

How to Cite:

Jaung, A.-H., & Moon, M.-young. (2022). Effect of career choice motivation and major satisfaction of college students in the department of health on career identity. *International Journal of Health Sciences*, 6(S4), 45–60. <https://doi.org/10.53730/ijhs.v6nS4.5386>

Effect of career choice motivation and major satisfaction of college students in the department of health on career identity

Ae-Hwa Jaung

Professor, Department of Nursing, Kyungwoon University, Gumi, Republic of Korea

Mi-young Moon

Professor, Department of Nursing, Joongbu University, Chungcheongnam-do, Republic of Korea

Abstract---To identify basic data for systematic guidance and education to establish a firm career identity by identifying the relationship between major satisfaction and career identity for college students in health department. This study measured major satisfaction, career choice motivation, and career identity for college students in the Department of Health at J University, and conducted frequency, percentage, t-test, ANOVA and Scheffe post-test, and Pearson correlation analysis using the SPSS/WIN 18.0 program. As a result of analysing the correlation between the subject's career satisfaction and career identity, there was a negative correlation. As a result of analysing the correlation between the subject's career satisfaction and career choice motivation, there was a negative correlation. As a result of analysing the correlation between career identity and career choice motivation, there was a negative correlation, in the group who experienced clinical practice and improved grades, major satisfaction was high and career identity was low. Therefore, the need for educational support and programs to increase career satisfaction is required.

Keywords---*nursing college student, major satisfaction, career identity, major commitment, academic stress.*

Introduction

The work environment in the modern society of biotechnology has changed in various aspects compared to the past work environment. In order to adequately cope with future jobs in a changing environment in various aspects, it must be constantly developed [1]. Humans should develop their ability to actively cope

with changes in social development and the professional world in a rapidly changing environment.

It is said that a new nurse is one of the many factors leading to a turnover from an organization, and that nursing students are not fully prepared for their career and concerns [2][3]. Nursing students lack self-confidence in their nursing jobs because their sense of career identity has not been established [4][5]. Because of the higher the motivation for major selection, the higher the major satisfaction, so it is necessary to provide an opportunity to experience the major in advance in consideration of individual aptitude and interest from adolescence. In other words, it is necessary to provide various programs that can motivate you to select the optimal major through direct or indirect experience of the major so that you can be satisfied with the selected major [4].

Career decision-making efficacy refers to the degree to which the best decision can be made in the career choice process and affects career identity and future career view formation [5]. In the research results of Choi [5], career decision-making self-efficacy was found to have the greatest influence on career identity compared to career decision-making level, career decision-making type, and career preparation behavior. Career identity is a sense of self-identity related to the field of work, which means a clear and stable picture of an individual's goals, interests, and talents, and is deeply related to self-confidence in making appropriate decisions in the face of inevitable and ambiguous environmental situations [7].

In line with this, this study aims to identify career choice motivation, it is necessary to identify factors that affect career identity in order to clearly form the identity of college students in the Department of Health before graduation.

Research Methods

The primary objective of this study was to identify career choice motivation for college students in the Department of Health and to identify the relationship between major satisfaction and career identity, and to clarify the relationship between major satisfaction, career choice motivation and career identity. It is intended to provide basic data for systematic guidance and education to establish a firm sense of identity for career by identifying factors affecting career identity. The specific purpose of this is as follows.

To identify the subject's major satisfaction, motivation for career choice, and career identity and to identify the motivation for career choice, major satisfaction, and career identity according to the general characteristics of the subject. To identify the relationship between the subject's motivation for career choice, major satisfaction, and career identity, and to identify the factors that influence the subject's career choice and major satisfaction on career identity.

Research Methods

Research Design

The primary objective of the study is to identify career choice motivation. The descriptive- research is an approach to problem-solving which seeks to identify the career choice motivation and major satisfaction of college students in the Department of Health at J University located in one of the universities in Chungcheong Province.

