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The Integrated Effects of Nursing Students' Psychosocial Well-being, Job Preparing Stress and Career Decision-making Self-efficacy on Career Preparation Behavior during the Era of COVID-19

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Abstract. This study is intended to find out the correlation among psychosocial well-being, job preparing stress and career decision-making self-efficacy of nursing students during the era of COVID-19, and to comprehend the integrated factors that affect nursing students' career preparation behavior. The survey was done on 196 seniors of nursing college from April 12 to 16, 2021, and for data analysis, IBM SPSS Statistics 23.0 program was used. In the results of the analysis, psychosocial well-being has positive correlation ($r=.391$, $p<.001$) with job preparing stress, and negative correlation ($r=-.446$, $p<.001$) with career decision-making self-efficacy. Career decision-making self-efficacy and job preparing stress have negative correlation ($r=-.215$, $p<.01$, and career decision-making self-efficacy and career preparation behavior showed positive correlation ($r=.547$, $p<.001$). The integrated factors that affect nursing students' career preparation behavior are career decision-making self-efficacy ($\beta =.583$, $p<.001$), job preparing stress ($\beta =.240$, $p<.001$) and club activity ($\beta =-.117$, $p<.05$), and the total explanation power of these factors is 36.6%. Therefore, it is necessary to seek comprehensive career preparation behavior promotion programs, so that nursing students can prepare their career actively in the reality that various programs and participation are difficult due to the continuing COVID-19 that requires non-contact situations.

Keywords: psychosocial, well-being, job, stress, career, self-efficacy, behavior

1. Introduction

The pandemic of COVID-19 that spread from early 2020 caused not only socio-economic problems but also changes in overall education world. Especially, nursing students, who have to prepare their career successfully by developing direct experiences and working ability in the field of hospital through clinical practice, an essential course of nursing education, have stress due to the increase of online classes (Sheroun, D. et al, 2020).

Psychosocial well-being means the conflict situation that has social attribute by the threat of individual resources and reaction ability (Jang, S. J., 2000), and this should be considered importantly as a basic element to take care of others by providing nursing services after graduation. When nurses are healthy psychosocially, they can be equipped with resources to overcome stress and conflicts and perform tasks better (Lee, J. Y. et al, 2015), and as psychosocial well-being is better, resilience and self-directed learning ability improve (Kim, Y. M., 2020). Therefore, despite the fact that nursing students' psychosocial well-being is very important in the stress situation caused by pandemic, related studies are not sufficient, and it is necessary to check the current level of psychosocial well-being in preparation for post-COVID-19.

Nursing students engage in college life for four years after they decide their career as a nurse in a certain degree upon entering college. Their employment stress level is getting higher from mental pressure of career preparation behavior including grade management for customized career preparation to get a job in desired hospital, extracurricular activities, certified English scores, various certificates and passing national test (Kim, E. A., & Kim, N. Y., 2020). Moreover, as they have restrictions in various activities due to long-standing COVID-19, their employment stress should be adjusted, and checking factors that affect employment stress is meaningful.

Career decision-making self-efficacy is the confidence of ability to perform tasks for career decision successfully (Betz, N. E. et al, 1996), is the most decisive variable to predict career preparation behavior (Seok, H. J., & Lee, J. S., 2016) and functions as a motivation factor to choose and maintain career (Kim, S. O., 2016). As nursing students' career decision-making self-efficacy is higher, employment stress is lower, and career preparation behavior shows improvement (Jang, H. J. et al, 2020; Kim, K. H., 2021; Kim, M. H., 2021), which shows nursing students' career decision-making self-efficacy, employment stress and career preparation behavior are correlated. Due to the long period of COVID-19, students has situational restrictions to cope with their career matters actively, and this seems to have an impact on the adjustment to the field after getting a job, but still it is important to comprehend career decision-making self-efficacy.

