



DEVELOPMENT OF SUPERVISION BASED ON EMOTIONAL INTELLIGENCE MODEL ON NURSING SERVICE QUALITY

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ABSTRACT

The quality of nursing services in hospitals is related to the assessment of patient and family satisfaction, so supervision is needed to minimize the provision of less-than-optimal nursing services. Supervision is influenced by the emotional condition and intelligence of the supervisor. This research aims to develop a supervision based on emotional intelligence (EI) model for the quality of nursing services. The research consisted of two stages, namely stage 1 using an explanatory survey with a cross sectional approach. The population was 262 nurses at Blambangan Hospital, Banyuwangi Regency, r sample of 168 respondents was obtained through probability sampling with cluster random sampling. Data was collected using a questionnaire and analyzed using Partial Least Square (PLS). Stage 2 research is the preparation of a supervision based on EI module that refers to strategic issues obtained from the results of the first stage research, focus group discussions and expert consultations. There is a significant influence of individual factors (T=8.789), organizational factors (T=4.519), psychological factors (T=13.853), and work factors (T=3.517) on supervision based on EI. There is an influence of individual factors (T=11.703), organizational factors (T=5.012), psychological factors (T=9.008), and work factors (T=6.512) on the quality of nursing services. There is an influence of supervision based on EI (T= 3.224) on the quality of nursing services, as well as the arrangement of supervision based on EI modules to improve the quality of nursing services. The development of supervision based on EI which includes normative, formative and restorative can be an effort by the head of the room or supervisor to improve the quality of nursing services and it is important to pay attention to self-awareness, social awareness, self-management and relationship management.

Keywords: emotional intelligence; quality of nursing care; supervision

First Received 14 March 2024	Revised 22 April 2024	Accepted 24 April 2024
Final Proof Received 28 May 2024		Published 01 August 2024

How to cite (in APA style)

Andayani, E., Fitriyasaki, R., Sari, D. W., Ayatulloh, D., & Priyantini, D. (2024). Development of Supervision Based on Emotional Intelligence Model on Nursing Service Quality. *Indonesian Journal of Global Health Research*, 6(4), 2263-2278. <https://doi.org/10.37287/ijghr.v6i4.3325>.

INTRODUCTION

Poor quality nursing services will provide negative perceptions and judgements, and will affect the quality of hospital services (Abbasi-Moghaddam et al., 2019; Karaca & Durna, 2019). Nurses often get complaints and unfavorable assessments as a result of their attitudes and behavior, such as working while playing mobile phones, lack of friendliness, explanations of patient conditions and nursing actions that are sometimes not carried out, slow and unresponsive responses and lack of empathy towards patients (Mamengko & Rares, 2021). One of the reasons for the poor quality of nursing services is the lack of a support system from management and supervisors, who should always appreciate the duties of their

subordinates, and provide support both internally and externally in service quality improvement programmed (Kendeng et al., 2023; Silalahi, 2021).

Appropriate supervision activities can increase nurse job satisfaction which will affect patient perceptions of the quality of nursing services (Ariani et al., 2020; Silalahi, 2021). However, supervision carried out so far has not been optimal because supervisors emphasis more on action supervision and are rigid, so that many nurses become afraid and feel pressured when supervision activities are carried out (Patterson, 2019). As for other perceptions, that supervisors tend to scold nurses who are wrong in action and do not provide much feedback after supervision is complete, this is because Emotional Intelligence (EI) is often not owned by supervisors. EI in supervisors is needed to form a figure who not only provides advice, input and evaluation (Cummings et al., 2018; Kendeng et al., 2023; Nuryati et al., 2022), but is also useful in having a positive influence on the social environment around them, including in improving the quality of nursing services (Reshetnikov et al., 2020). Supervisors with qualified EI will be able to become ideal role models for all nurses to be able to motivate and improve their quality, especially in nursing services (Boyatzis and McKee, 2006; Issah, 2018). The supervision process or activities are expected to increase nurses' work productivity so that the end result is an increase in the quality of nursing services. However, the development of emotional intelligence-based supervision has not been explained and no research has been found that develops supervision based on EI in nurses.

The prevalence of nursing service quality abroad and in the country, itself is still far from optimal. This is evidenced by the results of research that has been conducted in several Ethiopian hospitals in the African country mentioning 48.33% of nurses show poor quality of nursing services about the responsiveness of nurses in responding to patients, so that as many as 37.10% of patients feel dissatisfied with the nursing services they receive (Kibret et al., 2022). Research conducted in 40 hospitals in India on service quality 86% stated that it was good, 79.3% stated satisfaction and 89.7% stated patient loyalty, this can be concluded that it has not reached 100%, which means that there are still some problems with lack of responsiveness and have not been able to fully solve patient problems such as finding hospital payment solutions. The Indonesian Ministry of Health standards related to nurse performance which include nursing services are 70-80%, but the quality of nursing services in one of the hospitals in Indonesia is mostly in the insufficient category (57.4%) (Oxyandi, 2018) and research in one of the government hospitals stated that 58.5% of patients were not satisfied with nursing services because nurses were less responsive and did not explain the actions provided (Yulandasari et al., 2020).

