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Impact of Christian Worldview of Nursing Students on Clinical Practice Competency: Focusing on the mediating effect of Interpersonal Caring Behaviors Yeol-Eo Chun¹, Cheon-Kook Kang² and Sung-Woo Hwang^{3,*}

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Abstract: Christian world-view is the perspective from which Christians view the world, and Christian universities operate various curricula to help students establish Christian values and outlook on life. Accordingly, an attempt was made to confirm the Christian worldview of nursing students at a Christian university and to determine the impact of interpersonal caring behaviors on clinical practice competency. The subjects of the study were third- and fourth-year nursing students participating in clinical practice at University B in City C, and the data collection period was from May 1 to May 30, 2023. A total of 176 people participated in the survey. The collected data were analyzed using independent t-test, ANOVA, Pearson's correlation analysis, and multiple regression using SPSS/Win 23.0. It was not possible to verify the mediating effect of interpersonal caring behaviors in the relationship between Christian worldview and clinical practice competency. However, as a result of analyzing religiously Christian participants, it was verified that interpersonal caring behaviors had a complete mediating effect on Christian worldview and clinical practice competency. This study is believed to be able to contribute to improving the students' clinical practice competency by confirming whether nursing students' Christian worldview has an influence on interpersonal caring behaviors in the relationship with clinical practice competency.

Keywords: Christian Worldview, Nursing Students, Clinical Practice Competency, Interpersonal Caring Behaviors, Nursing

1. Introduction

The term world-view refers to the eyes through which one looks at the world, that is, perspectives from which one looks at the world [1]. The problem of how and in what way one sees the world as it exists is a problem of worldview. The way people view reality is called their worldview. It can be said that everyone living in this world has a worldview [2]. Worldviews are the core of culture, basic assumptions, and unquestionable realities. Worldview helps people view and understand the world and make various judgments. A correct world view not only contributes to setting the direction of thinking and action, but also provides the overall purpose of life and the basis for moral judgment [3]. A worldview should not be a simple theory or slogan, but should serve as a direction or guide in the specific context in which we live. Worldview leads not only personal life, but also social and cultural life, and can be seen as being directly related to one's way of life, acting as something continuous rather than temporary even in personal life. Christian world-view refers to the world view held by Christians. This includes both the Christian's perspective on the world and the Christian's understanding of the world from that perspective[1]. The Christian worldview is based on the Bible and sees the Bible as recording God's creation and the fall and salvation of humans. This structure of creation, fall, and redemption

can be said to be a characteristic of the Christian worldview from a reformist perspective[3]. Christian universities operate a variety of curricula to teach students Christian values and outlook on life, instill Christian culture in them, cultivate Christian culture and mature character, and lead students to live as Christians [1].

In nursing, caring is a life experience that strengthens the therapeutic process through nurturing interpersonal relationships through interaction and communication between the nurse and the patient, expressing concern and interest for the purpose of protection [4]. Based on Watson's care theory, Kim Su-ji [5] developed 10 interpersonal care theories in Korea: listening, comfort, sharing, participation, acceptance, forgiveness, hope, praise, recognition, and companionship. The initial interpersonal care behavior measurement tool developed was active listening (listening, providing comfort, sharing, participation), acceptance and forgiveness (listening, providing comfort, sharing, participating), hope and praise, recognition, and companionship were identified as five factors in the study of Lee Sook et al. [6] through item analysis and exploratory and confirmatory factor analysis of 10 concepts. Based on this, it has been developed and used in various ways to measure the caring behavior of nurses and nursing students from the perspectives of nurses, nursing students, and patients. Nurses provide specific interpersonal care based on love and interest, so that those who receive personal care have their care needs met, increase their self-esteem, maintain a state of well-being, and have a positive impact on their health and quality of life. [5]. Students who receive attention, support, information, and recognition through the interpersonal care of nursing students and professors are positively influenced [7], and the care experience received by nursing students has a positive impact on improving their confidence as nurses. This influence influenced nursing performance, improving adaptability in clinical settings when working as a nurse after graduation [4]. It was reported that when nurses use interpersonal care as a communication skill, they reduce patients' symptoms of anxiety, emotional withdrawal, tension, and depression [7]. In addition, based on person care theory, there is a positive correlation between interpersonal care behavior and emotional intelligence, self-efficacy, self-esteem, happiness, job satisfaction, school life adaptation, and social support, and the variable that affects interpersonal care behavior is expression of anger., anger rumination, emotional intelligence, job stress, self-efficacy, and social support were reported [9]. However, there is a lack of research on the extent of interpersonal caring behaviors among nursing students and the factors that influence it. Accordingly, this study seeks to determine the degree to which nursing students at a Christian university perform interpersonal caring behaviors according to the Christian worldview and establish a foundation for a curriculum that can promote interpersonal caring behaviors.

