

# The development of transformational leadership model based on caring as an effort to increase nursing performance

Fitriyanti Patarrù,<sup>1</sup> Sena Wahyu Purwanza<sup>2</sup>

<sup>1</sup>Bachelor of Nursing, Sekolah Tinggi Ilmu Kesehatan Stella Maris, Makassar; <sup>2</sup>Bachelor of Nursing Science, Sekolah Tinggi Ilmu Kesehatan Maharani Malang, Malang, Indonesia

## Abstract

Leadership plays a crucial role in formulating strategies to achieve an organization's mission, vision, and goals. It occupies a significant position in broader initiatives aimed at enhancing nurse performance. Implementing an unsuitable leadership style, as dictated by leaders to their employees, can adversely affect employee motivation, performance, and job satisfaction. The study aimed to develop a transformational leadership model based on the principle of caring to improve nurse performance. This study employed an explanatory design and involved 115 respondents selected through cluster sampling techniques. Data were collected using

questionnaires that had undergone both validity and reliability testing. The study examined variables such as personal factors, organizational factors, staff factors, work factors, transformational and caring leadership, and nurse performance. For data analysis, partial least squares were utilized with a significance threshold set at  $t > 1.96$ . The research findings indicate that personal factors exert a positive influence on both transformational leadership and caring ( $t = 5.677$ ). Organizational factors also positively impact transformational leadership and caring ( $t = 4.474$ ), and staff factors exhibit a positive influence on these leadership styles as well ( $t = 4.157$ ). However, work factors do not directly impact transformational leadership and caring ( $t = 0.554$ ). Notably, both transformational and caring leadership styles positively affect nurse performance ( $t = 7.755$ ). The development of a transformational leadership model based on caring is influenced by multiple factors, including personal, organizational, and staff factors. Implementing this leadership model can significantly improve nurses' performance, thereby leading to enhancements in the quality of health services provided in hospitals.

Correspondence: Fitriyanti Patarrù, Bachelor of Nursing, Sekolah Tinggi Ilmu Kesehatan Stella Maris, Makassar, Indonesia.  
E-mail: patarrufitriyanti@yahoo.com

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## Introduction

Employee performance in an organization is closely tied to the expectations and demands placed on them to fulfill their responsibilities and achieve the organization's goals.<sup>1,2</sup> The issue of nursing performance is influenced by various factors, including leadership.<sup>3</sup> Leadership is one of the important factors that play a key role in determining strategies to achieve an organization's mission, vision, and objectives.<sup>4,5</sup> Nursing services are an integral component of health service performance. Nurses, as service providers, are at the forefront and play a pivotal role in shaping a hospital's reputation. The image of a healthcare facility is often evaluated by patients based on their perception of the quality of nursing health services they receive during their hospital stay.<sup>6-8</sup>

The ideal performance standard value that hospitals should achieve is typically set at 70-80%. However, many hospitals still struggle to meet this percentage of performance standards.<sup>9</sup> Data from the World Health Organization (WHO) for Southeast Asia indicates that approximately 35% of healthcare service users express satisfaction with the services provided, while about 55% express dissatisfaction.<sup>10</sup> The research obtained the results of the performance of nurses in Sudan Hospital is 32%.<sup>11</sup> Research at South Africa's Hospital Emergency Department in Gaeteng Province found that nurse performance was 68.3%.<sup>12</sup> In East Java province, the performance percentage is 52%, while the performance percentage data for Lavalette Hospital ranges from 55% to 67%. These figures indicate that nurse performance in the region is still categorized as poor, which poses a problem in providing health services to patients, including in Indonesia.

