

Analysis of the effectiveness of Havruta learning method in fundamentals nursing classes

Jihyun Kim¹, Jeong Ha Yang^{2*}, Sun-Young Park³

¹Associate Professor, Department of Nursing Science, JEI University, Korea

²Assistant Professor, Department of Nursing, Suwon University, Korea

³Associate Professor, Department of Nursing, Baekseok University, Korea

기본간호학 수업에서 하브루타 수업방식의 효과 분석

김지현¹, 양정하^{2*}, 박선영³

¹재능대학교 간호학과 부교수, ²수원대학교 간호학과 조교수, ³백석대학교 간호학과 부교수

Abstract The purpose of this study is to investigate the impact of education applying the Havruta learning method in fundamentals nursing classes for nursing students on problem-solving ability, self-directed learning ability, critical thinking disposition, and learning commitment. One-group pretest-posttest design was used. Nursing students received training applying the Havruta learning method for 6 weeks (12 hours) in fundamentals nursing classes. The study was conducted from September 18 to November 6, 2023. Data were analyzed using SPSS/WIN 28.0 with mean, standard deviation, and paired samples t-test. problem-solving ability ($t=4.52$, $p<.001$), self-directed learning ability($t=-4.61$, $p<.001$), critical thinking disposition($t=-4.10$, $p<.001$) significantly increased before and after the 6-week Havruta learning method training for nursing students. However, there was no statistically significant difference in learning commitment ($t=-0.28$, $p=.782$). The Havruta learning method is an effective nursing education tool for improving problem-solving ability, self-directed learning ability, and critical thinking disposition. The results of this study can serve as basic data for nursing professors when planning teaching and learning strategies using Havruta. Research will be needed to utilize the Havruta learning method in various classes and evaluate its effectiveness.

Key Words : Education, Learning, Nursing, Student

요약 본 연구의 목적은 기본간호학 수업에서 간호대학생에게 하브루타 수업방식을 적용한 교육이 문제해결능력, 자기 주도적 학습능력, 비판적 사고성향 및 학습몰입에 미치는 영향을 알아보는 것이다. 연구는 2023년 9월 18일부터 11월 6일까지 진행되었고, 간호학과 학생 43명을 대상으로 기본간호학 수업에서 6주 동안 하브루타 수업을 적용하였다. 자료는 SPSS/WIN 28.0을 사용해 평균, 표준편차, 대응표본 t-검정으로 분석하였다. 간호대학생을 대상으로 하브루타 수업전후로 문제해결능력($t=4.52$, $p<.001$), 자기주도학습능력($t=-4.61$, $p<.001$), 비판적사고성향($t=-4.10$, $p<.001$) 이 통계적으로 유의하게 증가했으나, 학습몰입에서는 통계적으로 유의한 차이가 없었다($t=-0.28$, $p=.782$). 하브루타 수업은 문제해결능력, 자기주도적 학습능력, 비판적 사고 성향을 향상하기 위한 효과적인 수업방식이다. 본 연구 결과는 간호학과 교수들이 하브루타를 활용한 교수학습 전략을 기획할 때 기초자료로 활용될 수 있을 것이며, 하브루타 수업방식을 다양한 교과목에 활용하고 그 효과를 평가하기 위한 후속 연구를 제안한다.

주제어 : 교육, 교수법, 간호대학생

*교신저자 : 양정하(mint2243@hotmail.com)

접수일 2024년 01월 10일 수정일 2024년 02월 07일 심사완료일 2024년 02월 11일

1. Introduction

With the advent of the era of the 4th Industrial Revolution, there is an emphasis on teaching and learning strategies that enable learners to actively participate in learning and improve high-level abilities and various competencies, rather than the unilateral transmission of knowledge by instructors [1]. The OECD suggests that leading students' participation in learning needs to be treated as an important educational content for future education [2]. In line with these changes, teaching methods in which learners actively participate in learning, such as flipped learning or case-based learning, are being applied to nursing education [3,4].