Accordingly, this study aims to confirm the Christian worldview of nursing students at a Christian university and determine the impact of interpersonal caring behaviors. on clinical performance. In addition, it is intended to serve as basic material for preparing a curriculum to improve clinical practice competency by promoting a Christian worldview and interpersonal caring behaviors.

The specific purpose of this study is as follows.

First, identify nursing students' Christian worldview, interpersonal caring behaviors, and clinical practice competency. Second, identify differences in clinical practice competency according to the general characteristics of nursing students.

Third, identify the relationship between nursing students' Christian worldview, interpersonal caring behaviors, and clinical practice competency.

Lastly, the mediating effect of interpersonal caring behaviors in the relationship between nursing students' Christian worldview and clinical practice competency is identified.

2. Materials and Methods

2.1. Research Design

The design of this study is as shown in [Figure 1], and this study is a descriptive research study to confirm the relationship between nursing students' Christian worldview, interpersonal caring behaviors, and clinical practice competency.

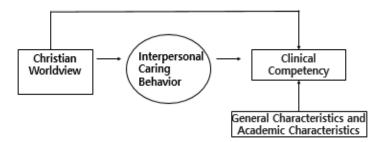


Figure 1. Research Design

2.2 Research subject

This study was conducted at a nursing department in one city, with participants who understood the purpose of this study, were able to communicate, and signed a consent form to participate in the study. The number of subjects was calculated through the G*Power 3.19 program considering the effect size of .5, significance level (a) = .05, and power $(1-\beta)$ = .95 during regression analysis, and the required sample number was 160. Accordingly, considering the dropout rate of 10%, a survey was conducted on more than 176 people.

2. 3. Research Tools

2.3.1. Christian Worldview

The Christian worldview measurement tool in this study was the Christian worldview questionnaire developed by Heeyoung Jeong and Taekyung Kwon [10]. The content of this questionnaire is divided into six categories: the beginning and meaning of creation, the essence of human beings, the meaning of human history, human death, moral foundations, and expression of faith in life. The questionnaire consists of a total of 23 questions, and the response to each question is on a 5-point scale, with higher scores indicating a higher Christian worldview. In the study by Heeyoung Jeong and Taekyung Kwon [10], the overall Cronbach α was reported to be .95. In this study, the overall Cronbach α was found to be .991.

2.3.2. Interpersonal Caring Behaviors

For the interpersonal caring behaviors scale, the interpersonal caring behaviors tool of Seon-hee Yoon [8] was used as a questionnaire whose validity was verified by Sook Lee, Ae-sook Choi, So-yeon Lim, and Yeol-eo chun [6]. This tool has a total of 32 questions and is composed of 5 sub-domains: 10 questions on active listening, 8 questions on acceptance and forgiveness, 7 questions on hope and praise, 5 questions on recognition, and 2 questions on companionship. Each item is on a 5-point Likert scale, ranging from 5 for 'very much' to 1 for 'very little.' The reliability in the study at the time of development was Cronbach' a = .97. In this study, Cronbach' a = .993.

2.3.3. Clinical Practice Competency

To measure the clinical practice competency of nursing students, the clinical practice competency's measurement tool developed by Won-hee Lee et al. [11] was modified and improved by Mi-sook Choi [12]. This tool consists of a total of 5 subfactors and 45 questions. The 5 subfactors are nursing process(11 questions), nursing technology(11 questions), educational partnership(8 questions), and interpersonal relationships/communication(6 questions), professional development(9 questions). Each question is rated from 1

(not at all) to 5 (very much), with higher scores indicating a higher level of clinical performance. In the study by Lee Won-hee et al. (1991), Cronbach's α was .96, and in the study by Choi Mi-sook (2005), Cronbach's α was .92. In this study, reliability was .93.