Based on the results of a survey in East Java in providing nursing services in private hospitals from 2015 to 2020, there was a downward trend from 92% to 73%, while in government hospitals in 2015 it was 98% to 85% in 2020 (Chairina et al., 2019). As for research in 5 public and private hospitals in East Java, out of 103 respondents, 35 (33.9%) still did not carry out the nursing service process properly (Sulistyawati et al., 2020). When viewed from several studies above, the problem of nursing services that have not fully 100% reached the good category means that the quality of nursing services needs to be improved and optimized again. The results of a preliminary study conducted by observation at one of the hospitals in Banyuwangi in April 2023 showed that of the 12 respondents, as many as 3 (25%) respondents stated that the quality of nursing services provided was not good, such as nurses who were less friendly and smiling, less in serving attentively and providing nursing services that were less responsive.

Ability, attitude and behavior are indicators that affect the quality of nursing services that will provide an assessment of performance and quality of service in the hospital (Kahya & Oral, 2018). The impact of less than optimal quality of nursing services is an assessment of the ability and competence of nurses who are getting worse (He, Kumar and Chilamkurti, 2015; Faraji et al., 2019). Naidu (2019) explains that the final result of nursing service is whether the patient is satisfied with the service received. In addition, the behavior and attitude of health workers are important factors in assessing perceptions of whether or not they are comfortable and satisfied while being treated. Therefore, reliability, assurance, tangible, empathy, and responsiveness (RATER) indicators are indicators that can measure the quality of nursing services (Nursalam, 2020a).

Supervision is one of the managerial activities that can ensure the competence of each nurse in carrying out nursing actions (Fatonah & Yustiawan, 2020; Oktaviani et al., 2019). This is done to improve the quality of nursing services, of course, good performance is also needed by nurses (Budiyarti et al., 2022). Brigid Proctor's clinical supervision model has several components, namely normative, formative and restorative, which can improve evidence-based clinical services and can provide adequate support for clinical services, especially in nursing services and develop professionalism in nursing supervisors (Trigantara et al., 2019; Gazali, 2022). The ideal evaluation process of planned supervision activities, consistency, good structuring or discussion, improving the quality of service and improving the implementation of activities in the room, is a supervision model from Brigid Proctor that is differentiated from other supervision models (Trigantara et al., 2019). However, supervisors with EI can more effectively achieve self-awareness, objectivity, and equality, in an effort to improve outcomes, workplace culture, and improve the quality of nursing services (Hurley et al., 2020). Thus, supervisors with emotional intelligence are able to make it easier for nurses to provide learning and justification for inappropriate actions.

The solution offered from the phenomenon, the problem and the underlying theory is the need for "Development of Supervision based on Emotional Intelligence Model for Nursing Service Quality". This model is built based on Koplemen's work productivity theory, which is generally defined as the efficiency of using resources to produce outputs from actions performed by nurses (Xue and Tuttle, 2017; Nursalam, 2020). The use of resources intended to produce output is the supervisor who carries out supervision activities and is combined with EI. The self-awareness, social awareness, self-management and relationship management components of EI will be integrated into the supervision components, namely normative (assessment and quality), normative (tasks, decisions, reflective practice) and restorative (support). The integration of this theory is expected to improve the quality of nursing services from supervision actions by managing emotions and feelings of oneself, as well as others, providing good feedback, guiding, directing and providing examples in good and professional nursing service actions. This research aims to develop a supervision based on emotional intelligence (EI) model for the quality of nursing services.

METHOD

Phase 1 of the study used explanatory research with a cross sectional approach on 168 nurses at RSUD Blambangan, Banyuwangi who were recruited using cluster random sampling technique. The criteria for research respondents are nurses who work in the inpatient room, executive nurses, at least diploma 3 nursing education, at least 1 year of work, do not have structural positions, are not trainees, are not on study assignments and leave. Independent latent variables of individual factors (X1), organizational factors (X2), psychological factors (X3), work factors (X4), supervision based on EI (X5) and the dependent variable of nursing

service quality (Y1). The instrument used in this study is a questionnaire that has been modified by the researcher and has been tested for validity and reliability. The results of the validity test shows that all item question in questionnaire has r measurement $> r$ table (r table = 0.257) and Cronbach alfa showed above 0.6. Data analysis using SEM-PLS test. Phase 2 research used a qualitative design to develop a research module. The module was refined through focus group discussions and expert consultation with nursing management experts. The instruments used were focus group discussion (FGD) and expert consultation guidelines, and descriptive data analysis was used to analyze recommendations from FGD and expert consultation.

RESULTS

Table 1.
Description of Demographic Characteristics of Respondents (n = 168)

Indicator	Research Sample	
	f	%
Gender		
a. Male	29	17,3
b. Female	139	82,7
Age (Years Old)		
a. 20-25	61	36,3
b. 25-30	46	27,4
c. 31-40	44	26,2
d. > 40	17	10,1
Length of Service		
a. 1-5	9	5,4
b. 6-10	70	41,7
c. 11-15	62	36,9
d. >16	27	16,1
Education		
a. Diploma 3 Nursing	84	50,0
b. Diploma 4 Nursing	11	6,5
c. Nurse Profession	73	43,5
Type of Employee		
a. Civil Servant	41	24,4
b. Non Civil Servant	97	57,7
c. Honorary Employee	30	17,9
Marriage Status		
a. Single	29	17,3
b. Married	138	82,1
c. Widow/ Widower	1	0,6

Table 1. shows that out of 168 respondents, the most dominant gender is female as many as 139 respondents (82.7%) with the age range mostly between 20-30 years as many as 61 respondents (36.3%). The indicator of the length of work of nurses shows that the most is between 6-10 years, namely 70 respondents (41.7%) with the most dominant educational level is diploma 3 nursing as many as 84 respondents (50.0%) and most have an employment status, namely non civil servant as many as 97 respondents (57.7%). In the indicator of marital status, the majority of 138 respondents with a percentage (82.1%) have married marital status.