Career preparation behavior means the behavior of long-term preparation in the specific and practical level for logical and proper career decision rather than cognitive or attitudinal level (Kim, B. H., & Kim, G. H., 1997). In college, students seriously prepare for the performance in the job field, and preparation behavior implementation is very important in proper decision making for future career (Kim, B. H., & Kim, G. H., 1997). However, nursing students tend to opt to adjust their qualification suitable for medical institutions instead of seeking various types of career and preparing for future career systemically. The lack of enough consideration for future career and preparation behavior can cause them to be unable to adapt themselves to the nursing job, and could lead to changing their jobs easily since they do not have responsibility or motivation to cope with heavy workload stress (Im, B. M. et al, 2015). Students of the last year of college course, when they have to prepare and decide career as the final stage of nursing course, need active career preparation behavior with spontaneity and autonomy emphasized, and it is necessary to provide specific career education during the college life for successful employment and adaptation to complicated clinical fields and to reinforce their career preparation behavior. Nevertheless, students who engaged in club activities show higher score of career preparation behavior than those who didn't (Ko, Y. J., & Kim, I. K., 2011). This indicates that there should be systemic and multilateral comprehension of factors to support nursing students to check their career preparation status and to prepare their career actively.

Therefore, this study is to provide basic resources to develop programs for supporting nursing students' career preparation behavior by checking correlation among psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior and by comprehending factors that affect career preparation behavior directly.

2. Related Works

2.1. Methods

2.1.1. Study Design

This study is a descriptive research study to check the correlation among nursing students' psychosocial well-being, job preparing stress and career decision-making self-efficacy in the era of COVID-19 and to comprehend factors that affect their career preparation behavior.

2.1.2. Study Subjects

This study does convenience sampling of senior nursing students in a four-year-course college located in W-Si who understood the purpose this study and who want voluntary participation. Regarding the number of participants, the minimum sample

numbers is 188 with .05 of two-tail test significance level, 30 of intermediate size in the multiple regression analysis and 95% test power with the use of G*power 3.1.9 Program. Total 200 copies of questionnaires were distributed with the reflection of wastage rates, and 196 copies with the exclusion of four insufficient answers were analyzed.

2.1.3. Study Tools

• Psychosocial Well-being

This study uses simple form of PWI-SF (Psychosocial Well-being Index Short Form) that Jang, S. J. (2000) developed by adjusting Goldberg (1978)'s General Health Questionnaire (GHQ) to Korean situation. The tool is composed of total 18 questions, and each question is from point 0 'Always' to 3 'Never', and 8 inverse problems are processed with inverse conversion. The higher the scores are, the higher their psychosocial stress is, and total score is 54. Scores over 27 are classified as 'high risk stress group', 9-26 'potential stress group' and under 8 'healthy group'. The reliability level of the tool was 90 in Cronbach's α of Jang, S. J (2000)'s study, and 91 in this study.

• Job Preparing Stress

This study uses a tool Kang, M. Y. (2012) organized in 12 questions based on a tool Hwang, S. W. (1998) developed by revising and compensating Cornell Medical Index: CMI' (Shepherd, M. et al, 1996). The tool consists of 5 questions of 'employment preparation volume stress by excessive employment preparation volume', 3 questions of 'ability stress for his or her own ability', 2 questions of 'major-related stress for major and employment relation' and 2 questions of 'progress stress for employment preparation progress degree'. Each question is from score 1 'Never' to 5 'Very' in Likert-type scale, and as the score is high, job preparing stress is high. The reliability level of the tool was 75 in Cronbach's α of Kang, M. Y. (2012), and 76 in this study.

• Career Decision-making Self-Efficacy

This study uses a tool from which Betz, N. E. et al (2005) validated and Lee, G. H., & Lee, H. J (2000) translated Betz, N. E. et al (1996)'s Career Decision-making Self-Efficacy Scale-Short Form (CDMSES-SF). The tool is composed of total 25 questions; 5 questions of 'self-appraisal', 5 questions of 'occupational information', 5 questions of 'goal selection', 5 questions of 'planning' and 5 questions of 'problem solving'. Each question is from score 1 'Never' to 5 'Very' in five point Likert-type scale, and as the score is high, career decision-making self-efficacy is high. The reliability level of the tool was 92 in Cronbach's α of Lee, G. H., & Lee, H. J (2000)'s study, and 93 in this study.