2.4 Data Collection

The data collection period for this study is scheduled to be conducted from May 1 to May 30, 2023. After receiving permission from the Dean of the Department of Nursing, the researcher visited the students in person and explained the purpose of the study to the students after class, provided them with a URL, and collected data anonymously online. The anonymity of the data was guaranteed by requiring the online questionnaire to be filled out in a self-reported form after checking consent to participate in the study. For the ethical protection of research subjects, the purpose, necessity, and process of the study were explained to the subjects before data collection, and they were informed that they could withdraw at any time if they did not wish to do so while completing the questionnaire. A consent form for participation in the study was obtained, including that it would not be used for any purpose other than research and that personal information would be kept confidential.

2.5 Data Analysis

The data collected in this survey was analyzed using SPSS 23.0 for windows statistical program, and each analysis method is as follows.

- 1)Nursing students' general characteristics, Christian worldview, interpersonal caring behaviors, and clinical practice competency were calculated as frequencies, percentages, averages, and standard deviations.
- 2) Differences in clinical clinical practice competency to general characteristics of nursing students were tested using independent samples t-test, one-way analysis of variance, and Scheffe post-hoc test.
- 3)Pearson's correlation analysis was conducted to investigate the relationship between nursing students' Christian worldview, interpersonal caring behaviors, and clinical practice competency.
- 4) Multiple regression analysis was conducted according to the three-step procedure of Baron & Kenny[13] to determine the mediating effect of interpersonal caring behaviors in the relationship between the subject's Christian worldview and clinical practice competency, and the significance of the mediating effect was confirmed using the Sobel test. did.

3. Results

3.1. General characteristics

The results of analyzing the general characteristics of the subjects are as follows. The average age was 23.51 ± 4.75 years, and the sex was 134(76.1%) female and 42 (23.9%) male. By grade, 48 students(27.3%) were 3rd graders and 128 students(72.7%) were 4th graders. Regarding religion, 71 people (40.3%) had it, of which 53 people(30.1%) had Christianity, and 105 people(59.7%) had no religion. The most common motivation for applying to the nursing department 69 students(39.2%) was aptitude and interest, followed by high employment rate and overseas expansion, professional position, and recommendation from parents or friends. As for the hope course, 170 people(96.6%) wanted to work at a hospital, and the residence type was 73 people(41.5%) main house, 29 students(16.5%) living in a dormitory, and 74 students(42.0%) living on one's own. Health status was above average at $3.76\pm.93$, interpersonal relationships were $4.04\pm.76$, major satisfaction was $3.76\pm.90$, and clinical practice satisfaction was $3.80\pm.84$ (Table 1).

Table 1. Results of general characteristics

variabl	catego	n(%)/, M±SD			
age					
	Male	2	42(23.9%)		
sex	Fema	le	134	(76.1%)	
	3rd gra	ıde	48(27.3%)	
grade	4rd gra	ıde	128	(72.7%)	
	V	Christian	71/40 20/)	53(30.1%)	
religion	Yes	Other Religions	71(40.3%)	18(10.2%)	
	No		105	(59.7%)	
	recommendation from	parents or friends	29(16.5%)	
motivation for applying	high employment rate	41(23.3%)			
	aptitude and	69(39.2%)		
	professional	37(21.0%)			
	Main ho	Main house		41.5%)	
residence	dormit	29(16.5%)			
	Living on or	74(42.0%)			
,	hospital emp	170(96.6%)			
hope course	Nursing publ	Nursing public official		3.4%)	
Health Status	1 ~ 5poi	3.2	76±.93		
Interpersonal Relationships	1 ~ 5poi	4.0	04±.76		
Major Satisfaction	1 ~ 5points 3.76±.9		76±.90		
Clinical practice Satisfaction	1 ~ 5poi	ints	3.8	80±.84	