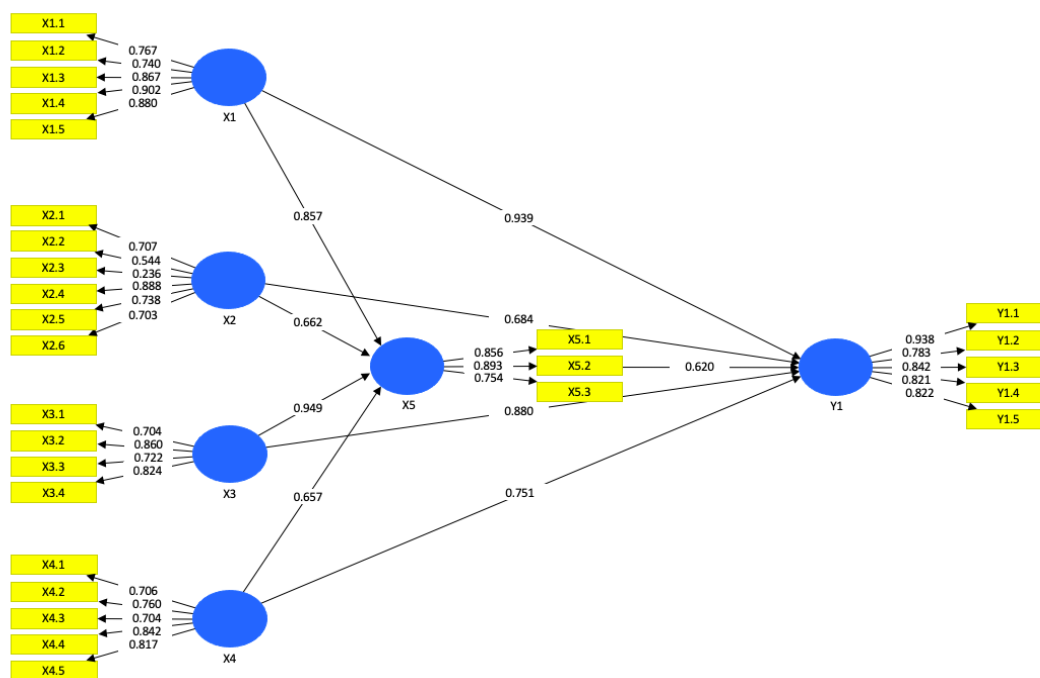


Figure 1. Outer Model

Table 2.
Research Convergent Validity Testing Results

Latent Variable	Observe Variable	Loading Factor	T Value	Cut Off	Validiy
X1 Individual Factors	X1.1 Knowledge	0,767	10,882	0,5	Valid
	X1.2 Skills	0,740	3,038	0,5	Valid
	X1.3 Ability	0,867	28,232	0,5	Valid
	X1.4 Communication	0,902	60,490	0,5	Valid
	X1.5 Values and Norms	0,880	35,891	0,5	Valid
X2 Organizational Factors	X2.1 Reward System	0,889	14,112	0,5	Valid
	X2.4 Training and Development	0,954	31,255	0,5	Valid
	X2.5 Leadership	0,890	26,345	0,5	Valid
	X2.6 Organizational Structure	0,812	9,156	0,5	Valid
X3 Psychological Factors	X3.1 Perception	0,704	2,187	0,5	Valid
	X3.2 Attitude	0,860	36,489	0,5	Valid
	X3.3 Personality	0,722	10,722	0,5	Valid
	X3.4 Motivation	0,824	24,639	0,5	Valid
X4 Work Factors	X4.1 Objective Performance	0,706	8,318	0,5	Valid
	X4.2 Feedback	0,760	14,668	0,5	Valid
	X4.3 Work Design	0,704	3,436	0,5	Valid
	X4.4 Work Schedule	0,842	24,527	0,5	Valid
	X4.5 Workload	0,817	21,602	0,5	Valid
X5 Supervision based on Emotional Intelligence	X5.1 Normative (combination with self-awareness, social awareness, self-management, relationship management)	0,856	25,471	0,5	Valid
	X5.2 Formative (combination with self-awareness, social awareness, self-management, relationship management)	0,893	37,903	0,5	Valid
	X5.3 Restorative (combination with self-awareness, social awareness, self-management, relationship management)	0,754	4,186	0,5	Valid

Latent Variable	Observe Variable	Loading Factor	T Value	Cut Off	Validiy
Y1 Nursing Service Quality	Y1.1 Reliability	0,938	74,385	0,5	Valid
	Y1.2 Assurance	0,783	13,212	0,5	Valid
	Y1.3 Tangible	0,842	13,788	0,5	Valid
	Y1.4 Empathy	0,821	10,495	0,5	Valid
	Y1.5 Responsiveness	0,822	11,725	0,5	Valid

Based on the analysis results, it is known that the outer loading value on all latent variables shows the results of $\lambda \geq 0.5$ and the statistical T value ≥ 1.96 . Valid variable measurements are individual factors (knowledge, skills, abilities, communication and values and norms), organizational factors (reward system, training and development, leadership and organizational structure), psychological factors (perception, attitude, personality and motivation), work factors (objective performance, feedback, work design, work schedule and workload), supervision based on emotional intelligence (normative, formative and restorative (self-awareness, social awareness, self-management and relationship management)) and nursing service quality consisting of reliability, assurance, tangible, empathy and responsiveness.

