RESEARCH ARTICLE

The Effect of Interpersonal Communication, Emotional Intelligence, Supervision and Motivation of Achievement in Caring Behavior in Nursing

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Abstract

Background: The application of caring behavior based on knowledge of attitudes and professional behavior is important in nursing services. Nursing students who are carrying out professional education in hospitals must be able to understand and apply caring behavior in providing nursing care to patients. This study analyzes the effects of interpersonal communication, emotional intelligence, supervision, and achievement motivation on the caring behavior of nurses students in applying nursing care. Methods: Quantitative research with a path analysis approach. Sampling used a simple random sampling technique as many as 271 respondents from 871 populations. Data were collected using a developmental questionnaire. Results: interpersonal communication (p=0.385), emotional intelligence (p=0.134), clinical supervision (p=0.286), achievement motivation (p=0.119) had a positive effect on caring behavior. Conclusion: Increasing interpersonal communication, emotional intelligence, clinical supervision, and achievement motivation can improve caring behavior.

Keywords: *Achievement motivation, Caring behavior*, *Emotional intelligence, Interpersonal communication, Supervision.*

Introduction

Nursing services are an essential component in hospitals in improving patient health status [1]. Rapid technological development and intense competition, the hospital continues to enhance the quality of service [2]. Nursing is the most significant percentage of health workers in hospitals, and nurses' performance determines the quality of service [3, 4]. The best nursing services can be realized with caring behavior. Caring is fundamental in improving good and useful nurse and patient relationships [5-7].

The international nursing community recognizes caring as a fundamental value in nursing education and services [5, 8, 9]. The caring behavior must be developed since the beginning of the student in academic education as an essential element in learning the values and essence of the nursing profession [10]. Some nursing graduates have designed course content that has been shown to have a positive impact on

increasing caring behavior in nursing students [1, 11]. Nursing students and nurses are important to have a good perception related to caring behavior because nurses and nurses students have been with patients for the longest time as part of the health care team in the inpatient room [12]. Caring behavior is the application of the nursing process as a form of nurse performance. Gibson in 2012 stated that individual, psychological, and organizational factors that influence nurses' performance [13]. Individual factors like abilities, skills, background, and demographics.

Attitude, personality, learning, and motivation is consist of psychological. Organizational factors include resources, leadership, rewards, structure, and job design. In Indonesia, caring becomes one of the assessments for users of health services. Research conducted at one hospital in Indonesia showed that 49.3% of patients

were dissatisfied with hospital services under national health insurance, and 7.8% were very dissatisfied. One of the factors that influence nurses' attitudes towards patients is not adequately providing the care process and caring behavior [14].

A survey of first and last year of nursing students found a significant decrease in the caring behavior of nursing students in clinical nursing practice [15]. Based on this background, the importance of understanding the factors that influence nurses caring behavior, Researchers are interested in researching the effect of interpersonal communication, emotional intelligence, supervision, and achievement motivation against caring behavior of nurse students in implementing nursing care. This study aims to analyze the relationship between research variables and measure the direct or indirect influence between one variable with another variable.

Methods

This type of research was quantitative research with a path analysis approach. The study population was 871 students of the Nursing Study Program in Aceh Province in 2018/2019. The sample of 271 respondents using a proportionate random sampling technique. Data collection techniques using a questionnaire in the form of a Likert scale. Questionnaires were used after validity and reliability testing. An item analysis was performed with a product-moment correlation by correlating the scores of each item with the total count of item responses to test the validity of the instrument. To check the reliability of the questionnaire using the alpha formula from Cronbach.

Data analysis techniques using path analysis. Path analysis uses regression analysis to estimate causality relationships between variables (causal models) that have been predetermined based on theory. Path analysis can determine the pattern of relationships between three or more variables and cannot be used to confirm or reject imaginary causal hypotheses. Models or variables that were assumed to have met the path analysis requirements include interval scale data, normally distributed, the fulfillment of linearity, normality, homogeneous assumptions, and free from multicollinearity problems.