The Havruta learning method, a Jewish educational method, is fundamentally different from the various teaching methods that have been used so far on the premise that learning takes place in the student [5], and improves the learner's capabilities compared to existing teaching methods in that the student becomes the subject of education. The Havruta learning method is a teaching and learning method that develops the thinking process through conversations, asking each other questions in pairs and discussions [6]. Students listen to each other's opinions through questions and conversations, focus on activities that cooperate with each other and develop thinking skills [7], participate more actively in class through collaborative learning and teaching activities among students, and engage in student-to-student activities. Through this, concentration is achieved and interpersonal skills and thinking skills improve [5]. Currently, the Havruta learning method is being attempted to be applied to various subjects in education. In nursing, as a result of applying the Havruta learning method to fundamental nursing practice subjects, improvements in skill performance confidence, communication skills, and academic self-efficacy were confirmed [8]. In addition, research on the

Havruta learning method was applied to adult nursing [9], community nursing subjects [10], pediatric nursing [11], and woman health nursing [12]. However, it could not be confirmed that it was applied in fundamental nursing classes. As a result, it was effective in communication skills [10], self-directed learning skills [12,13], and critical thinking disposition [9,10], problem-solving ability [13], learning commitment [9], and learning satisfaction [9].

Nursing students' problem-solving ability [14], self-directed learning ability [15], critical thinking disposition [16], and learning commitment experience [17] are reported to have a positive impact on clinical competence. Nursing education aims to train nurses who can perform nursing in various situations by improving clinical competence along with cultivating professional knowledge [4]. Accordingly, if there is a teaching and learning strategy that is related to improving the clinical competence of nursing students, it will be given priority in nursing education.

However, as research results sometimes differ, repeated research on the effectiveness of the Havruta learning method is necessary. In addition, since it cannot be confirmed whether the Havruta learning method has been applied to fundamentals nursing classes, it will be meaningful in confirming its effectiveness in nursing major subjects.

Therefore, this study seeks to confirm consistent evidence for the effectiveness of the Havruta learning method in nursing major subjects and to present a teaching and learning model that can be applied to other theoretical subjects.

2. Materials and Methods

2.1 Study design

This is a one-group pretest-posttest design to determine the effect of the Havruta learning method on the problem-solving ability, self-directed

learning ability, critical thinking disposition, and learning commitment of nursing students.

2.2 Subjects of study

The subjects of the study were second-year students taking fundamentals nursing classes at S University in Gyeonggi-do, and the study was conducted with voluntary consent after a thorough explanation of the purpose of the study. The number of study subjects was calculated as a single group by applying a paired t-test using the G power 3.1 program, referring to previous studies [13,18]. When the effect size was set at .50, significance level at .05, and power at .92, the minimum number of subjects required was 39. The total number of subjects who participated in this study was 43, which meets the appropriate sample size considering the dropout rate.

2.3 Measures

2.3.1 Problem-solving ability

Problem-solving ability was assessed using a tool developed by Lee et al. [19] consisting of a total of 45 questions. It consists of a total of 9 sub-factors. This tool includes problem recognition (5 questions), information collection (5 questions), analysis (5 questions), divergent thinking (5 questions), decision making (5 questions), planning ability (5 questions), execution and risk taking (5 questions), evaluation (5 questions), and feedback (5 questions). The higher the score on a 5-point likert scale, the higher the problem-solving ability. At the time of development, the instrument reliability Cronbach's α value was .94, and in this study, Cronbach's α was .96 for pre and .96 for post.

2.3.2 Self-directed learning ability

Self-directed learning ability was assessed by using a tool developed by Lee et al. [19] consisting of a total of 45 questions. It consists of a total of 8 sub-areas: learning needs assessment (10 questions), learning goal setting (5 questions), identify

resources for learning (5 questions), basic self-management ability (5 questions), selection of learning strategies (5 questions), continuity of learning practice (5 questions), attribution of effort to results (5 questions), and introspection (5 questions). This tool is scored on a 5-point Likert scale. The higher the value, the higher the self-directed learning ability. At the time of development, the instrument reliability Cronbach's α value was .93, and in this study, Cronbach's α was .93 for the pre and .94 for the post.

