

Effects of Work Values and Career Adaptability on Job Preparation Behavior in Graduation Year Nursing Students

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졸업학년 간호대학생의 직업가치관과 진로적응력이 취업준비행동에 미치는 영향

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Abstract : This study is a descriptive survey research conducted to confirm the effects of work values and career adaptability on job preparation behavior in Graduation year nursing students. The subjects are 4th grade students who are attending two university nursing departments in city G and N, and data were collected from September to October 2023. The data were analyzed by descriptive statistics, t-test, ANOVA, Pearson's correlation analysis and controlled regression analysis. The research results are as follows. Intrinsic values ($\beta=-.127, p=.122$) had not statistically a significant effect on job preparation behavior. Extrinsic values ($\beta=.168, p<.001$) and career adaptability ($\beta=.415, p<.001$) had statistically a significant positive effect on job preparation behavior. The variables predicting the job preparation behavior of nursing students were identified in the order of career adaptability and extrinsic values. The study model accounted for 35.5% of job preparation behavior. It suggests that strategies are needed to enhance the extrinsic values and career adaptability in order to promote job preparation behavior in nursing students. However, considering the nature of nursing and the sense of calling of nurses who perform nursing, we should not overlook the fact that the intrinsic values of nursing itself is also an important aspect that nursing students preparing to become future nurses must cultivate.

Keywords : Graduation year, Nursing students, Work values, Career adaptability, Job preparation behavior

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1. Introduction

Adequate supply and demand of nurses, who make up the largest number of medical personnel, is a very important factor in ensuring patient safety and quality of medical services [1]. Experiencing the COVID-19 pandemic was an opportunity to realize that adequate supply and demand of nursing personnel is very important [2]. Looking at the supply and demand status of nursing personnel, the number of active nurses per 1,000 people in Korea is 4.4, which is significantly lower than the OECD average of 8.9 [3]. In order to secure an adequate supply and demand of nursing staff, the government has been pushing for the establishment of a new nursing department and an increase in the number of admissions to the nursing department, which has resulted in a high employment of new nurses [4]. However, in proportion to the high employment of new nurses, the number of resignations is also increasing every year, and it was found that more than half (52.8%) quit their jobs in 2021. What is notable about the resignation of new nurses is that most of them give up seeking employment before joining the company [3]. The reasons for giving up employment before joining the company may be due to a combination of various factors, but job preparation behavior to prepare what is needed for the job field decided upon before graduation is a very important factor in leading to successful employment later [5,6]. Therefore, this study focused on the job preparation behavior of nursing students about to enter the workforce and sought ways to promote this for nurses' successful transition into the world of work.

An individual's values are the source of inducing behavior and are an important variable that effects an individual's behavior [7]. Work values are an individual's thoughts and attitudes toward a job and the desires or goals an individual wants to achieve through a

job, which motivates an individual to choose a job [8]. Therefore, the work values of college students who are about to transition into the world of work after graduation can be said to be an important factor that influences their future employment goals and actions to achieve those goals. The classification of the components of work values is diverse, but they can generally be divided into intrinsic values, which values the work itself, and extrinsic values, which values the rewards and conditions that come with work [9]. In a study on nursing students, work values were confirmed as a variable that increases commitment to the major [10], and were also found to have a positive influence on the formation of nursing professionalism [11]. In a study that examined the impact on job preparation behavior, it was found that the higher the work values, the better the job preparation behavior [12]. When examined separately into intrinsic values and extrinsic values, it was confirmed that students with higher intrinsic values than extrinsic values were more active in job preparation behavior [13]. These results can be said to be a very desirable and encouraging phenomenon because the driving force behind nursing students' active job preparation behavior is to values nursing care for others rather than the rewards or conditions that come from work. However, since it is based on only one research result, it is necessary to conduct repeated studies to confirm the effect of nursing students' intrinsic and extrinsic values on job preparation behavior.