• Career Preparation Behavior

This study uses a tool revised and compensated by Lee, M. S. (2003) from a career preparation behavior measuring tool developed by Kim, B. H (1997). The tool is

composed of three sub-factors of 6 ‘information gathering activity’ questions, 5 ‘equipment furnishing activity’ questions and 7 ‘practical effort’ . Each question is from score 1 ‘Never’ to 4 ‘Very’ in four point Likert-type scale, and as the score is higher, career preparation behavior is high. The reliability of the tool was 88 in Cronbach's α of Lee, M. S (2003)’ s study, and 88 in this study.

2.1.4. Data Collection and Ethical Consideration

Data collection was done for five days from April 12 to 16, 2021. After the researcher explained the purpose of this study, anonymity guarantee of collected data and the right of participants, and those who agreed to participate voluntarily became the subjects of this study. It took about 10 minutes to write the questionnaires, and participants were given pre-selected gifts of gratitude. All data and personal information were anonymous, and the information of each participant was identified with the use of code without real name. The questionnaires in each sealed individual envelop were stored by the researcher to avoid the leakage. The questionnaires will be shred and discarded one year later the study is completed.

2.1.5. Data Analysis Method

For data analysis, IBM SPSS Statistics 23.0 program was used.

- Participants’ general characteristics and the degrees of psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior were analyzed with natural number, percentage, average and standard deviation.
- For the differences of psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior by general characteristics of participants, Independent t-test and ANOVA were implemented, and Scheffé’ s test was used for post hoc analysis.
- The correlation among participants’ psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior was analyzed with the use of Pearson correlation coefficients.
- Factors that affect participants’ career preparation behavior were analyzed with the use of Stepwise multiple regression.

2.2. Results

2.2.1. General Characteristics

The general characteristics are shown in <Table 1>. Regarding gender, ‘female’ was 82.7%, and the highest ratio in the reason for choosing nursing department was ‘suitable for aptitude and interest’ , which is 50.5%. Regarding the satisfaction level of college life, ‘medium’ was 66.3%, and regarding subjective health condition, ‘medium’ was 54.6%. The biggest number of students wanted to work in ‘university hospital’ (83.2%).

Table 1: Characteristics of the subjects (N=196)

Variables	Categories	N (%)
Gender	Male	34 (17.3)
	Female	162 (82.7)
Religion	Yes	59 (30.1)
	No	137 (69.9)
Club Activity	Yes	78 (39.8)
	No	118 (60.2)
Motivation for Nursing Department	suitable for Aptitude and interest	99 (50.5)
	because It is good for employment	36 (18.4)
	because It's a worthwhile job	28 (14.3)
	because It's a stable job	20 (10.2)
	according to Grades	8 (4.1)
	on the Recommendation of parents	5 (2.6)
Satisfaction with College Life	High	57 (29.1)
	Medium	130 (66.3)
	Low	9 (4.6)
Last Semester Grade	High (A ⁰ /A ⁺)	100 (51.0)
	Medium (B ⁰ /B ⁺)	92 (46.9)
	Low (C or less)	4 (2.0)
Financial State	High	16 (8.2)
	Medium	158 (80.6)
	Low	22 (11.2)
Subjective Health Condition	High	80 (40.8)
	Medium	107 (54.6)
	Low	9 (4.6)
Pin Money	< 20 million won	45 (23.0)
	20 – 40 million won	110 (56.1)
	≥ 40 million won	41 (20.9)
Work Experience	Yes	15 (7.7)
	No	181 (92.3)
Desired Place to Work	University hospital	163 (83.2)
	Secondary hospital	22 (11.2)
	Others	11(5.6)

2.2.2. Nursing Students' Psychosocial Well-being, Job Preparing Stress, Career Decision-making Self-efficacy and Career Preparation Behavior