Results

Sub Structures

The path coefficient test results for substructure were summarized in the following tables:

Tabel 1: Simultaneous Hypothesis Testing (F Test Results) Model I

	Model	Sum of Squares	df	Mean	F	Sig.
	ANOVA					
1	Regression	1088.804	3	362.935	7.528	.000[b]
	Residual	12872.923	267	48.213		
	Total	13961.727	270			

Source: Primary data, 2020

Based on table 1 ANOVA statistical test obtained a probability of F of 7,528 at a significance level of 0,000 <0.05, meaning H_0 is rejected. So interpersonal communication, emotional intelligence, and clinical supervision have a direct positive effect on achievement motivation. After the simultaneous model was proven significant, partial path tracking can be performed

Table 2: Partial Hypothesis Testing (t-Test) Model I

		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
	Coefficients					
1	(Constant)	60.006	18.515		3.241	.001
	Interpersonal Communication	.243	.083	.178	2.948	.003
	Emotional Intelligence	.212	.097	.129	2.187	.030
	Clinical Supervision	.156	.071	.134	2.217	.027

Source: Primary data, 2020

Referring to the Model I regression output in table.2 coefficients can be seen that the significance value of the three variables is interpersonal communication = 0.003, emotional intelligence = 0.030, and clinical supervision = 0.027 less than 0.05. These results provide the conclusion that the Model I regression, namely interpersonal communication, emotional intelligence, and clinical supervision has a significant effect on achievement motivation

Table 3: Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.279[a]	.078	.068	6.944

Source: Primary data, 2020.

The value of R2 or R square contained in table 3 of the Model summary is 0.078. It shows that the contribution or contribution of influence is interpersonal communication, emotional intelligence; clinical supervision of achievement motivation is 7.80%. In comparison, the remaining 92.20% is a contribution from other variables not included in the study. For the value of $e_1 = \sqrt{(1-0,078)} = 0.960$

Thus obtained the pathway structure model I as follows:
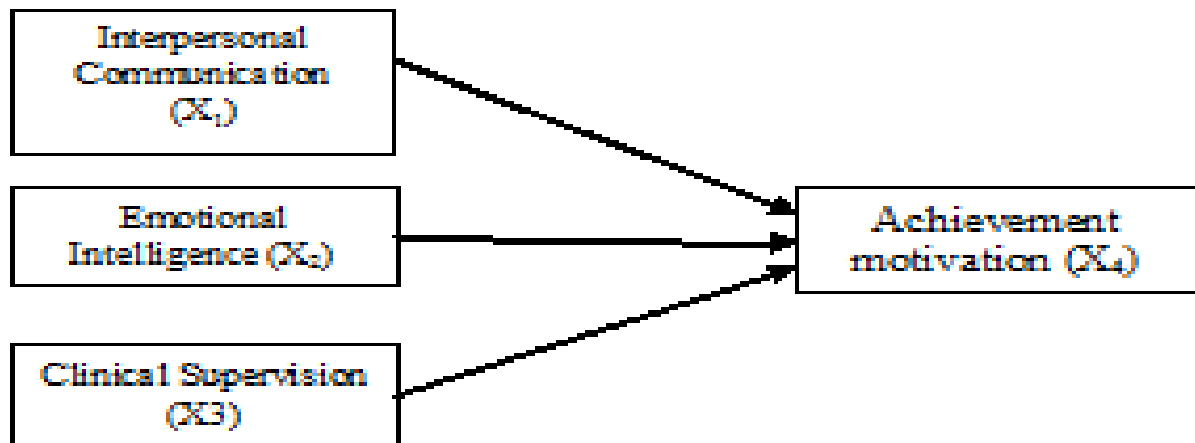
Figure 1: Line diagram of the structural model I

Sub Structure 2

The results of the path coefficient testing for sub-structures are summarized in the following tables:

