

The Relevance between Communication Self-Efficacy, Performance of Therapeutic Communication Knowledge Application Technique and Communication Competency in Clinical Training of Nursing College Students

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Abstract:

The purpose of this study is to provide basic data to reinforce the communication learning ability of effective clinical training by identifying the relevance between communication self-efficacy and performance of therapeutic communication knowledge application technique in clinical training of nursing college students. The data analysis was conducted with t-tests and one-way ANOVA using the SPSS 21.0 program. Therapeutic communication knowledge application, technical performance and communication competency describes 25.6% of communication self-efficacy. Grade, communication self-efficacy, and communication technique accounted for 28.3% of therapeutic communication knowledge application and technical performance. Academic achievement, economic status, communication self-efficacy, therapeutic communication knowledge application and technical performance describes 30.4% of communication competency. Therefore, the method for enhancing communication competency of nursing students needs to establish educational learning strategies to improve communication self-efficacy and to develop communication promotion program in the clinical site that directly carries out the knowledge of therapeutic communication.

Keywords: Communication self-efficacy, Therapeutic Communication Knowledge Application and Technique, Communication competency, Clinical Training, Nursing College Students

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1. INTRODUCTION

As a nursing technique necessary for approaching and understanding patients in the holistic perspective, the therapeutic communication is a professional nursing competency that should be essentially equipped for effectively understanding patients' needs, providing the security to patients by helping their problem-solving, and also performing nursing activities for the health enhancement and prevention[1].

Education for enhancing communication competency is required to be further diversified and reinforced in the nursing education course at the clinical site[2]. In addition, communication

education is required to adapt various situations quickly and clearly and to make satisfactory interpersonal relationships for nursing college students[3].

Also, to provide the opportunities for learning to experience the therapeutic communication to nursing students, there should be some efforts to develop the effective learning methods[4].

And the self-efficacy to enhance the efficiency of practical education is closely related to the learner's academic achievement with a self-belief that the learner is able to successfully perform the task[5].

Understanding the therapeutic communication knowledge application, communication skills, and

communication self-efficacy will help nursing students develop the contents and methods of communication education[6].

This study examines the performance of therapeutic communication knowledge application technique with the case subjects in the clinical situation while nursing students carry out clinical training, and identify the relevance between communication self-efficacy and communication competency and related factors. Therefore, the purpose of this study will be to be used as basic data to strengthen therapeutic communication learning capacity in clinical training education of actual clinical situation.

2. STUDY METHOD

2.1. RESEARCH DESIGN

This is a descriptive survey research for understanding the communication self-efficacy, performance of therapeutic communication knowledge application and technique, communication competency of nursing college students during clinical training.

2.2. STUDY SUBJECT

This study selected Grade 3 & 4 of nursing college students who completed the clinical training for two weeks or more in two universities located in K province and D metropolitan city through the convenience sampling. After selecting 235 subjects who understood the objective of this study and agreed on it. In the results of using the G power 3.1 software [7](Mindspark Interactive Network, 2015). to calculate the proper number of sample, with the significance level(α).05, power($1-\beta$).95, effect size(r).15(middle), and 14 predicting variables, the minimum sample size necessary for the multiple regression analysis was calculated as 194. Considering the 10% drop-out rate, the questionnaires were distributed to 275 people through the convenience sampling. Out of the collected 251 questionnaires, total 235 respondents(93.5%) were selected as the research subjects after excluding 16 questionnaires(6.5%) with insufficient responses.

2.3. STUDY TOOLS

2.3.1. COMMUNICATION SELF-EFFICACY :

As a measurement tool of communication self-efficacy, [8] used a modified and complementary tool to measure the communication self-efficacy of nursing students. A total of 37 questions in five areas consisted of 12 specific communication skills, 10 questions for counseling process, 7 for handle difficult client behaviors, 4 for ability to deal with cultural differences, and 4 for awareness of values. The measurement was used on the Likert 5-point scale consisted of 1 point is “Not really” and 5 points is “Totally yes”. It means that the higher the score, the higher the communication self-efficacy. In this study, the Cronbach's alpha was .866, and the tools in the subcategory were specific communication skills .826, counseling process .885, handling difficult client behaviors .358, ability to deal with cultural differences .660, awareness of values .146.

