The Effect of Stress, Emotional Intelligence, and Recovery Elasticity on Clinical Performance of Nursing College Students

Kang minjeong, Kim a yeon, Woo yeonju, Lee jimin, Lim jihye, Chae sua, Park byeongjun
[1]Lim jihye: Department of Nursing, student, Daegu Health Colleage, Daegu, Korea, 42759
[2]Kang minjeong: Department of Nursing, student, Daegu Health Colleage, Daegu, Korea, 42759
[3]Kim a yeon: Department of Nursing, student, Daegu Health Colleage, Daegu, Korea, 42759
[4]Woo yeonju: Department of Nursing, student, Daegu Health Colleage, Daegu, Korea, 42759
[5]Lee jimin: Department of Nursing, student, Daegu Health Colleage, Daegu, Korea, 42759
[6]Chae sua: Department of Nursing, student, Daegu Health Colleage, Daegu, Korea, 42759
[7]Park byeongjun: Department of Nursing, professor, Daegu Health Colleage, Daegu, Korea, 42759
Email: [1]lim08276@gmail.com, [2]alswjd5823@naver.com [3]dkdus474@naver.com,
[4]sos384@naver.com,[5]ljm1114@naver.com, [6]csa4273@naver.com, [7]byungjuny00@dhc.ac.kr

ABSTRACT

Introduction: this study seeks to identify the relationship between stress and resilience, emotional intelligence, and clinical performance of nursing college students, and to understand the impact of these variables on clinical performance. **Purpose**: First, the stress, resilience, and emotional intelligence of nursing college students identify the degree of clinical performance. Second, we identify the differences in stress, resilience, emotional intelligence, and clinical performance according to the general characteristics of nursing college students. Third, identify the correlation between stress, resilience, emotional intelligence and clinical performance of nursing college students. Fourth, identify factors that affect clinical performance of nursing college students. **Methodology**: This study was conducted on 95 nursing students in the third and fourth grades of Daegu University. The subjects of the study were third and fourth grade students with internship experience. **Findings**: Clinical performance is emotional intelligence (β=.172, p=0.034), recovery elasticity (β=.481, p=0.001). In other words, the higher the emotional intelligence and resilience, the higher the clinical performance. **Implication**: Nurses' clinical performance is an important concept that directly affects nursing and hospital-wide efficiency (Park, 2007) , and it is urgent to identify and improve clinical performance and professional skills (Kim, 2020) . Nursing college students develop clinical performance skills to integrate overall nursing knowledge and practice through clinical practice, apply communication skills and basic nursing skills in practice, learn problem-solving skills, and develop value systems as professional nurses.

Keywords: Stress, Emotional Intelligence, Recovery Elasticity, Clinical Performance

INTRODUCTION

Nurses' clinical performance is an important concept that directly affects nursing and hospital-wide efficiency (Park, 2007), and it is urgent to identify and improve clinical performance and professional skills (Kim, 2020).

Nursing college students develop clinical performance skills to integrate overall nursing knowledge and practice through clinical practice, apply communication skills and basic nursing skills in practice, learn problem-solving skills, and develop value systems as professional nurses.

Nursing college students not only have to adapt to unfamiliar clinical conditions, but also experience clinical practice stress due to unexpected clinical conditions, heavy work, and ambiguous roles. In addition, although clinical practice is essential, clinical practice education situations become increasingly difficult, with most of the practical training limited to observation, which leads to loss of confidence in nursing and shrinkage (Oh & KANG, 2016). Clinical practice stress undermines key basic nursing confidence or learning skills (Kim, 2017), which is an important achievement in nursing education, and hinders adaptation as a new nurse after graduation (Yu, 2015) (Park, 2020).

Recovery elasticity means improving mental resistance, overcoming adversity and 'elasticity' combined, while recovery elasticity is the ability to adapt to changing conditions and control various stresses in work performance (Kim, 2011).

At the clinical scene, nurses refrain from expressing their feelings internally in their relationships with many people, including medical staff, subjects, and careers, and consciously alter their feelings to benefit the well-being and health of the nurse (Kang, 2015).