Table 3.
Research Discriminant Validity Test Results

Variable	X1	X2	X3	X4	X5	Y1
X1 Individual Factors	0,728					
X2 Organizational Factors	0,721	0,750				
X3 Psychological Factors	0,663	0,617	0,725			
X4 Work Factors	0,682	0,636	0,586	0,713		
X5 Supervision based on Emotional Intelligence	0,495	0,474	0,670	0,503	0,779	
Y1 Quality of Nursing Services	0,519	0,499	0,698	0,579	0,411	0,843

Table 3. above shows that all Fornell Larcker Criterion values among variables show greater than the values between variables, so it is concluded that the model has a good discriminant validity value.

Table 4.
Research Reliability Test Results

Latent Variable	Cronbach's Alpha	Rho A	Composite Reliability	Average Variance Extracted
X1 Individual Factors	0,769	0,852	0,841	0,529
X2 Organizational Factors	0,838	0,862	0,882	0,562
X3 Psychological Factors	0,968	0,752	0,806	0,526
X4 Work Factors	0,744	0,800	0,831	0,508
X5 Supervision based on Emotional Intelligence	0,767	0,750	0,816	0,607
Y1 Quality of Nursing Services	0,897	0,914	0,924	0,710

Table 4. above, namely the reliability test on latent variables shows that the composite reliability value has met the requirements, which is more than 0.7. Likewise with the Cronbach's alpha value > 0.6 and AVE > 0.50 . Thus, it can be concluded that all latent variables in the study have fulfilled the reliability test.

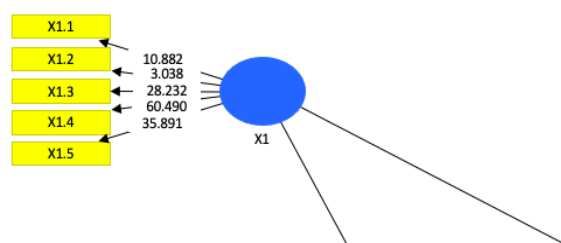


Figure 2. Inner Model

Table 5.
Results of the Research Determination Coefficient

Variable	R Square	R Square Adjusted
X5 Supervision based on Emotional Intelligence	0,608	0,599
Y1 Quality of Nursing Services	0,706	0,697

Table 4 shows that the R-square value of the diversity of supervision based on emotional intelligence variables and the quality of nursing services can be explained by individual factors, organizational factors, psychological factors and work factors as a whole by 59.9%, while the remaining 0.501 or 50.1% is the contribution of other variables not discussed in this study. The results of R-square testing show that variable X5 supervision based on emotional intelligence shows a value of 0.599 and variable Y1 quality of nursing service shows a value of 0.697. This indicates that the strength of the model is in the moderate category ($R^2 > 0.33$).

Table 6.
Research Predictive Relevance Test Results

Variable	SSO	SSE	Q ² (=1-SSE/SSO)
X1 Individual Factors	840,000	840,000	
X2 Organizational Factors	1008,000	1008,000	
X3 Psychological Factors	672,000	672,000	
X4 Work Factors	840,000	840,000	
X5 Supervision based on Emotional Intelligence	504,000	339,047	0,327
Y1 Quality of Nursing Services	840,000	472,049	0,438

The results in table 6 show that all variables produce a Predictive Relevance (Q²) value greater than 0 (zero) which indicates that the model is said to be good enough.

Table 7.
Research Model Fit Testing Results

	Saturated Model	Estimated Model
SRMR	0,097	0,099
d_ ULS	4,670	4,670
d_ G	2,498	2,498
Chi-Square	1652,419	1652,419
NFI	0,956	0,951
rms Theta		0,097

In accordance with the model fit picture above, the RMS Theta value is $0.097 < 0.102$ and the NFI value is $0.956 > 0.9$. So based on these two model assessments, the model meets the model fit criteria. Likewise, with the SRMR or Standardised Root Mean Square Value, the value is $0.097 < 0.10$, so the model fits, so it can be concluded that the model fits the research data.

Table 8.
Research Hypothesis Testing Results

Variable	Original Sample (O)	T Statistics ((O/STDEV))	P Values	Description
X1 Individual Factors => X5 Supervision based on Emotional Intelligence	0,857	8,789	0,005	Significant
X1 Individual Factors => Y1 Quality of Nursing Services	0,939	11,703	0,000	Significant
X2 Organizational Factors => X5 Supervision based on Emotional Intelligence	0,662	4,519	0,016	Significant
X2 Organizational Factors => Y1 Quality of Nursing Services	0,684	5,012	0,013	Significant
X3 Psychological Factors => X5 Supervision based on Emotional Intelligence	0,949	13,853	0,000	Significant
X3 Psychological Factors => Y1 Quality of Nursing Services	0,880	9,008	0,000	Significant
X4 Work Factors => X5 Supervision based on Emotional Intelligence	0,657	3,517	0,026	Significant
X4 Work Factors => Y1 Quality of Nursing Services	0,751	6,512	0,012	Significant
X5 Supervision based on Emotional Intelligence => Y1 Quality of Nursing Services	0,620	3,224	0,028	Significant

Based on the results of data processing, there is an evaluation of the structural model (inner model) to determine the validity of the model. The results of hypothesis testing show that everything is significant.

