Predictive Variables of Professionalism Among Nurse Educators of Nothen Indian States

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Abstract

Patients must be cared by nurses who are not only competent but also behave professionally. Nursing is considered as highly respected profession in Society. Nurse educators are in the unique position to inculcate professional values in the education, practice and also among students. A cross-sectional descriptive survey was planned to determine the predictive variables of professionalism among nurse educators working in selected northern Indian states. A total of 343 samples were recruited using maximum variation sampling from the 37 institutions of 23 districts of the selected states. Flexner criterion of professionalism was used to assess the professionalism of nurse educators. Likelihood ratio test (logistic regression analysis) revealed the predictive variables of professionalism that include professional experience, qualification, nature of college management and its duration of establishment, post graduate institutions and institutions attached with own medical college. The study was concluded that number of personal, professional and organizational variables determine the professionalism of the nurse educators.

Keywords: Professionalism; Nurse educators; Predictive variables; North Indian states; Flexner criteria; Professional behavior

Introduction

Nursing practice is a commitment to compassion, caring and strong ethical values; continuous development of self and others; accountability and responsibility for insightful practice; demonstrating a spirit of collaboration and flexibility [1]. Nurses who value professionalism exhibited adherence to practice standards and technical (psychomotor) competence [2]. Professionalism is defined as the conceptualization of obligations, attributes, interactions, attitudes, and role behaviors required of professionals in relationship to individual clients and to society as a whole [3].

Adams, Miller and Beck reported that nursing professionalism requires nurses to demonstrate specific behaviours that illustrate the beliefs of the nursing profession [4]. These behaviours encompass the knowledge, attitudes and skills that represent the professional identity of nurses and their commitment to the profession [5].

European commission's report "communication on teacher education" stated that teacher's quality is significantly and positively correlated with pupil attainment. Teachers help in shaping and reshaping the society and determine the quality of life in the community and the nation. Most effective way to develop good students in a dynamic and changing environment is to begin with a well-developed education program and continue throughout career with long learning opportunities. Each society, therefore, should make some provision for good education and continuous professional development of teachers and students in order to help them contribute in the growth of society. There is ample empirical research evidence to suggest that students' professionalism is significantly related to the professional values and preparation of teachers [6].

Review of Literature

In 1984, Barbara Kemp Miller developed a model entitled the "Wheel of Professionalism in Nursing" to explore the concept of professionalism. This model was created in response to nurse's need to recognize attributes and behaviours necessary for the nursing professionalism [7].

Baumann and Kolotylo [8] have developed 'The professionalism and environmental factors in the workplace questionnaire' (PEFWQ) to examine professionalism and environmental attributes that may influence professionalism of nurses at their workplace.

Ghadirian et al. [9] followed Rodgers' evolutionary method of concept analysis and revealed that nursing professionalism is determined by three attributes i.e., cognitive, attitudinal, and psychomotor. In addition, the most important antecedents' concepts were demographic, experiential, educational, environmental, and attitudinal factors.

Dikmen et al. [10] studied nurse's professionalism using Behavioural Inventory Form for Professionalism in Nursing (BIPN). The result showed that the areas with the highest levels of professional behaviour were competence and continuing education. The professionalism levels for nurses were the lowest in the areas of autonomy, publication and research. Study concluded that the arrangement of the nurse's working conditions affects their professional behaviours. Hasandoost et al. [11] revealed that the factors such as age and year of nursing experience affect nurse's level of professionalism. Çelik and Hisar [12] found the positive relationship between job satisfaction and professionalism among nurses. Kim-Godwin et al. [13] explored the variables predicting professionalism among nurses includes membership in organization and total year of nursing experience.

Kwon et al. [14] revealed the significant relationship between nursing professionalism, nursing performance, job satisfaction and retention intention among clinical nurses. The nursing professionalism was identified as a predictor of nursing performance, job satisfaction, and retention intention. It was further stated that nursing shortage becomes more and more problematic issue for professionalism in this era.

Wynd [15] used Hall's Professionalism Inventory scale to measure professionalism among 774 registered nurses licensed in the American state of Ohio and revealed that membership in professional organizations and years of experience as an RN to be the most significant predictors of total scores of professionalisms. Hampton and Hampton [16] conducted an exploratory study on the level of professionalism among certified- nurse midwives (CNMs) and revealed causal relationship between reward structure, education levels of CNM and level of professionalism.