Participants and Data Collection

The subjects of this study were students enrolled in the Department of Nursing, Physical Therapy, and Health Administration at J University, and a total of 250 questionnaires were distributed. As a result of using G-power 3.1 software to calculate the appropriate number of subjects in this study, when verifying the difference between the groups with the significance level (α).05, power ($1-\beta$) .95, effect size (r).15, the minimum sample size required was calculated at 189. In consideration of the dropout rate of this researcher, questionnaires were distributed and collected to 250 people by convenience sampling, and 240 (96%) of the collected questionnaires, excluding 10 (4%) with insufficient responses, were selected as subjects.

Research Tools

Major Satisfaction: Among the 34 department satisfaction tools prepared by Kim and Ha [8], major satisfaction tool which was used and selected by Lee[9] was used. Satisfaction with the major department was divided into five sub-satisfaction factors and configured to be specifically measured. Seven general satisfaction factors and five recognition satisfaction factors were selected to measure department satisfaction. Except for school satisfaction, the rest of the questions were revised and supplemented appropriately for the purpose of the researcher. Satisfaction with the major department was divided into five sub-satisfaction factors and configured to be specifically measured. In this study, a total of 26 questions were asked about satisfaction with the major department, and they were divided into five unloading areas: general satisfaction, subject satisfaction, relationship satisfaction, perception satisfaction, and career survey. The Cronbach α figure was .92 as the reliability of the internal agreement of 34 questions in the department satisfaction questionnaire. Looking at the reliability of each factor, it was found that general satisfaction and perception satisfaction were the highest at .89, school satisfaction was .87, relationship satisfaction was .76, and subject satisfaction was .73.

Career Identity: In this study, 18 questions on the identity scale, a sub-scale of the My Vocational Situation (MVS) developed by Holland, Diager, and Power (1980) [6], were translated to suit the Korean situation, and 14 questions were revised by Kwon and Kim [11] to suit Korean nursing college students. This tool is a Likerts' four-point scale indicating four-point 'so yes', three-point 'rather yes', two-point 'not so intended' and one-point 'not at all'. The higher the score, the higher the sense of career identity. In the study of Kwon and Kim (2002)[11], the

reliability of the tool was Cronbach's α .88, and the reliability in this study was Cronbach's α .86.

Data Collect Methods

Data Analysis Methods

The collected data was analyzed using the SPSS 21.0 software. The subjects' general characteristics, motivation for career choice, major satisfaction, and career identity were analyzed using frequency and percentage. For the relationship between major satisfaction, career choice motivation, and career identity according to the general characteristics of the subject, t-test, ANOVA, and Scheffe post-test were used. Pearson correlation analysis was used for the relationship between the subject's motivation for career choice, major satisfaction, and career identity. Stepwise Multiple regression was analyzed to confirm the effect of the subject's career choice motivation and major satisfaction on career identity.

Results

General characteristics of students majoring in nursing, physical therapy, and health administration

Table 1
General characteristics

Characteristics	Categories	N	%
Department	Nursing	138	57.5
	Physical therapy	65	27.1
	Health administration	37	15.4
Sex	Male	63	26.3
	Female	177	73.8
Grade	The second grade	93	38.8
	The third grade	145	60.4
	Top ranks (A+)	15	6.3
Performance	Middle upper ranks(A)	46	19.2
	Middle ranks(B+)	115	47.9
	Middle low ranks(B)	49	20.4
	Lower ranks(less than C)	15	6.3
	Very satisfied	3	1.3
Major satisfaction	Satisfied	10	4.2
	Normal	86	35.8
	Unsatisfied	1116	48.3
	Very unsatisfied	25	10.4
Clinical	Yes	114	47.5

experience	No	126	52.5
	Very good	36	15.0
Health	Good	101	42.1
	Normal	84	35.0
	Bad	19	7.9
	Very good	27	11.3
Relationship	Good	131	54.6
	Normal	78	32.5
	Bad	1	0.4
	Very bad	3	1.3
	Hard	3	1.3
Economic status	Not enough	27	11.3
	Average	147	61.3
	Affordable	51	21.3
	Enough	12	5.0

**Scheffe post hoc analysis*

The general characteristics of the subjects of this study are shown in Table 1.