As the career environment has become rapidly changing and uncertain with the recent entry into the era of the 4th industrial revolution, the development of career adaptability to appropriately respond and cope with this career environment has become important [14]. The 4th industrial revolution has brought about many changes in the medical and nursing fields [15], and nursing students must also adapt to this environment

after graduation, so developing career adaptability is becoming important. According to career construction theory, which explains career development, an individual's career development does not unfold on the premise of a stable career environment, but occurs in the context of a rapidly changing and uncertain career environment [16]. Career adaptability is one of the core concepts of career construction theory, and it refers to an individual's self-regulated resources and ability to cope with and adapt to challenges or difficulties facing individuals in the transition period of career development. This career adaptability induces adaptive behavior and helps career adaptation [16]. In a study on college students, students with higher career adaptability showed more promoted behaviors related to career development, such as occupational engagement behavior [17], career preparation behavior [18], and job preparation behavior [19]. In this way, since career adaptability was confirmed as a variable predicting job preparation behavior in a study targeting college students, it can be assumed that career adaptability will also have an impact on the job preparation behavior of nursing students. However, confirming this empirically is necessary to promote job preparation behavior of nursing students.

In this context, this study attempted to confirm the influence of the work values and career adaptability of graduating nursing students on job preparation behavior and use it as basic data to establish a strategy to promote job preparation behavior of nursing students. The specific goal was as follows: First, identify the subject's work values, career adaptability, and job preparation behavior. Second, identify differences in job preparation behavior according to the general characteristics of the subject. Third, identify the correlation between the subject's work values, career adaptability, and job preparation behavior. Fourth, determine the impact of the

subject's work values and career adaptability on job preparation behavior.

2. Research methods

2.1. Research subjects

This study was conducted on fourth-year students enrolled in the nursing departments of two four-year universities located in G city. The number of study subjects was calculated using the G*Power 3.1.9.7 program to calculate the appropriate sample size for regression analysis with an effect size of .15, significance level of .05, power of .95, and 8 observed variables. The calculated number of samples was 160, and a survey was conducted on 190 people considering the recovery rate and dropout rate. Of the responded questionnaires, 2 were excluded due to insincere responses, and 188 were used in the final analysis.

2.2. Data collection methods and ethical considerations

Data collection was conducted from September to October 2023 according to the procedures of the university and department after explaining the purpose of the research to the department head of each university and obtaining permission to conduct the research. The researcher explained the purpose, methods, and procedures of the study to the research subjects, and explained that personal information was confidential and that withdrawal from the study was possible at any time. Additionally, it was explained that there would be no disadvantage, including grades, even if the participant withdrew from participating in the study. A survey was conducted on those who voluntarily agreed in writing to participate in the study. A small gift was provided to the research subjects as a token of gratitude for their participation in the study.

2.3. Research instruments

2.3.1. Work values

To measure work values, an instrument developed by Ahn [20] was used as a tool validated for college students by Park and Lee [21]. It consists of a total of 7 questions, 3 questions about intrinsic values and 4 questions about extrinsic values, on a 5-point Likert scale ranging from 1 'strongly disagree' to 5 'strongly agree'. A higher score means higher work values. The Cronbach's α value of the tool was .74 for extrinsic values and .77 for intrinsic values in the study by Park and Lee [21]. In this study, intrinsic values was .83 and the extrinsic values is .82.

2.3.2. Career adaptability

To measure career adaptability the one constructed by Savickas and Porfeli (2012) [22] and modified by Jeong and Jyung [23] was used. It consists of a total of 24 questions on a 5-point Likert scale ranging from 1 'strongly disagree' to 5 points 'strongly agree'. A higher score means higher career adaptability. The Cronbach's α value of the tool was .93 in the study by Jeong and Jyung [23] and .95 in this study.

2.3.3. Job preparation behavior

To measure job preparation behavior, the tool developed and validated by Han [24] was modified to suit nursing students, and the 'credit management' question was added with the consent of three nursing professors. It consists of a total of 5 questions on a 5-point Likert scale, ranging from 1 'strongly disagree'

to 5 points 'strongly agree'. A higher score means higher job preparation behavior. The Cronbach's α value of the tool was .66 in the study by Han [24] and .79 in this study.