Hungler et al. [17] conducted a survey with the purpose to investigate the relationship between a nurse's area of functional preparation in master's degree program and the individual's' levels of professionalism. The independent variable of the study was functional area of preparation in master's program. The dependent variables become enrolment in a formal program of study, subscription of professional journals, attendance at non- formal educational programs, number of authored publications, Membership in professional organization and employment in prepared area, as these seemed to reflect the criteria of professionalism explicated by Flexner. The result revealed significant association between professionalism and graduate specialty. Post graduates prepared as teachers met Flexner's' criteria more often than those post graduates who prepared as clinical specialist.

Objective

To determine the predictive variables of professionalism among nurse educators

Hypothesis

H_0: There is no difference between the null model and final regression model to determine the predictive variables of professionalism among the nurse educators at 0.05 level of significance.

H_0: The regression model is adequately fit to determine the predictive variables of professionalism among the nurse educators at 0.05 level of significance.

Materials and Methods

Design and sample

This study employs cross sectional descriptive survey design to determine the predictive variables of professionalism among nurse educators working under various nursing educational institutions of selected north Indian states (Punjab, Haryana and Rajasthan). Ethical permission was obtained from the IEC of saraswati nursing institute,

Kurali. 343 nurse educators from 37 nursing institutions were selected based on power analysis, using maximum variation sampling.

Data collection

From February through July 2018 data was collected by the investigator. Institutions in each predetermined state-wise zone were listed and principals were requested for permission of data collection. Principals were also requested to provide a person from their institutions who can help and coordinate between researcher and the prospective participants of the study. Study tools in most of the institutions were sent along with the return addressed envelope via registered parcel service of Indian post office. A total of 388 questionnaires were distributed from that 343 completed questionnaires were received. A standardized criterion of professionalism developed by Flexner was used to assess the nurse educator's level of professionalism. Tool consist of six criteria that includes Conference/workshop participation in last one-year, Authored publications, Membership of professional organization/s, Participation in continuous nursing education program/s, Subscription of professional journals and Advance course in nursing skills. Dichotomous response (yes/no) for each item was framed where scores for the entire scale may range from 0 to 6, with higher scores indicative of higher level of professionalism. Data related to socio-demographic/ professional and organizational characteristics of study participants were collected. Implied consent was obtained from the subjects. The statistical analysis program SPSS Version 22 was used to analyze the data.

Data analysis

Data was checked for outliers, wild codes, irregularities and internal consistency by testing compatibility of data within participants. Frequency distribution on variable-variable basis was performed to assess the extent of and patterning of missing values. Overall the percentage of missing data was very less (less than 3%). Data quality was also checked in terms of limited variability and extreme skewness. Descriptive statistics i.e., frequencies, mean, median, percentage, and standard deviation and inferential statistics i.e., One-way ANOVA and multiple nominal regression was used to analyze data. Two-sided significance tests were used throughout and the level of significance was set at <0.05.

Findings

Sample characteristics

Demographic characteristics of study subjects revealed that majority (67.9%) of the survey participants were female whereas 110 (32.1%) were male. Most of the subjects (86.8%) were from medical background and more than half (52.18%) were having post graduation or above degree in nursing. Majority (76.0% and 71.72%) completed their final degree of nursing from private institution and had up to 5 years of professional experience at their credit respectively (Table 1).

Demographic variables	State			Total
	Punjab f (%)	Haryana f (%)	Rajasthan f (%)	

Gender	Male	11 (9.4)	14 (13.0)	85 (72)	110 (32.1)
	Female	106 (90.6)	94 (87.0)	33 (28)	233 (67.9)
Professional Qualification	B.Sc. Nursing	41 (35)	43 (39.8)	45 (38.1)	129 (37.6)
	P. B. Nursing	08 (6.8)	14 (13)	13 (11)	35 (10.2)
	M.Sc. Nursing	66 (56.4)	51 (47.2)	55 (46.6)	172 (50.1)
	PhD Nursing	02 (1.7)	0	05 (4.2)	07 (02)
College of final degree attainment	Private	82 (70.1)	85 (78.7)	93 (79.5)	260 (76)
	Government	35 (29.9)	23 (21.3)	24 (20.5)	82 (24)
Professional Experience in completing years	6 months -1	23 (19.7)	54 (50)	30 (25.4)	107 (31.2)
	43587	62 (53.0)	40 (37)	37 (31.4)	139 (40.5)
	43683	14 (12.0)	07 (6.5)	21 (17.8)	42 (12.2)
	43808	11 (9.4)	06 (5.6)	15 (12.7)	32 (9.3)
	Above 12	07 (6.0)	01 (0.9)	15 (12.7)	23 (6.7)

Table 1: Frequency distribution of study participants as per their demographic characteristics (n=343).