The students of the Department of Nursing, Physical Therapy, and Health Administration at Jungbu University consisted of 174 women (74.0%) and 61 men (26.0%) out of 235. The survey was conducted mainly for the second and third graders, with one in the first grade (0.4%), 91 in the second grade (38.7%), 142 in the third grade (60.4%), and one in the fourth grade (0.4%). In terms of grades, 111 people (47.2%) were in the middle (average credit B+), 49 people (20.9%) in the middle low (average credit B), 46 people (19.6%) in the middle upper (average credit A), 15 people (6.4%) in the top (average credit A+) and 14 people (6.0%) in the lower (average credit C or less).

In terms of major satisfaction, 115 people (48.9%) said they were satisfied which were the highest, followed by 83 (35.3%) average, 25 very satisfied (10.6%), 9 dissatisfied (3.8%), and 3 very dissatisfied (1.3%). The presence or absence of clinical practice experience was 114 (48.5%) for "yes" and 121 (51.5%) for "no". Of the 114 patients who chose to have experience in clinical practice, 83 were satisfied with clinical practice.

In terms of health status, 101 people (43.0%) were in the highest order, followed by 83 (35.3%) average, 35 people (14.9%) who were very good, 15 people (6.4%), who were bad and 1 person who was very bad (0.4%). In interpersonal relationships, 130 people (55.3%) were mostly good, followed by 75 people (31.9%) who said average, 27 people (11.5%) were very good, and 3 people (1.3%) were very bad. As for the degree of economic life, 144 (61.3%) said they are enough, followed by 50 (21.3%) with "affordable," 27 (11.5%) with "average," 12 (5.1%) with "sufficient," and 2 (0.9%) with "hard".

Differences in major satisfaction according to the general characteristics of students in nursing, physical therapy, and health administration

Table 2
General characteristics with Major satisfaction

Characteristics	Categories	Major satisfaction	
		M±SD	t or F(p)
Department	Nursing ^a	3.59±0.38	6.124(.003)) (c<b)
	Physical therapy ^b	3.70±0.53	
	Health administration ^c	3.39±0.41	
Sex	Male	3.60±0.50	0.354(.724))
	Female	3.58±0.41	
Grade	The second grade	3.66±0.45	2.118(.035))
	The third grade	3.54±0.42	
Performance	Top ranks (A+) ^a	4.00±0.49	5.543(.000)) c,d,e<a
	Middle upper ranks(A) ^b	3.71±0.37	
	Middle ranks(B+) ^c	3.53±0.42	
	Middle low ranks(B) ^d	3.50±0.42	
	Lower ranks(less than C) ^e	3.51±0.47	
Major satisfaction	Very satisfied ^a	4.10±0.47	36.613(.000)) e<d<c<b<a
	Satisfied ^b	3.73±0.33	
	Normal ^c	3.32±0.32	
	Unsatisfied ^d	3.31±0.34	
	Very unsatisfied ^e	3.14±0.61	
Clinical	Yes	3.59±0.43	0.025(.980))

experience	No	3.59±0.4 4	
	Very good ^a	3.90±0.5 0	
	Good ^b	3.66±0.4 1	15.509(.00 0)
Health	Normal ^c	3.43±0.3 7	c,d <b<a
	Bad ^d	3.31±0.3 0	
	Very good ^a	4.01±0.4 6	
	Good ^b	3.63±0.3 9	
Relationship	Normal ^c	3.41±0.3 8	13.514(.00 0)
	Bad ^d	3.38±0.0 0	
	Very bad	2.91±0.1 8	
	Hard	3.37±0.5 1	
	Not enough	3.58±0.3 9	
Economic status	Average	3.58±0.4 4	1.420(.228)
	Affordable	3.56±0.4 2	
	Enough	3.86±0.4 9	

**Scheffe post hoc analysis*

Table 2 shows the differences in major satisfaction according to the general characteristics of students in the Department of Nursing, Physical Therapy, and Health Administration.

