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## Effects of Sociability, Service to Nursing Students on Nursing Professionalism in the Covid-19 Pandemic

**<sup>1</sup>Bo Ram Choi and <sup>2</sup>Jung Im Kim**

<sup>1</sup>Professor, Department of Health Administration, Hanyang Cyber University, South Korea

1220004@hycu.ac.kr<sup>1</sup>

<sup>2</sup>Professor, Department of Nursing, Kyungdong University, South Korea  
jjkim@kduniv.ac.kr<sup>2</sup>

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### Abstract

This study was conducted to identify factors affecting professionalism of nursing students. This data is meant to be used as a starting point for identifying the educational methods required to build nursing professionalism. From March 18 through April 8, 2022, the subjects of this study were surveyed online through Google. With this, 194 questionnaires were collected from fourth-year students of the nursing department at a university. The analysis revealed a positive correlation between sociability, service, and nursing professionalism, with service having the greatest impact on nursing professionalism ( $p < .001$ ). Therefore, it is urgent to prepare a non-regular curriculum program that can cultivate the service of nursing students. Furthermore, it is important to create an educational program that may help nursing students become professionals in the field through a variety of volunteer activities, such as non-face-to-face programs, encouraging voluntary participation, and continuous management.

**Keywords:** Sociability, Service, Nursing Professionalism, Nursing Students

### 1. INTRODUCTION

Higher education was impacted by the worldwide COVID-19 outbreak that began in December 2019 and spread throughout the world, which resulted in social isolation and gathering bans. In particular, communication and volunteer activities of college students who must prepare for social life were hardly carried out due to the complete cessation of clinical practice education for nurturing medical personnel, as well as theoretical education as well as practical education within the school.

Nursing students need to establish nursing professionalism in order to provide high-quality nursing care and adapt to their role changes in various situations in the medical field where collaboration is carried out in harmony with professionals of various occupations [1]. This is due to the fact that positive nursing professionalism improves clinical performance [2] and has an impact on nursing-related beliefs and role performance [3]. Through professional nursing education during their undergraduate years, nursing students build their values for nursing and establish their professionalism in nursing [4].

However, if they are dissatisfied with their major, it is an obstacle for nursing students to form the right beliefs and attitudes to efficiently perform their duties as nurses in the future, which may cause confusion and negative effects on their job [5,6]. To this end, each nursing college fosters social skills and service through a variety of non-regular subjects, including regular subjects for on-campus and clinical practice, and volunteer activities. The use of non-face-to-face communication is more common among nursing students, who must prepare for social life owing to the lengthy COVID-19. The majority of the nursing students were unable to participate in volunteer activities as a result of the lack of demand for face-to-face volunteering.

Therefore, in this study, the factors affecting the nursing professionalism of nursing students who have experienced the social situation of COVID-19 were identified and used as basic data for finding the educational methods necessary to establish nursing professionalism during the period of infectious disease. The purpose of this study is to understand the effect of sociability and service on nursing professionalism. The specific purpose is as follows.

## 2. LITERATURE REVIEW

### 2.1 Sociability and Service

Sociability is a subcategory of sociality which refers to the emotion or willingness to be popular and liked by others by being kind and friendly with many people, engaging in activities that are always hopeful and attractive [7]. Additionally, the definition of coexistence, or living in a community, is implied by the word "sociability" in an old dictionary definition [8]. As such, sociability plays an important role in the formation of interpersonal relationships.

However, many of today's college students struggle to establish new relationships and feel a variety of unfavorable feelings; as a result, they frequently turn to online forums to help them feel comfortable and connected [9]. The realization of social distance regulations brought about by the introduction of COVID-19 has also led to the disappearance of many face-to-face activities among college students. As a result, non-face-to-face activities have evolved into more comfortable alternatives to face-to-face activities.

After graduation, most of the nursing students work as nurses who provide direct nursing care for patients in the clinical environment. Therefore, building interpersonal relationships is crucial when taking into consideration the qualities of a profession that emphasizes patient nursing and communication with medical practitioners. In particular, it is important to cultivate sociability and social skills during the college student period (before going out into society). With this, sociability and social skills can be cultivated through learning processes such as team learning, team project, and team practice (in-school & clinical) in the subject program, as well as circles and volunteer activities in the non-regular curriculum program.