The degree of nursing students' psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior during the COVID-19 era are shown in <Table 2>. The average score of psychosocial well-

being is 0.90 out of 3. The level of psychosocial well-being can be classified into healthy group (0-8), potential stress group (9-26) and high risk stress group (over 27) based on the total score 54, and in the result of frequency analysis, ‘potential stress group’ was the highest (62.8%), followed by ‘healthy group’ (27.6%) and ‘high risk stress group’ (9.7%). The average score of job preparing stress is 2.91 out of 5, and in its sub-factors, ‘major-related stress’ is the highest (4.31) followed by ‘progress stress’ (3.06) and ‘job readiness stress’ (2.63). The average score of career decision-making self-efficacy is 3.82 out of 5, and in its sub-factors, ‘self-appraisal’ is the highest (3.91) followed by ‘goal selection’ (3.88) and ‘occupational information’ (3.83). The average score of career preparation behavior is 2.85 out of 4, and in its sub-factors, ‘intelligence collection activity’ is the highest (3.28) followed by ‘tools supporting activity’ (2.94) and ‘practical effort’ (2.41).

Table 2: Nursing Students’ Psychosocial Well-being, Job Preparing Stress, Career Decision-making Self-efficacy and Career Preparation Behavior (N=196)

Variables	N (%)	M ± SD
Psychosocial Well-being (0-3)		0.90 ± 0.51
Healthy group	54 (27.6)	0.28 ± 0.13
Potentially stress group	123 (62.8)	1.03 ± 0.31
High risk stress group	19 (9.7)	1.81 ± 0.24
Job Preparing Stress (1-5)		2.91 ± 0.53
Job Readiness Stress		2.63 ± 0.77
Skill Stress		2.37 ± 0.84
Major-related Stress		4.31 ± 0.76
Progress Stress		3.06 ± 0.84
Career Decision-making Self-efficacy (1-5)		3.82 ± 0.54
Self-appraisal		3.91 ± 0.58
Occupational information		3.83 ± 0.65
Goal selection		3.88 ± 0.62
Planning		3.77 ± 0.61
Problem solving		3.69 ± 0.66
Career Preparation Behavior (1-4)		2.85 ± 0.46
Intelligence collection activity		3.28 ± 0.47
Tools supporting activity		2.94 ± 0.63
Practical effort		2.41 ± 0.62

2.2.3. Nursing Students’ Psychosocial Well-being, Job Preparing Stress, Career Decision-making Self-efficacy and Career Preparation Behavior by General Characteristics

The differences of nursing students’ psychosocial well-being, job preparing stress,

career decision-making self-efficacy and career preparation behavior are shown in <Table 3>. The variables that show significant difference in psychosocial well-being are club activity ($t=-2.20, p=.029$), satisfaction with college life ($F=12.71, p=.000$), grades of last semester ($F=11.26, p=.000$), financial state ($F=4.74, p=.010$) and subjective health condition ($F=15.48, p=.000$). The variables that show significant difference in job preparing stress are gender ($t=-2.79, p=.006$), religion ($t=2.52, p=.013$) and subjective health condition ($F=3.11, p=.047$). The variables that show significant difference in career decision-making self-efficacy are religion ($t=-2.08, p=.039$), satisfaction with college life ($F=8.33, p=.000$), financial state ($F=4.37, p=.014$) and subjective health condition ($F=7.64, p=.001$). The variables that show significant difference in career preparation behavior are gender ($t=-2.59, p=.010$), club activity ($t=3.19, p=.002$) and financial state ($F=5.37, p=.005$).

2.2.4. Correlation among Nursing Students’ Psychosocial Well-being, Job Preparing Stress, Career Decision-making Self-efficacy and Career Preparation Behavior

The results of analyzing correlation among nursing students’ psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior are shown in <Table 4>. Psychosocial well-being has a positive correlation with job preparing stress ($r=.391, p<.001$), and negative correlation with career decision-making self-efficacy ($r=-.446, p<.001$). In addition, career decision-making self-efficacy and job preparing stress show negative correlation ($r=-.215, p<.01$), and career decision-making self-efficacy and career preparation behavior have positive correlation ($r=.547, p<.001$).