Emotional intelligence is the ability to accurately understand the sensibilities of oneself as well as others around them with positive emotional tendencies (Wong & Law, 2002). Nursing college

students should express their emotions in appropriate behavior according to their situation rather than impulsive behavior that responds immediately to their feelings during clinical practice, and positively evaluate and respond in a desirable direction even if stress is given. Therefore, nursing college students need accurate understanding of themselves and others, as well as emotional intelligence to control, organize and utilize their emotions. Emotional intelligence is reported to build a therapeutic relationship between nurses and patients (McQueen, 2004) and to increase the clinical performance of health workers and students (Codier, Kooker & Shoultz, 2008). Therefore, emotional intelligence can be seen to affect clinical performance.

Overseas, research is being conducted on emotional intelligence and nursing performance skills, emotional intelligence and stress response, psychological well-being, and relationship with stress among nursing college students. Studies show that emotional intelligence improves nursing performance, improves problem-oriented response and well-being, and reduces stress.

Therefore, this study seeks to identify the relationship between stress and resilience, emotional intelligence, and clinical performance of nursing college students, and to understand the impact of these variables on clinical performance.

LITERATURE REVIEW
1. Stress
Stress refers to "tension caused by an individual's physical and mental behavioral response to a source of stress (internal and external stimuli)", and it also acts as a cause factor for mental illness. When stress accumulates due to factors such as academic, interpersonal, and emotional relationships, it causes physical and psychological symptoms or causes dissatisfaction and maladjustment in college life. Stress is one of the key socio-psychological factors in the curriculum, affecting well-being as well as academic achievement of nursing college students. It adds to the seriousness of existing disabilities by making the target vulnerable and affects the return to society. Anxiety disorders, panic disorders, mood disorders, and suicides are often mentioned in relation to stress, and stress life events are considered major risk factors for adolescents and adolescents (Park, 2011).

As the study of stress has been conducted for a long time, there are various understandings and definitions of it. So far, scholars can organize their views on stress from three perspectives. The first is stress as a reaction resulting from pressure on the body's special mechanism to maintain homeostasis, which is the body's normal state. Second, stress as stimulus was viewed as external environmental stimulus, and finally, stress as an interaction

between humans and the environment was a threat to well-being beyond the limits of individual resources (Recommendation, 2012). In general, the stress that nursing college students refer to is experienced by clinical stress such as pain, death, and lack of professional knowledge in addition to external stress such as tests, homework, and economic problems (Jimenezetal, 2010). Nursing is an applied science based on clinical practice, and clinical practice is an essential course. In a study[Unlike college students, they experience a lot of stress because they have to adapt to the clinical practice environment (Park, 2001; Lee, 2003) on the stress and response methods of nursing college students, the highest score of each area was the major classroom area, and the general characteristics of the major classroom area stress and non-major classroom area stress differed significantly from the family's economic level (Park, 2001). (Lazarus & Falkman, 1984) stated that influencing an individual's adaptation to stress is a way of coping with stress rather than with the internal resources and abilities that an individual has. On the link between stress and coping methods, Wong, Leung and So (2001) reported the link between inefficient coping methods and mental ill health and various diseases, Munakata (1996) said that escapist and vicious coping causes chronic stress and increases depression, Choi, Lee& Lee, (1996) suggests that effective stress coping as an individual's internal resource is very important, as emotional-centered coping methods do not reduce depression and anxiety. Kim Soon-rye and Lee Jong-eun's studies have also been confirmed, which can be interpreted as learning how to cope with stress through more learning and clinical experience and training as the grade goes up (Park, 2010).

2. Emotional Intelligence
Emotional intelligence refers to the ability to understand the feelings of oneself and others and to control one's emotions according to the circumstances (Wong & Law, 2002). Emotional intelligence is also defined as the ability to understand and express the emotions of oneself and others, the technology to effectively manage the emotions of oneself and others, and the ability to leverage emotions of one's own performance (Salovey & Mayer, 1990). Emotional intelligence refers to the ability to understand and effectively control and utilize emotions of oneself and others in various situations (Mayer & Salovey, 1993).