Moreover, it is reported that college students' major-related volunteer activities are effective in forming professional values [1]. This type of service learning, which entails voluntary activities coupled with learning, evaluation, and reflection, first emerged in the 1980s in the United States and the 1990s in Korea [10]. Additionally, volunteering is seen as a significant aspect of character development, and self-directed volunteer work in particular has the benefit of preparing participants for success in society by helping them understand the value of cooperation and communication [11]. In other words, volunteer activities can provide opportunities for personal growth, the realization of one's potential, and opportunities for community awareness and social responsibility [12]. Accordingly, nursing students' volunteer activities related to their major can cultivate social skills based on cooperation with others, maintaining good relationships, and self-development [6,13]. To this end, each nursing college in Korea is emphasizing the importance of college students' volunteer activities by introducing and utilizing volunteering hours and social service certification systems among the conditions for college graduation of nursing students. As a result of analyzing previous studies, the factors affecting service are shown in **Table 1**.

As confirmed in previous studies, volunteer activities of college students are important programs that can help them grow into responsible members of society and improve their social sensitivity and empathy by positively leading relationships with others [10].

### 2.2 Nursing professionalism

A systematic vision of nursing and a professionally aware perspective on the nursing activity process or the position itself of the person in charge of nursing can be considered to be nursing professionalism, which is the sum of beliefs, thoughts, and impressions regarding nursing and nurses as a profession [18]. For nursing students, nursing professionalism is the perception and attitude to support and closely observe nursing patients with responsibility [19]. Over time, nursing professionalism is developed systematically as nursing students receive professional education, and after graduation, they become nurses and grow firmly in the process of performing practical work in the nursing field [20]. As a result of analyzing previous studies, the factors affecting nursing professionalism are shown in **Table 2**.

As confirmed in previous studies, the establishment of nursing professionalism among nursing students has a positive effect on the qualities required in the clinical field (major satisfaction, clinical performance ability, critical thinking ability, etc.) as nurses in the future. Therefore, it can be seen that it is an important variable in

the formation of professional values. In addition, the establishment of desirable nursing professionalism for nursing students increases the value of their profession and enables them to have pride and self-esteem as professionals [25]. Additionally, if nursing professionalism is well-established, it can inspire employees, enhance job satisfaction, and help lower the nursing field's turnover rate [16]. Therefore, the college of nursing is making efforts to enhance the quality of clinical practice so that nursing students can have well-established nursing professionalism.

### **3. RESEARCH METHOD**

#### **3.1 Research Design**

This study is a descriptive research study which aims to understand the social and service characteristics of nursing students and to analyze the factors that affect nursing professionalism. The model of the study is shown in **Figure 1**.

#### **3.2 Research subjects and data collection**

The data gathering of this study was done through Google online survey method from March 18 to April 8, 2022, targeting fourth-year students of the nursing department at a university in Gangwon-do. A total of 195 students participated in the survey, however one dropped out midway through, leaving 194 students as the final study subjects.

#### **3.3 Definition of Variables and Research Tools**

##### **3.3.1 Sociability and Service**

In this study, sociability is defined as the emotion or willingness to be popular and likable to others by being kind, friendly, participatory, always hopeful, and engaging with other people [7]. Service is also characterized by feelings or a readiness to work together with everyone, as well as the kindness of helping others without expecting anything in return or assisting those in need [7].

As for the tool used in this study, the sociality test developed by Kim [7] was reconstructed by Lee [27] as a youth social development index, and the sociability and service tool was modified to a 4-point scale and applied to this study. Sociability is 14 items, and serviceability is 14 items, with 4 points for 'very much' and 1 point for 'not at all'. The reliability of the tool was sociability Cronbach's  $\alpha=.87$  in Lee's study [27], Cronbach's  $\alpha=.86$  for service, and Cronbach's  $\alpha=.778$  for sociability and Cronbach's  $\alpha=.776$  for service in this study.