Organizational characteristics of study subjects

Findings presented in Table 2 depicts that majority of the survey participants 241(70.3%) were working in the private institutions. More than half (51.9%) were working with the institutions running under-graduate courses (BSc/ Post basic) whereas 132(38.5%) were working with institutions running both UG and PG courses (BSc/ Post basic and MSc Nursing). Majority (72.6%) were working in the colleges attached with parental hospital and 102 (29.7%) in the institutions attached with medical colleges.

Demographic variables		Punjab f (%)	Haryana f (%)	Rajasthan f (%)	Total f (%)
Nature of College Management	Private	67 (57.3)	95 (88)	79 (66.9)	241 (70.3)
	Government	31 (26.5)	3 (2.8)	31 (26.3)	65 (19)
	Missionary	10 (8.5)	01 (.9)	0	11 (3.2)
	Deemed University	09 (7.7)	09 (8.3)	08 (6.8)	26 (7.6)
Nursing courses offered by the institution	B.Sc./Post Basic	33 (28.2)	73 (67.6)	72 (61)	178 (51.9)
	M.Sc. and B.Sc./Post basic	64 (54.7)	26 (24.1)	42 (35.6)	132 (38.5)
	PhD, M.Sc. B.Sc./Post Basic	20 (17.1)	09 (8.3)	04 (3.4)	33 (9.6)
Parental Hospital	Yes	69 (59)	74 (68.5)	106 (89.8)	249 (72.6)
	No	48 (41)	34 (31.5)	12 (10.2)	94 (27.4)
Medical college	Yes	33 (28.2)	21 (19.4)	48 (407)	102 (29.7)
	No	84 (71.8)	87 (80.6)	70 (59.3)	241 (70.3)

Table 2: Frequency distribution of study participants as per their organization's characteristics (n=343).

Predictive variables of professionalism among the nurse educators

Part 1: Testing statistical relevancy of the regression model.

H_0: There is no difference between the null model and final model to determine the predictive variables of professionalism among the nurse educators at 0.05 level of significance.

Since the calculated p value is less than 0.05 hence null hypothesis is rejected and concluded that the final model is more significant than the null model to determine the predictive variables of professionalism among nurse educators (i.e., final model is adequately fit) (Table 3).

Score of Professionalism		Model	Model Fitting Criteria	Likelihood Ratio Tests		
<median	≥ median	-2 Log Likelihood	Chi-Square	Df	Sig.	
167 (48.68%)	176 (51.31%)	Intercept Only	453.853			
		Final	298.355	155.498	34	0.000**

Table 3: Model Fitting Information of Likelihood Ratio Tests for predictive variables of professionalism among survey participants (n=343). ** Significant at 0.01 (Median=2).

H_0: The regression model is adequately fit to determine the predictive variables of professionalism among the nurse educators at 0.05 level of significance.

Pearson value is 0.218 which is more than the 0.05 (expected p value) hence we accept the null hypothesis and concluded that the regression model is adequately fit to determine the predictive variables of professionalism among the nurse educators ($P \geq 0.05$) (Table 4).

Goodness-of-Fit			
	Chi-Square	Df	Sig.
Pearson	278.537	261	0.218
Deviance	277.005	261	0.237

Table 4: Goodness of fit to determine the predictive variables of professionalism among the nurse educators (n=343).

From the above two tables (Tables 3 and 4) it is concluded that the regression model used in present study is statistically relevant to determine the predictive variables of professionalism among nurse educators.

Part 2: Predictive variables of professionalism.