DISCUSSION

Individual factors consisting of knowledge, skills, abilities, communication, and values and norms show an influence on supervision based on emotional intelligence, this shows that supervision based on emotional intelligence is related to individuals in their success. Individual factors from the research results show that the indicator of supervisor knowledge is in the moderate category, meaning that not all supervisors have a good level of knowledge of supervision activities carried out to nurses. According to Kopelmen (1986), the characteristics of knowledge can be interpreted as actionable information or information that can be used as a basis for action, making decisions and taking certain directions or strategies (Nursalam, 2020). The results of research conducted by Pedras et al., (2018) there is a relationship between knowledge and supervision (Demang, F. Y., et al, 2022). Zhang et al., (2019) found a positive correlation between knowledge and education. Knowledge is synonymous with high education, so that the higher the supervisor's education, it is expected to have better knowledge compared to nurses who have less education. Therefore, knowledge is an important indicator in the success of supervision activities to nurses.

The results showed that there is a significant influence between organizational factors consisting of reward systems, organizational goals, selection, training and development, leadership and organizational structure on supervision based on emotional intelligence. Emotional support, one of which is in the form of an award received by nurses from supervisors, can improve nurse performance through self-confidence and motivation in the nurse's emotional capacity (Pohl et al., 2022). The same thing with research conducted by Baljoon et al. (2018) stated that the reward system in supervision is a strong factor to foster work motivation in nurses. In the research of Putra et al. (2021) stated that rewards in the form of rewards and praise in the form of feedback during supervision can improve nurses' caring behaviour and also indirectly improve the quality of service and performance of nurses in nursing care. Good supervision will increase confidence in the nurse's own abilities so that it will improve their performance. Training provided by the organization along with good supervision to nurses will increase their ability and motivation at work. Increased ability and motivation will affect the improvement of service quality (Okyere et al., 2017). Research conducted by Suratno et al. (2018) stated that leadership is one of the factors that affect the quality of nurses' work. Leadership from a good head of the room is able to create supportive supervision so that executive nurses get encouragement in improving the quality of work.

The psychological factor of nurses has a significant influence on nursing supervision, because in this case the psychological aspects of nurses that can shape individual character will greatly affect how the ability and style of a supervisor in carrying out nursing supervision, including various potential conflicts that may occur in organizational dynamics. Psychological factors consist of several indicators that can shape individual character in interpreting duties and responsibilities related to nursing supervision activities. Based on research conducted, managers and leaders do not always have control over the organizational climate, culture, and previous influence on employees from their predecessors. Some research does reflect that positive nursing supervision changes do take time to positively influence employee attitudes and perceptions, and that positive changes can ultimately result in employees supporting organizational change (Asrar-ul-Haq & Kuchinke, 2016). However, research has conducted explains positive change can change the negative attitudes and perceptions of extrinsically motivated employees towards organizational change, in addition to appropriate management and leadership techniques that can help change resistance to change in extrinsically motivated employees (Khuwaja et al., 2020). Past research has stated that every leader will learn how to be effective in their role to be able to progress and develop in their career, one of which is conducting nursing supervision (Parr & Bernthal, 2017). Motivating employees is an important leader task, because motivation translates employee knowledge, skills, and abilities into effort and performance by determining the direction, intensity, and duration of work-related behaviour (Ro, 2018). So that the leader as a supervisor must be able to place himself to be able to carry out nursing supervision to nurses in the room. The role of the supervisor is crucial in shaping the perceptions and positive attitudes of his team. Supervisors also act as role models in terms of increasing the desire to learn to develop self-capacity and motivation at work.

The results showed that all individual characteristics indicator variables were mostly in the good category but there were still in the sufficient category. The ability assessment is seen from the parameters used, namely the competence to carry out actions in accordance with the main task, the competence to carry out actions according to procedures, the competence to complete actions properly, the competence to assist or give direction to colleagues in carrying out actions, and the competence to determine the best procedures in carrying out actions. Research conducted by Russell et al. (2018) states that the lack of nurse knowledge causes a

decrease in the quality of nursing services in nursing supervision actions, so that it will affect the level of compliance. The quality of nursing services is the application of knowledge and abilities possessed and applying this knowledge in providing services and having responsibility in improving health status and serving patients in accordance with their duties, functions, and competencies (Hasibuan & Sinurat, 2020). The quality of nursing services is manifested in abilities that are integrated with knowledge, skills, and attitudes in every nursing care provided (Ahsan & Dewi, 2021). Motivation is included in the psychological elements that can encourage a person to achieve a predetermined or organized goal. Good self-motivation in nurses is reflected in maximum work results and services provided wholeheartedly to patients. So motivation is one of the dominant factors that influence the performance of nurses in providing care (Munandar et al., 2022). This is in line with research conducted by Asmara et al. (2019) states that motivation has a significant relationship to the quality of nursing services because motivation is a direct driver in the quality of work and a basic factor in improving performance. Research conducted by Kim & Lee (2021) states that aspirations or ideals have a positive relationship to the quality of nursing services to nursing supervision. Improving the quality of nursing services can result from the similarity of goals to be achieved, namely making nursing supervision work well.