Transformational leaders should have the ability to inspire and

motivate their subordinates to embrace change, especially when the change impacts employee performance or the employees themselves. This is crucial in ensuring that the organization's goals and objectives are effectively implemented.<sup>13</sup> Leadership style positively and significantly affects nurse performance.<sup>14,15</sup> A leader should also possess a genuine concern for their employees. Caring behavior places significant emphasis on empathy, respect, and consideration for others. The leader's demonstration of caring behavior towards their executives or staff is referred to as caring leadership. This process can significantly influence the group's dynamics and their collective efforts in achieving common goals through the implementation of caring behavior.<sup>16-18</sup> Therefore, the organization needs reformist leaders and care that can be the driving motor of transformation to create good cooperation between leaders and subordinates that can improve the performance and quality of health services by implementing transformational leadership models. The four elements of the Transformational Leadership Style are interconnected with each other. They include setting an example for those around them (Idealized Influence), increasing employee motivation through inspirational motivation, encouraging employees to solve problems in innovative ways (Intellectual stimulation), and providing necessary physical facilities and infrastructure to support employee work.<sup>14,19</sup> These four elements must be possessed and effectively realized by a hospital leader. On the other hand, Swanson's caring behavior consists of five aspects: knowing, being with, doing for, enabling, and maintaining belief.<sup>20</sup> The choice of an appropriate leadership style can lead to the attainment of both individual and organizational goals. Conversely, an inappropriate leadership style may result in the abandonment of organizational goals, causing employees to feel upset, agitated, disaffected, and dissatisfied. This study aimed to develop a leadership model, specifically focusing on the elements of the transformational leadership style, while also incorporating the element of caring.

## Materials and Methods

The study utilized an explanatory design and targeted a population of 221 nurses working across various units, including inpatient, intensive care, and outpatient departments. A sample of 115 nurses was selected using cluster sampling, a form of probability sampling. The inclusion criteria for nurse participants in this study were employment at PT. Nusantara Sebelas Medika Lavalette Hospital, willingness to participate as a respondent in the study, minimum educational qualification of an associate's degree in nursing, minimum work experience of three years. These criteria were applied to identify suitable participants for the research.

Variable factors that influence leadership are personal factors, organizational factors, staff factors, work factors, caring-based transformational leadership, namely idealized influence, inspirational motivation, intellectual stimulation, individualized consideration and caring dimensions maintaining belief, knowing, being with, doing for, enabling and independent variables were observed simultaneously with nurse performance variables. Data were collected using questionnaires from each sub-variable. The independent variable instrument is for personal factors. It consists of 3 sub-variables, namely personality, experience and expectations.<sup>2</sup> Organizational characteristics consist of development and training sub-variables as well as organizational structure using a questionnaire from WorldatWork which was adopted from research.<sup>21</sup> The leadership behavior questionnaire (LTQ/Leadership Trait Questionnaire) is a measure that can be used to assess the charac-

teristics of superior behavior,<sup>22</sup> Subordinate behavior questionnaires and expectations questionnaire,<sup>2</sup> The job characteristics instrument in this research is based on the theory of Hackman and Oldham (1980) in research,<sup>23</sup> The measuring tool used for transformational leadership is a modification of the Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio in research.<sup>24</sup> Meanwhile, the independent variable instrument is The instrument regarding nurse performance standards.<sup>2</sup>

Data analysis included both descriptive and inferential methods. Descriptive analysis involved calculating measures like frequency, mean, median, and mode for data on a nominal or ordinal scale. Inferential analysis utilized a variance-based Structural Equation Modeling (SEM) known as Partial Least Square (PLS). The research was conducted following ethical principles and rigorous testing. Focus Group Discussions (FGDs) were carried out to identify solutions to strategic problems. These discussions were conducted in two sessions: the first included 13 implementing nurses, and the second involved the Head of Nursing Committee and 13 heads of rooms. The insights and findings from the Focus Group Discussions were used to develop plans for enhancing the transformational leadership model based on caring within the hospital and for improving the standard of nurse care. To address the issues identified during the FGDs, further consultations with experts were conducted to create a development module that included content about the significant factors in enhancing transformational leadership based on caring to improve nurse performance.

## Results

Based on Table 1, it can be found that of the 115 respondents, the majority of respondents are female 75.7%, aged 21 - 40 years 69.6%, the last person in Nursing D3 69.6%, staffing status as a permanent employee 80.0 %, and have been working for 1-5 years 60.9%.