Table 4: Simultaneous Hypothesis Testing (F Test Results) Model I

ANOVA						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8920.307	4	2230.077	35.690	.000[b]
	Residual	16620.749	266	62.484		
	Total	25541.055	270			

Source: Primary data, 2020

Based on table 4. ANOVA above obtained a probability of F of 35.690 at a significance level of 0,000 <0.05. So simultaneous interpersonal communication, emotional intelligence, clinical supervision, and achievement motivation have a positive direct effect on caring behavior. After the synchronous model is proven significant, partial path tracking can be performed

Table 5: Partial Hypothesis Testing (t-Test) Model I

Coefficients						
		Unstandardized Coefficients		**Standardized Coefficients**		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	-16.365	21.489		-.762	.447
	Interpersonal	.712	.095	.385	7.461	.000
	Emotional Intelligence	.298	.111	.134	2.681	.008
	Clinical Supervision	.452	.081	.286	5.584	.000
	Achievement motivation	.161	.070	.119	2.316	.021

Source: Primary data, 2020

Referring to the Model II regression output in table 5 the coefficients can be seen that the significance value of the four variables namely interpersonal communication = 0,000, emotional intelligence = 0.008, clinical supervision = 0,000, and achievement motivation = 0.021 less than 0.05. These results suggest that Model II regression, namely interpersonal communication variables, emotional intelligence, clinical supervision, and achievement motivation, significantly influences caring behavior

Table 6: Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591a	.349	.339	7.905

Source: Primary data, 2020

The amount of R2 or R square in Table 6 of the Summary Model is 0.349. It shows that the contribution or contribution of the influence of X1, X2, X3, and X4 to X5 is 34.90%, while the remaining 65.10% was contributed by other variables not included in the study. For the value of e1 = √ (1-0,349) = 0,807. Thus the path structure model II was obtained as follows:
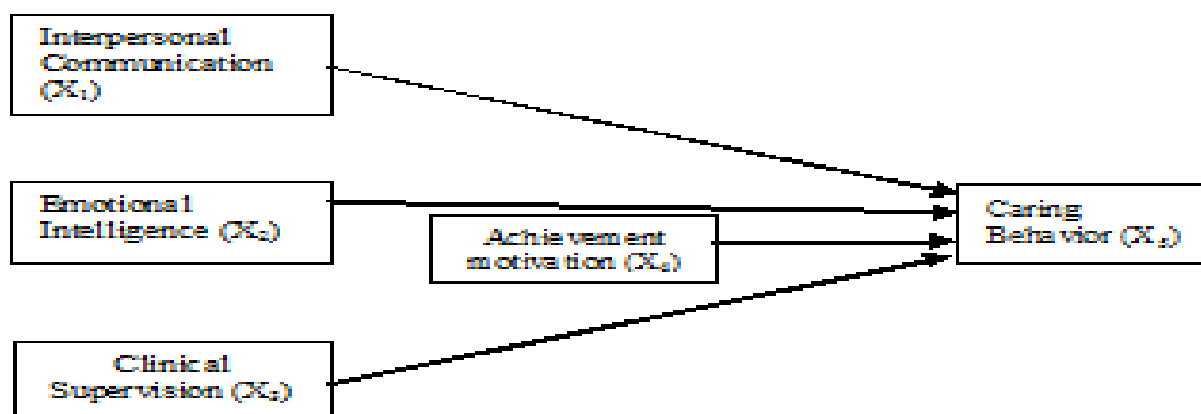
Figure 2: Structure Diagram of Structure Model II

