

## Factors Affecting Ethical Sensitivity Among Nursing Students : Secondary Data Analysis

<sup>1</sup>Jung Min Lee, <sup>2</sup>Hye Young Min, <sup>3</sup>Yoonjung Kim

<sup>1</sup>Assistant professor, School of Nursing, Hallym University, Chuncheon, Republic of Korea

<sup>2,3</sup>Lecturer, College of Nursing, Ewha Womans University, Seoul, Republic of Korea  
[j\\_lee0624@hallym.ac.kr](mailto:j_lee0624@hallym.ac.kr), [hymin@ewha.ac.kr](mailto:hymin@ewha.ac.kr), [ykim.ew@gmail.com](mailto:ykim.ew@gmail.com)

### Abstract

Ethical sensitivity is a basic competency required for nursing students to work as professionals who will care patients in the clinical field after graduation. Therefore, efforts are needed to improve the knowledge on ethical sensitivity in undergraduate education. This study aimed to identify the demographic characteristics that influence ethical sensitivity among nursing students. This study was a secondary analysis that referred to a previous work measuring ethical sensitivity in nursing students. The participants were 128 nursing students, who had experienced clinical practicums. Among the participants, those who were third-year ( $t=2.345$ , 95% CI=[1.24, 14.64],  $p=0.021$ ), female ( $t=2.635$ , 95% CI=[3.65, 25.69],  $p=0.009$ ) and were satisfaction with major ( $t=-2.389$ , 95% CI=[-16.54, -1.50],  $p=0.019$ ) consistently reported significantly higher mean scores on ethical sensitivity. The explanatory power of the model was 13.3%. Gender (Exp (B))=0.875, 95% CI=[0.804, 0.952],  $p=0.002$ ) and year at university were the strongest predictors of ethical sensitivity (Exp (B))=0.921, 95% CI=[0.873, 0.971],  $p=0.002$ ). Based on the results, an appropriate ethics education that considers the following issues should be provided for undergraduate nursing students: both genders' perspectives, seniors' further development, and students experiencing low satisfaction with their major. Future nursing education should consider these individual demographic characteristics to develop nursing students' ethical sensitivity that will further affect their ethical behavior and ultimately improve the quality of nursing.

**Keywords:** Ethical sensitivity, Ethics, Ethics education, Student nurse

## 1. INTRODUCTION

In modern society, expectations of healthy and longer lives have led to the rapid development of life sciences and medical technologies, and social issues related to medical ethics are quickly emerging as well. Nurses in clinics must have the ability to help their patients maintain their dignity and make ethical and moral decisions. Nursing ethics refers to the ethical norms or principles that are practically implemented in nursing practice, and it occurs in relationships with or in support of patients [1]. Understandably, the implementation of nursing ethics requires ethical sensitivity.

Ethical sensitivity refers to a skill with which people understand contextual ethics and adopt moral behaviors while facing a specific situation [2]. It also implies an understanding of patients' vulnerable situations as well as an awareness of the moral implications of the decisions made on patients' behalf [3]. A higher level of

---

Manuscript received: November 15, 2021 / revised: November 25, 2021 / accepted: December 7, 2021

Corresponding Author: [ykim.ew@gmail.com](mailto:ykim.ew@gmail.com)

Tel: +82-3277-2875, Fax: +82-0504-413-5823

Lecturer, College of Nursing, Ewha Womans University, Seoul, Republic of Korea

ethical sensitivity allows people to become sensitively and morally aware of several situations that may be overlooked; and it helps nurses make responsible decisions in critical decision-making situations, including ethical dilemmas [4]. Further, nurses with high ethical sensitivity have the ability to objectively identify ethical conflicts and recognize problems in clinical settings, allowing them to offer the best results for the patients [5].

In nursing, the concept of ethical sensitivity is used interchangeably with the idea of moral sensitivity. Studies have related it to various concepts: ethical sensitivity and empathic ability among nursing students [2], nursing students' moral sensitivity and values concerning awareness of life and medical ethics [6], concept analyses of ethical competencies [7], and the moral sensitivity of nursing students [8]. The results of these studies have shown that the ethical values and moral sensitivity of nursing students influence their perceptions of the code of ethics for nurses and their religion. By examining the ethical sensitivity of university students with different majors in relation to their campus life, Hong and Kim [9] found that differences in ethical sensitivity depend on gender, year at university, religion, and whether they had taken ethics-related courses.