A person with high emotional intelligence is known to have high performance in various situations in which emotions are involved, using emotions well to plan and achieve his or her work (Lee, 2013). Emotional intelligence is the ability to read and understand emotions properly while recognizing the feelings of oneself or others, which is the basis for

emotional control, expression, and empathy (Kim, 2010). This is also the primary ability that must be achieved in nursing professions that require efficient coping skills, in various situations, in relationships with different people (Yang, 2015).

Emotional intelligence plays a key role in building successful relationships between nurses and patients, is reported to increase clinical performance of health workers and students, indicating that emotional intelligence plays an important role in improving performance in healthcare sites. A prior study on emotional intelligence and performance showed that there was a static correlation between emotional intelligence and performance in the study of (Adonian, 2013) students in the department of occupational therapy. Studies in Rice (2015) on nursing students showed a static correlation between emotional intelligence and performance, while studies in Lee (2015) showed that emotional intelligence affects clinical performance (Kim, 2016). Wong & Law (2002) developed a self-reporting emotional intelligence measure to classify emotional intelligence into self-emotion, understanding of others, emotional control, and emotional utilization. Emotional understanding refers to the ability to accurately understand and manage one's emotions, the ability to understand and observe other people's emotions, the ability to utilize emotions for one's performance, and emotional control. From this perspective, emotional intelligence can be said to be the ability to control one's emotions and utilize them properly to facilitate relationships with others, as well as positively affect the performance of individuals and organizations (Hwang, 2007). Looking at the preceding research, Cordier (2010) argued that emotional intelligence in nursing practice correlates with nursing professionalism and improvement in nursing performance. A study of 190 nurses (Lee, 2013) confirmed that emotional intelligence is a highly relevant factor in interpersonal skills and nursing performance. In a study by Kim (2011), the higher the emotional intelligence, the higher the level of organizational immersion, (Lee, 2015) reported that emotional intelligence improves nursing work performance by managing stress or crisis through emotional understanding and management of oneself and others. These preliminary studies show that improving nurse nursing performance requires emotional intelligence, an important ability in problem solving and relationship management (Yu, 2015), which requires high emotional intelligence to accurately understand patients' emotions and communicate well (Kim, 2017).

3. Recovery Elasticity
Recovery elasticity is a developmental process that successfully overcomes stress and unaffordable situations and an individual's ability to improve

through education or training (Hong, 2006). Nursing University students' resilience is a personal development process that successfully overcomes stressful and difficult situations, and their success experiences have been reported to improve their adaptability and well-being (Ji, 2016). Therefore, higher resilience has been reported to reduce academic and clinical stress in nursing college students and to increase their ability to adapt to college life, suggesting that resilience is a much-needed competency for nursing college students (Hong, 2016).

Nursing college students experience a lot of stress in clinical practice, not only due to academic but also due to major characteristics, such as ambiguous student role theory and practice gaps, lack of practice opportunities, and lack of skills interpersonal skills (Gogh, 2015). Furthermore, after admission, nursing college students were more stressed about their studies than university students in other departments due to intensive theoretical education and clinical practice due to preparation for the national exam (Park, 2010).

Nursing college students' resilience has a partial mediated effect on the relationship between clinical practice stress and clinical performance, so reducing clinical practice stress is necessary, but increasing resilience plays an important role in improving clinical performance (Kim, 2018).

The results of prior studies suggest that resilience is determined by dynamic and complex interactions between internal and personal environmental factors, including psychological, behavioral, cognitive, and social ability factors, and external protection factors. Thus, we find that explaining the dynamic and multi-dimensional nature of resilience elasticity as one factor is impossible (Day, 2009; Luthar, 2007).

As such, nursing college students must adapt well to changes in the environment during clinical practice, overcome severe stress, and could recover elasticity for efficient practical performance (Park, 2011).

4. Clinical Performance
Competency refers to the state of having appropriate knowledge, judgment, skill, or power in terms of skill. Clinical performance refers to the ability to demonstrate the knowledge, skills, attitudes, and judgments learned in clinical situations through clinical education (Kim, 2014).