2.3.2. THERAPEUTIC COMMUNICATION KNOWLEDGE APPLICATION AND TECHNIQUE SCALE :

The performance of therapeutic communication knowledge application and technique was composed of the ones for professors, standardized patients, and students, developed by [8] to evaluate the performance degree of therapeutic communication of nursing students by directly observing the process of applying the therapeutic communication technique to the standardized patients. Out of them, this study used the one for students, which was composed of total 15 items including total 11 items(openness, active listening, empathy, focusing, encouraging, silence, three of providing information, and two of summarizing) for measuring the degree of therapeutic communication knowledge and technique, three items for measuring the perception of nursing problem, and one item for measuring the satisfaction with the overall therapeutic communication application. In the measurement, two points were given to ‘Yes’ and one point was given to ‘No’. Based on the score range from minimum 15 to maximum 30, when the score was higher, the performance of therapeutic communication knowledge application and technique was high. In this study, the Cronbach's alpha was .778.

2.3.3. COMMUNICATION COMPETENCY SCALE : To measure the participants' individual communication competency, this study used the Global Interpersonal Communication Competence Scale (GICC), which was originally developed by [9] and complemented by [10]. Questions were responded on a 5-point Likert scale, in which higher mean score indicates higher communication competency. In this study, the Cronbach's alpha was .709.

3. DATA ANALYSIS

Collected data were analyzed using the SPSS 21.0 program. The general characteristics of the nursing college students, communication self-efficacy, therapeutic communication knowledge application and technical performance, and communication competency were analyzed by descriptive statistics such as frequency and percentage, mean and standard deviation. The differences between general characteristics of nursing students and their communication self-efficacy, therapeutic communication knowledge application and technical performance, and communication competency were analyzed by t-test, ANOVA, and Scheffe. The correlation analysis (pearson correlation coefficient) was used to analyze the correlation between communication self-efficacy, therapeutic communication knowledge application

and technical performance, and communication competency of nursing students. The effects of communication knowledge application, technical performance, and communication competency were analyzed by multiple linear regression.

4. RESULTS

4.1. COMMUNICATION SELF-EFFICACY, THERAPEUTIC COMMUNICATION KNOWLEDGE APPLICATION AND TECHNICAL PERFORMANCE, AND COMMUNICATION COMPETENCY ACCORDING TO THE GENERAL CHARACTERISTICS OF THE SUBJECTS

It has been shown that there was no significant difference in communication self-efficacy according to the general characteristics of the subjects. Therapeutic communication knowledge application and technical performance were significant in economic status ($p=.047$) and clinical training period ($p=.000$). In terms of communication competency, it was significant in academic performance ($p=.011$), economic status ($p=.036$), and academic achievement level ($p=.011$) [Table 1].

Table 1. The General Characteristics with Learning attitude, Academic achievement and Self-directed learning ability

Contents		N(%)	Communication self-efficacy		Therapeutic Communication Knowledge Application and Technique		Communication competency	
			mean±sd	t or F (p)	mean±sd	t or F (p)	mean±sd	t or F (p)
Gender	Men	47(20.0)	3.26±0.30	-0.476	1.83±0.19	-1.384	3.77±0.53	-0.085
	Women	188(80.0)	3.29±0.34	(.634)	1.86±0.14	(.168)	3.78±0.46	(.932)
Grade	Grade 3	180(76.6)	3.27±0.31	-1.020	1.83±0.16	-5.038	3.76±0.47	-1.310
	Grade 4	55(23.4)	3.33±0.39	(.309)	1.95±0.08	(.000)	3.85±0.50	(.192)
School Record*	High(top 30%) ^a	60(25.5)	3.27±0.28	0.063 (.939)	1.88±0.14	1.846 (.160)	3.94±0.47	4.637 (.011) (b < a)
	Middle ^b	129(54.9)	3.29±0.37		1.84±0.16		3.72±0.48	
	Low(bottom 30%) ^c	46(19.6)	3.28±0.29		1.87±0.12		3.72±0.44	
Religion	Christianity	41(17.4)	3.32±0.34	1.665 (.175)	1.86±0.15	2.239 (.084)	3.82±0.53	2.171 (.092)
	Buddhism	20(8.5)	3.24±0.28		1.78±0.20		3.58±0.45	
	Catholicism	24(10.2)	3.15±0.21		1.83±0.19		3.65±0.35	