For undergraduate nursing students, ethical sensitivity is an essential competency in their work after graduation as professional nurses in clinical settings. Thus, ethical sensitivity must be taught in undergraduate education. According to Solum et al. [10], undergraduate nursing students are unable to fully develop their ethical capacities, as they are afraid of revealing their mistakes or lack of knowledge during clinical practice. Nursing educators should strive to improve the understanding of ethical sensitivity in undergraduate education and conduct field training on ethical sensitivity.

To estimate the factors affecting ethical sensitivity, this study targeted undergraduate nursing students and confirmed differences in ethical sensitivity based on general characteristics, such as gender, age, year at university, religion, and satisfaction with their major as well as knowledge on the code of ethics. Furthermore, this study aimed to provide educational evidence for developing undergraduate course that can help nursing students improve their competencies in making ethical decisions as professional nurses in the future.

## **2. MATERIALS AND METHODS**

### **2.1 Study Design**

This study was a secondary analysis that utilized the work of Min et al. [11] to measure ethical sensitivity in nursing students. These authors used Kim and Joung's [12] definition of ethical sensitivity to compare the concurrent validity of their Ethical Sensitivity Questionnaire for Nursing Students instrument. The present study employed this questionnaire to identify the factors affecting ethical sensitivity among nursing students.

### **2.2 Study Sample**

The participants' specific selection criteria were as follows: students aged 18–25 years, third- and fourth-year undergraduate nursing students, experience in clinical practice, can communicate in Korean, understood the purpose of this study, and agreed to participate in the research. We excluded those who had not experienced clinical practice among the third- and fourth-year nursing students. We limited the students' age to 18–25 years, because this age range represents a period of transition from adolescence to adulthood, involving physical, mental, and social changes [13]. During this period, young adults begin to establish attitudes, beliefs, values, and behaviors with respect to certain concepts [13], including ethical sensitivity. Informed consent was obtained from all subjects involved in the study.

### **2.3 Research Instrument**

The ethical sensitivity measurement used in this study was developed by Kim and Joung [12], who also

targeted Korean undergraduate nursing students. The 34-item ethical sensitivity instrument was measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A total score for the instrument was obtained by summing each of the item scores. The possible final scores ranged from 34 to 170 points. In this study, participants' scores ranged from 48 to 165 points. The Cronbach's alpha for the total scale was 0.96 in the original study [12] and 0.98 in this study. Higher scores signified having a higher level of attention to social and cultural ethical issues in nursing care.

## 2.4 Data Analysis

We performed the statistical analysis using SPSS 25.0. The descriptive statistics summarized participants' demographic characteristics and ethical sensitivity scores. As previous research has not provided evidence on cut-off points for ethical sensitivity, we obtained participants' scores (high, moderate, or low) prior to the study to compare their performance. These scores were retrieved through norm referenced standard setting methods. These norms were used to characterize examinee groups, while the statistics served to summarize each group's level in each cognitive variable [14]. In the present study, we calculated the norm referenced standard setting methods using averages, median scores, and standard deviations. Participants with scores within the median range were considered as having moderate ethical sensitivity, whereas those with scores below the median range represented low ethical sensitivity. We then analyzed the differences in demographic characteristics based on ethical sensitivity using an independent sample t-test. Lastly, we used gamma regression to determine the associations between demographic characteristics and ethical sensitivity among nursing students.

**Table 1. Demographic characteristics of participants (N = 128)**

Variables	Categories	n (%)	M ± SD
Gender	Female	115 (89.8)	21.73 ± 0.96
	Male	13 (10.2)	
Age (years)	<24	102 (79.7)	
	≥24	26 (20.3)	
Year at university	Third	61 (47.7)	
	Fourth	67 (52.3)	
Religion	Yes	40 (31.3)	
	No	88 (68.8)	
Satisfaction with major	Negative or neutral	50 (39.1)	
	Positive	78 (60.9)	
Education on ethics	Yes	114 (89.1)	
	No	14 (10.9)	
Recognition of code of ethics	Yes	87 (68.0)	
	No	41 (32.0)	

## 3. RESULTS

### 3.1 Participants' Demographic Characteristics

As Table 1 shows, the participants were 128 undergraduate nursing students. Almost 9 out of 10 (89.8%, n = 115) respondents were female, and the average age of participants was 21.73 years (SD=0.96). The distribution of third-year (47.7%, n=61) and fourth-year (52.3%, n=67) participants was almost identical. Most participants responded that they were not religious (68.8%, n=88), and had positive perceptions of the nursing

major (60.9%, n=78). Those who reported negative or neutral views were a smaller proportion (39.1%, n=50). Nine in 10 participants (89.1%, n=114) said that they received ethics education at the university. Lastly, 68% (n=87) of the participants reported that they knew about the standards in the code of ethics.