Clinical performance refers to the ability to demonstrate appropriate knowledge, judgment, and skills in clinical situations (Barrett, 1998), which is comprehensive and holistic, which cannot be seen separately from individuals, and is expected and required by nursing educators and practitioners (Lee, 1990).

Nurses' clinical performance is an important concept that directly affects the efficiency of nursing work

and hospitals (Park, Park, Kim & Sung, 2007), and it is urgent to understand and improve clinical performance.

In nursing education, clinical performance refers to the ability to combine one's knowledge, skills, attitudes, judgment, etc. to perform desired nursing (Campbell & Mackay, 2001). Clinical performance is effective in nursing (Campbell & Mackay. 2001), which is the final product of the curriculum expected by educators to improve the quality of nursing services, refers to the experience and change of students throughout the curriculum (Byeon, 2003).

In the clinical curriculum, nursing students will learn the process of applying the knowledge obtained from the lecture to the subjects, confirming the problems, arbitrating the results of the arbitration (Sung, Jung & Jang, 1998).

(Benner, 1984) In the process of developing nurses from beginner to expert, they go through five stages: novice, advanced beginner, competent, professional, expert, which depend on the time and experience they spend as nurses.

Therefore, nursing students are expected to improve their clinical performance through various practical experiences as they advance in their grades. In fact, Choi (1991) showed that the higher the grade, the higher the score in nursing technology, cooperative relationships, interpersonal relationships, self-respect, nursing process and professional development (Lee, 2000).

The research on clinical performance required by nursing college students shows that clinical performance is influenced by critical thinking tendency (Nervous Children, 2012), self-leadership (Nervous Children, 2012), and. In addition, overcoming (Kim, 2017), self-efficacy (Park, 2012) and professional self-concept (neurological children, 2012) strengthen clinical performance. Thus, the results of previous studies showed that clinical performance affected the various abilities of nursing college students (Kim, 2018).

Method

1. Research Design

This study is a descriptive study to understand the effect of stress, emotional intelligence, resilience and clinical performance of nursing college students on clinical performance.

2. Research Subjects

This study was conducted on 95 nursing students in the third and fourth grades of Daegu University. The subjects of the study were third and fourth grade students with internship experience. The sample size was calculated using the G-Power 3.1.9.2 program, and the minimum number of nursing students was

set to 9 predictors (gender, age, grade, religion, hospital practice, stress, emotional intelligence, resilience, clinical performance).

3. Measurement

1) Stress

The clinical practice stress measurement tool was developed by Beck & Srivastava and corrected and supplemented by Kim and Lee. The tool consists of five practical and educational environments, six undesirable role models, four practical work burdens, four interpersonal problems and five conflicts with patients. Each question is a five-point Likert scale, ranging from one for "not at all" to five for "very much so," indicating that the higher the score, the more stressful the clinical practice is. Cronbach's a =.91 (Kim, 2017)

2) Emotional intelligence

The Wong and Law Emotional Intelligence Scale (WLEIS) developed by Wong & Law (2002) was used to measure emotional intelligence in this study. This tool consists of 16 questions: self-awareness, others' perceptions of sensibility, utilization of sensibility and regulation of sensibility. Each question was measured on a scale of 7 points from "Selection, No" to "Very" and 16 to 112 points. The higher the score, the higher the emotional intelligence (Wong & Law, 2002).

3) Resilient Elasticity

In this study, to measure resilience (Yang). 2015), developed for nursing college students, consists of seven areas: confidence, positivity, coping ability, emotion regulation ability, organizational style, relationship and social support. The higher the score, the higher the resilience (Lee, 2018) is applied to each question as a scale of 5 points for Likert.

4) Clinical Performance

Clinical performance tools developed by Lee, 1990, 74 and core nursing performance tools developed by Joo & (Song, 2014) and 75 were modified (Kim, Chae & Choi, 2018), and 76 were used. The tool consists of 34 questions, including leadership, professional development, nursing skills, communication, and nursing courses, and is a self-reported questionnaire that allows students to read and answer questions themselves. On the five-point Likert scale, the higher the score, the higher the clinical performance. At the time of development, Cronbach's α was .96 and Cronbach's α was .84 to .93 on the lower scale (Kim, 2018).