As a result of analysing the difference in major satisfaction according to general characteristics, there were statistically significant differences in department, grade, major satisfaction, health status, and interpersonal relationships. In the department of physical therapy, the mean and standard deviation were higher than that of nursing and health administration ($F=5.193$ $p=0.006$). The upper ranks were higher than the upper middle ranks in the post-mortem results ($F=5.340$ $p=0.00$). On the post-mortem examination, major satisfaction was in the order of very satisfaction, very dissatisfaction, and dissatisfaction ($F=35.696$ $p=0.00$). Regarding health status, very good was higher in average and standard deviation compared to good, average, bad, and very bad ($F=10.704$ $p=0.00$).

Interpersonal relationships were in the order of very good, normal, and very bad on the post-test ($F=17.046$ $p=0.00$). In addition, there were no statistically significant differences in gender, grade, clinical practice experience, and economic degree of life.

Differences in career identity according to the general characteristics of students in nursing, physical therapy, and health administration

Table 3
General characteristics with career identity

Characteristics	Categories	Career identity	
		M $\pm$ SD	t or F(p)
Department	Nursing ^a	2.38 $\pm$ 0.46	5.895(.003) b<c<a
	Physical therapy ^b	2.17 $\pm$ 0.54	
	Health administration ^c	2.47 $\pm$ 0.46	
Sex	Male	2.28 $\pm$ 0.57	-.093(.276)
	Female	2.36 $\pm$ 0.46	
Grade	The second grade	2.26 $\pm$ 0.46	- 1.888(.060)
	The third grade	2.38 $\pm$ 0.51	
Performance	Top ranks (A+)	2.09 $\pm$ 0.48	3.358(.011)
	Middle upper ranks(A)	2.26 $\pm$ 0.49	
	Middle ranks(B+)	2.30 $\pm$ 0.49	
	Middle low ranks(B)	2.52 $\pm$ 0.44	
	Lower ranks(less than C)	2.44 $\pm$ 0.53	
Major satisfaction	Very satisfied ^a	2.28 $\pm$ 0.93	30.649(.000) a,c,d,e<b
	Satisfied ^b	3.12 $\pm$ 0.30	
	Normal ^c	2.59 $\pm$ 0.37	
	Unsatisfied ^d	2.19 $\pm$ 0.4	

		1	
	Very unsatisfied ^e	1.84±0.4 4	
Clinical experience	Yes	2.34±0.5 2	0.216(.829)
	No	2.33±0.4 7	
	Very good	2.22±0.5 0	
Health	Good	2.25±0.4 7	4.399(.005)
	Normal	2.44±0.4 9	
	Bad	2.57±0.5 1	
	Very good	2.35±1.0 3	
	Good	3.21±0.0 0	
Relationship	Normal	2.51±0.4 9	6.028(.000)
	Bad	2.28±0.4 4	
	Very bad	2.06±0.4 8	
	Hard	2.17±0.5 3	
	Not enough	2.25±0.4 3	
Economic status	Average	2.36±0.4 4	1.529(.194)
	Affordable	2.48±0.4 4	
	Enough	2.09±1.0 2	

**Scheffe post hoc analysis*

Table 3 shows the difference in career identity according to the general characteristics of students in the Department of Nursing, Physical Therapy, and Health Administration.

As a result of analyzing the difference in career identity according to general characteristics, there were statistically significant differences in department, grade, major satisfaction, health status, interpersonal relationships, and economic life. In the post-mortem examination department, the Department of

Health Administration was higher than the Department of Physical Therapy ($F=5.876$, $p=0.003$). In terms of grades, the mean and standard deviation of middle lower were higher than those in the top, upper middle, middle, and lower ranks ($F=3.051$, $p=0.018$). In terms of major satisfaction, dissatisfaction was very higher than satisfaction. In terms of health status, bad was higher than that of very good, good, normal, and very bad ($F=5.039$, $p=0.001$). In terms of interpersonal relationship, very bad was higher in mean and standard deviation compared to very good, good and average. ($F=6.586$, $p=0.000$) Post-mortem examination shows that the degree of economic life had an order of not enough, average, and hard ($F=2.634$, $p=0.035$). In addition, there were no statistically significant differences in gender, grade, and clinical practice experience.