**Table 2. Average participant scores on ethical sensitivity (N = 128)**

No.	Item	M ± SD				
Q1	I think that the patient must be respected as a human first and foremost.	4.41± 0.67				
Q2	I think that even if the patient is unconscious, they should be treated as a human being.	4.43± 0.66				
Q3	I think that nursing care should be made without discrimination with respect to the characteristics and circumstances of the patient.	4.45± 0.70				
Q4	I think that it is important for nurses to respect patient needs and opinions.	4.32± 0.70				
Q5	I think that nurses should always try to work for their patients.	4.09±0.87				
Q6	I believe that patients should be involved in treatment-related decisions.	4.29± 0.73				
Q7	I believe that the confidentiality of the patient must be kept.	4.48± 0.72				
Q8	I believe that nurses should be honest with patients and guardians within the scope of their duties.	4.38± 0.71				
Q9	I believe that nursing care should be provided based on nursing knowledge.	4.45± 0.67				
Q10	I believe that nurses must have ethical knowledge and judgment for them to discover unethical medical behavior.	4.45± 0.73				
Q11	I believe that the medical team should be able to speak on behalf of the patient.	4.21± 0.88				
Q12	I think patient care should not be neglected even under heavy work.	4.20± 0.75				
Q13	I believe that nurses should be responsible for medical errors.	4.31± 0.77				
Q14	I think that it is my responsibility as a nurse to make sure there are no omissions when providing care to the patient.	4.30± 0.75				
Q15	I think nurses should be knowledgeable of the patient's general condition.	4.46± 0.71				
Q16	I think that nurses should explain every detail to the patient and the guardians so that they can understand their situation fully.	4.41± 0.73				
Q17	I believe that nurses are responsible for checking the doctor's prescription errors.	4.40± 0.74				
Q18	I think that nurses should try to know the kind of care patients want to receive even if the patients do not tell nurses.	3.93± 0.87				
Q19	I think nurses should try to think from the view of the patient.	4.18± 0.78				
Q20	When I see a patient suffering from a disease, I am willing to help them.	4.17± 0.80				
Q21	I think that the therapeutic needs of patients should be taken into account before the convenience of medical personnel.	4.07± 0.82				
Q22	I believe that patient care is more important than the situation and circumstances of a medical institution.	3.80± 0.92				
Q23	I believe that treatment should not be delayed by the medical institution's business rules or procedures.	4.16± 0.79				
Q24	I would feel helpless if I had to consider first medical practice rather than patient comfort.	4.00± 0.83				
Q25	I will feel guilty if I cannot tell the patient the truth about the treatment.	4.12± 0.79				
Q26	I will feel conflicted if I am in a therapeutic situation that contradicts my ethical values.	4.23± 0.75				
Q27	I believe that nurses should act in consideration of the differences in ethical values between doctors, nurses, and patients.	4.20± 0.74				
Q28	I believe that nurses should think deeply based on nursing ethics before providing nursing care to the patient.	4.23± 0.72				
Q29	I think that nurses should consider whether their nursing behavior is ethically appropriate.	4.33± 0.74				
Q30	I will be a nurse who will try to stop medical practices when I feel them to be unethical.	4.16± 0.74				
Q31	When I become a nurse, I will persuade the patient to reconsider ethically inadequate choices.	4.15± 0.84				
Q32	I will be a nurse who gives my opinion on the comfort of patients in an authoritative setting.	3.91± 0.86				
Q33	I will be a nurse who gives my opinion when I disagree with the doctor about the best treatment.	4.05± 0.77				
Q34	I will be a nurse who gives nursing care to patients even that with no benefit to the institution.	4.00± 0.80				
Total score	N (%)			Mean ± SD	Score range	Median (Min–Max)
	Low	Moderate	High			
	64 (50)	4 (3.1)	60 (46.9)	139.34 ± 19.47	34–170	142 (48–165)