2.4. Data analysis method

SPSS Ver 26.0 was used to analyze the data collected in this study. First, descriptive statistics were used to determine the subjects' general characteristics, work values, career adaptability, and job preparation behavior. Second, the degree of job preparation behavior according to the subjects' general characteristics was analyzed using t-test, ANOVA, and Scheffé test. Third, the correlation between the subject's work values, career adaptability, and job preparation behavior was analyzed by calculating Pearson's correlation coefficient. Fourth, the effects of the subject's work values and career adaptability on job preparation behavior was analyzed using multiple regression analysis.

3. Results and discussion

3.1 Results

3.1.1 Degree of measurement variables

In this study, the subjects' work values, career adaptability, and job preparation behavior degrees are as follows. As shown in table 1, in the case of work values, intrinsic values averaged 4.09 points (SD=0.64), extrinsic values averaged 4.26 points (SD=0.54), career adaptability averaged 4.01 points (SD=0.48), and job preparation behavior

Table 1. Descriptive statistics of measurement variables

(N=188)

Variables	M±SD
Intrinsic values	4.09±0.64
Extrinsic values	4.26±0.54
Career adaptability	4.01±0.48
Job preparation behavior	3.14±0.58

averaged 3.14 points (SD=0.58).

3.1.2. Differences in job preparation behavior according to the general characteristics

In this study, as shown in table 2, the job preparation behavior according to the general characteristics of the subjects differed according to major satisfaction, college life adaptation, and credit (last semester). As a result of the post-test, satisfaction was significantly higher than that of ordinary and unsatisfactory in major satisfaction and college life satisfaction, and in credit, 4.0 or higher was significantly higher than 3.5–3.9 and 3.0–3.4.

3.1.3. Correlation among measurement variables

In this study, as shown in table 3, the correlation between the subjects' work values, career adaptability, and job preparation behavior is as follows. In case of work values, intrinsic values has a positive correlation with career adaptability ($r=.598$, $p<.001$) and job preparation behavior ($r=.314$, $p<.001$). Extrinsic

values has a positive correlation with career adaptability ($r=.454$, $p<.001$) and job preparation behavior ($r=.353$, $p<.001$). Career adaptability and job preparation behavior showed a positive correlation ($r=.521$, $p<.001$).

3.1.4. Factors influencing job preparation behavior

This study attempted to determine the influence of the subject's work values and career adaptability on job preparation behavior and utilize it to establish a strategy to promote job preparation behavior of nursing students.

Multicollinearity of independent variables and autocorrelation of dependent variables were verified, and the lowest tolerance in the multicollinearity of independent variables was .523, which was .10 or more, and the dispersion expansion factor (VIF) was 1.912, which did not exceed 10, indicating that each independent variable was independent. In addition, the autocorrelation of the dependent variable was found to be independent without

Table 2. Degree of job preparation behavior according to general characteristics (N=188)

Characteristics	Range	n(%)	Job preparation behavior	
			Mean ± SD	t / F (p) Scheffé
Sex	Female	155(82.4)	3.16±0.55	.679 (.245)
	Male	33(17.6)	3.04±0.65	
Motive for applying	Aptitude, Interest	48(25.5)	3.17±0.56	1.959 (.144)
	Stable Job	101(53.7)	3.22±0.53	
	Another's advice	39(20.7)	2.89±0.68	
Major satisfaction	Satisfaction ^a	98(52.1)	3.43±0.45	12.219 (<.001) a>b,c
	Moderate ^b	81(43.1)	2.86±0.51	
	Dissatisfaction ^c	9(04.8)	2.80±0.66	
Credit	≥4.0 ^a	84(44.7)	3.45±0.51	10.482 (<.001) a>b,c
	3.5–3.9 ^b	90(47.9)	2.89±0.44	
	3.0–3.4 ^c	14(07.4)	2.88±0.57	
	≤2.9 ^d	41(21.8)	3.71±0.45	

Table 3. Correlation among measurement variables (N=188)

