 that could be obtained from the scale used for data collection. According to these results, it can be said that the professional attitudes of students in the study were partly positive. There are also some studies supporting this finding in the literature. In the studies of Karadağ et al. [13] using the same instrument in our country, the levels of professional attitudes in the final grade nursing students were reported to be higher (113.6 ± 15.0). In a study of Atalay, [22] it was also indicated that 96% of the nursing students attended social organizations, 85.3% subscribed to a nursing magazine, and 70% attended occupational organizations.

The mean score of the autonomy subscale is shown to be high (13.92 ± 21.73) in the study. According to this result, the education received may be suggested to have a substantial enhancement of their autonomic characteristics. Likewise, Karagözoğlu [8] reported that the autonomy levels of students were found to be high in a study examining the autonomy levels of nursing students who were receiving undergraduate education. In a study of Kaya et al, [23] it was found that the undergraduate nursing students had autonomic personality characters above medium-level. However, comparative studies conducted with different student groups suggested that the autonomy levels of nursing students were low in general. [22,24] Another study revealed

that the autonomy levels of nursing students were relatively low compared to those studying at educational sciences, social sciences, natural sciences and economics. [24] In the literature, it has been emphasized that the nursing students are more reliant and obedient, and therefore their autonomy levels have not sufficiently been developed, compared to those studying at other programs. [8,20] In a study, Howkins and Ewens [25] highlighted that the students particularly addressed to the importance of autonomy, political awareness and teamwork in their attitudes towards professionalism. Autonomy is one of the important criteria for professionalism, and an essential component of decision-making. [26] However, the study results indicated that the autonomy levels of nurses were lower. [5,27,28] Yet, another important point in this study was higher levels of the students' autonomy levels. According to the literature, new graduate nurses will positively affect their colleagues in terms of autonomy levels. [8,20] In our study, the participation level of students to occupational organizations was found to be low (11.89 ± 2.71). Similarly, Karadağ et al. [13] reported, in their study, that the final grade students at nursing had low levels of participation to occupational organizations. Today, the nurses not only are expected to care patients, but also to participate occupational organizations and political activities as well. [29] The first professional society by nurses in Turkey was established under the name of "Turkish Society of Nursing (TSN)" in 1933, and there are currently 23 specialized societies of nursing today. [18] However, it can be stated that the attendance rate of students to professional organizations is very low, and that their awareness towards professionalism is under-developed. Further studies are needed on how students should exhibit more positive attitudes for attendance to professional organizations.

In this study, it was found that the final grade students had significantly higher scores in professional attitude (108.32 ±

11.70) than those of the first grade students (102.27 ± 12.55). Besides, the subscale scores of final grade students in "autonomy", "competence and continuing education" and "codes of ethics and theory" were found to be higher than the first grade students. In the literature, Karaöz [30] stated that the nursing courses contributed to enhance the professional identities and professional images of the students in a study supporting our results. Park, Chapple, Wharrad and Bradley [31] found in their study conducted by newly graduated nurses that most of these nurses had self-confidence and self-motivated through making career in the nursing profession. Secret et al. [32] also reported that the perspective of nursing students on professionalism was significantly different between the first grade and final grade students. These results were found to consist with our findings, and a positive change was remarked in professional attitudes of the final grade students over the years. It was considered as an important finding of our research in that it revealed the importance of educational process in developing professional identity. However, we believe that this change has not reached the desired level.

In this study, it was found that the majority of the students (70.9%) were content with the nursing profession, and that their levels of professional attitude were significantly higher than those without content (p>0.05). Based on these findings, the professional identities can be said to have developed in a more positive manner for the students who have internalized the principles and norms of the profession, as well as its values, and who have adopted the profession of nursing during the educational process at school.

CONCLUSION

According to this study results, it can be said that the professional attitudes of nursing students increased in the final grade students with differentiating based on their occupational satisfaction levels. These findings demonstrate the importance of the educational process in the school in developing professional identity. In this context, considering that the professional nursing application would not be possible without the development of professional identity in the nurses and the said process constitutes a basis for the professionalization of nursing, the nursing schools are recommended to continuously update their curriculum in order to develop professional identity-rich nurses in accordance with the necessities of the time. On the other hand, it seems to be important to reach more students by way of common awareness meetings to be held between the occupational organizations and nursing schools, as well as to support attendance of students to national / international scientific activities. In addition, training programs can be held before graduation for the purpose of enhancing the professional levels nursing students by way of qualitative studies examining opinions and attitudes of more students.

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REFERENCES

1. Deppoliti, D. Exploration how new registered nurses construct professional identity in hospital settings. The Journal of Continuing Education in Nursing. 2008; 39(6):255-262.
2. Gregg, MF, Magilvy, JK. Professional identity of Japanese nurses: Bonding in to nursing. Nursing & Health Sciences. 2001; 3(1): 47-55.
3. Cook TH, Gilmer MJ, Bess CJ. Beginning students' definitions of nursing: An inductive frame work of professional idenity. Journal of NursingEducation.2003; 42(7): 311-317.
4. Directive, 2005. 2005/36/EC of The European Parliament and of the Council on the recognition of the professional

qualifications, [Internet]. 2013 [cited 2015 Nov 14]. Available from http://eurlex.europa.eu/LexUriServ/Lex UriServ.do?uri=OJ:L:2005:255:0022:01 42:en:PDF

5. Karadağ A, Hisar F, Elbaş NÖ. The level of professionalism among nurses in Turkey. Journal of Nursing Scholarship.2007; 39(4):371-374.