Table 4: Correlation among Nursing Students’ Psychosocial Well-being, Job Preparing Stress, Career Decision-making Self-efficacy and Career Preparation Behavior (N=196)

	Job Preparing Stress $r(p)$	Career Decision-making Self-efficacy $r(p)$	Career Preparation Behavior $r(p)$
Psychosocial Well-being	.391 (.000)	-.446 (.000)	-.126 (.079)
Job Preparing Stress		-.215 (.003)	.128 (.074)
Career Decision-making Self-efficacy			.547 (.000)

Table 3: Nursing Students’ Psychosocial Well-being, Job Preparing Stress, Career Decision-making Self-efficacy and Career Preparation Behavior by General Characteristics (N=196)

Variables	Categories	Psychosocial Well-being				Job Preparing Stress				Career Decision-making Self-efficacy				Career Preparation Behavior			
		M±SD	t/F	p	Sch- effé	M±SD	t/F	p	Sch- effé	M±SD	t/F	p	Sch- effé	M±SD	t/F	p	Sch- effé
Gender	Male	0.88±0.52	-0.23	.818		2.69±0.53	-2.79	.006		3.74±0.61	-0.93	.355		2.67±0.50	-2.59	.010	
	Female	0.90±0.51				2.96±0.52				3.83±0.52				2.89±0.45			
Religion	Yes	1.00±0.54	1.75	.082		3.06±0.59	2.52	.013		3.70±0.56	-2.08	.039		2.79±0.52	-1.12	.267	
	No	0.86±0.50				2.85±0.49				3.87±0.53				2.88±0.44			
Club Activity	Yes	0.80±0.55	-2.20	.029		2.99±0.58	1.54	.126		3.91±0.54	1.93	.055		2.98±0.48	3.19	.002	
	No	0.96±0.49				2.87±0.49				3.76±0.53				2.77±0.43			
Motivation for Nursing Department	suitable for Aptitude and interest	0.84±0.54	1.13	.344		2.89±0.54	0.97	.436		3.87±0.54	0.89	.490		2.90±0.49	1.08	.373	
	because It is good for employment	1.03±0.60				2.91±0.60				3.79±0.68				2.78±0.42			
	because It's a worthwhile job	0.94±0.47				3.09±0.43				3.75±0.45				2.90±0.41			
	because It's a stable job	0.80±0.34				2.77±0.48				3.84±0.38				2.79±0.39			
	according to Grades	0.93±0.31				2.96±0.55				3.61±0.39				2.66±0.46			
	on the Recommendation of parents	1.13±0.30				2.98±0.36				3.52±0.76				2.62±0.68			
Satisfaction With College Life	High ^a	0.66±0.44	12.71	.000	a<b a<c b<c	2.79±0.53	2.61	.076		4.05±0.48	8.33	.000	b<a	2.96±0.52	2.71	.069	
	Medium ^b	0.97±0.50				2.98±0.52				3.73±0.53				2.82±0.41			
	Low ^c	1.40±0.55				2.83±0.57				3.60±0.66				2.65±0.65			
Last Semester Grade	High(A ⁰ /A ⁺) ^a	0.74±0.48	11.26	.000	a<b	2.90±0.46	0.89	.413		3.88±0.53	1.98	.141		2.87±0.47	0.82	.441	
	Medium(B ⁰ /B ⁺) ^b	1.05±0.51				2.95±0.60				3.76±0.56				2.84±0.46			
	Low (C or less) ^c	1.29±0.22				2.60±0.38				3.47±0.18				2.58±0.33			
Financial State	High ^a	0.65±0.50	4.74	.010	a<c	2.82±0.49	0.37	.693		4.07±0.53	4.37	.014	c<a	3.02±0.39	5.37	.005	c<a, b
	Medium ^b	0.89±0.51				2.93±0.53				3.83±0.52				2.87±0.44			
	Low ^c	1.15±0.45				2.88±0.56				3.56±0.62				2.57±0.59			
Subjective Health Condition	High ^a	0.69±0.48	15.48	.000	a<b a<c	2.83±0.56	3.11	.047		3.99±0.46	7.64	.001	b<a	2.87±0.46	1.61	.202	
	Medium ^b	1.01±0.48				2.95±0.50				3.69±0.53				2.86±0.46			
	Low ^c	1.42±0.49				3.23±0.41				3.84±0.88				2.58±0.49			

