Effects of Nursing Professionalism on Career Preparation Behavior, Career Resilience, and Emotional Intelligence in Senior Nursing Students

Joo-Young Lee [1], Do-Young Lee [*2]

[1] *Professor, Dept. of Nursing, Seoul Women's College of Nursing, 38, Ganhodae-ro, Seodaemun-gu, Seoul, 03617, Korea*

[*2] *Assistant Professor, Dept. of Nursing, Changshin University, 262, Palyongro, Masanhoewon-gu, Changwon-si,*
Gyeongsangnam-do, 51352, Korea.

daisy58@hanmail.net[1], shinern@cs.ac.kr [2]*

Corresponding author [*]: Do-Young Lee, E-mail : shinern@cs.ac.kr

Abstract

Background/Objectives: This study was aimed to contribute the enhancement of nursing professionalism in the senior nursing students by analyzing the factors to influence their nursing professionalism.

Methods/Statistical analysis: *This is a descriptive survey research to investigate career preparation behavior, career resilience, emotional intelligence, and degree of nursing professionalism in the senior nursing students and to find out the influential factors on their nursing professionalism.*

Findings: The study results, career preparation behavior, career resilience, emotional intelligence and nursing professionalism showed the correlations, and the most influential factors on their nursing professionalism showed in the order of emotional intelligence, satisfaction level on their university life, education of nursing professionalism, types of career hope. It is necessary to develop and educate the programs including the influential factors to enhance nursing professionalism.

Improvements/Applications: It is required to have the opportunity to check the goals of nursing philosophy and to achieve the career goals by the analysis of nursing professionalism in the nursing students before their graduation.

Keywords: Nursing professional, Career preparation behavior, Career resilience, Emotional intelligence, Nursing students

1. Introduction

Nursing professionalism means a basic belief and value for nurses to have the vocational view and provide quality nursing, which relates to the value on nursing [1]. Nursing professionalism can be developed with professional knowledge and skills upon continuous development of working experiences starting from the education in the university [2], when is the first critical step to develop desirable nursing professionalism for nursing students.

Beside the development of nursing professionalism, it is necessary for nursing students to prepare their career systemically so as to be adapted in their role changes into nurses after graduation. With more passionate to the career and fierce competition among students, they simply select their majors that are favorable to get jobs [3]. In particular for nursing students, their employment rate is extraordinarily high compared to the other majors and most of them select nursing job without serious thinking on their career after entering universities [4].

No evident philosophy and goals on nursing after graduation hinders desirable nursing activities, which requires the development of positive and constructive nursing professionalism. Considering the increasing trend that new nurses have not been adapted well in the professional socialization among the problems of nursing society, it is necessary to establish desirable nursing professionalism by education [3].

Enhancements of nursing professionalism and career preparation behavior by university education can affect the students' motivation and ambition on nursing and enhance the satisfaction level of their workplaces when they become new nurses [5].

It is important to develop career resilience and career preparation behavior with nursing professionalism, however, few studies have been conducted.

Emotional intelligence is the capability to understand the feeling of himself/herself as well as others correctly and to control and use their emotion [6]. Those with higher emotional intelligence were reported to see the situation positively and to progress in a desirable direction [7]. Therefore, the studies are required on the relationship between emotional intelligence and nursing professionalism.

Hence, this study was to provide the fundamental data required for enhancement of nursing professionalism in nursing students by investigating the relationship among nursing professionalism, career preparation behavior, career resilience, and emotional intelligence in senior nursing students, and analyzing the influential factors on their nursing professionalism.

2. Materials & Methods

2.1. Design of the study

This is a descriptive survey research to investigate career preparation behavior, career resilience, emotional intelligence, and degree of nursing professionalism in the senior nursing students and to find out the influential factors on their nursing professionalism.

2.2. Study subjects

The subjects of this study were senior nursing students who were studying in the universities located in S City. 155 subjects who were informed of the study objectives and showed written consent on the study participation, voluntarily, were selected by convenience sampling. Sample size was calculated using by G-power 3.1.5 Program [8]. It was satisfied with the minimum sample size of 107 which was estimated with significance level .05, size of effect by .15, and statistical power 95% in multiple regression analysis. A total of 155 copies of survey sheets were distributed and 151 copies were collected. A total of 147 copies (94%) were used for final analysis excluding 5 cases with over 10% of unanswered questionnaires or insincere reports of 3 or more consecutive unanswered questionnaires.

2.3. Research Tools

2.3.1. Career preparation behavior

With respect to the tool for career preparation behavior, that developed by [9] and [10] was used. Each questionnaire used 4-point Likert Scale, meaning higher score with higher career preparation behavior. Cronbach's α of the tool was .84 at the time of its development, .88 in the study [10], and .90 in this study.