3.2. The subject's Christian Worldview, interpersonal caring behaviors, and Clinical Practice Competency

The subject's Christian worldview was 3.25 ± 1.13 points, and interpersonal caring behaviors was $4.02\pm.69$ points. Among the subcategories, 'active listening($4.03\pm.70$)' and forgiving & accepting($4.03\pm.70$) were the highest, 'noticing($4.01\pm.73$)', 'companioning ($4.01\pm.77$)', and 'complimenting & hoping($4.00\pm.73$)' appeared in that order. Clinical Practice Competency was $3.92\pm.68$ points, and the highest in the sub-areas was professional development($3.96\pm.71$), interpersonal relationships and communication($3.93\pm.70$), and educational partnerships($3.93\pm.73$)', 'nursing skills($3.94\pm.69$)', and 'nursing process($3.87\pm.68$)' (Table 2).

Table 2. The subject's Christian worldview, Interpersonal Caring Behaviors, and Clinical Practice Competency

N=176

variable	variable category		(range)	
	Christian Worldview	3.25		
	active listening	4.03±.70		
	forgiving & accepting	4.03±.70		
Interpersonal Car- ing Behaviors	complimenting & hoping	4.00±.73	4.02±.69	
ing benaviors	noticing	4.01±.73		
	companioning	4.01±.77		
	nursing process	3.87±.68		3.3.
	nursing skills	3.94±.69		
Clinical Practice	educational partnership	3.93±.73	3.92±.68	
Competency	Interpersonal Relationships and Commu-	3.93±.70	3.721.00	
	nication	3.73±.70		
	professional development	3.96±.71		

Differences in Clinical Practice Competency according to the general characteristics of the subject

Clinical Practice Competency according to general characteristics of nursing students includes health status, interpersonal relationships, satisfaction with major, and satisfaction with clinical practice(r=.191, .528, .247, .298, p=.011, .000, .001, .000) was found to have a significant correlation. However, there were no significant differences in age, sex, grade, religion, motivation for applying, residence, and hope course (Table 3).

Table 3. Differences in Clinical Practice Competency according to the general characteristics of the subject

N=176

variable	category	M±SD	t or F/r	p Scheffe's	
	age	23.51±4.75	105	.167	
	Male	3.91±.76	1/2	973	
sex	Female	3.93±.65	162	.872	
1.	3rd grade	3.79±.72	1.624	107	
grade	4rd grade	3.98±.66	-1.624	.106	
1	yes	3.96±.66	C 4.1	F22	
religion	no	3.90±.69	.641	.522	
motivation for apply- ing	recommendation from parents or friends	3.79±.69	1.671	.175	

	high employment rate and overseas expansion	3.81±.73		
	aptitude and interest	4.06±.64		
	professional position	3.91±.65		
	Main house	3.92±.67		
residence	dormitory	3.93±.67	.002	.998
	Living on one's own	3.92±.70		
homo course	hospital employment	3.91±.67	1 200	.199
hope course	Nursing public official	-1.288		.199
	Health Status	3.76±.93	.191	.011
Interp	Interpersonal Relationships		.528	.000
N	Major Satisfaction		.247	.001
Clinic	al practice Satisfaction	3.80±.84	.298	.000

3.4. The subject's Christian Worldview, Interpersonal Caring Behaviors, and Clinical Practice Competency

Christian worldview had no significant correlation with interpersonal care behavior. However, the Christian worldview had a significant positive correlation with interpersonal relationships & communication, professional development, and Clinical Practice Competency, but the correlation scores were .149(p= .049), .152(p= .044) and .151(p=.045), and there was a significant correlation between Interpersonal Caring Behaviors and Clinical Practice Competency in all subdomains (r=.602~.970, p=.000) (Table 4).

Table 4. Correlation between the subject's Christian Worldview, Interpersonal Caring Behaviors, and Clinical Practice Competency