Variables	1 r(p)	2 r(p)	3 r(p)	4 r(p)
Intrinsic values	1			
Extrinsic values	.566 ($\langle .001$)	1		
Career adaptability	.598 ($\langle .001$)	.454 ($\langle .001$)	1	
Job preparation behavior	.314 ($\langle .001$)	.353 ($\langle .001$)	.521 ($\langle .001$)	1

1.: Intrinsic values, 2: Extrinsic values, 3: Career adaptability 4: Job preparation behavior

Table 4. Effects of variables on job preparation behavior (N=188)

Variables	B	SE	β	t	p
Constant	.749	.251		4.010	$\langle .001$
Intrinsic values	-.152	.098	-.127	-1.556	.122
Extrinsic values	.231	.100	.168	2.297	.023
Career adaptability	.633	.119	.415	5.305	$\langle .001$

Ad. $R^2 = .355$ F(p)=11.283($\langle .001$) Durbin-Watson=2.018

autocorrelation, as the Dubin Watson value was met at 2.018 ($1.862 < d < 2.138$).

As shown in table 4, the regression model for job preparation behavior was found to be statistically significant and appropriate ($F=11.283$, $p < .001$), and the adjusted coefficient of determination was .355, confirming that the independent variables explains 35.5% of job preparation behavior. The effects of work values and career adaptability on job preparation behavior is as follows. Intrinsic values ($\beta = -.127$, $p = .122$) had not statistically a significant effect on job preparation behavior. Extrinsic values ($\beta = .168$, $p < .001$) and career adaptability ($\beta = .415$, $p < .001$) had statistically a significant positive effect on job preparation behavior. The variables predicting the job preparation behavior of nursing students were identified in the order of career

adaptability and extrinsic values.

3.2. Discussion

This study was attempted to confirm the influence of the subject's work values and career adaptability on the job preparation behavior and to use it as basic data to establish strategies to promote the job preparation behavior of nursing students in the graduation year. The discussion based on the results of this study is as follows.

In this study, the subjects' work values, career adaptability, and job preparation behaviors are as follows. In this study, the intrinsic values of job value averaged 4.09 points, and the average extrinsic value averaged 4.26 points, which was slightly higher than the intrinsic values of 4.41 points and extrinsic values of 4.48 points in Gu and Park

[25]. And in the study by Shin [26], the intrinsic values was 3.78 points and the extrinsic values was 4.21 points, which were slightly lower than this study. In this study, extrinsic values was found to be higher than intrinsic values, which is the same result as the study by Ku and Park [25] and the study by Shin [26]. This result is understood to be because the economic situation, which is a realistic aspect, was reflected as the subjects of the study were in their final year of graduation and about to get a job [26]. Additionally, it is also understood that this is because many of the subjects of this study applied to the nursing department because of a stable job rather than aptitude or interest. In this study, the subject's career adaptability averaged 4.01 points out of 5, but there was no study that only looked at graduation students as a single group, so it was compared and considered with the study of all grades. In Kim's study, the career adaptability score of nursing students was 3.80 points for the first year, 3.81 points for the second year, 4.20 points for the third year, and 3.93 points for the fourth year [27]. In the study of Kim, the career adaptability score of nursing students was 4.24 points for the second year, 4.00 points for the third year, and 4.39 points for the fourth year [28]. In both studies by Kim [27] and Kim [28], significant differences were found by grade. In Kim's study [27], third graders had the highest scores, and in Kim's study [28], fourth graders had the highest scores. In this study, the average of job preparation behavior of the subjects was 3.14 points, which was similar to the average of 3.07 points of Kim and Ha [29], and the average of 3.11 points of Shin [26]. In this study, job preparation behavior differed depending on major satisfaction, satisfaction with college life, and credit. Credit was consistent with the study of Kim and Ha [29] on 4th grade students and the study of Hwang and Cha [30] on 3rd and 4th grade students. There are few studies set as general

characteristics of major satisfaction and college life satisfaction, so there is a limit to direct comparative consideration. However, it can be understood that major satisfaction [31,32] and college life satisfaction [33] are in line with studies confirmed to influence behavioral variables of career development such as career preparation behavior or job preparation behavior.