**Table 1.** Distribution of respondent characteristics.

Characteristics of respondents	n	%
Gender		
Male	28	24.3
Women	87	75.7
Age		
<21 years old	0	0
21-40 years old	80	69.6
41-60 years old	35	30.4
Education		
Nursing diploma	80	69.6
Bachelor degree	35	30.4
Master degree	0	0
Staffing status		
Permanent employees	92	80.0
Honorary employees	23	20.0
Contract employees	0	0
Long working time		
<1 year	0	0
1-5 years old	70	60.9
>5 years old	45	39.1
Total	115	100

**Table 2.** Variable distribution.

Variables	n	%
<b>Personal factors</b>		
Personality		
Good	46	40.0
Enough	42	36.5
Less	27	23.5
Experience		
Good	63	54.8
Enough	37	32.2
Less	15	13.0
Hope		
High	79	68.7
Are	36	31.3
Low	0	0
<b>Organizational factors</b>		
Development and training		
Good	23	20.0
Enough	49	42.6
Less	43	37.4
Organizational structure		
Good	62	53.9
Enough	41	35.7
Less	12	10.4
<b>Staff factor</b>		
Staff expectations		
High	26	22.6
Are	64	55.7
Low	25	21.7
Leader behavior		
Good	59	51.3
Enough	31	27.0
Less	25	21.7
Subordinate behavior		
Good	57	49.6
Enough	45	39.1
Less	13	11.3
<b>Occupation factor</b>		
Objective performance		
Good	92	80.0
Enough	23	20.0
Less	0	0
Feedback		
Good	66	57.4
Enough	24	20.9
Less	25	21.7
Correction		
Good	70	60.9
Enough	45	39.1
Less	0	0
Design jobs		
Good	35	30.4
Enough	65	56.5
Less	15	13.0
Work schedule		
Good	39	33.9
Enough	53	46.1
Less	23	20.0

Personal factor variables consist of personality, experience, and expectations. Organizational factor variables consist of development and training as well as organizational structure, staff factor variables consist of staff expectations, boss behavior, and subordinate behavior and work factor variables consist of objective performance, feedback, correction, job design and job schedule. Transformational and caring leadership variables consist of idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation, and nurse performance variables consist of caring, collaboration, empathy, response speed, decency, and honesty (Table 2).

The results of the study that there is a significant influence of personal factors (personality, experience, and expectations) on transformational leadership and caring (ideal influence, motivational inspiration, intellectual stimulation, intellectual consideration) ( $t = 5,677 > 1.96$ ). There is an influence of organizational factors (development and training and organizational structure) on

**Transformational leadership based on caring**

Ideal influence		
Good	33	28.7
Enough	51	44.3
Less	31	27.0

Motivational inspiration		
Good	33	28.7
Enough	25	21.7
Less	57	49.6

Intellectual stimulation		
Good	40	34.8
Enough	26	22.6
Less	49	42.6

Individual configuration		
Good	36	31.3
Enough	27	23.5
Less	52	45.2

**Performance**

Caring		
Good	27	23.5
Enough	30	26.1
Less	58	50.4

Collaboration		
Good	55	47.8
Enough	40	34.8
Less	20	17.4

Empathy		
Good	35	30.4
Enough	40	34.8
Less	40	34.8

Response speed		
Good	54	47.0
Enough	38	33.0
Less	23	20.0

Courtesy		
Good	49	42.6
Enough	32	27.8
Less	34	29.6

Honesty		
Good	69	60.0
Enough	34	29.6
Less	12	10.4
Total	115	100

transformational leadership and caring (ideal influence, motivational inspiration, intellectual stimulation, intellectual consideration) ( $t = 4,474 > 1.96$ ). There is a significant influence of staff factors (expectations, the behavior of subordinates, and superiors' behavior) on transformational and caring leadership (ideal influence, motivational inspiration, intellectual stimulation, intellectual consideration) ( $t = 4,157 > 1.96$ ). There is no influence of work factors (objective performance, feedback, correction, job dimensions, work schedule) on transformational leadership and caring (ideal influence, inspirational motivation, intellectual stimulation, intellectual consideration. ( $t = 0,554 > 1.96$ ), transformational leadership and caring (ideal influence, inspirational motivation, intellectual stimulation, intellectual consideration) to nurses' performance (caring, collaboration, empathy, speed of response, politeness, honesty) ( $t = 7,755 > 1.96$ ) (Table 3).