Organisational factors consisting of reward systems, organizational goals, selection, training and development, leadership and organisational structure on the quality of nursing services. Research conducted by Pertiwi & Hariyati (2019) states that the reward system can improve the quality of nursing services through improvements in critical thinking skills, encouraging evidence-based practice, and increasing nurse knowledge. This research is in line with research conducted by Iversen et al (2021) which states that the reward system can improve the quality of nursing services in conducting nursing supervision. Other studies have also stated that the reward system is able to improve the quality of nursing services because the reward system given to nurses is able to provide motivation in conducting nursing supervision (Gaughan et al., 2021). Effective leadership will help team members develop trust in their organizational structure and maintain the stability of their team members' performance in implementing nursing supervision (Qvistgaard et al., 2019). This is supported by research findings which state that leadership is significantly related to the development, implementation, and evaluation of nursing supervision. Effective leadership will foster a work culture in the work environment well, be able to become a role model for its team members, and be able to overcome problems related to the implementation of supervision in its team well through effective communication so that it will improve the quality of nursing services (Burnett, 2018). Training for nurses can improve the quality of nursing services in line with increasing nurses' knowledge and skills in implementing supervision (Baskara et al., 2019). Supervisors who play a very important role in leadership and organization in hospitals to coordinate and evaluate all nursing services, so that quality and optimal services will be formed. Supervisors provide space and conditions for the implementation of supervision in a sustainable and long-term manner.

Psychological aspects can be strengthened through internal and external factors with indicators of perception, attitude, personality and motivation. Psychological factors consisting of perceptions, attitudes, personality and motivation show that there is a significant influence on the quality of nursing services. Based on research conducted, it states that employee perceptions of performance appraisals have a positive and significant effect on job performance and staff commitment to the organization (Bekele et al., 2019). Related to attitudes, a study explains that there is a significant and positive relationship between work attitudes (job satisfaction, commitment, organizational leadership and work involvement) and

individual work performance (Rahiman & Kodikal, 2017). This supports an understanding that positive performance must also be based on positive staff attitudes towards performance. Based on the findings of previous research that personality traits are positively correlated with work performance, except for the personality of neuroticism which actually has a negative correlation with performance (Delima, 2020). An open, conscientious, and pleasant personality will potentially have better performance. In addition, proper training and resource development can shape nurses' personalities to be more positive towards performance (Singh & Kumar, 2017). A positive organisational climate that is open to new things can influence staff's desire to improve their capacity as well as their morale. Training and development conducted by organisations or companies have a positive effect on improving employee performance (Sinaga & Riyanto, 2021). Training and development, job satisfaction, and performance are very important in organisations because they provide opportunities for employees to acquire and update the necessary skills (Nguyen & Duong, 2021). The various limitations possessed by organisations will certainly be an obstacle to nurses' self-development if they only stand idly by. Strengthening psychological factors internally will certainly be better in maintaining individual perceptions and attitudes that are always positive, empowered, and highly motivated in completing every task and responsibility.

The results showed that the job characteristics factor consisting of objective performance, feedback, work design, work schedule and workload had a significant effect on nurse performance in implementing quality nursing services. The results of this study are not in line with research conducted by Cho & Han (2018) which states that irregular work shift schedules will tend to cause nurses to have an unhealthy lifestyle. This will affect the quality of nurse performance. In addition, nurses' performance in implementing nursing supervision depends on nurses' compliance in implementing the programme. Nurses who have a long work schedule will cause fatigue and low levels of compliance (H. Kim & Hwang, 2020). Research conducted by Katz & Gurses (2019) states that high nurse workload affects the quality of nursing services. The complexity of nurses' tasks causes nurses to pay less attention to the implementation of nursing supervision. Working environment conditions that are comfortable, safe, conducive, and pleasant can produce good quality nursing services (Handiyani et al., 2018). However, the results of this study are in line with research conducted by Tran et al. (2018) which states that environmental conditions do not significantly affect the quality of nursing services. Information exchange and support between nurses are not significant where nurses usually follow shift schedules, work patterns and their respective work units.

There is a significant effect of developing an supervision based on emotional intelligence model on the quality of nursing services. Effective supervision is when a leader or person in charge provides all assistance to nurses aimed at the development of nurses in achieving nursing care goals and in this supervision activity there is encouragement or motivation, guidance and opportunities for growth and development of skills and abilities of nurses (Kamalia et al., 2020). Research conducted by Farokhzadian et al. (2018) states that effective supervision is supervision that can increase the work commitment of nurses so that it can improve nurses' performance at work. Basically, supervision is a process of professional support and learning to help implementing nurses develop knowledge, competence and responsibility (Ayu, 2022). Supervision is able to improve the quality of nursing services through improvements in compliance in the implementation of nursing care (Sahiledengle et al., 2018). Supervision is a form of management activity and the right way to maintain the quality of care services that can be implemented in the form of nursing record documentation (Yunita Panjaitan, La Ode Abdul Rahman, Rr. Tutik Sri Hariyati, 2022). Lack of supervision

carried out by supervision and the head of the room can reduce the quality of nursing care services and can lead to an increase in patient safety incidents, thus having an impact on the quality of services provided (Agustina et al., 2020). Based on this description, the supervisor's ability to improve the quality of nursing services with the EI approach is normative, formative and restorative. The dimension that has the highest coefficient value is formative, so that this formative dimension can be improved with EI, namely self awareness (self-awareness, accurate self-assessment, self-motivation and self-confidence), social awareness (empathy, organizational awareness and service orientation), self management (self-control, transparency, adaptability, achievement orientation, optimism towards success and initiative), relationship management (inspiring, influencing, developing, catalysing change, conflict management, teamwork and collaboration) which is specific about tasks, decisions and reflective practice is important to increase and improve to be even better.