##### **3.3.2 Nursing professionalism**

In this study, nursing professionalism is defined as a systematic view of nursing as a profession, and a professionally conscious viewpoint on the nursing activity process of the person in charge of nursing and the position itself [18]. The nursing professionalism questionnaire used in this study was developed by Yeun et al. [18] and modified and supplemented by Han et al. [28] and Kang [29] was modified and applied on a 4-point scale. With a total of 18 items, 'very much' is 4 points and 'not at all' is 1 point. The reliability of the tool was Cronbach's  $\alpha=.92$  in Han et al. [28], Cronbach's  $\alpha=.95$  in Kang [29], and Cronbach's  $\alpha=.829$  in this study.

#### **3.4 Data Analysis**

The collected data used IBM SPSS Statistics Standard 25.0 version program. First, frequency analysis was performed to find out the general characteristics of the study subjects. Second, t-test and ANOVA were performed to check the averages and differences of sociability, service, and nursing professionalism according to the characteristics of the subjects, and the Scheffe test for post-hoc comparison was performed. Third, a correlation analysis (Pearson correlation coefficient) between sociability, service, and nursing professionalism was conducted. Fourth, multiple regression analysis was performed using this as a dependent variable to analyze the factors affecting nursing professionalism.

## 4. RESULTS

### 4.1 General Characteristics Subjects

Table 3 shows the results of analyzing the general characteristics of the subjects. The average age of the study subjects was 23.5 years, 78.9% under 24 years old, and 21.1% over 24 years old. The gender distribution was 15.5% male and 84.5% female. If there was a regular meeting, 66.0%, if not, 34.0%, if there was a friend to share concerns with, 94.8%, and if not, 35.2%. Major satisfaction was dissatisfaction 4.6%, usually 23.7%. and satisfaction 71.6%. In addition, 41.8% of students made a career decision, and 58.2% did not.

### 4.2 Sociability, Service, and Nursing Professionalism According to the Characteristics of the Subject

Table 4 shows the results of analyzing sociability, service, and nursing professionalism according to the characteristics of the subjects. Sociability is in the group under the age of 24 ( $p=.035$ ), regular meetings ( $p<.001$ ), having friends with whom you can share your concerns ( $p=.001$ ), and a high degree of satisfaction with your major ( $p=.001$ ), and career decision ( $p=.006$ ). Service was found to be high in female students ( $p<.001$ ), the group under 24 years old ( $p=.033$ ), high major satisfaction ( $p=.006$ ), and career decisions ( $p=.003$ ). Nursing professionalism was higher in female students ( $p=.009$ ) and in the case of high major satisfaction ( $p=.004$ ).

### 4.3 Correlation between Sociability, Service, and nursing professionalism

Pearson correlation coefficient analysis was conducted on sociability, service, and nursing professionalism, and the results of the analysis are shown in Table 5. Sociability was found to have a significant positive correlation with both service ( $r=0.540$ ,  $p<.001$ ) and nursing professionalism ( $r=0.304$ ,  $p<.001$ ). Hence, service was found to have a significant positive correlation with nursing professionalism ( $r=0.535$ ,  $p<.001$ ), and all three variables showed a statistically significant positive correlation.

### 4.4 Factors Affecting Nursing Professionalism

Multiple regression analysis was performed to identify factors affecting nursing professionalism, and the results of the analysis are shown in Table 6. The tolerance limit of each variable was 0.100 or more, and the Variance Inflation Factor (VIF) values were all less than 10. It was found that there was no problem with multicollinearity. As a result of the analysis, the Durbin-Watson value was 2.059, indicating that the error was independent and there was no autocorrelation.

Gender and major satisfaction, which were significantly calculated in the average analysis of nursing professionalism according to the characteristics of the subjects, were input as control variables, and sociability and service were included as independent variables. As a result of multiple regression analysis, the factor affecting nursing professionalism was service ( $\beta=0.498$ ,  $t=6.544$ ,  $p<.001$ ) and had a significantly positive (+) effect. In other words, the higher the level of service, the higher the establishment of nursing professionalism.

## 5. DISCUSSION AND CONCLUSIONS

This study was conducted to understand the effect of nursing students' sociability and service on nursing professionalism.