2.3.3 Critical thinking disposition

Critical thinking disposition was assessed using a 27-item instrument developed by Yoon [20]. It is composed of a total of 7 sub-factors: intellectual passion/curiosity (5 questions), prudence (4 questions), confidence (4 questions), systematicity (3 questions), intellectual fairness (4 questions), healthy skepticism (4 questions), and objectivity (3 questions), and This tool scored is on a 5-point Likert scale. The higher the score, the higher the Critical thinking disposition. At the time of development, the instrument reliability Cronbach's α value was .84, and in this study, Cronbach's α was .90 for the pre and .81 for the post.

2.3.4 Learning commitment

Learning commitment was measured using a tool consisting of 29 questions developed by Kim et al. [21]. It is composed of a total of 9 sub-factors: challenge-skill balance (3 questions), clear goals (3 questions), specific feedback (3 questions), action-perception match (3 questions), task focus (3 questions), sense of control (3 questions), loss of self-consciousness (3 questions), modified sense of time (3 questions), and autotelic experience (5 questions). It is based on a 6-point Likert scale, and the higher the score, the higher the degree of Learning commitment. At the time of development, the instrument reliability Cronbach's α value was .90,

and in this study, Cronbach's α was .95 for pre and .93 for post.

2.4 Study process

2.4.1 Developing Havruta learning methods

This researcher sought advice from a group of experts, that is, one education professor and one nursing professor, to run Havruta learning method classes. Experts suggested that students' concentration in class may decrease if they apply Havruta learning method to the entire subject. In previous studies, it was confirmed that the application of the Havruta learning method varied from 3 to 12 times [9-11,13,22], and it was found that there were no consistent results in terms of effectiveness depending on the number of applications. Accordingly, based on the advice of experts, we planned to apply 6 weeks, equivalent to half of the total class [10,13].

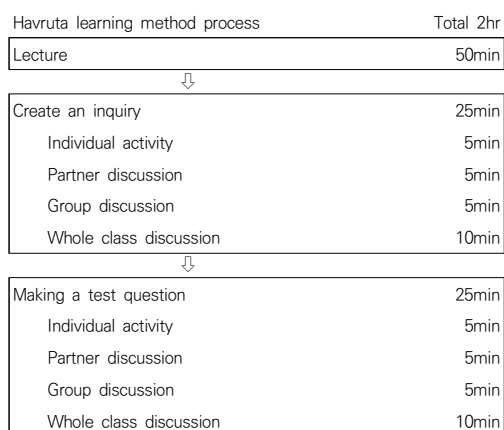
We selected appropriate topics for Havruta learning method classes through advice from experts. The selected Havruta learning method class topics are 'Nutrition', 'Urine', 'Defecation', 'Activity and Exercise', 'Rest and Sleep', and 'Spiritual Health and dying'. Participating students experienced in the class by listening to a lecture on the topic for an hour and then taking a Havruta learning method class for another hour. As a result of the literature review, it was confirmed that applying two or more types of Havruta learning method was effective [10,22], and as a result of expert consultation, 'create an inquiry' and 'making a test question' were found to be appropriate Havruta learning method class types for teaching the topic. was proposed, and the Havruta learning method of 'create an inquiry' and 'making a test question' were ultimately selected as they were considered useful in achieving weekly learning goals as they were frequently used methods in nursing research [7,12]. The participating students were composed of teams of four people, and through the process of communicating and discussing

with each other, members proceeded to 'create an inquiry' and 'making a test question' on learning topics.

2.4.2 Havruta learning method class operation

In the case of the participants in this study, all students had no experience with Havruta learning method before and had no understanding of Havruta learning methods. Accordingly, the researcher provided an introduction to the Havruta learning method weekly lecture topics, and detailed explanations of class operation through subject orientation.