Looking at the correlation between job preparation behavior and independent variables, which are the variables of interest in this study, both work values and career adaptability showed positive correlations with job preparation behavior. In terms of work values, both intrinsic and extrinsic values showed positive correlations with job preparation behavior, but in the study of Shin [26] of nursing college students, only intrinsic values showed statistically significant positive correlations, which was not consistent with this study. A study by Park and Kim (34) on students attending the department of emergency medical science found that both intrinsic values and extrinsic values were positively correlated with job preparation behavior, supporting the results of this study. The results of this study suggest that both intrinsic and extrinsic values should be considered when planning employment-related counseling or programs as a consideration to increase the degree of job preparation behavior. In the study by Oh and Lim [35], which examined the work values and career preparation behaviors of nursing students, both intrinsic and extrinsic values were positively correlated with career preparation behavior, as in this study. Job preparation behavior mainly focuses on preparation behavior limited to employment, while career preparation behavior refers to a more comprehensive behavior encompassing job preparation behavior by focusing on preparation behavior related to overall career development from a longer-term perspective[36]. Therefore it can be understood that the research results of Oh and Lim [35] are in part in line with the

results of this study. The results of this study showed that career adaptability was positively correlated with job preparation behavior, but since no research was conducted on the correlation between the two variables targeting nursing students, discussion of the research results is limited. However, in a study targeting general college students, it was confirmed that students with high career adaptability had high job preparation behavior, supporting the results of this study [19].

As a result of examining the effect of work values on job preparation behavior, this study found that intrinsic values did not effect job preparation behavior, but only extrinsic values effected job preparation behavior. Therefore, it can be seen that the higher the extrinsic values, the more active job preparation behavior is. These results were inconsistent with the studies of Ahn and Park [13], which showed that intrinsic values rather than extrinsic values have a relatively greater influence on job preparation behavior. Considering that career preparation behavior is a more comprehensive concept that encompasses job preparation behavior as discussed above, in the study of Oh and Lim [35], which found that only the extrinsic values of nursing students affects career preparation behavior, supports the results of this. Studies dealing with the causal relationship between work values and job preparation behavior consistently showed that work values is a factor that promotes job preparation behavior, but the effects of intrinsic and extrinsic values did not show consistent results. Therefore, repeated studies on the effects of intrinsic and extrinsic values are required as factors to promote job preparation behavior of nursing students. Based on the results of this study, extrinsic values such as rewards and conditions related to work will be important to promote job preparation behavior of nursing students, but when considering the essence of nursing and the sense of calling of the nurse who performs nursing, the future for nursing students preparing to become nurses, the intrinsic values of nursing

itself is also an important aspect that must be cultivated. In this study, career adaptability was found to have a positive effect on job preparation behavior, and the higher the career adaptability, the more actively preparing for employment. Although direct verification is limited due to the lack of research on the causal relationship between career adaptability and job preparation behavior, the results of this study are supported by previous research showing that career adaptability has a positive effect on career-related behavioral variables [17-19]. Therefore, in order to promote job preparation behavior of nursing students, it is necessary to develop and utilize programs that can foster career adaptability.

4. Conclusion

This study was a descriptive investigation attempted to provide empirical data to find ways to improve the job preparation behavior of graduation year nursing students by verifying the impact of their work values and career adaptability on their job preparation behavior it's research. As a result of this study, it was confirmed that career adaptability and extrinsic values influenced the job preparation behavior of graduated nursing students in that order. Therefore, in order to promote the employment preparation behavior of graduating nursing students, various efforts are needed to improve career adaptability during college life in the nursing education field. In addition, employment guidance and counseling will be needed to set specific goals for the salary and working conditions of the workplace where you will be employed after graduation, and to prepare the necessary things with the goal of finding a job that meets these goals.

This study has limitations in generalization because it only targeted upper-year nursing students at some local universities. Therefore, in order to generalize the research results, it is recommended to expand the research subjects

and repeat the study. Additionally, suggestions for future research are as follows. First, it is suggested to check the differences in the sub-areas of work values (intrinsic values, extrinsic values) depending on the grade. Second, in order to promote employment preparation behavior, we suggest research on the development and use of programs to increase career adaptability.

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