6. Çelik S, Hisar F. The Influence of the professionalism behaviours of nurses working in health instutiations on job satisfaction. International Journal of NursingPractice.2012; 18(2):180–187.

7. Atalay M, Tel H. Bachelor's education in nursing in then extcentury. C.Ü. Journal of School of Nursing2009; 3:48-56 (in Turkish).

8. Karagözoglu, S. Nursing students' level of autonomy: a study from Turkey. NurseEducationToday.2009; 29(2):176-87.

9. Hisar, F, Karadağ A. Determining the professional behavior of nurse executives. Intational Journal Nursing Practice. 2010; 16(4):335-341.

10. Scott, SD. 'New professionalism' - shifting relationships between nursing education and nursing practice. NurseEducationToday.2008; 28: 240-245.

11. Zhang, HF, Petrini MA. Factors influencing Chinese undergraduate nursing students' perception of the nursing profession. International NursingReview.2008; 55(3):274-280.

12. Bang KS, Kang JH, Jun MH, Kim HS, Son HM, Yu S, Kwon MK, Kim JS. Professional values in Korean under graduate nursing students. Nurse EducationToday.2011; 31(1):72-75.

13. Karadağ A., Hisar F, Çelik B, Baykara ZG. Determining professionalism in Turkish students nurses. Journal of Human Sciences.2016; 13(1):674-682.

14. Kukulu K. Nursing in Turkey. Nurse Educator.2005; 308(3):101-103.

15. Nursing Law, 2007. Internet]. 2015 [cited 2015Dec 8]. Available from Available from URL: http://www.mevzuat.adalet.gov.tr/html/ 976.html. Accessed 11 january 2013. (in Turkish)

16. HUÇEP YÖK Hemşirelik Ulusal Çekirdek Eğitim Programı (HUÇEP)

Komisyon Raporu 2002 (YÖK'ün Üniversitelereğönderdiği 16.09.2003-019528 no'luyazısı). (In Turkish).

17. Hsieh SI, Hsu LL. An outcome-based evaluation of nursing competency of baccalaureate senior nursing students in Taiwan. Nurse Education Today.2013; 33 (12):1536-1545.

18. Dikmen, Y, Yönder M, Yorgun S, Usta YY, Umur S, and Aytekin A. Hemşirelerinprofesyoneltutumlarıilebun uetkileyenfaktörlerinincelenmesi. Journal of Anatolia Nursing and Health Sciences.2014; 17(3).158-164.

19. Kwon MK, Kim JS. Professional values in Korean under graduate nursing students. NurseEducationToday.2011; 31(1):72-75.

20. Karagözoglu S. Level of autonomy of Turkish students in the final year of university baccalaureate degree in health-related fields. Nursing Outlook.2008, 56(2):70-77.

21. Sabancıoğulları S, Doğan S, Bircan H. Professional self-concept scale in clinician nurses; development, reliability, validity. Turkiye Klinikleri Journal of Nursing. 2011, 3(1):16.

22. Atalay E, Güler N, Özlü S, Demir Ş, Karadağ A. Opinion of final year nursing students on: professionalism. 3. International Student Nursing Congress. Abstract Book, Turkey: Odak Press, (in Turkish) 2004.p.92.

23. Kaya N, Aştı T, Acaroğlu R, Kaya H, Şendir M. Hemşire öğrencilerin sosyotropik-otonomik kişilik özellikleri ve ilişkili faktörlerin incelenmesi. C.Ü. Hemşirelik Yüksekokulu Dergisi.2006; 10(3):1-11.

24. Boughn SA. A lack of autonomy in the contemporary nursing student: a comparative study. Journal of NursingEducation.1988; 27(4):150-155.

25. Howkins EJ, Ewens A. How students experience professional socialisation. International Journal of Nursing Studies. 1999; 35:41-49.

26. Cerit B, Dinç L. Ethical decision-making and professional behaviour among nurses: a correlational study. Nurs Ethics. 2013; 20(2):200-12.

27. Karadağ A, Hisar F, Elbaş NÖ. Hemşirelikte Profesyonelliğe İlişkin

Davranışsal Envanter. Hemşirelik Forumu.2004; 7(4):14-22.

28. Kavaklı Ö, Uzun Ş, Arslan F. Yoğun Bakım Hemşirelerinin Profesyonel Davranışlarının Belirlenmesi. Gülhane Tıp Dergisi.2009; 51:168-173.

29. Oweis AI. Bringingthe Professional Challenges for Nursing in Jordan to Light. Int J Nurs Pract. 2005; 11(6):244-9.

30. Karaöz S. Hemşirelik öğrencilerinin eğitimleri sırasında mesleğe ilişkin algılarındaki değişimin incelenmesi: Hemşireliğe giriş dersinin bu değişimdeki rolü. C. Ü. Hemşirelik Yüksek Okulu Dergisi.2002; 6(2):10-20.

31. Park JR, Chapple M, Wharrad H, Bradley S. Early nursing career experience for 1994-2000 graduates from the University of Nottingham. Journal of Nursing Management.2007; 15(4):414-23.

32. Secrest JA, Norwood BR, Keatley VM. "I was actually a nurse": the meaning of professionalism for baccalaureate nursing students. Journal of Nursing Education.2003; 42(2):77-82.

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