Differences in career choice according to the general characteristics of students in the Department of Nursing, Physical Therapy, and Health Administration

Table 4
General characteristics with career choice

Characteristics	Categories	Career choice	
		M $\pm$ SD	t or F(p)
Department	Nursing ^a	3.47 $\pm$ 0.6 7	3.849(.023) c<a<b
	Physical therapy ^b	3.52 $\pm$ 0.8 5	
	Health administration ^c	3.14 $\pm$ 0.5 1	
Sex	Male	3.34 $\pm$ 0.5 6	-.093(.278)
	Female	3.47 $\pm$ 0.7 6	
Grade	The second grade	3.57 $\pm$ 0.7 0	2.370(.019)
	The third grade	3.35 $\pm$ 0.7 1	
	Top ranks (A+)	3.58 $\pm$ 0.7 1	
	Middle upper ranks(A)	3.58 $\pm$ 0.4 4	
Performance	Middle ranks(B+)	3.39 $\pm$ 0.7 0	1.096(.359)
	Middle low ranks(B)	3.42 $\pm$ 0.9 6	
	Lower ranks(less than C)	3.22 $\pm$ 0.4 6	
Major	Very satisfied ^a	3.73 $\pm$ 0.5	8.331(.000)

satisfaction		5	d,e<c
	Satisfied ^b	3.61±0.8 4	
	Normal ^c	3.19±0.4 1	
	Unsatisfied ^d	2.96±0.4 7	
	Very unsatisfied ^e	2.58±0.8 0	
Clinical experience	Yes	3.38±0.5 3	-
	No	3.48±0.8 4	1.092(.276)
	Very good	3.72±1.0 4	
Health	Good	3.46±0.4 9	
	Normal	3.33±0.7 7	3.295(.021)
	Bad	3.20±0.5 4	
	Very good	3.70±1.2 4	
Relationship	Good	3.46±0.4 4	
	Normal	3.32±0.8 1	2.063(.086)
	Bad	3.25±0.0 0	
	Very bad	2.83±0.8 7	
	Hard	2.91±0.8 0	
Economic status	Not enough	3.41±0.5 2	
	Average	3.40±0.6 7	0.850(.495)
	Affordable	3.56±0.8 9	
	Enough	3.44±0.7 3	

**Scheffe post hoc analysis*

Table 4 shows the differences in career choice motivation according to the general characteristics of students in the Department of Nursing, Physical Therapy, and Health Administration.

As a result of analyzing the difference in career choice motivation according to general characteristics, major satisfaction, health status, interpersonal relationship, and economic degree of life showed statistically significant differences. On the post-mortem examination, major satisfaction was in the order of very satisfaction, satisfaction, and very dissatisfied ($F=8.245$, $p=0.000$). Regarding health status, very good was higher in mean and standard deviation compared to good, normal, bad, and very bad ($F=3.395$, $p=0.010$). In terms of Interpersonal relationships, very good was higher in mean and standard deviation compared to good, normal and very bad ($F=2.697$, $p=0.047$). Regarding economic status, affordable was higher in mean and standard deviation compared to hard, not enough, average and enough. ($F=0.852$, $p=0.494$). There were no statistically significant differences in departments, gender, grade, performance, and clinical practice experiences.