The prolonged COVID-19 has not only changed the learning and non-face-to-face lifestyles of college students, but also uncertainty in the professionalism of their majors. Moreover, the formation of nursing professionalism among nursing students is an important factor in responding to the increased nursing needs in the COVID-19 situation [30], and poorly formed nursing professionalism can be a factor influencing clinical practice stress [31]. In addition, when nurses have firm nursing professionalism, they can increase organizational commitment in the medical field to provide quality nursing care and perform nursing tasks efficiently [32]. Therefore, it is very important to establish the right nursing professionalism so that nursing students can demonstrate their qualifications as nurses and their abilities as experts in the clinical field after graduation.

In this study, it was found that the factor affecting nursing professionalism was service. Therefore, it is necessary to expand volunteer activities in order to establish proper nursing professionalism. The 'Service' established through the non-regular curriculum program is a very necessary activity to become a nurse in the

future. Volunteering identifies issues in the field, draws conclusions about solutions, and emphasizes reflective thinking in the event of mistakes, allowing for the creation of new knowledge using prior knowledge and experience related to the major [6, 33], making it a suitable program for developing nursing professionalism. However, due to the social distancing policy, the demand for existing volunteer activities has greatly decreased. As a result, the number of volunteer activities, hours, and opportunities were insufficient compared to the past. Therefore, it is necessary to expand social volunteer activities and learning.

In other words, it is essential to prepare a non-regular curriculum program that can foster service in order to establish the correct nursing professionalism of nursing students. To this end, it is necessary to develop an educational program that can establish nursing professionalism through various face-to-face and non-face-to-face volunteer activities, encouraging voluntary participation and continuous management. If infectious diseases must always coexist in our lives, nursing colleges that prepare nurses should focus on teaching them how to safely manage infectious diseases and how to actively volunteer their time instead of teaching them how to take preventative measures. It is essential to foster a spirit of service by encouraging nursing students to engage in volunteer activities and expand non-regular subjects as it can improve nursing professionalism. This improved nursing professionalism will enable nursing students to demonstrate their professional competence as nurses after graduating from college in the era of COVID-19 or similar infectious diseases [24].

Based on the above research results, I would like to suggest as follows. First, since the factor that affects nursing professionalism is service, it is necessary to expand and continue active non-regular curriculum programs that can foster service. Second, this study is the conclusion of a survey of students from a nursing college during the period of COVID-19. Therefore, in order to establish the appropriate nursing professionalism following the completion of COVID-19, it will be necessary to implement a service-cultivating program based on the findings of additional student surveys and analyses that take the representativeness of the sample into account.

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## TABLES AND FIGURES

**Table 1 :** Previous studies related to student volunteer activities

Previous Studies	Positive Influencing Factors On Volunteer Activities
Shin [14]	Major satisfaction, Self-esteem
Yoon & Yim [15]	Self-esteem
Lee & Song [1]	Community awareness, Nursing professionalism
Yang [16]	Happiness, Self-leadership
Kim [6]	Major satisfaction, Self-esteem
Yoo & Bang [17]	Job preparation behavior, Major satisfaction, Self-leadership, Career decision self-efficacy

**Table 2 :** Previous studies related to nursing professionalism

Previous studies	Positive influencing factors on nursing professionalism
Park [21]	Self-leadership, Critical thinking
Jang & Moon [22]	Job preparation behavior
Lim [23]	Clinical nurse's character, Stress coping
Whang [24]	Major satisfaction, Career identity
Kim [25]	Clinical performance ability, Clinical practice satisfaction, Emotional intelligence (Positive emotional disposition to control one's emotions)
Ju [26]	Major satisfaction, Critical thinking

**Table 3 :** General characteristics of subject

Variables	Categories	N	%
Gender	Male	30	15.5
	Female	164	84.5
Age(years)	<24	153	78.9
	≥24	41	21.1
Regular meeting	Yes	128	66.0
	No	66	34.0
Friends who share concerns	Yes	184	94.8
	No	10	5.2
Major satisfaction	Dissatisfied	9	4.6
	Usual	46	23.7