### 3.2 Participants' Average Ethical Sensitivity Scores

Table 2 shows participants' average scores in the ethical sensitivity questionnaire. The item that obtained the highest average score was "I believe that the confidentiality of the patient at work must be kept" (M=4.48, SD=0.72), followed by "I think nurses should be knowledgeable of a patient's general condition" (M=4.46, SD=0.71). Three items had the same average score of 4.45: "I think that nursing care should be performed without discrimination, in accordance with the characteristics and circumstances of a patient" (SD=0.70); "I believe that nursing care should be provided based on nursing knowledge" (SD=0.67); and "I believe that nurses must have ethical knowledge and judgment to discover unethical medical behavior" (SD=0.73). In contrast, the items with the lowest scores were: "I believe that patient care is more important than the situation and circumstances of a medical institution" (M=3.80, SD=0.92), followed by "I will be a nurse and give my opinion to comfort patients in an authoritative setting" (M=3.91, SD=0.86) and "I think that nurses should try to determine the kind of care the patients want to receive even if they have not informed the patients" (M=3.93, SD=0.87).

We calculated the norm-referenced standard-setting methods using mean scores, median scores, and standard deviations. Participants with a median score were considered as having moderate ethical sensitivity; those with scores below the median (Median - 1\*IQR) as having low ethical sensitivity; and those with scores above the median (Median + 1\*IQR) as having high ethical sensitivity. Participants' mean total score in the ethical sensitivity questionnaire was 139.34 (SD=19.47) and the median score was 142. Half of the participants had low ethical sensitivity (50%, n=64), indicating a lower level of attention to social and cultural ethical issues in nursing care. About 46.9% (n=60) had high ethical sensitivity and only 3.1% (n=4) had moderate ethical sensitivity.

**Table 3. Differences in demographic characteristics based on ethical sensitivity (N = 128)**

Classification	Mean ± SD	t	p-value	95% CI		
				Lower	Upper	
Gender	Female	140.83 ± 17.50	2.635	.009**	3.65	25.69
	Male	126.15 ± 29.90				
Age (years)	<24	140.09 ± 18.36	0.865	.389	-4.77	12.18
	≥24	136.38 ± 23.49				
Year at university	Third	143.49 ± 16.61	2.345	.021*	1.24	14.64
	Fourth	135.55 ± 21.17				
Religion	Yes	143.55 ± 15.29	0.129	.099	-13.43	1.17
	No	137.42 ± 20.90				
Satisfaction with major	Negative or neutral	133.84 ± 23.69	-2.389	.019*	-16.54	-1.50
	Positive	142.86 ± 15.36				
Education on ethics	Yes	139.67 ± 19.03	-0.547	.585	-13.97	7.92
	No	136.64 ± 23.39				
Awareness of code of ethics	Yes	139.69 ± 21.22	0.298	.766	-6.22	8.43
	No	138.59 ± 15.31				

### 3.3. Ethical Sensitivity According to General Characteristics and Major Satisfaction

Table 3 presents the differences between demographic characteristics based on ethical sensitivity. The

findings showed statistically significant group differences in gender ( $t=2.635$ , 95% CI=[3.65, 25.69],  $p=0.009$ ), year at university ( $t=2.345$ , 95% CI=[1.24, 14.64],  $p=0.021$ ), and satisfaction with nursing major ( $t=-2.389$ , 95% CI=[-16.54, -1.50],  $p=0.019$ ). Moreover, the results also indicated that female undergraduate students, third-year students, and students who were satisfied with the nursing major had higher mean scores on ethical sensitivity than male students, fourth-year students, and students who had negative or neutral perceptions of their major. However, we found no group differences in ethical sensitivity ( $p > 0.05$ ) based on participants' age, religion, ethics education, and awareness of code of ethics.

### 3.4 Results of Gamma Regression on Ethical Sensitivity

Table 4 reveals the results of the gamma regression on ethical sensitivity. The results showed that the predicted mean ethical sensitivity score of female students was 12.5% higher than that of male students, after adjusting participants' age, year at university, religion, satisfaction with nursing major, ethics education, and awareness of code of ethics (Exp (B)=0.875, 95% CI=[0.804, 0.952],  $p=0.002$ ). Additionally, the junior students predicted mean frequency of the ethical sensitivity score was 7.9% higher than senior students', with the other variables being adjusted (Exp (B)=0.921, 95% CI=[0.873, 0.971],  $p=0.002$ ).