Model Approval Test

The model goodness of fit test was to test whether the proposed model has a fit (fit) with the data or not. A model showed to be fit with the data if the sample correlation matrix was not much different from the estimated correlation matrix or the expected correlation matrix. Based on the calculation above, no path coefficient is not significant, meaning Q = 1 so that it can be concluded that the proposed model is a perfect fit with the data. Furthermore, based on the correlation coefficient and path coefficient obtained from the calculation results, a path diagram can be drawn which was a fixed model or a theoretical model of causality relationships between research variables that determine the caring behavior of nurses students in Aceh Province, like the following:
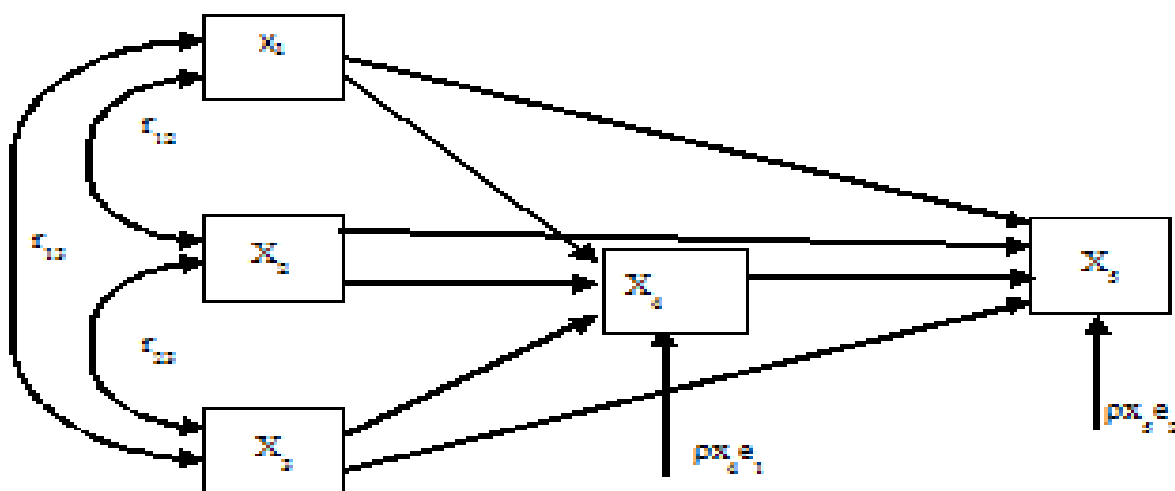
Figure 3: Theoretical Model Path Diagram

Information

X₁ = Interpersonal Communication

X₂ = Emotional Intelligence

X₃ = Clinical Supervision

X₄ = Achievement motivation

X₅ = Carin's behavior and

e₁, e₂ = residual variable (error)

Direct Influence and Indirect Influence

Table 7: Relative Effects of Interpersonal Communication (X1), Emotional Intelligence (X2), and Clinical Supervision (X3) Against Achievement Motivation (X4)

Var	Influence				Total effect	Non-line	
	Directly Against X4	Indirectly Against X4 Melalui					
		X1	X2	X3		S	U
X1	0.178				0.178		0.027
X2	0.129				0.129		0.006
X3	0.134				0.134		0.047

Source: Primary data, 2020

Based on table 7 above can be seen that the relative direct effects of interpersonal communication, emotional intelligence, and clinical supervision on achievement motivation are (0.178; 0.129 and 0.134). The remainder of the Unanalyzed component for interpersonal communication, emotional intelligence, and clinical supervision were (0.027; 0.006; 0.047). So the effect of total interpersonal communication, emotional intelligence, and clinical supervision on achievement motivation were (0.178; 0.129 and 0.134).

Table 8: Relative Effects of Interpersonal Communication (X1), Emotional Intelligence (X2), Clinical Supervision (X3) and Achievement Motivation (X4) Against Caring Behavior (X5)

Var	Influence					Total effect	Non-line	
	Directly Against X5	Indirectly Against X4 Melalui						
		X1	X2	X3	X4		S	U
X1	0.385				0.024	0.409		0.060
X2	0.134				0.016	0.150		0.012
X3	0.286				0.022	0.308		0.093
X4	0.119					0.119	0.149	