Likelihood ratio tests revealed the independent variables (predictive variables) which significantly impact the level of professionalism among nurse educators that includes professional experience (0.01*), professional qualification (0.01**), nature of college management (0.001**), duration of establishment (0.014*), courses offered by the institutions (0.001**) and institution with own medical college (0.030*). Variables such as age, native place and 10+2 background of nurse educators along with their organization's characteristics such as having attached parental hospital and location of the institution do not have significant predictive impact on the nurse educator's professionalism ($P \geq 0.05$) (Table 5).

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	298.355	0	0	.
Age	302.723	4.368	5	0.498
Place	307.227	8.872	4	0.064
10+2 Background	300.613	2.258	3	0.521
Professional experience	310.55	12.195	4	0.016*
Qualification	318.496	20.141	2	0.000**
Nature College Management	53.701	38.174	3	0.000**
Duration of College Establishment	34.557	12.456	4	0.014*
Courses offered	42.329	27.818	2	0.000**
Institution with Parental Hospital	11.794	0.834	1	0.361
Medical college associated Institution	303.058	4.703	1	0.030*
College Location	301.627	3.272	1	0.07

Table 5: Nominal regression (logistic) analysis to determine the predictive variables of professionalism among the nurse educators (n=343). *Significant at 0.05, ** Significant at 0.01.

Parameter estimates of predictive variables of professionalism

Nurse educators with professional experience more than 08 years are almost four times (Odds Ratio=3.687) more likely to have higher score on Flexner criteria of professionalism as compared to educators with less experience (P=0.016). Educators with higher qualification (M.Sc./PhD Nursing) are almost eight times (Odds Ratio=7.654) more likely to have higher score on criteria of professionalism as compared to educators with B.Sc. Nursing qualification (P=0.000). Nurse educators from Punjab are 1.16 times (Odds Ratio=1.163) more likely to have higher score on criteria of professionalism as compared to educators from the other states but statistically not significant (P=0.807) (Table 6a).

Nurse educators working in deemed university (OR=6.024), missionary (OR=14.343) and government institutions (OR=3.473) are more likely to have higher score on criteria of professionalism as compared to educators of private institutions. Nurse educators who are working with the institution having longer duration of establishment were more likely to have higher score on criteria of professionalism, even though it was not statistically significant. Nurse educators working in post graduate institutions are nearly 3 times (Odds Ratio=2.740) and with PhD institutions are almost 5 times (Odds Ratio=5.055) more likely to have higher score on criteria of professionalism as compared to educators working in the institutions running under- graduate courses (P=0.000**). Nurse educators working with the medical college associated nursing institutions are almost three times (Odds Ratio=2.927) more likely to have higher score on criteria of professionalism as compared to educators of other institutions (P=0.031) (Table 6b).

Professionalism score	Variables	B	Std. Error	Wald	Df	Sig.	Exp(B)	Exp(B)
Reference category ≥ median (M=2)	**Professional Experience (in years)**							
	6 months -1 year	-1.259		0.995	1.599	1	0.206	0.284
	43587	-0.854		0.929	0.844	1	0.358	0.426
	43683	-0.725		0.973	0.556	1	0.456	0.484
	43808	1.305		0.987	1.75	1	0.016*	3.687
	Above 12	0(b)		.	.	0	.	.
	Professional Qualification							
	Post Basic Nursing		-0.362	0.652	0.308	1	0.579	0.696
	M.Sc./ PhD Nursing		2.035	0.529	14.828	1	0.000**	7.654
	B.Sc. Nursing		0(b)	.	.	0		
	Native Place							
	Punjab		0.151	0.62	0.06	1	0.807	1.163
	Haryana		-0.366	0.651	0.316	1	0.574	0.693
	Rajasthan		-1.04	0.612	2.892	1	0.089	0.353
	Himachal Pradesh		-0.49	0.751	0.426	1	0.514	0.612
	Other		0(b)			0		

Table 6a: Parameter estimates (regression analysis) of predictive variables of professionalism among nurse educators (n=343).