Finally, the predicted mean frequency of the ethical sensitivity score for students with negative or neutral satisfaction levels in adjusting toward in the nursing discipline was 7.9% lower than for students with positive satisfaction levels, with the other variables being adjusted (Exp (B)=1.079, 95% CI=[1.025, 1.136],  $p=0.004$ ). These findings indicated that gender, year at university, and satisfaction with nursing major were significantly associated with students' ethical sensitivity scores. Specifically, gender and year at university were the strongest predictors of ethical sensitivity.

**Table 4. Gamma regression results on ethical sensitivity (N = 128)**

Variables	Exp (B)	95% CI	p-value
Gender	0.875	0.804–0.952	.002
Age	1.044	0.975–1.118	.217
Year at university	0.921	0.873–0.971	.002
Religion	1.040	0.985–1.099	.115
Satisfaction with major	1.079	1.025–1.136	.004
Education on ethics	0.995	0.918–1.079	.908
Awareness of code of ethics	1.003	0.951–1.058	.916

## 4. DISCUSSION

This study investigated the factors affecting Korean nursing students' ethical sensitivity, that is the ability to recognize ethical issues in a situation and the ways one's actions affect others [15]. As such, it precedes ethical action [15] and is an important factor for nursing students to be able to initiate ethically appropriate decisions in clinical situations [16]. Moreover, ethical sensitivity is based on ethical action. As nursing students are expected to become nurses after graduation, nursing educators should pay special attention to their ethical sensitivity. As such, studying this important element in nursing students will help set the direction of ethics education and ultimately affect the quality of nursing.

The average ethical sensitivity score was  $139.34 \pm 19.47$ , which was lower than in Joung's study [17] for nurses,  $142.20 \pm 12.29$ . If the average score of the participants is converted into a score out of 5, the current participants' average score was  $4.27 \pm 0.47$ , and it was also lower than that of Kim and Joung's [12] nursing

students. These results indicate that the present study's participants had lower levels of attention to social and cultural ethical issues in nursing care. These results may be related to our use of convenience sampling, and the relatively small sample size when compared to previous studies on ethical sensitivity in different South Korean populations. Accordingly, these limitations may restrict the generalizability of our findings. In the future, additional research should be conducted on ethical sensitivity using online surveys of a larger sample of undergraduate nursing students and nurses to increase the potential generalization of the results.

The item "Q7. I believe that the confidentiality of the patient at work must be kept" obtained the highest score, perhaps owing to the content of ethics education at nursing colleges and the culture of patient information protection in hospitals. Meanwhile, the four items with the lowest scores were related to students' eagerness to do well, such as willingness to practice proper and just care for the patients [17], matching Kim and Joung's [12] results. Ethical sensitivity in practice, such as the protection of patient information, was high in this study, as education on this matter is currently provided. However, ethical sensitivity related to the practice of specific compassionate actions was low. Previous studies have revealed that ethical sensitivity is presented as a key element in ethical decision making, regarding the ability to recognize and detect conflicts by sensitively identifying the problems in patients' situations [5, 6, 18]. Thus, a variety of course content related to ethical sensitivity, such as the application of compassionate actions, should be included in ethics education. This will ultimately improve the ethical sensitivity of nursing students as well as practicing nurses.

The results of our ethical sensitivity analysis according to demographic factors showed differences based on gender, year in college, and satisfaction with the major. Ethical sensitivity was higher for female in their third-year, and for students who were satisfied with their majors. Regarding gender differences, female scored statistically significantly higher in ethical sensitivity than male, confirming previous results [19]. Another prior study [20] found that female had a higher level of ethical sophistication in recognizing the nuances of ethical problems presented in cases compared to male. Therefore, ethical sensitivity is also thought to have occurred because female is more sensitive to understanding the nuances of ethical issues than male. However, it is important to note that generally, there are less male nursing students, and our study, as well as the aforementioned research, accordingly had fewer male than female within its sample. As the proportion of male undergraduate nursing students and male nurses is increasing compared to past numbers, nursing educators should pay attention to the elements and sub-attributes of ethical sensitivity that require further education, while considering both genders' perspectives. Thus, ethics education, such as a detailed example of the ethical problem situation for developing ethical sophistication for recognition, should provide a focus on components that addresses the weakest points in nurses' ethical considerations.