2.3.2. Career resilience

With respect to the tool for career resilience, the tool of [11] was used. It contains a total of 30 questionnaires and each questionnaire used 5-point Likert Scale, meaning higher score with higher career resilience. Cronbach's α of the tool was .93 at the time of its development, and .96 in this study.

2.3.3 Emotional intelligence

With respect to the tool for emotional intelligence, Wong & Law Emotional Intelligence Scale (WLEIS) developed by [6] was used. It contains a total of 16 questionnaires and each questionnaire used 7-point Likert Scale, meaning higher score with higher emotional intelligence. Cronbach's α of the tool was .89 at the time of its development, and .916 in this study.

2.3.4 Nursing professional

A tool to measure nursing professionalism developed by [12] and modified by [13] was used in this study. It contains a total of 18 questionnaires and each questionnaire used 5-point Likert Scale, meaning higher score with higher nursing professional. Cronbach's α of the tool was .92 at the time of its development, .94 in the study [13] and .86 in this study.

2.4. Data collection methods & Ethical considerations

Data were collected from November 2nd to 16th, 2018. For ethical considerations of the study, the study was conducted only with the subjects who were informed thoroughly on the study objectives, methods, protection of personal information in case of study participation, time to spend for the survey, and so on, and showed their consents. They were informed that the data would not be used beyond the study scope and the disadvantage from non-participation would not be occurred. Anonymity of the subjects were secured, and the survey data were coded. In addition, they were informed that they could withdraw the study participation at anytime when they did not want. The time to spend for the survey was about 10 minutes.

2.5. Data Analysis

The collected data were analyzed using by SPSS/win 23.0 program. Mean and standard deviation were used for career preparation behavior, career resilience, emotional intelligence, and nursing professionalism of the subjects. T-test and ANOVA were used for the differences of career preparation behavior, career resilience, emotional intelligence, and nursing professionalism by general characteristics; and Pearson correlation coefficient was used for correlations among variables. Multiple regression analysis was used to investigate the degree of impacts on subjects' nursing professionalism.

3. Results & Discussion
3.1. General characteristics of study subjects

[Table 1] shows the general characteristics of study subjects. 88 subjects (59.9%) answered their health status as 'Fair,' and 116 (78.9%) were the age group of 20-25 years old, which were the largest portions. Most of them with 140 subjects (95.2%) answered getting job as their types of career hope, and 70 (47.6%) answered 'Normal' on their satisfaction level of university life. 97 (66.0%) answered that they had received the education on nursing professionalism.

Table 1: General Characteristics   (N=147)

Characteristics	Categories	N (%)	%
Physical condition	Good	88	59.9
	Ordinary	54	36.7
	Bad	5	3.4
Age	20-25	116	78.9
	26-29	17	11.6
	over 30 years of age	14	9.6
Career hope type	Employment	140	95.2
	go to a school	4	2.8
	Etc	3	2.0
College life satisfaction level	High	35	23.8
	Ordinary	70	47.6
	Low	42	28.6
Nursing professional education status	Yes	97	66.0
	No	50	34.0

3.2. Differences of nursing professionalism by general characteristics

[Table 2] shows the differences of nursing professionalism by general characteristics of the subjects. Statistically significant differences of nursing professionalism were found in types of career hope (F=4.677, p=.004), satisfaction level of university life (F=14.169, p<.001), and education of nursing professionalism (F=3.282, p=.001) among general characteristics.

Table 2: General Characteristics   (N=147)

Characteristics	Categories	M±SD	t or F	p
Physical condition	Good	3.50±0.50	.604	.548
	Ordinary	3.41±0.44		
	Bad	3.54±0.25		
Age	20-25	3.47±0.43	.707	.495
	26-29	3.37±0.68		
	over 30 years of age	3.58±0.54		
Career hope type	Employment [a]	3.46±0.46	4.677	.004 (b>c>a)
	go to a school [b]	4.56±0.47		
	Etc [c]	3.67±0.07		
College life satisfaction level	High [a]	3.78±0.15	14.169	<.001 (a>b>c)
	Ordinary [b]	3.51±0.41		
	Low [c]	3.13±0.46		
Nursing professional education status	Yes	3.54±0.40	3.282	.001
	No	3.27±0.54		

3.3. Degree of the Variable of the Subject

[Table 3] shows career preparation behavior, career resilience, emotional intelligence, and degree of nursing professionalism of the subjects.

Career preparation behavior, career resilience, emotional intelligence, and degree of nursing professionalism showed 3.45±0.62 points, 3.57±0.62, 5.01±0.79, and 3.47±0.47, respectively.