Professionalism score	Variables	B	Std. Error	Wald	Df	Sig.	Exp(B) Odd Ratio
≥ median 2	**Nature of college management**						
	Government	1.245	0.303	16.935	1	0	3.473
	Missionary	2.663	1.057	6.349	1	0	14.34
	Deemed University	1.796	0.515	12.18	1	0	6.024
	Private	0(b)	.	.	0	.	.
	Duration of establishment (in years)						

6-10	-0.265	0.276	0.926	1	0	0.767
11-15	0.51	0.308	2.752	1	0	1.666
16-20	0.713	0.384	3.446	1	0	2.039
Above 20	0.882	0.573	2.369	1	0	2.416
0-5	0(b)	.	.	0	.	.
Nursing courses offered						
B.Sc./Post Basic/ M.Sc.	1.008	0.237	18.062	1	0	2.74
B.Sc./Post Basic/ M.Sc./PhD	1.62	0.435	13.908	1	0	5.055
B.Sc./Post Basic	0(b)	.	.	0	.	.
Hospital						
Affiliated Hospital	0.222	0.243	0.831	1	0	1.248
Parental Hospital	0(b)	.	.	0	.	.
Medical college institutions						
Yes	1.074	0.499	4.629	1	0	2.927
No	0(b)	.	.	0	.	.

Table 6b: Parameter estimates (regression analysis) of predictive variables of professionalism among nurse educators (n=343).

Discussion

The current study planned to determine the predictive variables of professionalism among nurse educators as perceived by them in selected nursing educational institutes of North India. A cross-sectional survey was adopted to collect data from 343 nurse educators working in various nursing educational institutions of Punjab, Haryana and Rajasthan using maximum variation (judgmental) sampling. Throughout the study, due care was taken to minimize bias and enhance the validity of the study findings. Present study was undertaken using strong and improvised methodological approach, as compared to previous researches conducted in this area.

Predictive variables of professionalism explored among nurse educators in the present study include professional experience, qualification and designation of nurse educators, nature of college management, duration of college establishment, Courses offered, and institution associated with medical colleges. Somewhat similar findings were reported by Wynd [15] where higher educational degree in nursing, years of experience, other certifications and membership in professional organizations found significant association with professionalism of nurses also indicated that an increased level of education is positively associated with higher degree of professionalism. Tanaka et al. [18] reported that professionalism was significantly related to higher educational preparation, years of experience, and current position as a nursing administrator or faculty.

Kim-Godwin et al. [13] reported that current position in the nursing (designation), current employment status, work setting, total years of nursing experience, location of final degree attainment, and duration of nursing education were associated with level of professionalism. Variables predicting professionalism include membership in organization and total years of nursing experience;

however, in the present study designation of the educators was not associated with their overall level of professionalism

In the present study participants with post graduation or above degree (M.Sc./Ph.D) scored high on Flexner criteria of professionalism. Consistency was observed with the findings of the study conducted by Fantahun et al. [19] who revealed that age of respondents, work setting, and work experience were significantly correlated with total professionalism of nurses. Similar findings were also reported by Chnug and Ko [20] where professionalism was significantly different according to age, academic qualification, work experience and position of the nurses. Bang et al., Martin et al. [21,22] reported a positive correlation between educational level and professional values scores among students.

Implications of the study

The findings of this study have several implications.

- Study revealed predictive variables of professionalism that will help the nurse educators to evaluate and enhance their level of professionalism.
- Predictive variables explored in present study can be used as a tool to evaluate professional efficacy and credibility of individual nurse educators.
- Predictive variables of professionalism can be used while recruiting the faculty for the nursing educational institution.
- Accreditation bodies/ universities and government can use the findings to facilitate environment conducive for professional development.

Limitations of the study

Several limitations to this study deserve consideration. First, we only included those nurse educators working with the degree nursing educational institutions which are located into the selected north Indian states. Second, despite rigorous research design and maximum variation sampling, most of the study participants were of young age and belonged to private organizations thus, findings might have limited generalizability. Third More precise measuring instruments, designed to assess actual professional behavioral characteristics will provide more information to assess behavioral indicators of professionalism along with the attributes and lastly predictive variables explored in the present study are able to predict only up to 54% of the nurse educator's professionalism hence there could be some other variables that could not be explored.

Recommendation for future research

- Observational measures of professionalism among nurse educators and nurses need to be developed.
- A study to determine the predictive variables of professionalism of clinical nurses and nursing students can be conducted.
- Predictive variables explored in present study account up to 54% of professionalism therefore study need to be conducted to explore other determinants of professionalism.
- A qualitative study can be conducted to understand the phenomena of professionalism in nursing.

Conclusion

The study was concluded that personal, professional and organizational factors play very important role in professional development of nurse educators and significantly impact their professionalism. Predictive variables identified in present study will help the nursing fraternity to enhance professionalism of its members.