The class management method was planned based on expert advice and the design of previous research [9-11], which suggested that it would be appropriate to conduct a 50-minute lecture on the learning topic on the day of class and apply the Havruta learning method for 50 minutes. In each process, Step 1 is writing individual 'create an inquiry' and 'making a test question', Step 2 is selecting the best 'create an inquiry' and 'making a test question' from each other through pair discussion, Step 3 is selecting the best 'create an inquiry' and 'making a test question' through group discussion, and Step 4 consists of presentation time. During the presentation, the instructor provided feedback on the selected problems and question selection process. The specific class management method is as shown in [figure 1]. The 'create an inquiry' Havruta learning method is useful for improving the ability to understand and explore information on the lecture topic, and the 'making a test question' Havruta learning method is useful for learning as a way to clearly understand the goal and actively participate in the class through the learning participation process [7]. Participants create individual questions about the lecture topic, expand their thinking through pair and group discussions, and find strategies to effectively evaluate their understanding of the lecture topic by creating test questions.



[Fig. 1] Flow diagram of the class management method

2.5 Data collection and statistical analysis

Data collection was conducted from September 18 to November 6, 2023. The participant recruitment notice consisted of a detailed explanation of the purpose of the study and educational content. The collected data was analyzed using IBM SPSS WIN 28.0. The reliability of the scale used in the study was Cronbach's α value was calculated, the subject's general characteristics were analyzed in real numbers and percentages, and the effect of the dependent variable using the Havruta learning method was analyzed using paired t-test.

2.6 Ethical concerns

Before conducting the study, the purpose and methods of the study were explained, and only students willing to participate in the study were selected as subjects. It was clearly stated in the questionnaire that the responses would never be used for purposes other than research purposes, and it was fully explained that there would be no coercion or disadvantage even if the participants refused the study or withdrew their participation during the study.

3. Results

3.1 General Characteristics of the Subjects

The average age of the subjects was 21.70 ± 1.42 years, with 12 men (27.9%) and 31 women (72.1%). Major learning satisfaction and campus life satisfaction are shown in <Table 1>.

<Table 1> General characteristics of the subjects

Characteristics		Mean(SD)	n(%)
Age(years)		21.70±1.42	
Gender	Male		12(27.9)
	Female		31(72.1)
Major learning satisfaction	Very satisfied		9(20.9)
	Satisfied		26(60.5)
	Neither dissatisfied nor satisfied		7(16.3)
	Dissatisfied		1(2.3)
	Very dissatisfied		-
Campus life satisfaction	Very satisfied		6(14.0)
	Satisfied		26(60.5)
	Neither dissatisfied nor satisfied		10(23.3)
	Dissatisfied		1(2.3)
	Very dissatisfied		-

3.2 Problem-solving ability

The average score of problem solving ability before and after applying Havruta learning method to nursing students was 3.68 points before and 3.85 points after, showing a statistically significant difference ($t=-4.52, p<.001$)(Table 2).

3.3 Self-directed learning ability

The average score of self-directed learning ability before and after applying the Havruta learning method to nursing students was 3.08 points before and 3.57 points after, showing a statistically significant difference ($t=-4.61, p<.001$)(Table 2).

3.4 Critical thinking disposition

The average score of Critical thinking disposition before and after applying Havruta learning method to nursing students was 3.31 points before and 3.63 points after, showing a statistically significant difference ($t=-4.10, p<.001$)(Table 2).

3.5 Learning commitment

The average score of learning commitment before and after applying the Havruta learning method to nursing students was 3.09 points before and 3.12 points after, showing no statistically significant difference ($t=-0.28$, $p=.782$)(Table 2).

〈Table 2〉 Difference of dependent variables between before and after Havruta learning method

Variables		Mean(SD)	t	p
Problem-solving ability	Pretest	3.68±0.47	-4.52	〈.001
	Posttest	3.85±0.53		
Self-directed learning ability	Pretest	3.08±0.50	-4.61	〈.001
	Posttest	3.57±0.50		
Critical thinking disposition	Pretest	3.31±0.50	-4.10	〈.001
	Posttest	3.63±0.32		
Learning commitment	Pretest	3.09±0.40	-0.28	.782
	Posttest	3.12±0.50		

4. Discussion

This study was conducted to propose an efficient teaching method by confirming the effect of education using Havruta learning method on nursing students' problem-solving ability, self-directed learning ability, critical thinking disposition, and learning commitment. Statistically significant differences were confirmed in nursing students' problem-solving abilities, self-directed learning abilities, and critical thinking disposition before and after applying the Havruta learning method. However, there was no statistically significant difference in learning commitment.