Correlation between subject's major satisfaction, motivation for career choice, and sense of career identity

Table 5
Correlation between the subject's career satisfaction, career identity, and motivation for career choice

	Career satisfaction		Career choice motivation		Career identity	
	r	p	r	p	r	p
Career satisfaction	1		.370	.000	-.512	.000
Career choice motivation			1		-.218	.001
Career identity					1	

As a result of analyzing the correlation between the subject's career satisfaction and career identity, there was a negative correlation ($r=-.516$, $p=.000$). As a result of analyzing the correlation between the subject's career satisfaction and career choice motivation, there was a negative correlation ($r=.370$, $p=.000$), as a result of analyzing the correlation between career identity and career choice motivation, There was a negative correlation ($r=-.219$, $p=.001$) [Table 5].

Effect of subject's major satisfaction and motivation for career choice on career identity

Table 6
Factors of subject's major satisfaction and motivation for career choice on career identity

Variables	Non-standardization coefficient		standardization coefficient	t(p)	Collinearity statistics	
	B	SE	β		Tolerance	VIF
(Constant)	4.369	.215		20.276		
Major satisfaction	-0.229	.042	-.358	-5.424	0.636	1.572
Total score of major satisfaction	-0.334	.075	-.296	-4.478	0.636	1.572
$F(p)$				61.890(.000)		
adj. R^2				0.338		
Durbin-Watson				1.834		

For multiple regression analysis, stepwise regression analysis, normality, equal variance, and independence of residuals were confirmed, and the independence of residuals is explained by Durbin-Watson value. Among the variables, the total score of major satisfaction and major satisfaction were found to affect career identity.

As a result of analysing residual independence through the Durbin-Watson test in the two variables, it was found that the error terms were not autocorrelation at 1.926. The tolerance limit was both .636 which was over 0.1 and the variance expansion factor (VIF) was 1.572, which did not exceed 10, indicating that there was no problem with multicollinearity.

The total score of major satisfaction and major satisfaction was found to be negative influencing factors on career identity, and it was significantly found that career identity increased as the total score of major satisfaction and major satisfaction decreased ($p < .005$) [Table 6].

Discussion

This study identifies career choice motivation for college students in the Department of Health and identifies the relationship between major satisfaction and career identity. It was conducted to provide basic data for systematic guidance and education to establish a firm career identity by identifying factors affecting career identity by revealing the relationship between major satisfaction, career choice motivation, and career identity.

As a result of analyzing the difference in major satisfaction according to general characteristics, there were statistically significant differences in department, grade, major satisfaction, health status, and interpersonal relationships. These results were similar to those of Jung et al. [12] showing significant differences in major satisfaction according to general characteristics such as grade, school performance, clinical practice experience, clinical practice satisfaction, and motivation for entering school. In addition, there were no statistically significant differences in gender, grade, clinical practice experience, and economic degree of life. In the study of Jung et al. [12], there were significant differences in grade and clinical practice experience, but in this study, there was no significant difference. I think the reason is that there are more subjects who do not experience clinical practice. In the future, we propose a repetitive study to see the difference according to the presence or absence of practical experience.

As a result of analyzing the difference in career identity according to general characteristics, there were statistically significant differences in department, grade, major satisfaction, health status, interpersonal relationships, and economic life. These results were similar to those shown by Jung et al. [12] according to age, clinical practice experience, clinical practice satisfaction, and motivation for entering school in the case of career identity which are general characteristics. In addition, there were no statistically significant differences in gender, grade, and clinical practice experience. In the future, we propose a repetitive study to see the difference according to the presence or absence of practical experience.

As a result of analyzing the difference in career choice motivation according to general characteristics, major satisfaction, health status, interpersonal relationship, and economic degree of life showed statistically significant differences. There were no statistically significant differences in departments, gender, grade, performance, and clinical practice experiences. Students who responded to "very satisfied" with their major satisfaction have the highest motivation for career choice, which is believed to require measures to increase their major satisfaction in the department.

As a result of analyzing the correlation between the subject's major satisfaction, career choice motivation, and career identity, it was found that career choice motivation had a negative correlation with career identity, and major satisfaction had a negative correlation with career identity. Departments that conduct clinical practice first experience the role they play in their jobs through the curriculum and think about whether they match their aptitude. Therefore, it is believed that improving the degree of adaptation to the major by grasping each student's aptitude, interest, and problems at the beginning of admission through regular meetings with professors and seniors and juniors can have a positive effect on future career identity [12].