Focus Group Discussion (FGD) results show that it is necessary to improve the implementation of transformational leadership models based on caring headroom by hospitals by Making hospital policies regarding the application of a caring-based transformational leadership model based on personal factors, organizational factors, staff factors to improve nurse performance, conduct outreach to nurses, increase knowledge of the head of the room, train the application of caring-based transformational leadership, Increase the responsibility and commitment of the headspace, improve nurse performance by applying caring-based transformational leadership.

## Discussion

The variables of personality, experience, and expectations have been validated and considered effective in measuring personal factors. They play a dominant role and are categorized as good indicators. The statistical tests demonstrate that personal factors significantly affect transformational leadership and caring. Personality traits are evaluated based on several factors: the leader's adaptability, creativity, decision-making ability, cooperation skills, emotional control, and self-confidence. Experience is measured through the duration of work, the extent of knowledge, proficiency in skills, adherence to procedures, and a sense of responsibility in fulfilling duties. Expectations are determined by the nurses' aspirations for career advancement, recognition, and improved performance. Most nurses at Lavalette Hospital Malang exhibit good ratings for personality, experience, and expectations. The application of leadership type depends heavily on personality characteristics owned by a leader, personality is a certain characteristic or character that becomes unique to each individual. The research findings indicate a positive and significant correlation between personality and transformational leadership.<sup>25</sup>

Organizational factor variables have sub-variables namely development and training and organizational structure. In the sub-

variables the organizational structure belongs to the category both but on the development and training category is sufficient. Based on statistical test results, the two sub-variables are valid for measuring organizational factor variables. Statistical test results show that organizing factors positively affect transformational leadership and caring. Human Resources Development is an activity that must be carried out by an organization to improve employees' knowledge, ability, and skills to comply with their work demands.<sup>21</sup> While the organizational structure is the unity of the organizational framework set out for the managerial process, the system is the pattern of behavior that arises and occurs in organizing the organization and management. The results of this study are in line with research which states that the cultural factors of the organization have a significant effect on leadership.<sup>26</sup> Organization is one of the factors that affects an individual's performance, because the organization is a system of roles, activity flows and processes of work relationship patterns and involves several people as executors of tasks designed to achieve common goals.

The staff factor has sub variables namely staff expectations, boss behavior, subordinate behavior. Sub-variabel expectations of staff fall into the category of having moderate expectations and for sub variables of superior behavior and subordinate behavior fall into the category of good. Based on statistical test results, the 3 sub-variables are valid for measuring staff factor variables. In statistical test results, there was a significant influence of staff factors on transformational leadership and caring. Thus, it can be interpreted that the better the staff factor, the better it tends to improve transformational leadership and caring. The expectations of the staff in this study are to discuss the level of satisfaction felt by nurses during their work, namely the satisfaction of service wages, facilities and infrastructure and relationships between leaders. As for the behavior of the boss, the assessment of the nature and behavior of the boss such as being able to communicate well to subordinates, creative, insightful and able to motivate. For subordinate behavior, discuss feelings in carrying out the basic duties and functions of nurses that are their responsibility.