N=176

variable CW		CW		ICB(r(p))							CPC(r(p))					
varia	bie	(r(p))	1	2	3	4	5	total	1	1 2		4	5	total		
CW	J	1	.117	.102	.122	.131	.108	.122	.127	.153	.147	.149	.152	.151		
(r(p))	1	(.123)	(.175)	(.106)	(.082)	(.154)	(.107)	(.094)	(.042)	(.051)	(.049)	(.044)	(.045)		
	1		1	.947	.865	.890	.844	.952	.653	.665	.647	.602	.633	.663		
	1	_	1	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)		
	2			1	.891	.910	.886	.971	.658	.659	.646	.607	.622	.662		
		-	_	1	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(000.)	(.000)		
	3				1	.911	.818	.940	.644	.640	.651	.610	.602	.653		
ICB	3	_	-	_	1	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(000.)	(.000)		
(r(p))	4					1	.900	.968	.675	.689	.687	.648	.646	.693		
	4	_	-	_	-	1	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(000.)	(.000)		
	5						1	.935	.608	.612	.612	.564	.586	.618		
	3	_	-	_	-	_	1	(.000)	(.000)	(.000)	(.000)	(.000)	(000.)	(.000)		
	to-							1	.679	.658	.680	.636	.648	.690		
	tal	_	_	_	_	_	_	1	(.000)	(.000)	(.000)	(.000)	(.000)	(000)		
	1								1	.926	.884	.879	.873	.945		
CPC	1	_	_	_	_	_	_		1	(.000)	(.000)	(.000)	(.000)	(.000)		
(r(p))	2									1	.939	.914	.908	.972		
		-	-	-	-	-	-	-	-	1	(.000)	(.000)	(.000)	(.000)		

3	-	-	-	-	-	-	-	-	-	1	.944 (.000)	.925 (.000)	.974 (.000)
4	-	-	-	-	-	-	-	-	-	-	1	.938 (.000)	.970 (.000)
5	-	-	-	-	-	-	-	-	-	-	-	1	.963 (.000)
to- tal	-	-	-	-	-	-	-	-	-	-	-	-	1

* CW:Christian worldview, ICB:Interpersonal Caring Behaviors, CPC:Clinical Practice Competency

3.5. The mediating effect of Interpersonal Caring Behaviors in the relationship between a subject's Christian Worldview and Clinical Practice Competency

The results of confirming the mediating effect of interpersonal caring behaviors in the relationship between the subject's Christian worldview and clinical practice competency are shown in <Table 5>, <Table 6>, and <Table 7>. Before confirming the mediating effect, the tolerance limit and variance inflation factor were checked to diagnose multicollinearity between independent variables. As a result, the tolerance limit was 0.34 to 0.88, which is more than 0.1, and the variance inflation factor (VIF) range was 1.00 to 1.13, which was less than 10. It was small and showed no multicollinearity. The autocorrelation of the dependent variable showed a Durbin-Watson value of 2.01, confirming that it was independent without autocorrelation. The normality test of the residuals was statistically significant (Z=2.595, 2.504, p=.000), indicating that the regression model was appropriate.

First, as a result of identifying factors affecting clinical practice competency, interpersonal caring behaviors and interpersonal relationships were found to be influential factors(β =.847, p<.001, β =.329, p<.001).

In order to identify the mediating effect of interpersonal caring behaviors in the relationship between Christian worldview and clinical practice competency, the results of Baron & Kenny[13]'s three-step verification procedure are as follows.

As a result of the first-stage regression analysis, the independent variable, Christian worldview, did not have a significant effect on the mediating variable, iinterpersonal caring behaviors(β =.122, p=.107). In the second-stage regression analysis, the mediating variable, interpersonal caring behaviors, was confirmed to be a significant factor influencing the dependent variable, clinical practice competency(β =.690, p<.001). In the three-stage regression analysis, the independent variable, Christian worldview, had no effect on clinical practice competency(β =.068, p=.220), and the mediating variable, interpersonal caring behaviors, had a significant effect on the dependent variable, clinical practice competency(β =.681, p<.001). However, in the first stage, there was no significant effect on the independent and mediating variables, interpersonal caring behaviors, so it was not possible to verify the mediating effect of interpersonal caring behaviors on Christian worldview and clinical practice competency.

On the other hand, the results of the analysis of participants whose religion was Christian are as follows. As a result of the first-stage regression analysis, the independent variable, Christian worldview, had a significant effect on the mediator, interpersonal caring behaviors(β =.343, p=.012). In the second-stage regression analysis, the mediating variable, interpersonal caring behaviors, was confirmed to be a significant factor influencing the dependent variable, clinical practice competency(β =.690, p<.001). In the three-stage regression analysis, the independent variable, Christian worldview, had no effect on clinical practice competency(β =.109, p=.227), and the mediating variable, interpersonal caring behaviors, had a significant effect on clinical practice competency(β =.765, p<.001). In step 3, compared to step 2, the relationship between the independent variable, Christian worldview, and the dependent variable, clinical practice competency, was not significant, verifying that interpersonal caring behaviors has a full mediating effect on Christian worldview and clinical practice competency.