Variables	Categories	Psychosocial Well-being				Job Preparing Stress				Career Decision-making Self-efficacy				Career Preparation Behavior			
		M±SD	t/F	p	Sch- effé	M±SD	t/F	p	Sch- effé	M±SD	t/F	p	Sch- effé	M±SD	t/F	p	Sch- effé
Pin Money	< 20 million won	0.95±0.56				3.01±0.53				3.83±0.52				2.86±0.45			
	20 – 40 million won	0.87±0.50	0.47	.627		2.86±0.56	1.45	.237		3.75±0.55	2.58	.078		2.83±0.50	0.39	.677	
	≥ 40 million won	0.93±0.51				2.96±0.42				3.98±0.52				2.90±0.39			
Work Experience	Yes	1.02±0.44				2.89±0.40				3.98±0.58				2.78±0.70			
	No	0.89±0.52	0.95	.346		2.92±0.54	-0.16	.876		3.80±0.54	1.25	.215		2.86±0.44	-0.62	.535	
Desired Place to Work	University hospital	0.89±0.51				2.94±0.53				3.83±0.53				2.86±0.46			
	Secondary hospital	1.05±0.54	1.44	.239		2.83±0.54	0.73	.482		3.67±0.66	0.97	.380		2.69±0.45	2.13	.122	
	Others	0.75±0.48				2.78±0.53				3.87±0.42				3.02±0.45			

2.2.5. Factors that Affect Nursing Students' Career Preparation Behavior

The results of analyzing factors that affect nursing students' career preparation behavior are in <Table 5>. Regarding methods to verify multicollinearity, below 0.1 of Tolerance or over 10 of variance inflation factor (VIF) indicates that there is problem in multicollinearity. In this study, Tolerance is .928-.961 and variance inflation factor is 1.041-1.078, which indicates no problem. Factors affecting career preparation behavior are career decision-making self-efficacy ($\beta = .583, p < .001$), job preparing stress ($\beta = .240, p < .001$) and club activity ($\beta = -.117, p < .05$), and total explanation power of these factors is 36.6%.

Table 5: Factors that Affect Nursing Students' Career Preparation Behavior (N=196)

	B	SE	β	t	p	tolerance	VIF
(Constant)	.510	.302		1.687	.093		
Career Decision-making Self-efficacy	.499	.051	.583	9.852	.000	.928	1.078
Job Preparing Stress	.210	.052	.240	4.076	.000	.934	1.070
Club Activity	-.110	.055	-.117	-2.006	.046	.961	1.041

F=38.57, $p < .001$, $R^2 = .376$, adj $R^2 = .366$

2.3. Discussion

This study is done to check the relationship among nursing students' psychosocial well-being, job preparing stress and career decision-making self-efficacy, and to find out factors affecting their career preparation behavior.

The score range of nursing students' psychosocial well-being levels is 0-54, and is classified into 'healthy group' for less than 8, 'potential stress group' for 9-26 and 'high risk stress group' for over 27. In the results, the highest portion is 'potential stress group' (62.8%), which is similar to 54.6% reported in a study of Kim, J. H., et al (2010). In this study done on nursing students, 'high risk stress group' is 9.7%, but in the study of Kim J. H., et al (2010) done on clinical nurses, it is 41.7%, showing big difference. This means nursing students meet patients indirectly at clinical practice fields without practicing direct nursing, but clinical nurses should meet patients directly in the fields and perform nursing intervention accurately without mistakes responsibly, so there are many in 'high risk stress group'. Most nursing students become clinical nurses after graduation, so it is necessary to operate various activities to manage their potential stress and to improve psychosocial well-being before graduation. In addition, as general characteristics such as club activity, satisfaction with college life, grades, financial state and health condition show significant difference in psychosocial well-being, there should be development and adoption of mental health promoting programs with those characteristics considered.