Source: Primary data, 2020

Based on table 8 above, it can be seen that the relative direct influence of interpersonal communication, emotional intelligence, clinical supervision, and achievement motivation on caring behavior was (0.385; 0.134; 0.286 and 0.119). The indirect effect of interpersonal communication, emotional intelligence, and clinical supervision through achievement motivation was (0.024; 0.016, 0.022). The remainder of the Unanalyzed component of interpersonal communication, emotional intelligence, and clinical supervision was (0.060; 0.012, 0.093). While the Spurious part for achievement motivation was 0.149. So the effect of total interpersonal communication, emotional intelligence, and clinical supervision, achievement motivation on caring behavior are (0.409; 0.150; 0.308; and 0.119)

Table 9: Effect of Proportional Interpersonal Communication (X1), Emotional Intelligence (X2), Clinical Supervision (X3), and Achievement Motivation (X4) on Caring Behavior (X5)

Var	Influence					Total effect	Non-line	
	Directly Against X5	Indirectly Against X5 Melalui						
		X1	X2	X3	X4		S	U
X1	0.148				0.009	0.157		0.023
X2	0.018				0.002	0.020		0.002
X3	0.082				0.006	0.088		0.027
X4	0.014					0.014	0.018	
Jumlah						0.280	0.018	0.051

Source: Primary data, 2020.

Based on table 9 above, it can be seen that interpersonal communication that directly and indirectly determines changes in the caring behavior of nurses by 0.157 or 15.7%. The power of emotional intelligence that directly and indirectly determines changes in the caring behavior of nurses is 0.020 or 2.0%. The effect of clinical supervision is 0.088 or 8.8%. The influence of achievement motivation, which directly determines changes in caring behavior is 0.014 or 1.40%.

The total effect consisting of direct influence and indirect effect simultaneously on caring behavior is 0.280. So together determine the change in caring behavior by 28.0%. The rest in the Spurious component is 0.018 and the Unanalyzed component is 0.51. Direct and indirect influences, Spurious, and Unanalyzed = 0,280 + 0,018 + 0,051 = 0,349.

While the influence of other factors outside the research is equal $1 - 0,349 = 0,651 = 65.1\%$, with $e_2 = \sqrt{1 - R_2^2} = \sqrt{1 - 0,349} = 0,807$.

To find out the magnitude of the influence of Model I, and Model II obtained from the summary model precisely the R square number, the results of statistical analysis are obtained as follows:

Table 10: Determination Coefficients of Model I and Model II

Model summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
I	.279a	.078	.068	6.944
II	.591a	.349	.339	7.905

Based on the data obtained that KD = R2 x 100%, then the Model I determination coefficient can be calculated at 7.8% while other factors influence the remaining 92.2%. Furthermore, the ratio of determination of Model II from the calculation results obtained by 34.9%, while other factors influence the remaining 65.1%

Discussion

Research Results of the Effect of Interpersonal Communication on Achievement of Nursing Student Achievement

The results of this study indicate that excellent interpersonal communication skills can increase student achievement motivation in nursing study programs in providing nursing care. It can be stated there was a positive direct effect of interpersonal communication on achievement motivation. Interpersonal communication was communication done directly between a person and another person, between two or more people, where the effectiveness was determined by several indicators including openness, empathy, support, positive feelings, and equality [16].

In health service communication interactions, interpersonal communication often occurs, which creates intimacy and motivation for students to apply the best nursing care practices and leads to the development of new communication approaches with patients [17]. Practical interpersonal communication skills of nursing students in the health team at the hospital generate self-confidence and providing nursing services can affect the achievement motivation of nurses students to achieve the goals to be completed.

It means that better interpersonal communication, which includes openness, empathy, support, positive attitudes, and equality between nurses' students, patients, and other health teams, the higher the motivation of achieving student nurses. Conversely, the lower the interpersonal communication, the lower the achievement motivation of nursing students in providing nursing care in a hospital ward.