Conflict of Interest

The study entitled "Predictive variables of professionalism among nurse educators of nothen indian states of india' is the self funded research work of Mr. Bharat Kumar Pareek and authors have declared no conflict of interest.

References

1. Gunther M, Alligood MR (2002) A discipline-specific determination of high-quality nursing care. J Adv Nurs 38: 353-359.
2. Hodges BD, Ginsburg S, Cruess R, Cruess S, Delport R, et al. (2011) Assessment of professionalism: recommendations from the Ottawa 2010 Conference. Med Teach 33: 354-363.
3. Swisher LL, Beckstead JW, Bebeau MJ (2004) Factor Analysis as a Tool for Survey Analysis Using a Professional Role Orientation Inventory as an Example. Phys Ther 84: 784-799.
4. Adams D, Miller BK, Beck L (1996) Professionalism behaviors of hospital nurse executives and middle managers in 10 western states. West J Nurs Res 18: 77-88.
5. Secrest JA, Norwood BR, Keatley VM (2003) "I was actually a nurse": the meaning of professionalism for baccalaureate nursing students. J Nurs Educ 42: 77-82.
6. Darling-Hammond L, Richardson N (2018) Research Review/Teacher Learning: What Matters?
7. Alidina K (2012) Professionalism in post-licensure nurses in developed countries. J Nurs Educ Prac 3: 128.
8. Baumann A, Kolotylo C (2009) The Professionalism and Environmental Factors in the Workplace Questionnaire®: development and psychometric evaluation. J Adv Nurs 65: 2216-2228.
9. Ghadirian F, Salsali M, Cheraghi MA (2014) Nursing professionalism: An evolutionary concept analysis. Iran J Nurs Midwifery Res 19: 1-10.
10. Dikmen Y, Karataş H, Arslan GG, Ak B (2016) The Level of Professionalism of Nurses Working in a Hospital in Turkey. J Caring Sci 5: 95-102.
11. Hasandoost F, Moghadas T, Momeni M, Rafiei H (2016) Factors Influencing Professionalism: A Cross Sectional Study among Iranian Registered Nurses. IOSR J Nurs Health Sci (IOSR-JNHS) 5: 47-49.
12. Çelik S, Hisar F (2012) The influence of the professionalism behaviour of nurses working in health institutions on job satisfaction. Int J Nurs Pract 18: 180-187.
13. Kim-Godwin YS, Baek HC, Wynd CA (2010) Factors influencing professionalism in nursing among Korean American registered nurses. J Prof Nurs 26: 242-249.
14. Kwon KJ, Ko KH, Kim KW, Kim JA (2010) The Impact of Nursing Professionalism on the Nursing Performance and Retention Intention among Psychiatric Mental Health Nurses. J Korean Acad Nurs Admin 16: 229-239.
15. Wynd CA (2003) Current factors contributing to professionalism in nursing. J Prof Nurs 19: 251-261.
16. Hampton DL, Hampton GM (2000) Professionalism and the Nurse-Midwife Practitioner: An Exploratory Study. Journal of the American Academy of Nurse Practitioners 12: 218-225.
17. Hungler BP, Joyce A, Krawczyk R, Polit D (1979) Professionalism in nursing master's graduates. J Adv Nurs 4: 193-203.
18. Tanaka M, Taketomi K, Yonemitsu Y, Kawamoto R (2016) Professional behaviours and factors contributing to nursing professionalism among nurse managers. J Nurs Manag 24: 12-20.
19. Fantahun A, Demessie A, Gebrekirstos K, Zemene A, Yetayeh G (2014) A cross sectional study on factors influencing professionalism in nursing among nurses in Mekelle Public Hospitals, North Ethiopia, 2012. BMC Nursing 13: 10.
20. Chnug BY, Ko SH (2004) Nursing Professionalism and Job Satisfaction of Nurses in General Hospital. J Korean Acad Nurs Admin 10: 335-344.
21. Bang KS, Kang JH, Jun MH, Kim HS, Son HM, et al. (2011) Professional values in Korean undergraduate nursing students. Nurse Educ Today 31: 72-75.
22. Martin P, Yarbrough S, Alfred D (2003) Professional values held by baccalaureate and associate degree nursing students. J Nurs Scholarsh 35: 291-296.