4. Data Collection

The survey period was from April 9, 2021, to April 20, 2021. Ninety-five people who read and approved the purpose and procedures of the research were surveyed in the third and fourth grades of nursing at a university in Daegu. The distribution method was carried out on the school's Every time Nursing

Department bulletin board and nursing department group chat room, and the survey was conducted with the consent of those who wanted to participate in the research. The subjects were asked to answer the questionnaire anonymously so that they could answer the questionnaire honestly. The questionnaire was automatically collected and took about 15 minutes to complete.

5. Statistical Analysis

The SPSS/WIN 23.0 statistical program was used to analyze this study as follows.
·The general characteristics of subjects were analyzed by cross-sectional frequency and percentage, and the average and standard deviation of stress, emotional intelligence, resilience, and clinical performance were used.
·The differences in stress, emotional intelligence, resilience, and clinical performance were investigated by using t-test and ANOVA.
·The correlation between stress, emotional intelligence, resilience, and clinical performance of subjects was investigated using Pearson's correlation coefficient.
·The factors affecting the clinical performance of subjects were analyzed .
.

using stepwise multiple regression analysis.

6. Ethical Consideration

To protect the ethical aspects of the subjects, the purpose, content, personal information protection and questionnaire were used only for research purposes and voluntarily agreed to participate in the study. The links and passwords to the collected questionnaire statistics were set to be accessible only to the team of researchers. Ten researchers were selected by lottery to provide a prescribed return gift, and the contact information of the representative researcher was filled out in the questionnaire so that they could contact each other if they had any questions.

RESULT AND DISCUSSION
1. General Characteristics
Among the characteristics of the subjects, 89 (90.5 percent) were women, 23 years old and 44 (46.3 percent) were 27 years old. In the fourth grade, 48 students (50.5 percent) and 61 non-religious people (64.2 percent) were the most. Fifty-three (55.8 percent) said they had no hospital training

characteristics	Sortation		n	%
Gender	male		9	9.5
	female		86	90.5
Age	22 years of age or younger		42	44.2
	23 – 27 years old		44	46.3
	28 – 32 years old		5	5.2
	33 years of age or older		4	4.2
School year	3rd grade		47	49.5
	4th grade		48	50.5
Religion	O		34	35.8
	X		61	64.2
characteristics	Sortation	n		%
Hospital hands-on experience	O	Completion of first semester	6	44.2
		Completion of the second semester	19	
		Completion of the third semester	28	
	X	53		55.8

Table 1. general characteristics of participants **(N=95)**

2. Degree of stress and emotional intelligence, resilience, and clinical performance

The average clinical stress score was 2.97±0.78 out of 5, the average emotional intelligence score was 5.14±1.05, the average resilience score was 3.61±0.43, and the average clinical performance score was 3.96±0.51.

characteristics	Sortation	M±SD	Range
clinical stress	practical education environment	3.48±0.66	1~5
	undesirable role model	2.81±0.82	1~5
	burden of hands-on work	3.45±0.72	1~5
	interpersonal conflict	2.40±0.83	1~5
	Conflict with patients	2.71±0.87	1~5
	Total Points	2.97±0.78	
emotional intelligent	self-emotional recognition	5.40±0.90	1~7
	others' sensibility recognition	5.35±0.95	1~7
	emotional use	4.80±1.19	1~7
	emotional control	5.02±1.17	1~7
	Total Points	5.14±1.05	
resilient elasticity	confidence	3.81±0.74	1~5
	positivity	3.51±0.43	1~5
	ability to cope	3.93±0.67	1~5
	emotional instruction	3.53±0.79	1~5
	organizational style	3.06±0.86	1~5
	relationality	3.93±0.62	1~5

	social support	3.55±0.49	1~5									
clinical performance	nursing leadership	3.92±0.55	1~5									
	professional development	4.13±0.59	1~5									
	nursing skills	3.70±0.70	1~5									
	communication	4.00±0.59	1~5									
	nursing course	4.13±0.62	1~5									
	Total Points	3.96±0.51										

Table 2. Subject's stress, emotional intelligence, resilience elasticity, clinical performance   **(N=95)**

3. Differences in stress, emotional intelligence, resilience elasticity, and clinical performance according to the characteristics of the subject

The degree of stress caused by the general characteristics of the subjects was significantly different between clinical practice (F=7.65, p=.007) and grade (F=9.697, p=.002), but gender (F=.190, p=.664), ((F= .851, p= .606), (F= .357 p= .606).