CONCLUSION

The development of this model is built from the basic theory of work productivity developed by Kopelman (1986) and modified with Brigid Pactor's Supervision Theory (1986) and Goleman's emotional intelligence (1996) which explains that the quality of nursing services is influenced by individual factors, organizational factors, psychological factors, work factors and supervision based on emotional intelligence. There is 1 (one) dominant factor that has a significant influence and positive contribution directly to supervision based on emotional intelligence, namely psychological factors with a contribution of 94.9%. While the factor that has the most contribution directly to the quality of nursing services is the individual factor with a contribution of 93.9%. The best and longest path from this study is from psychological factors (X3) to supervision based on emotional intelligence (X5) to the quality of nursing services (Y1). Psychological factors include several indicators, namely perception, attitude, personality and motivation. Strengthening psychological factors can affect the supervisor's ability to carry out supervision based on emotional intelligence to nurses in order to improve the quality of nursing services.

REFERENCES

- Abbasi-Moghaddam, M. A., Zarei, E., Bagherzadeh, R., Dargahi, H., & Farrokhi, P. (2019). Evaluation of service quality from patients' viewpoint. *BMC Health Services Research*, 19(1), 1–7.
- Agustina, F. U., Afriani, T., & Handiyani, H. (2020). Analisis Fungsi Supervisi Kepala Ruang Dalam Pengurangan Risiko Jatuh Di Rumah Sakit X Jakarta: A Pilot Project. *Dunia Keperawatan: Jurnal Keperawatan Dan Kesehatan*, 8(3), 468. <https://doi.org/10.20527/DK.V8I3.7768>
- Ahsan, & Dewi, E. S. (2021). Knowledge Management dan Penerapannya pada Asuhan Keperawatan Pencegahan Infeksi Nosokomial (Magelang). *Tidar Media*.
- Ariani, D., Nugraha, T., & Muhammad, I. (2020). Analisa Faktor Penentu Kepuasan Kerja Perawat Pelaksana di Instalasi Rawat Inap RSUD Langsa. *J-KESMAS: Jurnal Kesehatan Masyarakat*, 6(1), 23–37.
- Asmara, A., Hariyati, R. T. S., Handiyani, H., & Avia, I. (2019). Analysis of Infection Prevention Control Nurse performance: A descriptive study. *Enfermería Clínica*, 29, 36–40. <https://doi.org/https://doi.org/10.1016/j.enfcli.2019.04.006>
- Asrar-ul-Haq, M., & Kuchinke, K. P. (2016). Impact of leadership styles on employees' attitude towards their leader and performance: Empirical evidence from Pakistani banks.

- Future Business Journal, 2(1), 54–64. <https://doi.org/10.1016/j.fbj.2016.05.002>
- Ayu, W. D. (2022). *Supervisi Keperawatan (Cirebon)*. CV. Rumah Pustaka.
- Baskara, D. G., Yanti, N. P. E. D., & Susiladewi, I. A. M. V. (2019). Training to Improve Knowledge, Skills and Behaviors of Healthcare Associated Infections Preventions in Nurses. *Indonesian Journal of Global Health Research*, 2(3), 207–216. <https://doi.org/10.37287/ijghr.v2i3.175>
- Bekele, A. Z., Shigutu, A. D., & Tensay, A. T. (2019). The Effect of Employees' Perception of Performance Appraisal on Their Work Outcomes. *International Journal for Research in Applied Science and Engineering Technology*, 7(4), 3092–3115. <https://doi.org/10.22214/ijraset.2019.4519>
- Boyatzis, R., & McKee, A. (2006). Inspiring others through resonant leadership. *Business Strategy Review*, 17(2), 15–19. <https://doi.org/10.1111/j.0955-6419.2006.00394.x>
- Budiyarti, Y., Syafwani, M., Harun, L., & Muhsinin, M. (2022). Effect Of Organisational Citizenship Behavior (OCB) On Performance Through Nurse Work Ethos. *Journals of Ners Community*, 13(6), 736–745.
- Burnett, E. (2018). Effective infection prevention and control: the nurse's role. *Nursing Standard*, 33(4), 68–72. <https://doi.org/10.7748/ns.2018.e11171>
- Chairina, L., Sularso, A., Tobing, D. S. K., & Irawan, B. (2019). “Determinants of nurse performance in accredited Indonesian private hospitals.” [https://doi.org/10.21511/ppm.17\(1\).2019.15](https://doi.org/10.21511/ppm.17(1).2019.15)
- Cho, H., & Han, K. (2018). Associations among nursing work environment and health-promoting behaviors of nurses and nursing performance quality: A multilevel modeling approach. *Journal of Nursing Scholarship*, 50(4), 403–410.
- Delima, V. J. (2020). Impact of Personality Traits on Employees ' Job Performance in Batticaloa Teaching Hospital. October. <https://doi.org/10.2139/ssrn.4182213>
- Demang, F. Y., Herman, A., Juanamasta, I. G., Pramana, C., Hidayat, R., Amir, H., Nurman, M., Rezkiki, F., Jakri, Y., Safitri, Y., Mariati, L. H., Badi'ah, A., Kartika, I. R., Ningsih, N. F., Jennifa, & Febrina, W. (2022). *Manajemen Keperawatan*. Media Sains Indonesia.
- Faraji, A., Karimi, M., Azizi, S. M., & Khatony, A. (2019). Evaluation of clinical competence and its related factors among icu nurses in Kermanshah-Iran: A cross-sectional study. *International Journal of Nursing Sciences*. <https://doi.org/10.1016/j.ijnss.2019.09.007>
- Farokhzadian, J., Dehghan Nayeri, N., & Borhani, F. (2018). The long way ahead to achieve an effective patient safety culture: Challenges perceived by nurses. *BMC Health Services Research*, 18(1), 1–13. <https://doi.org/10.1186/s12913-018-3467-1>
- Fatonah, S., & Yustiawan, T. (2020). Supervisi Kepala Ruangan dalam Meningkatkan Budaya Keselamatan Pasien. *Jurnal Keperawatan Silampari*, 4(1), 151–161.
- Gaughan, A. A., Walker, D. M., DePuccio, M. J., MacEwan, S. R., & McAlearney, A. S. (2021). Rewarding and recognizing frontline staff for success in infection prevention. *American Journal of Infection Control*, 49(1), 123–125. <https://doi.org/10.1016/j.ajic.2020.06.208>