Furthermore, the results showed that third-year students had higher ethical sensitivity than their seniors. As such, this was a notable finding, since fourth-year students who experienced more clinical practice had lower ethical sensitivity. Previous research has shown that nursing students who had not experienced clinical practice tended to have higher ethical sensitivity those who had [12]. This may relate to their lack of experience with real-life examples of ethically challenging situations. The relatively low ethical sensitivity of senior students who had experienced more sensitive situations may be attributed to the fact that ethics education is usually offered in courses prior to practice. In addition, some clinical practices may have caused misconceptions among nursing students, which may have led to lower ethical sensitivity. As a higher ethical sensitivity correlates to more ethical behavior [21], ethics education should be carried out in grade-level clinical practice, and not only in the lower grades, because nursing students in clinical practice will face a high number of situations requiring ethical sensitivity and ethical decision making.

Additionally, students who were satisfied with their major had higher ethical sensitivity, as also noted in a previous study [22]. In addition to ethics education, including ethical sensitivity, education on the nursing

profession may increase students' satisfaction with their major. To generalize this result, repeated future research is required to conform the result. Meanwhile, the hospital environment related to ethical violations has been shown to affect ethical sensitivity [23]. Positive nursing work environment, such as an environment in which nurses are able to provide quality care to patients, can enhance the satisfaction of nurses and nursing students. The findings from the previous studies that explore the association between work environment and job satisfaction showed that a positive nursing work environment has a positive effect on the maintenance of nurses and leads to higher nursing quality that affect patients' health results, increases in job satisfaction, and reductions in job-related exhaustion [24, 25]. In turn, the ethical sensitivity and ethical behaviors of nursing students and nurses may also improve.

We identified the factors influencing ethical sensitivity were gender, year at university, and satisfaction with major. A study on nursing students [19] also showed that gender and age are the major factors affecting moral sensitivity. As major satisfaction is a significant factor in ethical sensitivity, nursing colleges should consider measures to increase satisfaction in their educational practice. Based on these results, colleges should provide detailed ethics education for undergraduate nursing students, because these students should be transitioning to becoming ethically sensitive nurses [22]. Additionally, practical ethics education should increase their ethical sensitivity, and improve nursing quality by enabling and increasing ethical behavior.

In terms of limitations, this study only involved third- and fourth-year students with experience in clinical practice. Future research should include nursing students who had not experienced clinical practice to further examine this issue. In addition, our chosen demographic factors only explained about 13% of ethical sensitivity. Therefore, additional studies should examine various other factors affecting ethical sensitivity. Lastly, based on the results of this study, it is necessary to apply the ethical problem situation in advance by including the practice of specific compassionate actions among ethical susceptibility-related problem situations. Based on this, education on more effective ethical sensitivity should be provided.

## 5. CONCLUSION AND IMPLICATION

This study was conducted to identify the factors affecting ethical sensitivity among nursing students in Korea. Based on the results, an appropriate ethics education that considers the following issues should be provided for undergraduate nursing students: both genders' perspectives, seniors' further development, and students experiencing low satisfaction with their major. Further, ethics education in colleges and hospitals should offer access to a wider range of nursing ethics, including specific situations regarding the prior commitment of patients. To increase ethical sensitivity, students' satisfaction with major, that not only includes ethics education, but also the undergraduate nursing study itself, should be enhanced. These approaches may improve the ethical sensitivity of undergraduate nursing students and further influence their ethical behavior, ultimately improving the quality of nursing.

## ACKNOWLEDGEMENT

This research was supported by Hallym University Research Fund, 2021 (HRF-202110-001)

## REFERENCES

- [1] Jang KS, Lee MH, Kim IS, et al., *Ethics and Profession of Nursing*. Seoul: Hyunmoon, South Korea, 2013.
- [2] Kim J. M, Hong SK. "The relationships between moral self-concept ethical sensitivity, and empathy in college students," *Korean Journal of Medical Ethics*, Vol. 20, pp.317-329, 2017.
- [3] Lützn K, Blom T, Ewalds-Kvist B, Winch S. "Moral stress, moral climate and moral sensitivity among