The degree of emotional intelligence according to the characteristics of the subjects was whether they had hospital practice (F=.186, p=.667), gender (F=.336, p=.564), age (F=.612, p=.837), ((F=1.334, p=.251), religion (F=.855, p=.494)

The degree of resilience due to subject characteristics was whether there was a hospital practice (F=2.289, p=.134), gender (F=.011, p=.917), age (F=.563, p=.876), grade (F=.034, p=.855), religion (F=.854, p=.495).

The degree of clinical performance based on subject characteristics was whether there was a hospital practice (F=2.440, p=.122), gender (F=.320, p=.573), grade (F=1.475, p=.145), and religion (F=.322, p=.572).

Characteristic	Sortation	Stress			Emotional intelligence			Resilient Elasticity			Clinical Performance		
		M±SD	F	p	M±SD	F	p	M±SD	F	p	M±SD	F	p
Hospital hands-on experience	O	75.69±13.20	7.65	.007	82.97±11.23	.186	.667	84.85±7.62	2.289	.134	133.29±17.88	2.440	.122
	X	67.64±14.74			81.84±13.63			88.07±11.99			136.25±17.49		
Gender	male	73.22±14.50	.190	.664	84.67±11.75	.336	.564	87.00±10.35	.011	.917	138.11±14.78	.320	.573
	female	70.98±14.65			82.10±12.70			86.62±10.42			134.60±17.95		
Age	22 years of age or younger	73.61±14.85	.851	.606	81.69±12.90	.612	.837	86.11±10.51	.563	.876	132.11±17.91	1.475	.145
	23 – 27 years old	69.29±14.79			84.00±12.46			87.95±10.57			140.04±16.97		
	28 – 32 years old	69.20±12.43			82.40±10.52			86.00±9.43			125.60±11.84		

		stress	F/t	p	emotional intelligence	F/t	p	resilience	F/t	p	clinical performance	F/t	p
	33 years of age or older	69.25±12.23			71.00±9.66			78.75±4.78			120.00±10.39		
School year	3rd grade	75.70±15.00	9.697	.002	83.85±11.50	1.334	.251	86.85±9.66	.034	.855	133.77±17.78	.956	.331
	4th grade	66.79±12.82			80.88±13.51			86.46±11.10			136.08±17.59		
Religion	O	71.59±16.44	1.357	.255	79.71±10.97	.855	.494	84.12±8.48	.854	.495	139.91±15.79	.322	.572
	X	70.98±13.56			83.82±13.25			88.07±11.09			132.16±18.11		

Table 3. Stress, emotional intelligence, resilience elasticity and clinical performance according to the general characteristics of the subject

Variables	stress	emotional intelligence	resilience elasticity	clinical performance
				r(p)
stress	1	-.182 (.078)	-.136 (.190)	-.246* (.016)
emotional intelligence	-.182 (.078)	1	.738** (<.001)	.557** (<.001)
resilience elasticity	-.136 (.190)	.738** (<.001)	1	.593** (<.001)
clinical performance	-.246* (.016)	.557** (<.001)	.593** (<.001)	1

Table 4. Correlation between stress, emotional intelligence, resilience elasticity, and clinical performance.   (N=95)

5. Factors affecting clinical performance

To confirm the factors affecting the clinical performance of the subjects, we put sensory intelligence and resilience as independent variables and put clinical performance as dependent variables. The general characteristics of the subject are not significant, so they are not written down, and stress does not reach regression. As a result of confirming the multiple tolerances, the tolerance limit was 617, above 0.1, and the VIF value was 2.197, not above 10. Durbin Watson's value was 2.183, and the variable that had a meaningful impact on clinical performance was emotional intelligence (β=).172, p=.034), recovery elasticity (β=.481, p=.001). The explanatory power of the model was 38.3%, and the significance of the model was statistically significant at F=28.526 (p<.001). Among them, resilience is the most influential factor in clinical performance.