The score of job preparing stress is 2.91 out of 5, which is slightly higher than 2.11 reported in a study of Yang, S. A (2017) and 2.54 reported in the study of Jang, H. J., & Lee, J. H (2020). The reasons subjects in same department show various results might include their universities' locations, regional characteristics, grades and medical infrastructure. Regarding the sub-factors of job preparing stress, 'major-related stress' is the highest followed by 'progress stress', 'employment preparation volume stress' and 'ability stress'. However, in the study of Kang, M. Y (2012) done on regular department students, 'employment preparation volume stress' is the highest followed by 'ability stress', 'progress stress' and 'major-related stress'. This indicates that nursing students with clear job expertise in future career have higher stress about their major. Therefore, when universities' employment and start-up centers operate various programs to reduce job preparing stress, they need to consider group programs by regarding special features of each major realistically.

The score of career decision-making self-efficacy in this study is 3.82 out of 5, which is over intermediate level, which is slightly higher than 3.36 reported in the study of Jang, H. J., & Lee, J. H (2020), 3.54 by Kim, K. H. (2021) and 3.56 by YU, H. S. (2021). This is because most nursing students chose their major for their aptitude. In addition, general characteristics that show significant difference in career decision-making self-efficacy are religion, satisfaction with college life, financial state and subjective health condition. Therefore, there should be consideration not only of career related contents but also general characteristics in operating extracurricular activities to promote nursing students' career decision-making self-efficacy.

The score of career preparation behavior is 4 out of 2.85, which is over the intermediate level, and is rather higher than 2.65 reported in the study of Lee, M. S. (2003). Seok, H. J., & Lee, J. S. (2016) reported that to enhance college students' career preparation behavior, social support from family and meaningful others should be enhanced, but there should be elaborate access for college students to be able to recognize the social support instead of focusing on amount and dimension, and through this, college students comprehend their ability, value and desire accurately to improve career decision-making self-efficacy. Therefore, in developing programs to promote nursing students' career preparation behavior, there should be plans to improve career decision-making self-efficacy.

In the results of analyzing the correlation among psychosocial well-being, job preparing stress, career decision-making self-efficacy and career preparation behavior, psychosocial well-being and job preparing stress have positive correlation, but there is no precedent study about the two variables for nursing students, so there is limit for direct comparison. Nevertheless, as employment stress gets higher, psychosocial well-being is deteriorated (Chung, Y. H., & Choi, J. S., 2009), as Positive Psychological Capital, which means individual's positive mental state, is low, employment stress increases (Noh, G. O., & Im, Y. S., 2007), and job stress deteriorates psychosocial well-being level (Kim, I. A., 2007) in the study on laborers. These study results support the results of this study to some degree.

In the study of nursing students' employment stress experience after COVID-19 by Kim, S. N., & Kim, Y. H. (2021), most students experience employment stress negatively and anxiously, which affect successful job adaptation as a nurse after graduation. Therefore, psychosocial health and well-being are as important as physical and mental health. Thus, it is necessary to operate and manage employment support programs in nursing education programs to reduce employment stress systemically. Psychosocial well-being and career decision-making self-efficacy have negative correlation, but direct comparison is impossible because it is difficult to find precedent studies. Nevertheless, as psychosocial well-being is good, resilience is high (Kim, Y. M., 2020), those who have high emotional quotient (EQ) have higher resilience, which is a tendency to recover stressful situations using positive emotion (Lim, H. S., & Ryu, J. L., 2020), and there is pure correlation between resilience and career decision-making self-efficacy (YU, H. S., 2021). These results indicate psychosocial conflict situation can have a negative effect on career decision-making self-efficacy.