Table 5. Factors influencing Clinical Practice Competency

N=176

Variables	В	S.E.	β	t	p
Constant				1.926	.056
Interpersonal Caring Behaviors	.535	.057	.847	9.307	.000
Christian Worldview	.043	.032	.071	1.345	.180
Health Status	057	.046	078	-1.249	.213
Interpersonal Relationships	.295	.057	.329	5.178	.000
Major Satisfaction	.021	.042	.028	.497	.620
Clinical practice Satisfaction	.020	.049	.024	.406	.685
	R ² =.561, Adj.	R ² =.546, F=36.0	017, p<.01		

Table 6. The mediating effect of Interpersonal Caring Behaviors in the relationship between Christian Worldview and Clinical Practice Competency(N=176)

N=176

Variables	В	SE	β	t(p)	R2	F(p)		
1. Christian Worldview → Interpersonal Caring Behaviors	.075	.046	.122	1.618(.107)	.015	2.618(.107)		
2. Interpersonal Caring Behaviors → Clinical Practice Competency	.674	.054	.690	12.559(.001)	.475	157.736(.000)		
3. Christian Worldview, Interper-	.041	.033	.068	1.231(.220)				
sonal Caring Behaviors →Clinical Practice Competency	.666	.054	.681	12.334(.000)	.480	79.860(.000)		
Sobel test: Z=2.595 (p =<.001)								

Table 7. The mediating effect of Interpersonal Caring Behaviors in the relationship between Christian Worldview and Clinical Practice Competency (N=53)

N=53

Variables	В	SE	β	t(p)	R2	F(p)	
1. Christian Worldview → Interpersonal Caring Behaviors	.259	.099	.343	2.609(.012)	.118	6.808(.012)	
2. Interpersonal Caring Behaviors →Clinical Practice Competency	.782	.082	.802	9.583(.000)	.643	91.835(.000)	
3. Christian Worldview, Interper-	.080	.065	.109	1.224(.227)			
sonal Caring Behaviors →Clinical Practice Competency	.746	.086	.765	8.625(.000)	.653	47.116(.000)	
	Sobel	test: Z=2.5	504 (p = < 0) 101)	1	<u>I</u>	

4. Discussion

This study was conducted to confirm the impact of nursing students' Christian worldview and interpersonal care behavior on clinical performance ability and to test the mediating effect of interpersonal caring behaviors in the relationship between Christian worldview and clinical practice competency.

As a result of the analysis of all participants, there was no mediation effect between interpersonal caring behaviors and the relationship between Christian worldview and clinical practice competency. However, as a result of analysis targeting Christians, it was found that there was a complete mediating effect of interpersonal caring behaviors in the relationship between Christian worldview and clinical practice competency. In other words, it was confirmed that the higher the Christian worldview, the higher the interpersonal caring behaviors of Christians, and that if the interpersonal caring behaviors is good, clinical practice competency can be improved in the future.

Among the sub-domains of clinical practice competency, professional development was the highest, and the lowest question was the nursing process. This was similar to a study [14] conducted on 3rd and 4th year nursing students. Nursing students apply the nursing process during clinical practice through interviews with patients and medical staff [15]. However, because current clinical practice is observation-oriented, it is expected that it will be difficult to apply the nursing process learned through theory classes to actual patients. In order to solve this problem, it is believed that experience in applying the nursing process in situations where clinical cases are implemented through activation of on-campus simulation and integrated practice is needed. In addition, in order to reduce the gap between school education and clinical practice, changes in the educational environment are required, such that school education reflects changes in the nursing field and clinical practice communicates with school education.