Research Results The Effect of Emotional Intelligence on Achievement Motivation of Nurse Students

The results of this study indicate that emotional intelligence can improve student achievement motivation in Nursing programs. Emotional intelligence was an ability to recognize our feelings and the feelings of others, the ability to motivate oneself, and the ability to manage emotions in ourselves and relationships with others correctly [18]. Nursing students with high emotional intelligence will be more likely to recognize their feelings and capacities, be able to control themselves, understand the other opinions, build relationships, and be able to motivate themselves always to do their best.

Following research conducted by Joibari and Mohammadtaheri in 2011 about the relationship of emotional intelligence and academic achievement of high school students in the city of Tehran [19]. The results show that there was a significant correlation between the main components of emotional intelligence, including self-motivation, self-awareness, self-regulation, social awareness, social skills, and student academic achievement.

Research Results The Effect of Clinical Supervision on Achievement Motivation of Nurse Students

The results of this study indicate that clinical supervision can increase the achievement motivation of nurses study program students. Clinical supervision can be categorized as extrinsic motivation. Types of motivation

divide into two parts, namely intrinsic motivation and extrinsic motivation.

Intrinsic motivation is the desire to act due to the driving factors within the individual. While extrinsic motivation, its existence is caused by the influence of external stimuli [20]. Nursing clinic supervision is needed by nursing students in nursing practice settings to increase motivation to provide professional and quality nursing services.

Research Results The Effect of Interpersonal Communication on Caring Behavior of Nurse Students

The results of this study prove that interpersonal communication can improve the caring behavior of nurses study programs. Effective communication was one form of mutual trust as a form of caring expression [21]. Nursing students who have interpersonal communication skills will not only quickly establish a relationship of trust with clients, prevent legal problems, provide professional satisfaction in nursing services, and improve the image of the nursing profession and the image of the hospital. It was relevant to Stuart dan Laraia in 2005 stated that communication is an important thing that must be applied in nursing practice because communication is a tool to build a therapeutic relationship[22].

Research Results The Effect of Emotional Intelligence on Caring Behavior of Nurse Students

The results of this study prove that interpersonal communication can improve the caring behavior of nurses study programs. Research conducted by Rosalina in 2008 showed that emotional intelligence had a positive and significant effect on nurse performance at the hospital [23]. The better emotional intelligence of nurses will also have a good influence on caring behavior so that nurses' performance will be better.

Increased emotional intelligence can be achieved if nurses have an excellent ability to manage emotions (personal) and in dealing with others. The higher the emotional intelligence of nurses, it was expected that all problems related to nursing services and care could overcome properly to encourage increased nurse performance.

Research Results of the Effect of Clinical Supervision on Caring Behavior of Nurse Students

The results of this study indicate that clinical supervision can improve the caring behavior of nurses study programs. Clinical supervision is direct to develop clinical skills and caring practices of nursing students in providing nursing care to patients to improve the quality of service to patients [24]. Proper supervision was very beneficial for nursing students, especially those who provide nursing care in the ward and allows all nursing students to play an active role in supervision activities.

Research Results The Effect of Achievement Motivation on Caring Behavior of Nurse Students

The results of this study prove that achievement motivation can increase the caring behavior of nurses study programs. The motivation is an internal encouragement to do or behave to achieve the goals. Motivation arises in students of professional education because they have an awareness to act and behave after the individual understands to finish the work. Research conducted by Bakar in 2010 showed there was a significant relationship between achievement motivation and caring attitude[25].

Conclusion

Based on research results obtained that interpersonal communication, emotional intelligence, clinical supervision, and achievement motivation have a positive direct effect on caring behavior. It shows that by increasing interpersonal communication, emotional intelligence, clinical supervision, and achievement motivation can improve caring behavior.

The findings in this study obtained consistency with the theoretical model used. These findings are expected to be used as a reference for relevant research in the future, specifically relating to the caring behavior of nurses in applying nursing care to patients in the ward in a hospital.

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