In addition, in the study of Hwang, E. H., & Kim, K. H. (2017), career decision-making self-efficacy is the variable that affects nursing students' happiness, which indicates there should be repeated studies, along with the development of career related programs and the establishment of systemic strategies that consider psychosocial well-being and nursing students' positive resources to improve career decision-making self-efficacy. There is negative correlation between career decision-making self-efficacy and job preparing stress, which is the same as the results of studies by Jang, H. J., & Lee, J. H. (2020), Chae, M. O. (2019) and Ahn, E. G. (2018) that show employment stress becomes low as career decision-making self-efficacy is high. As career coaching programs improve career decision-making self-efficacy and reduce employment stress (Seo, Y. S., & Jeong, C. Y., 2016), and group career search programs are effective in career decision-making self-efficacy (Lim, Y. J., 2021), nursing students' employment stress should be reduced through integrated arbitration for prevention and relief of employment stress, and differentiated employment career education programs for students' levels should be developed and adopted. There is positive correlation between career decision-

making self-efficacy and career preparation behavior, which is the same results as the study of YU, H. S. (2021) and Kim, K. H. (2018) done on nursing students.

Various face-to-face activities were difficult due to long-lasting COVID-19, but nowadays, it is possible to return to our daily lives. In this situation, it is necessary to establish innovative and comprehensive education and arbitration program that can improve career decision-making self-efficacy to promote nursing students' career preparation behavior. The factors that affect nursing students' career preparation behavior are career decision-making self-efficacy, job preparing stress and club activity, and total explanation power is 36.6%. This is consistent with the results that career decision-making self-efficacy affects career preparation behavior (Kim, K. H., 2021., & YU, H. S., 2021), and employment stress affects career preparation behavior (Seong, J. A, 2018). Even though there is direct research result that psychosocial well-being affects career preparation behavior, but as employment stress gets higher, psychosocial well-being is deteriorated (Chung, Y. H., & Choi, J. S., 2009), which indicates psychosocial well-being has an influence on career preparation behavior.

This study suggests repeated studies on psychosocial well-being, which lacks precedent research, at this point when systemic and various types of curriculum for actual classes and non-contact campus life in the reality that contact and non-contact methods coexist due to the social changes by long-lasting COVID-19. This study is meaningful in that it is intended to check correlation among psychosocial well-being, employment stress, career decision-making self-efficacy and career preparation behavior, and to find out factors that affect career preparation behavior. Thus, this study is expected to be a basis for systemic access to provide a basic resource to reduce turnover of new nurses and help them play their role faithfully by innovative and comprehensive education and establishment to improve active employment competency through club activity activation and career preparation behavior promotion programs to reinforce psychosocial well-being.

2.4. Conclusion and Suggestion

This study is intended to provide basic resources for the development of differentiated career preparation program to reduce nursing students' job preparing stress by finding out factors that affect their career preparation behavior in the era of COVID-19. Nursing students' psychosocial well-being has positive correlation with job preparing stress and negative correlation with career decision-making self-efficacy. In addition, their career decision-making self-efficacy and job preparing stress have negative correlation, and career decision-making self-efficacy and career preparation behavior have positive correlation. In the results of multiple regression analysis to find out factors that affect career preparation behavior, career decision-making self-efficacy, job preparing stress and club activity have a significant effect, and total explanation power is 36.6%.

After graduation, nursing students will perform nursing work in various relationships in the medical field. This means that the psychosocial well-being of nursing students is just as important a factor as their physical health. However, due to COVID-19, free and active social activities have been restricted, and many students have difficulty in interpersonal relationships. This study confirmed that the psychosocial well-being of nursing students is an important link in preparing for and deciding on employment.

Considering the above results, there should be development of various programs to promote and support nursing students' career preparation behavior and research to verify the effects. The subjects of this study are limited in a certain region, and participants are only nursing students, so it is hard to generalize the results in nationwide college students with different regional characteristics and cultures. Therefore, there should be the expansion of research subjects and repeated research for generalized research results.

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2.6. References

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