Table 3 Degree of the Variable of the Subject (N=147)

Variables	M±SD	Min	Max	Range
Career preparation behavior	3.45±0.62	1.81	4.94	1~4
Career resilience	3.57±0.62	1.13	5.00	1~5
Emotional intelligence	5.01±0.79	2.63	6.75	1~7
Nursing professional	3.47±0.47	1.56	4.89	1~5

3.4. Relationships among the Study Variable

[Table 4] shows the correlations among career preparation behavior, career resilience, emotional intelligence, and degree of nursing professionalism of the subjects. Positive correlations were shown between career preparation behavior and career resilience($r=.626$, $p<.001$); career preparation behavior and nursing professionalism ($r=.316$, $p<.001$); career resilience and nursing professionalism ($r=.515$, $p<.001$); career preparation behavior and emotional intelligence ($r=.423$, $p<.001$); career resilience and emotional intelligence ($r=.637$, $p<.001$); and nursing professionalism and emotional intelligence ($r=.568$, $p<.001$).

Table 4 Relationships among the Study Variable (N=225)

Variables	CPB	CR	NP	EI
	r(p)	r(p)	r(p)	r(p)
CPB	1	.626(<.001)	.316(<.001)	.423(<.001)
CR		1	.515(<.001)	.637(<.001)
NP			1	.568(<.001)
EI				1

CPB : Career preparation behavior ; CR : Career resilience ; NP : Nursing professional ; EI : Emotional intelligence

3.5. Influential factors on nursing professionalism

[Table 5] shows the influential factors on nursing professionalism of the subjects. Stepwise multiple regression analysis was performed with the independent variables of career preparation behavior, career resilience, and emotional intelligence which showed correlations with nursing professionalism from the analysis results of differences by general characteristics; and dependent variable of nursing professionalism. Nominal variables among these were analyzed upon processing them as dummy variables. The calculated regression model with nursing professionalism of the subjects was significant ($F=20.591$, $p < .001$); the tolerance limit was over 0.1 upon the analysis results of homoscedasticity, normal distribution, and multicollinearity of residuals; and variance inflation factor (VIF) was 1.045~2.314, not more than 10 that is the limit, which did not show any problem of multicollinearity. Durbin-Watson statistics was 2.296, close to 2 upon the residual analysis, demonstrating no autocorrelation, which satisfied homoscedasticity and normal distribution of residuals. The most influential factors on nursing professionalism of the subjects showed in the order of emotional intelligence ($\beta=.389$, $p<.001$), satisfaction level on their university life ($\beta=-.215$, $p=.005$), education of nursing professionalism ($\beta=-.164$, $p=.016$), and types of career hope ($\beta=-.132$, $p=.049$). These variables explained 43.5% of nursing professionalism of the total subjects.

Table 5 Factors Influencing (N=225)

Variables	B	SE	β	t	p	TI	VIF
(Constant)	2.549	.359		7.098	<.001		
Types of career hope	-.112	.061	-.132	-1.984	.049	.957	1.045
Satisfaction level on their university life	-.127	.045	-.215	-2.833	.005	.737	1.357
Education of nursing professionalism	-.169	.069	-.164	-2.450	.016	.947	1.056
Career preparation behavior	.009	.064	.012	.144	.885	.637	1.569
Career resilience	.126	.079	.157	1.585	.115	.432	2.314
Emotional intelligence	.234	.052	.389	4.538	<.001	.577	1.734

4. Conclusion

This study is to investigate correlations among nursing professionalism, career preparation behavior, career resilience, and emotional intelligence in the senior nursing students and to analyze the influential factors on nursing professionalism. It was aimed to be used as the fundamental data required for the development of quality nursing professionals as well as for seeking the educational tools to enhance nursing professionalism of the senior nursing students.

In this study, nursing professionalism of the subjects showed 3.47 points out of 5. In a previous study on nursing professionalism, the scores of nursing students showed higher than those of nurses, and in particular, it was reported that social perception and independence of nursing among sub-factors showed low. These results meaning lower scores of social perception and independence for nurses than nursing students implicate that nursing universities and hospitals should consider the fact of lowered perception upon working as nurses in the practices. Hence, regulations or policies related to nursing should be supported in the universities to secure the independence of nursing together with education to enhance the level of nursing. Also, the plans to enhance the social perception on nurses should be sought in the clinical practices based on professional nursing skills and knowledge.