- psychiatric professionals," *Nurs Ethics*. Vol. 17, pp.213-224, 2010.
- [4] Han SS. "The Moral distress experienced by hospital nurses," *Journal of the Korean Bioethics Association*. Vol. 6, pp.31-47, 2005.
- [5] Lim MH. "Converged study of influencing factors on perceived ethical confidence in nurses," *Journal of the Korea Convergence Society*. Vol. 8, pp.75-84, 2017.
- [6] Kim MS. "Influence of moral sensitivity and ethical values on biomedical ethics awareness of nursing students," *Journal of Korean Academic Society of Nursing Education*. Vol. 21, pp.382-392, 2015.
- [7] Seo HE. "Concept analysis of nursing students' ethical competence," *Journal of the Korea Academia-Industrial Cooperation Society*. Vol. 19, pp.398-407, 2018.
- [8] An GJ. "Moral sensitivity of nursing students in Korea: A review of literature," *Journal of Chengju University Medicine Society*. Vol. 7, pp.9-15, 2018.
- [9] Hong SK, Kim SM. "Ethical sensitivity related to college life: Focusing on one college students," *Journal of the Korea Society of Nursing Research*. Vol. 2, pp.67-71, 2018.
- [10] Solum EM, Maluwa VM, Tveit B, Severinsson E. "Enhancing students' moral competence in practice: Challenges experienced by Malawian nurse teachers," *Nurs Ethics*, Vol. 23, pp.685-697, 2016.
- [11] Min HY, Kim Y, Lee JM. "Validity and reliability of the Korean Version of the ethical sensitivity questionnaire for nursing students," *Journal of Korean Academic of Community Health Nursing*. Vol. 31, No. 4, pp.503-513, 2020.
- [12] Kim YK, Joung MY. "Influence of nursing professionalism and campus environment on the perception of ethical sensitivity among nursing students," *J Korean Acad Soc Nurs Educ*. Vol. 25, pp.115-124, 2019.
- [13] Alexander KA, Jemmott LS, Teitelman AM, D'Antonio P. "Addressing sexual health behavior during emerging adulthood: A critical review of the literature," *J Clin Nurs*. Vol. 24, pp.4-18, 2015
- [14] American Educational Research Association, American Psychological Association, National Council on Measurement in Education. *Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association; 2014.
- [15] Rest JR. *A psychologist looks at the teaching of ethics [the Hastings Center report]*. The Hastings Center Report. Vol. 12, pp.29-36, 1982.
- [16] Muslichah M, Wiyarni W, Maria E. "The effect of ethical sensitivity on ethical decision making with religiosity as moderating variable," *Int Rev Manag Mark*. Vol. 8, pp.86, 2018.
- [17] Joung MY. *Development of Ethical Sensitivity Scale for Clinical Nurses* [Unpublished doctoral dissertation]. Busan, Republic of Korea: Pusan National University, 2017.
- [18] Eom SH, Kim SS. "Factors associated with nurses' moral sensitivity," *J Korean Acad Psychiatr Ment Health Nurs*. Vol. 27, pp.199-207, 2018
- [19] Tuvesson H, Lützn K. "Demographic factors associated with moral sensitivity among nursing students," *Nurs Ethics*. Vol. 24, pp.847-855, 2017
- [20] You D, Maeda Y, Bebeau MJ. "Gender differences in moral sensitivity: A meta-analysis," *Ethics Behav*. Vol. 21, pp.263-282, 2018.
- [21] Kim YS, Kang SW, Ahn JA. "Moral sensitivity relating to the application of the code of ethics," *Nurs Ethics*. Vol. 20, pp.470-478, 2013.
- [22] Kim YS, Park JW, You MA, Seo YS, Han SS. "Sensitivity to ethical issues confronted by Korean hospital staff nurses," *Nurs Ethics*. Vol. 12, pp.595-605, 2005.
- [23] Baykara ZG, Demir SG, Yaman S. "The effect of ethics training on students recognizing ethical violations and developing moral sensitivity," *Nurs Ethics*. Vol. 22, pp.661-675, 2015.
- [24] Choi HJ, Lee SO. "Effects of nursing work environment, job satisfaction, and organizational commitment on retention intention of clinical nurses," *The Korean Society of Health Service Management*. Vol. 12, pp.27-39, 2018.
- [25] Ko HJ, Kim JH. "Relationships among nursing work environment, job embeddedness, and turnover intention in nurses," *J Korean Acad Nurs Adm*. Vol. 22, pp.279-291, 2016.