	None	150(63.8)	3.30±0.35		1.87±0.13		3.82±0.47	
Economic Condition*	High ^a	17(7.2)	3.21±0.33	0.630 (.534)	1.90±0.15	3.095 (.047)	4.05±0.33	3.367 (.036) (c < a)
	Middle ^b	196(83.4)	3.29±0.34		1.85±0.15		3.77±0.49	
	Low ^c	22(9.4)	3.34±0.31		1.92±0.09		3.66±0.38	
Major Life Satisfaction	Very satisfied	14(6.0)	3.23±0.29	0.536 (.658)	1.86±0.16	0.676 (.567)	3.79±0.65	1.377 (.250)
	Satisfied	98(41.7)	3.26±0.29		1.84±0.18		3.84±0.40	
	Average	109(46.4)	3.31±0.35		1.87±0.12		3.75±0.51	
	Dissatisfied	14(6.0)	3.26±0.50		1.86±0.17		3.58±0.52	
Scholastic Achievement Level*	Excellent ^a	11(4.7)	3.13±0.36	1.766 (.173)	1.83±0.23	1.222 (.296)	4.16±0.45	4.556 (.011) (c < a)
	Satisfactory ^b	112(47.7)	3.32±0.30		1.87±0.15		3.80±0.47	
	Insufficient ^c	112(47.7)	3.27±0.36		1.84±0.15		3.72±0.47	
Experience in Taking Communication Course	Yes	230(97.9)	3.29±0.34	0.382 (.703)	1.86±0.15	0.707 (.480)	3.78±0.48	.867 (.387)
	No	5(2.1)	3.23±0.19		1.81±0.10		3.60±0.32	
Clinical Training Period*	2 weeks ^a	75(31.9)	3.25±0.29	0.793 (.556)	1.83±0.14	6.537 (.000) (a,b,e<f)	3.69±0.43	1.733 (.128)
	4 weeks ^b	23(9.8)	3.24±0.33		1.80±0.17		3.75±0.52	
	6 weeks ^c	40(17.0)	3.31±0.27		1.86±0.15		3.88±0.41	
	8 weeks ^d	21(8.9)	3.37±0.40		1.85±0.14		3.89±0.49	
	10 weeks ^e	21(8.9)	3.23±0.36		1.77±0.21		3.65±0.56	
	19 weeks ^f	55(23.4)	3.33±0.39		1.95±0.08		3.85±0.50	
Aspect of Family Communication	Order-oriented communication	7(3.0)	3.28±0.37	2.992 (.052)	1.91±0.14	0.417 (.660)	3.63±0.44	0.853 (.427)
	Position-oriented communication	40(17.0)	3.17±0.29		1.85±0.14		3.71±0.36	
	Character-oriented communication	288(80.0)	3.31±0.34		1.86±0.15		3.80±0.50	

* Scheffe's Post Test

4.2. CORRELATION WITH COMMUNICATION SELF-EFFICACY, THERAPEUTIC COMMUNICATION KNOWLEDGE APPLICATION AND TECHNICAL COMMUNICATION COMPETENCY

The results of the correlation analysis between communication self-efficacy, therapeutic communication knowledge application and technical performance, and communication

competency of the subjects in this study are as follows. Communication self-efficacy was positively correlated with therapeutic communication knowledge application, technical performance ($r=.399$, $p=.000$), and communication competency ($r=.450$, $p=.000$). Therapeutic communication knowledge application and technical performance were positively correlated with communication competency ($r=.386$, $p=.000$) [Table 2].

Table 2. Correlation with Communication self-efficacy, Therapeutic Communication Knowledge Application and Technique, Communication competency

	Communication self-efficacy	Communication self-efficacy					Therapeutic Communication Knowledge Application and Technique	Communication competency
		Specific communication technique	counseling process	Dealing with difficult client behaviors	Dealing with cultural differences	Awareness of values		
	r(p)	r(p)	r(p)	r(p)	r(p)	r(p)	r(p)	r(p)
Communication self-efficacy	1	.621 (.000)	.844 (.000)	.697 (.000)	.703 (.000)	.329 (.000)	.399 (.000)	.450 (.000)
Specific communication technique		1	.202 (.002)	.390 (.000)	.260 (.000)	.053 (.415)	.443 (.000)	.422 (.000)
counseling process			1	.498 (.000)	.594 (.000)	.278 (.000)	.192 (.003)	.336 (.000)
Dealing with difficult client behaviors				1	.401 (.000)	-.022 (.741)	.386 (.000)	.273 (.000)
Dealing with cultural differences					1	.132 (.043)	.292 (.000)	.268 (.000)
Awareness of values						1	-.087 (.182)	.094 (.153)
Therapeutic Communication Knowledge Application and Technique							1	.386 (.000)
Communication competency								1

4.3. FACTORS FOR PARTICIPANTS' COMMUNICATION SELF-EFFICACY, THERAPEUTIC COMMUNICATION KNOWLEDGE APPLICATION AND TECHNIQUE, COMMUNICATION COMPETENCY

It was analyzed that the statistically significant variables ($p < .05$) and the factors affecting communication self-efficacy, therapeutic communication knowledge application and technical performance, and communication competency in the general characteristics. Therapeutic communication Knowledge application, technical performance and communication competency account for 25.6% of communication self-efficacy ($F=41.209$, $p=.000$).