Variables	B	SE	β	t	p	VIF
(Constants)	1.347	.358		3.758	<.001	
emotional intelligence	.172	.080	.261	2.148	.034	2.197
resilience elasticity	.481	.146	.401	3.300	.001	2.197
R=.619ᵃ Adjusted R²=.383 F=28.526 *P*<.001.						

Table 5. Factors affecting clinical performance

CONCLUSION AND RECOMMENDATION

This study attempted to be used as a basic data when identifying the effects of stress, resilience, and emotional intelligence on clinical performance of nursing college students and preparing strategies to improve their clinical performance. The specific discussion of the findings is as follows.

In this study, the stress of nursing college students was moderate with an average rating of 2.97 points (±0.78) (5 points scale), and the stress from the training environment was highest with 3.48 points (±0.66) and 2.81 points with undesirable role models (±0.72) and 2.81 points with patients. This ranking is seen because of showing that nursing college students are under a lot of stress due to the hands-on educational environment. Therefore, we could see that strategies for stress relief for nursing college students were required, and it is necessary to reduce stress for nursing college students by improving the practical educational environment.

The stress of nursing college students showed a statistically significant difference between the subject's presence of hospital practice and that of nursing college seniors. 75.69 (±3.20) nursing college students with hospital practice experience were significantly higher than 67.64 (±4.74), who had no hospital practice experience. In addition, the stress index of third-year students who go to a lot of practice was high. Through this, it is necessary to prepare a stress management strategy for nursing college students who practice at a third-year hospital.

Through previous research, nurses are required to have high emotional intelligence as they have a lot of work to face directly with the subjects and must work with various professions. (Lee, 2013) can be seen. The emotional intelligence score of nursing college students averaged 5.14 points (±1.05) (7 points) and was moderate. As a result of analyzing emotional intelligence into four areas, self-sensitive recognition was the highest with 5.40 points (±0.90), followed by 5.35 points (±0.95), emotional control 5.02 points (±1.17), and emotional utilization 4.80 points (±1.19). Compared to the previous work, a similar degree of score of 4.7 points (7 points scale) was shown (Yang, 2015).

Compared to previous studies of the following nursing college students, the domestic study of (Lee & Song, 2010) showed a similar level of emotional intelligence as 4.8 points, (External & Gumiok, 2014) as 4.75 points, and (Shin & Park). In a study that identified nurses' emotional intelligence with the same measurement tool, emotional intelligence was 4.62 points, which is like this study (Hwang, 2007) showed the highest level of self-awareness. To enhance emotional intelligence of nursing college students, we could see that the level of emotional intelligence could be raised by raising "self-emotional awareness."

The resilience of nursing college students was 3.61 points (±0.43) (5 points scale), and the lower variables were 3.93 points (±0.62), 3.93 points (±0.67), confidence 3.81 points (±0.74), social support 3.55 points (±0.49), and positive tissue 3.53 (±0.79).

The clinical performance of nursing college students was found to be 3.96 points (±0.51) (5 points scale), followed by professional development 4.13 points (±0.59), nursing process 4.13 points (±0.62), communication 4.00 points (±0.59), nursing leadership 3.92 points (±0.55), and nursing instrument 3.70 points (±0.70).

Earlier studies showed that recovery elasticity and clinical performance correlated positively with clinical performance, and nursing college students showed slightly higher recovery elasticity than clinical nurses. To continue to maintain and promote this in undergraduate studies, it is necessary to find programs that can improve resilience and organize curriculum contents to help improve resilience within the nursing curriculum (Park & Song, 2019). Therefore, it is necessary to improve clinical performance by establishing a strategy to improve the relationship and coping ability of nursing college students.

This study was conducted on university students at a nursing university and is limited in generalizing the results of the study, and the general characteristics of the subjects were meaningless. However, we found that clinical performance and emotional intelligence had a significant positive correlation of (β=.172, p=0.034), and clinical performance and resilience had a significant positive correlation of (β=.481, p=0.001). Through this, we could think of strategies to increase emotional intelligence and resilience to improve clinical performance of nursing college students. This strategy suggests the need to foster emotional intelligence and resilience to improve the quality of nursing college students.