The work factor variable has sub-variables, objective performance, feedback, correction, job design, and job schedule. Sub variable objective performance, feedback, and corrections fall into both categories, while the design of the work and the work schedule is sufficient. Based on statistical test results it can be known that 5 sub-variables are valid to measure staff factor variables In the results of statistical tests obtained results that there is no significant influence of work factors on transformational leadership and caring. The work factor in this study discusses the ability to work based on the SOP that has been made by the hospital, evaluating the performance that has been done. The head of the room also gives corrections and directs its subordinates if it is not proper in carrying out its performance. The head of the room can set the shift schedule clearly. The study previous states that by modifying or changing the characteristics of the work, it should be more consid-

**Table 3.** Hypothesis test.

Influence	Original Sample (O)	T Statistics (O/STDEV)	p
Personal factors (X1) -> Transformational Leadership and Caring (X5)	0.332	5.677	0.000
Organizational factors (X2) -> Transformational leadership and Caring (X5)	0.328	4.474	0.000
Staff factor (X3) -> Transformational leadership and Caring (X5)	0.305	4.157	0.000
Job factor (X4) -> Transformational leadership and Caring (X5)	0.034	0.554	0.580
Transformational leadership and caring (X5) -> Nurse performance	0.515	7.755	0.000

ering the individual aspects.<sup>27</sup> The individual aspect in question is that a leader must have a desire to present himself or herself to be able to do the job. Transformational leadership and caring are not directly affected by the employment factor. The employee's work factor is basically individual because basically, each person's work ability has a different character.

Transformational leadership based on caring variables has sub-variables of idealistic influences, motivational inspiration, intellectual stimulation, and individual contingency. Sub variables of transformational leadership and caring for motivational inspiration, intellectual stimulation, and individual consideration fall into fewer categories whereas the dimensions of idealistic influence in the category are sufficient. Based on statistical test results, it can be known that 4 sub-variables are valid for measuring leadership and caring variables. Statistical test results show that there is a significant influence of transformational and caring leadership on the performance standards of professional nurses. Thus, it can be interpreted that implementing transformational leadership and caring tends to improve the performance standards of professional nurses. This research is in line with research that transformational leadership style has a positive and significant effect on nurse performance.<sup>28</sup> According to Bass, 1997 the transformational leadership model is a leadership style that can excite and motivate subordinates in order to develop and achieve higher performance, past previously thought. Transformational leadership based on caring is a model of leadership style that transforms or transforms something into another different form. A transformational leader must be able to optimally transform the organization's resources in order to achieve meaningful goals in accordance with the target stipulated. Transformational leadership is outlined in four main characteristics, namely: the idealization of influence, inspirational motivation, individuality, and intellectual stimulation and developed by incorporating the caring element, namely maintaining belief, knowing, doing for, being with, and enabling because the key to improving the quality of nursing services is to emphasize caring behavior. Therefore, it takes a leader who applies caring attitude in leading his subordinates.

Performance is a pattern of actions performed to achieve goals measured based on comparisons with various standards.<sup>29</sup> Performance is the achievement of the objective of a particular activity or activity to achieve the company's goals as measured by a standard. The results of the previous study showed that there is a significant influence of transformational leadership on performance.<sup>30</sup> This shows that the greater the influence of transformational leadership, the better the performance of nurses. The application of transformational and caring leadership models by the head of the room or manager can have a good impact on the performance of nurses. Applying the dimensions of transformational leadership including ideal influence/charisma, motivation inspiration, individual consideration, and intellectual stimulation integrated with caring dimensions, namely maintaining belief, knowing, doing for, being with, and enabling, can have a positive influence on the performance of nurses in hospitals. The influence of transformational leadership makes employees more loyal to their work. Research limitations during data collection are as follows: It is necessary to take a personal approach to the implementing nurse when filling out the questionnaire so that it takes quite a long time and the researcher adjusts the official holiday schedule with the nurse and Focus Group Discussion (FGD) with the executive nurse, head of room and representatives of hospital management with limited time because it was carried out online and the limited time each nurse concerned had considering the responsibility in providing nursing care.

## Conclusions

The transformational leadership model based on caring is influenced by various factors, including personal factors, organizational factors, and staff factors. The development of this model has the potential to impact nurses' performance positively and can be adopted by hospitals, particularly for ward managers or heads of departments, to enhance the quality of healthcare services. The findings from this research offer valuable insights and understanding for leaders and heads of departments in implementing a caring-based transformational leadership model, contributing to the development of nursing science as evidence-based practice.

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