The better the application of therapeutic communication knowledge and technical performance ($\beta=.264$, $p=.000$), and the higher the communication competency ($\beta=.348$, $p=.000$), it is founded that the effectiveness in the application of therapeutic communication knowledge and technical performance. Grade, communication self-efficacy, and communication competency accounted for 28.3% of therapeutic communication knowledge application and technical performance ($F=19.451$, $p=.000$). Academic achievement, economic status, communication self-efficacy, therapeutic communication knowledge application and technical performance accounted for 30.4% of communication competency ($F=21.439$, $p=.000$) [Table 3].

Table 3. Factors Influencing Communication self-efficacy, Therapeutic Communication Knowledge Application and Technique, Communication competency

		B	β	t(p)	R	Adjusted R ²	F(p)
Communication self-efficacy	Constant	1.297		5.451(.000)	.512	.256	41.209 (.000)
	Therapeutic Communication Knowledge Application and Technique	.572	.264	4.324(.000)			
	Communication competency	.245	.348	.5694(.000)			
Therapeutic Communication Knowledge Application and Technique	Constant	.919		8.328(.000)	.546	.283	19.451 (.000)
	Grade	.174	.473	3.250(.001)			
	Economic Condition	.026	.067	1.182(.238)			
	Clinical Training Period	-.005	-.214	-1.465(.144)			
	Communication self-efficacy	.121	.262	4.175(.000)			
	Communication competency	.084	.260	4.088(.000)			
Communication competency	Constant	1.450		3.808(.000)	.565	.304	21.439 (.000)
	School Record	-.096	-.134	-2.077(.039)			
	Economic Condition	-.224	-.190	-3.448(.001)			
	Scholastic Achievement Level	-.049	-.059	-0.913(.362)			
	Communication self-efficacy	.528	.371	6.227(.000)			
	Therapeutic Communication Knowledge Application and Technique	.727	.236	3.962(.000)			

5. DISCUSSIONS AND CONCLUSION

The purpose of this study was to examine the degree of therapeutic communication knowledge application, technical performance, communication self-efficacy, and communication competency among the 3rd and 4th year nursing students who had experience clinical training and analyzed the correlation and related factors.

The level of communication competency according to the general characteristics of the subjects in this study was significant in academic performance($p=.011$), economic status($p = .036$), and academic achievement level($p=.011$). The study has shown that the higher communication competency at the students with higher grades than middle grades students, students with higher

economic status than lower economic status students, and students with higher academic achievement levels. Reference [6] study did not match the results of the study, which showed statistically significant differences in age and interpersonal satisfaction. The results of this study are thought to be due mainly to education on communication competency, not clinical situations, but on general relationships or communication focused on lectures. So, it is thought that development of communication education for clinical practice is necessary.

The therapeutic communication knowledge application and technical performance according to general characteristics showed that the highest number of students performed the training for 19 weeks. The result shows that applying practical

therapeutic communication to the subject in the clinical situation of a nursing student should be based on a number of clinical training experiences[11].

The results of analyzing the correlation between communication self-efficacy and communication ability of subjects in this study are as follows. Communication self-efficacy was positively correlated with communication competency ($r=.450$, $p=.000$), and [6] study also found a significant positive correlation between verbal communication competency and communication self-efficacy. The result is same with this study result and those of [12]. These results are in the same as [4] one that learners with high self-efficacy have better cognitive abilities in a comfortable environment. The higher the communication self-efficacy, the more efficient the communication that promotes the therapeutic relationship. Therefore, it is necessary to educate students on systematic and continuous communication technique from undergraduate to professional nurses.

In view of the above results, it is necessary to educate nursing college students to take the lead in finding solutions to various scenario situations in order to better adapt to clinical environment in the future. In addition, providing diverse case-oriented communication training opportunities makes it clear that mutual experience and processes are important. This will enhance communication techniques by obtaining confidence in the ability to communicate effectively.

6. CONCLUSION

The purpose of this study was attempt to provide the basis for the development of effective communication promoting programs for nursing college students by examining therapeutic communication knowledge application, technical performance, communication self-efficacy, and communication competency in clinical training. It is shown that the communication self-efficacy and communication competency of the subjects in this study was a significant positive correlation. The higher the communication self-efficacy and the better communication competency, the better therapeutic communication knowledge application and technical performance to case subjects during clinical training.

It is thought that the educational needs of nursing college students to enhance their communication competency should be understood, so that performance-oriented communication education rather than theoretical learning and that school-level support should be necessary to develop communication education programs to carry out and maintain smooth interpersonal and therapeutic relationships with the subjects at the clinical site.

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Then, nursing students need to understand their needs and develop programs to reinforce their communication competency, and continue to follow up on their communication technique, communication self-efficacy, and therapeutic behaviors.

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