In this study, the most influential factors on nursing professionalism of the subjects showed in the order of emotional intelligence, satisfaction level on their university life, education of nursing professionalism, and types of career hope. Positive and constructive establishment of nursing professionalism will make nursing students, who will lead the future of nursing in the clinical practices, have clear nursing philosophy and goals. Therefore, establishment of proper nursing professionalism for nursing students is crucial not only for individuals but also the progression and development of nursing. It is important to establish the identity of professional distinguishing from other occupations because it will be difficult for nursing students to achieve the career goals without career preparation behavior though they have mature attitude on their careers. Considering the fact that nurses showed more positive responses on their working values, confidence on their job, and professionalism of nursing roles as they perceive the roles more positively, seamless education and interest are necessary in the clinical practices to establish positive nursing professionalism since it is not completed but continuously progressed and can be enhanced by multiple educations.

To enhance nursing professionalism of senior nursing students, the followings are proposed.

First, further studies are required with expanded subjects to verify the relationship with enhancement of nursing professionalism in senior nursing students.

Second, a variety of programs and systemic educational policies are required to enhance nursing professionalism in senior nursing students, together with further studies and continuous managements.

Last, qualitative studies are proposed to analyze the influential factors on nursing professionalism in senior nursing students.

5. References

1. Yeun E. J., Kwon Y. M. & Ahn O. H. (2005). Development of a nursing professional values scale. *Journal of Korean Academy of Nursing, 35(6),* 1091-1100. Available from: https://doi.org/10.4040/jkan.2005.35.6.1091
2. Kang M. R., Jeong K. S. (2020). Effects of self-esteem, nursing professionalism, cognitive emotion control strategy on clinical practice stress in nursing students. *Journal of Digital Convergence, 18(6)*, 353-361. Available from: https://doi.org/10.14400/JDC.2020.18.6.353
3. Ko Y. J. & Kim I. K. (2011). The Relationship between Professional Nursing Values and Career Preparation Behaviors of Nursing Students. *J Korean Acad Soc Nurs Edu*, 17(1), 62-71. Available from: https://doi.org/10.5977/JKASNE.2011.17.1.062
4. Myung H. J., Kwak M. S. & Ahn J. (2020). The relationship between nursing professionalism and career preparation behavior of nursing college students: The mediating effect of career decision-making self-efficacy. *The Journal of Vocational Education Research, 39(1),* 1-18. Available from: https://doi.org/10.37210/JVER.2020.39.1.1
5. Kwon Y. M. & Yeun E. J. (2007). Correlation study on nursing professional values, department satisfaction, sociality, self-esteem among nursing students. *The Journal of Korean Nursing Administration Academic Society, 13(3),* 285-292. Available from:
   https://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiOrteView.kci?sereArticleSearchBean.artiId=ART001082185
6. Wong C.S., & Law K.S (2002). The effects of leader and follow emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, *13(3),* 243-274.
   Available from: https://doi.org/10.1016/S1048-9843(02)00099-1Get rights and content
7. Lopes P.N., Brackeet M.A., Nezleck J.B., Schutz A., Sellin I. & Salovey P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychological, 30,* 1018-1034.
   Available from: https://doi.org/10.1177/0146167204264762
8. Faul F., Erdfelder E., Lang A., & Buchner A. (2007). G*Power 3: A flexible statistical power analysis for the social, behavioral, and biomedical sciences. *Behavioral Research Methods, 39(2),* 175-191. Available from: https://doi.org/10.3758/BF03193146
9. Kim B. W. & Kim K. H. (1997). Career decision level and career preparation behavior of the college students. *Korean Journal of Counseling and Psychotherapy, 9(1),* 311-333. Available from: http://s-space.snu.ac.kr/bitstream/10371/72467/1/01.pdf
10. Lee M. S. (2003). *Analysis of relationship among career self-efficacy*. Career Barriers Perception, and Career Preparation Behavior of College Students master's Thesis, Department of vocation & career counseling, Keonju University, Korea. Available from: http://www.riss.kr/search/download/FullTextDownload.do
11. Kim M. K. (2014). *The Development of the career resilience scale for college students.* Ph.D Thesis, Department of Education Graduate School, Kyungpook National University, Korea. Available from: http://dcollection.knu.ac.kr/public_resource/pdf/000000058704_20200826131315.pdf
12. Yeun E. J., Kwon Y. M., & Ahn O. H. (2005). Development of a Nursing Professional Value Scale. *The Journal of Korean*

Academy of Nursing, *35(6),* 1091-1100. Available from:
https://www.koreamed.org/SearchBasic.php?DT=1&RID=1006JKAN/2005.35.6.1091
13. Han S. S., Kim M. H., & Yun E. K. (2008). Factors affecting nursing professionalism. *Journal of Korean Academy Society of Nursing Education, 14(1),* 73-79.
Available from: https://doi.org/10.5977/JKASNE.2008.14.1.073