In a study by Jung and Jeong [13], who applied the Havruta learning method to nursing college students to teach nursing major subjects, they reported that problem-solving ability improved, which was consistent with the results of this study. Research will be needed to identify an appropriate Havruta learning method model to improve problem-solving skills by varying the intervention period or Havruta learning method. In addition, problem-solving ability showed a

positive correlation with self-direction ability and critical thinking disposition, supporting the results of this study. Later in nursing education, there is a need to see the effects of the Havruta learning method by applying various variables and teaching methods, including problem-solving skills.

Studies by Park et al. [22], Jung and Jeong [13], Yang and Jeong [12], and An [18], who applied the Havruta learning method to nursing college students to teach nursing major subjects, consistently showed that self-directed learning ability increased. This report is consistent with the results of this study. In this study, the 'create an inquiry', 'making a test question' Havruta learning method was applied to enable individual study before class and to create an inquiry for pair and group discussion during class. It is judged that self-directed learning of the learning topic was achieved because students must have a sufficient understanding of the learning topic for discussion to be able to clearly explain it to their peers in their own language.

In order to cultivate future talent, it is very important to use a teaching method that is learner-centered rather than instructor-centered [1,2]. In particular, the peer learning method can increase metacognition [23], increase competitiveness, and enhance the proactive tendency toward learning. In this study, it was confirmed that the critical thinking disposition score of the nursing students that applied the Havruta learning method improved. Lim [9] showed that the participant of critical thinking disposition improved after applying the question-centered Havruta learning method for 12 weeks in an adult nursing class, and in a study by Jung and Jeong [13], the result of applying Peer teaching Havruta learning method to community subjects showed that the participant of critical thinking disposition improved, which is consistent with the results of this study. On the other hand, the results are inconsistent with the case of Ha and Lee [10] applying the

making a test question/friend-teaching method in a community nursing class for 6 weeks. The inconsistent research results seem to be influenced by the learning type and intervention period of the Havruta learning method. Critical thinking disposition is a necessary competency to present the basis for nursing practice through correct evaluation and judgment in nursing practice [24]. Therefore, it is necessary to apply the Havruta learning method in various ways through follow-up research to check whether critical thinking disposition are improved and to apply the model that is best suited to major education.

In this study, there was no difference in the learning commitment scores of the participant that applied the Havruta learning method before and after the intervention, while Lim [9]'s study reported that the participant's learning commitment improved after the Havruta learning method, which was different from the results of this study. This study conducted create an inquiry/making a test question Havruta learning method for 6 weeks, but in Lim [9]'s study, it was judged that by continuously applying one Havruta learning method for 12 weeks, students were sufficiently familiar with the learning method and induced learning commitment. When designing Havruta learning methods classes in the future, it is necessary to check the results by varying the class model and number of applications among the five models of Havruta learning methods.

This study was conducted on nursing students at one university, so it is not possible to generalize the results of the study. It is a one-group pretest-posttest design, so there is no control group, so there are limitations in controlling exogenous variables and threats to validity may occur.

The Korean Accreditation Board of Nursing Education(KABON) also manages the quality of nursing education based on a performance-based curriculum [16], and in response to this, the development and application of teaching methods

that encourage student participation should be actively developed in the nursing education field. The Havruta learning method can be a good method for this, so it is necessary to actively utilize it in nursing major education.