There was a statistically significant difference in clinical practice competency according to the characteristics of the subjects in this study depending on health status, interpersonal relationships, satisfaction with major, and satisfaction with clinical practice. The difference in clinical performance ability according to grade showed different results from previous studies [16-18] in which 4th graders were higher than 3rd graders. This is believed to be the first time that both 3rd and 4th year students have conducted clinical practice as the clinical practice was conducted online due to COVID-19. As the research results show that clinical practice experience accumulates and clinical performance improves as the grade increases, repeated research is needed in the future. In addition, there were differences in clinical performance ability depending on interpersonal relationships, satisfaction with major, and satisfaction with clinical practice, which was similar to the results shown in a previous study [17]. The higher a nursing student's satisfaction with their major and clinical practice, the more active and positive their attitude toward clinical practice becomes and the more students become highly aware of their clinical practice and clinical performance abilities and act independently [16].

Christian worldview had no significant correlation with interpersonal caring behaviors . However, for Christians, there was a significant relationship between Christian worldview and interpersonal caring behaviors. The Christian worldview is that Jesus Christ came to this earth, died on the cross, and was resurrected, breaking all sins and restoring them to their original state, and the distorted world is completely transformed and the kingdom of God is completed [19]. Therefore, Christians can see who they are and the world's environment and problems they face through a Christian worldview. When Christians provide nursing care to patients in clinical settings, they provide nursing care based on the Christian worldview and care for patients based on their identity within the Christian worldview. Therefore, it is believed that Christians showed significant results in the relationship between Christian worldview and interpersonal caring behaviors. However, in the case of non-Christians, the Christian worldview and interpersonal caring behaviors did not have a significant effect, so it is necessary to examine the relationship between the Christian worldview and interpersonal caring behaviors through a program to establish a Christian worldview in non-Christian subjects at a Christian university in the future.

There was a significant correlation between Christian worldview and clinical practice competency in interpersonal relationships & communication, and professional development, and a very significant positive correlation with interpersonal caring behaviors. In

nursing, caring is a life experience that strengthens the treatment process through nurturing interpersonal relationships through interaction and communication between nurses and patients for the purpose of protection [4]. Active listening is the act of sharing the good deed of sharing something precious, such as the other person's feelings, contacts, thoughts, experiences, and knowledge, and truly concentrating and listening to the other person's words with all your heart and body. This kind of interpersonal caring behaviors of active listening [5] can act as a strength that helps nursing students overcome various stresses and adversities encountered in the clinical practice environment [20], thereby improving clinical practice competency. This means that if these interpersonal care behaviors are low, clinical performance ability may also decrease [21]. Therefore, based on the research results, a program that can improve nursing students' interpersonal care behavior can be developed and the basis for improving clinical performance ability is established. It is necessary to use it as a resource.

In reality, clinical practice stress situations cannot be experienced or avoided, so Christian-centered universities must establish an identity with a Christian worldview that can overcome these and promote interpersonal care to have a positive impact on clinical practice ability. To this end, We believe that in the future, Christian universities should consider ways to improve the Christian worldview and level of interpersonal care behaviors when developing programs to improve the clinical practice competency of nursing students.

5. Conclusions

As a result of this study, an analysis of Christians among nursing students showed that interpersonal caring behaviors had a complete mediating effect in the relationship between Christian worldview and clinical practice competency. Accordingly, the Christian worldview was found to have a significant impact on interpersonal caring behaviors, and interpersonal caring behaviors was found to have a significant impact on clinical practice competency. This study is believed to be able to contribute to improving the students' clinical practice competency by confirming whether nursing students' Christian worldview has an influence on interpersonal caring behaviors in the relationship with clinical practice competency. Accordingly, it was confirmed that there is a need to develop a program that can promote Christian worldview and interpersonal caring behaviors to improve nursing students' clinical practice competency. If a student is non-Christian or has low interpersonal caring behaviors, there is a high possibility that the student will have problems adapting to and performing clinical practice competency in the future. Therefore, it is considered very necessary to develop a program that can establish a Christian worldview and promote interpersonal caring behaviors at Christian universities.

Based on the results of this study, we suggest the need for repeated research for validity and generalization. In the future, there is a need to conduct research targeting Christians to confirm the mediating effect of interpersonal caring behaviors in the relationship between Christian worldview and clinical practice competency. Research results Based on this, we propose a study to develop a clinical performance improvement program for nursing students and verify its effectiveness.

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