REFERENCE

Andonian, L. (2013). Emotional intelligence, self-efficacy, and occupational therapy students' fieldwork performance. *Occupational Therapy in Health Care, 27*(3), 201-215.

Barrett, C., & Myrick, F. (1998). Job satisfaction in preceptorship and its effect on the clinical performance of the preceptee. *Journal of Advanced Nursing, 27*(2), 364-371.

Beck DL, Srivastava R. (1991). Perceived level and sources of stress in baccalaureate nursing students. *Journal of Nursing Education 30*(3), 127-133.

Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing

practice. *The American Journal of Nursing, 84*(12), 1480.

Byeon YS, Lim NY, Kang KS, Sung MS, Won JS, Ko IS, et al. (2003). Clinical nursing competency for new graduate nurses: A grounded theory approach. *Journal of Korean Academic Fundamental Nursing, 10*(1), 47–56.

Campbell B, Mackay G. (2001). Continuing competence: an Ontario nursing regulatory program that supports nurses and employers. *Nursing Administration Quarterly, 25*(2), 22–30.

Choi Hyun-young (1991). *The study of the relationship between clinical performance and stressors of nursing students*. Master's thesis at Chosun University Graduate School.

Codier, E., Kooker, B. M., & Shoultz, J. (2008). Measuring the emotional intelligence of clinical staff nurses: An approach for improving the clinical care environment. *Nursing Administration Quarterly, 32*(1), 8-14.

Codier, E., Muneno, L., Franey, K., & Matsuura, F. (2010). Is emotiona lntelligence an important concept for nursing practice*? Journal of Psychiatric and Mental Health Nursing, 17*(10), 940-948.

D. N. Oh, Y. R. Um, C. Kim, S. J. Ju, J. H. Jung & M. S. Park. (2016). The coping experience of nursing students in clinical practice: Trying to be a meaningful presence. *The Journal of Korean Academic Society of Nursing Education, 22*(4), 430-440.

Day, C., & Gu, Q. (2007). Veteran teachers: Commitment, resilience, and quality retention. *Teachersand Teaching: Theory and Practice, 15*(4), 441-457.

Goleman, D. (1995). *Emotional intelligence*. New York,NY: Bantam Books.

H. S. Yu. (2015). Relationship among stress of clinical practice, practice satisfaction and clinical competence in nursing students. *Korean Data Analysis Society, 17*(2), 1129-1144.

Hong HS, Kim HY (2016). Effect of academic stress, clinical practice stress, resilience on nursing student's adjustment to college life. *Asia-pacific Journal of Multimedia Service Convergent with Art, Humanities, and Sociology, 6*(2), 221-234.

Hong, E. S. (2006). Conceptual understanding of resilience and instructional suggestion. *Korean Journal of Special Education, 41*(2), 45-67.

Hwang Pil-ju (2007). *A Study on the Effect of Emotional Intelligence on Organizational Effectiveness of Organizational Members*. Sogang University, Seoul.

J. A. Park and E. K. LEE (2011). Influence of ego-resilience and stress coping styles on college adaptation in nursing students. *The Journal of Korean Nursing Administraion Academic Society, 17*(3), 267-276.

J. D. Mayer and P. Salovey. (1993). The Intelligence of Emotional Intelligence. *Intelligence, 17*, 433-442.

J. K. Goh (2015). The differences of stressors at grade and ways of coping in nursing students. *Health Commnuication, 5*(2), 79-86.

J. Y. Kim, M. K. Kim & J. Y. Cho. (2017). The Mediating Effect of the Resilience on the Relationship between Stress in Clinical Practice and Clinical Competence in Nursing Students. *Journal of the Korea Academia-Industrial Cooperation Society, 18*(1), 669-678.

Ji Youngjoo and Kim Kyungnam (2016). Factors affecting the resilience of nursing college students. *Art, Humanities, Social Convergence Multimedia Paper, 6*(12), 19-27.

Joo GE, Sohng