	Satisfied	139	71.6
Career decision	Yes	113	41.8
	No	81	58.2

**Table 4 :** Sociability, service, and nursing professionalism according to general characteristics of subject

Variables	Categories	Sociability		Service		Nursing professionalism	
		M±SD	t or F (p)	M±SD	t or F (p)	M±SD	t or F (p)
Gender	Male	2.77±0.48	-1.375 (.171)	2.83±0.38	-4.139 (<.001)	3.07±0.40	-2.640 (.009)
	Female	2.88±3.40		3.12±0.35		3.26±0.35	
Age (years)	<24	2.90±0.38	2.164 (.035)	3.11±0.35	2.147 (.033)	3.24±0.36	0.900 (.369)
	≥24	2.73±0.48		2.97±0.41		3.18±0.40	
Regular meeting	Yes	2.97±0.39	26.634 (<.001)	3.10±0.38	1.649 (.201)	3.26±0.36	2.973 (.086)
	No	2.67±0.38		3.03±0.35		3.17±0.38	
Friends who share concerns	Yes	2.89±0.39	3.524 (.001)	3.08±0.37	-0.008 (.994)	3.24±0.36	1.587 (.114)
	No	2.44±0.47		3.08±0.33		3.05±0.40	
Major satisfaction	Dissatisfied	2.58±0.31 <sup>a</sup>	7.537 (.001) a<b	2.82±0.36 <sup>a</sup>	5.301 (.006) a<b	2.91±0.51 <sup>a</sup>	5.769 (.004) a<b
	Usual	2.72±0.35 <sup>ab</sup>		2.98±0.27 <sup>ab</sup>		3.15±0.38 <sup>ab</sup>	
	Satisfied	2.93±0.41 <sup>b</sup>		3.13±0.39 <sup>b</sup>		3.27±0.34 <sup>b</sup>	
Career decision	Yes	2.93±0.42	2.757 (.006)	3.14±0.38	3.018 (.003)	3.24±0.36	0.321 (.749)
	No	2.78±0.37		2.99±0.34		3.22±0.38	

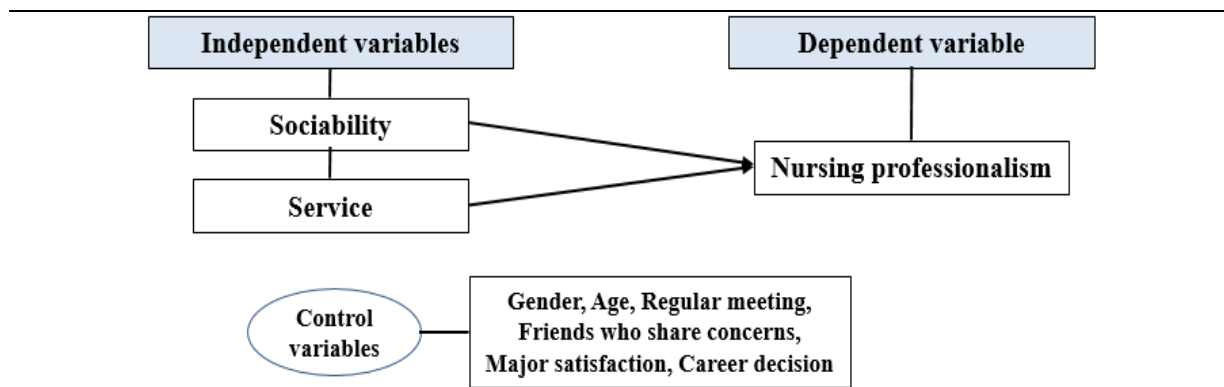
**Table 5 :** Correlation between sociability, service, and nursing professionalism

Variables	1. Sociability	2. Service	3. Nursing professionalism
1. Sociability	1.000		
2. Service	0.540 (<.001)	1.000	
3. Nursing professionalism	0.304 (<.001)	0.535 (<.001)	1.000

**Table 6 :** Multiple regression on sociability, service, and nursing professionalism

Variables	B	SE	β	t	p	Tolerance	VIF
(Constant)	1.477	0.215		6.886	<.001		
Gender	0.029	0.065	0.029	0.452	.652	0.904	1.106
Major satisfaction	0.040	0.028	0.092	1.429	.155	0.899	1.112
Sociality	0.007	0.066	0.008	0.108	.914	0.689	1.452
Service	0.495	0.076	0.498	6.544	<.001	0.643	1.554
R=.544, R <sup>2</sup> =.296, Adj R <sup>2</sup> =.281, F=19.845, p=<.001, Durbin-Watson=2.059							





**Figure 1:** Research model