Conclusions & Recommendations

In the influence of major satisfaction and career choice motivation on career identity, the total score of major satisfaction and major satisfaction was negative, and it was significantly found that career identity increased as the total score of

major satisfaction and major satisfaction decreased. In addition, based on these results, students should find and supplement ways to increase their satisfaction with the department to increase their self-esteem, improve the quality of the department, and accurately identify what they consider and what they are affected by before entering the department [12].

In addition, it is expected that practical and valuable research based on abundant data will be possible if follow-up research is conducted using multidimensional research tools after becoming accustomed to the digital education environment or non-face-to-face education method caused by the unexpected COVID-19 Pandemic phenomenon.

Based on this study, additional studies are needed to prove the causal relationship to the hypothesis. Since the sample was taken only for one school, there is a limitation in representativeness, so further research is needed.

References

- Jeong, J. H., & Lee, S. H. (2014). The difference in identity style, self-belief, and happenstance skills between vocational identity status. *Journal of Career Education Research*. 27(1), 151-170.
- Jang, T. J., & Moon, M. Y. (2016). Factors influencing the career preparation behavior of nursing students. *Journal of Korean Academy of Nursing Administration*, 22(4), 344-352.
- Kim, P. -H., & Kim, K. -N. (2019). Comparison of the difference of appearance satisfaction and self-esteem according to self-coordination of nursing college students. *International Journal of Advanced Nursing Education and Research*. 4(1), 13-18. doi:10.21742/IJANER.2019.4.1.02.
- Jee, Y. -J., & Yang, S. -K. (2019). A study on relationships among self-esteem, major satisfaction, social support and college life adjustment of nursing students. *International Journal of Advanced Nursing Education and Research*. 4(2), 51-56. doi:10.21742/IJANER.2019.4.2.09.
- Choi, E. H. (2009). A study on the relationship between career identity and clinical competency in nursing students. *Journal of Korean Academic Society of Nursing Education*. 15(1), 15-21.
- Park, I. S., & Kim, M. J. (2015). Influence of job selection motive and occupational values on major satisfaction and job preparation behavior in case of students who are majoring in airline services. *International Journal of Tourism and Hospitality Research*. 29(6), 139-151.
- Holland, J. L., Daiger, D. C., & Power, P. G. (1980). My vocational situation. Palo Alto, CA: *Counseling Psychology Press*.
- Kim, K. H., & Ha, H. S. (2000). A study of department satisfaction factors of undergraduate students. *Journal of Korean Counseling*. 1(1), 7-20.
- Lee, D. J. (2006). The relationships among satisfaction in major, gender identity, and gender stereotypes of male nursing students. *Unpublished master's thesis*. Yonsei University.
- Ham, Y. J. (2014). The study on the relationship between the degree of instruction participation and major satisfaction and the employment preparation behavior by the major selection motive and their work values of university students. *Doctoral Dissertation*. Kyungsung University.

- Kwon, Y. H., & Kim, J. N. (2002). Effects of a ready planned self-growth program through MBTI on interpersonal relationships and the career identity of nursing college students. *Journal of Korean Academy of Community Health Nursing*. 13(2), 216-229.
- Jung, J. S., Jeong, M. J., & Yoo, I. Y. (2014). Relations between satisfaction in major, career decision-making self-efficacy and career identity of nursing students. *Journal of Korean Academic Society of Nursing Education*. 20(1), 27-36.
- Lee, H. -S., Hong, S., & Bae, S. -Y. (2020). Convergent factors related to the hopelessness of some college students majoring in health science. *Journal of Nursing Methodology*. NADIA. 1(1), 9-16.
- Kim, B. K. (2018). Factors and satisfaction of departmental and major selection of beauty-related students -focused on the 4 years university students in Gwangju Metropolitan City. *Unpublished master's thesis*. Kwangju Women's University.