Previously in the nursing education field, the process of checking learners' understanding and memory of class content was often omitted [25], but the Havruta learning method allows students to check the degree of their understanding of class content during class time. It has the advantage of being able to provide effective guidance. This study applied the Havruta learning method to fundamentals nursing classes among nursing major theory subjects and statistically determined that nursing students' problem-solving skills, self-directed learning abilities, and critical thinking disposition improved before and after intervention and students' participation in major theory classes was investigated. It is significant in that it presents a Havruta learning method class design method that promotes.

5. Conclusion

According to the research results, nursing students who participated in classes applying the Havruta learning method showed improvements in problem-solving skills, self-directed learning skills, and critical thinking disposition. However, there was no statistically significant difference in learning commitment before and after intervention. As a follow-up study, it will be necessary to conduct repeated research by changing the Havruta learning model or diversifying the application period. In addition, through qualitative research, an effective Havruta learning method model can be confirmed based on the experiences of students who participated in Havruta learning methods.

REFERENCES

- [1] D.Kember, "Promoting student-centred forms of learning across an entire university," *Higher Education*, Vol.58, No.1, pp.1-13, 2009.
- [2] S.E.Lee and K.H.So, "Analysis of Change Trends on OECD's Competencies Frameworks for Curriculum Redesign: Focused on "Education 2030"," *The Journal of curriculum Studies*, Vol.37, No.1, pp.139-164, 2019.
- [3] M.H.Lee and M.S.park, "The effect of case-based learning (CBL) on critical thinking disposition, communication ability, problem solving ability and self-directed learning ability of nursing students in pathophysiology course," *Journal of Korean Biological Nursing Science*, Vol.18, No.3, pp.176-184, 2016.
- [4] C.S.Shim, "Study on the effects of flip learning-based simulation education on the learning flow, learning confidence, communication skills, and clinical competence of nursing students," *Journal of Korea Entertainment Industry Association*, Vol.13, No.8, pp.541-549, 2019.
- [5] S.B.Kim, "To explore the possibility of a shift in college teaching methods through the adaptation of Havruta Teaching methods-centered way," *Theology and Ministry*, Vol.44, pp.389-415, 2015.
- [6] S.Y.Joung and M.S.Kim, "Effect of online Havruta activity based on interpretive questioning on constructivist education view of pre-secondary secondary teachers," *The Journal of Learner-Centered Curriculum and Instruction*, Vol.22, No.3, pp.691-703, 2022.
- [7] O.Kent, "A theory of Havruta learning," *Journal of Jewish Education*, Vol.76, No.3, pp.215-245, 2010.
- [8] S.N.Lee, "The Effects of Fundamentals Nursing Practice using Havruta Learning Method on the Nursing skill Performance Confidence, Communication Skills, and Academic Self-Efficacy on Nursing Students," *Journal of the Korea Academia-Industrial cooperation Society*, Vol.24, No.7, pp.300-308, 2023.
- [9] S.H.Lim, "The effects of adult nursing education on the critical thinking disposition, learning commitment, and learning satisfaction of nursing students using the Havruta learning method," *Journal of Korea Academia-Industrial cooperation Society*, Vol.20, No.7, pp.547-554, 2019.
- [10] J.H.Ha and H.J.Lee, "The effect of the education applying Havruta's method on communication competency, critical thinking competency, and self-leadership of nursing students," *Journal of Korean Academy Community Health Nursing*, Vol.31, No.3, pp.337-347, 2020.
- [11] K.H.Byon, "Effect of designing and applying child health education classes based on the Havruta learning method," *The Journal of Humanities and Social Sciences 21*, Vol.13, No.1, pp.3123-3133, 2022.
- [12] J.H.Yang and M.Y.Chung, "The effects of self-directed learning ability, critical thinking, and learning commitment from utilizing the Havruta method in women's health nursing classes," *The Korean Academic Society of Nursing Education*, Vol.29, No.4, pp.352-361, 2023.
- [13] M.R.Jung and E.Jeong, "Effects of Havruta learning method on self-directed learning ability, critical thinking disposition and problem solving ability of nursing students," *The Journal of Humanities and Social Science*, Vol.1, No.4, pp.2269-2284, 2020.
- [14] J.J.Yang, "The Effect of Communication Ability, Problem Solving Ability, and Self-Directed Learning Ability on Clinical Competence of Nursing Students," *Korean Society for Wellness*, Vol.15, No.4, pp.217-228, 2020.
- [15] J.J.Yang and M.Y.Park, "The relationship of clinical competency and self-directed learning in nursing students," *The Journal of Korean Academic Society of Nursing Education*, Vol.10, No.2, pp.271-277, 2004.
- [16] H.J.Park, "Correlations among nursing professionalism, critical thinking disposition and self-leadership in nursing students," *The Journal of Korean Academic Society of Nursing Education*, Vol.21, No.2, pp.227-236, 2015.
- [17] E.S.Do, "Factors affecting the clinical performance of nursing students participating in alternative clinical practicum," *Journal of Korea Academia-Industrial cooperation Society*, Vol.22, No.12, pp.526-536, 2021.
- [18] M.N.An, H.J.Kim and E.Y.Lee, "The effect of Habruta learning method on self-directed learning ability, academic self-efficacy, learning commitment and critical thinking disposition of nursing students in online class," *Journal of Learner-Centered Curriculum and Instruction*, Vol.22, No.13, pp.17-29, 2022.
- [19] S.J.Lee, Y.K.Chang, H.N.Lee and K.Y.Park, "A study on the development of life-skills: Communication, problem solving, and self-directed learning," *Korean Educational Development Institute*, pp.114-121, 2003.
- [20] J.Yoon, "Development of an instrument for the measurement of critical thinking disposition: In nursing, Seoul, *The Catholic University of Korean*, 2004, pp.1-64. Dissertations.
- [21] A.Y.Kim, H.Y.Tack and C.H.Lee, "The development and validation of a learning commitment scale for adults," *Korean Journal of Educational Psychology*, Vol.24, No.1, pp.33-59, 2010.
- [22] H.S.Park, Y.H.Oh, J.E.Lee, Y.G.Lim and Y.G. "The effects of Havruta-based online debate on communication competency, self-directed learning, and academic self-efficacy of nursing students," *Journal of Korea Society for Wellness*, Vol.16, No.4, pp.17-22, 2021.
- [23] E.Holzer, "Welcoming opposition: Havruta learning and Montaigne's the art of discussion," *Journal of Moral Education*, Vol.44, No.1, pp.64-80, 2015.
- [24] K.A.Shin, B.H.Cho, "Professional self-concept, critical thinking disposition and clinical competence in nursing students," *Journal of Korean Academy of Fundamentals of*

Nursing, Vol.19, No.1, pp.46-56, 2012.

- [25] H.Kim, "A study on the application of Havruta's teaching-learning method in Korean language education," *The Study of Hansung Language and Literature*, Vol.40, pp.135-178, 2019.

김 지 현(Jihyun Kim) [정회원]



- 2002년 2월 : 이화여자대학교 간호학과(간호학석사)
- 2009년 8월 : 이화여자대학교 간호학과(간호학박사)
- 2010년 3월 ~ 2015년 2월 : 한서대학교 조교수
- 2015년 3월 ~ 현재 : 재능대학교 부교수

<관심분야>
아동간호, 시뮬레이션 교육

양 정 하(Jeong-Ha Yang) [정회원]



- 1997년 2월 : 이화여자대학교 간호학과(간호학사)
- 2001년 2월 : 이화여자대학교 간호학과(간호학석사)
- 2014년 2월 : 이화여자대학교 간호학과(간호학박사)
- 2022년 4월 ~ 현재 : 수원대학교 간호학과 조교수

<관심분야>
성인간호, 교수학습, 회복탄력성

박 선 영(Sun-Young Park) [종신회원]



- 1995년 2월 : 이화여자대학교 간호학과(간호학사)
- 1999년 2월 : 이화여자대학교 간호학과(간호학석사)
- 2004년 2월 : 이화여자대학교 간호학과(간호학박사)
- 2010년 3월 ~ 현재 : 백석대학교 간호학과 부교수

<관심분야>
성인 간호, 시뮬레이션 교육