- Handiyani, H., Hariyati, R. T. S., Yetti, K., & Indracahyani, A. (2018). *Healthy Nurse: Napping Sehat Bagi Perawat dan Tenaga Kesehatan* (Jakarta). UI Publisher.
- Hasibuan, E. K., & Sinurat, L. R. E. (2020). *Manajemen dan Strategi Penyelesaian Masalah dalam Pelayanan Keperawatan* (Malang). Ahlmedika Press.
- He, D., Kumar, N., & Chilamkurti, N. (2015). A secure temporal-credential-based mutual authentication and key agreement scheme with pseudo identity for wireless. *Information Sciences*, 321, 263–277. <https://doi.org/10.1016/j.ins.2015.02.010>
- Hurley, J., Hutchinson, M., Kozlowski, D., Gadd, M., & van Vorst, S. (2020). Emotional intelligence as a mechanism to build resilience and non-technical skills in undergraduate nurses undertaking clinical placement. *International Journal of Mental Health Nursing*, 29(1), 47–55. <https://doi.org/10.1111/inm.12607>
- Issah, M. (2018). *Change Leadership: The Role of Emotional Intelligence*. <https://doi.org/10.1177/2158244018800910>
- Iversen, A. M., Stangerup, M., From-Hansen, M., Hansen, R., Sode, L. P., Kostadinov, K., Hansen, M. B., Calum, H., Ellermann-Eriksen, S., & Knudsen, J. D. (2021). Light-guided nudging and data-driven performance feedback improve hand hygiene compliance among nurses and doctors. *American Journal of Infection Control*, 49(6), 733–739. <https://doi.org/10.1016/j.ajic.2020.11.007>
- Kahya, E., & Oral, N. (2018). Measurement of clinical nurse performance : Developing a tool including contextual items. 8(6). <https://doi.org/10.5430/jnep.v8n6p112>
- Kamalia, L. O., Said, A., & Risky, S. (2020). *Manajemen Keperawatan* (Bandung). Media Sains Indonesia.
- Karaca, A., & Durna, Z. (2019). Patient satisfaction with the quality of nursing care. *Nursing Open*, 6(2), 535–545. <https://doi.org/10.1002/nop2.237>
- Katz, M. J., & Gurses, A. P. (2019). Infection prevention in long-term care: Re-evaluating the system using a human factors engineering approach. *Infection Control and Hospital Epidemiology*, 40(1), 95–99. <https://doi.org/10.1017/ice.2018.308>
- Kendeng, M., Erfina, E., & Yusuf, S. (2023). Tantangan dan Hambatan Perawat Manajer dalam Penerapan Evidence Based Practice: A Scoping Review. *Jurnal Keperawatan*, 15(1), 237–246.
- Kibret, H., Tadesse, B., Debella, A., Degefa, M., & Regassa, L. D. (2022). The Association of Nurses Caring Behavior with the Level of Patient Satisfaction, Harari Region, Eastern Ethiopia. *Nursing: Research and Reviews*, Volume 12(January), 47–56. <https://doi.org/10.2147/NRR.S345901>
- Kim, H., & Hwang, Y. H. (2020). Factors contributing to clinical nurse compliance with infection prevention and control practices: A cross-sectional study. *Nursing and Health Sciences*, 22(1), 126–133. <https://doi.org/10.1111/nhs.12659>
- Kim, S. J., & Lee, E. J. (2021). Factors influencing emergency department nurses' compliance with standard precautions using multilevel analysis. *International Journal of Environmental Research and Public Health*, 18(11). <https://doi.org/10.3390/ijerph18116149>

- Mamengko, D. M., & Rares, J. J. (2021). Kualitas Pelayanan Instalasi Gawat Darurat di Rumah Sakit Umum Pusat Prof. dr. RD Kandou Manado. *AGRI-SOSIOEKONOMI*, 17(2 MDK), 549–560.
- Munandar, A., Mandiri, N. K., & Permatasari, I. (2022). *Etika Profesi dalam Praktik Keperawatan (Bandung)*. Penerbit Media sains Indonesia.
- Nguyen, C., & Duong, A. (2021). The Impact of Training and Development, Job Satisfaction and Job Performance on Young Employee Retention. *SSRN Electronic Journal*, May. <https://doi.org/10.2139/ssrn.3906100>
- Nursalam. (2020). *Manajemen Keperawatan: Aplikasi dalam Praktik Keperawatan Profesional* (P. P. Lestari (ed.); 6th ed.). Salemba Medika.
- Nuryati, N., Nurul, N., Kristina, K., & Taufik, M. (2022). Pengaruh Supervisi terhadap Kemandirian Perawat dalam Melaksanakan Dokumentasi Asuhan Keperawatan. *Jurnal Keperawatan*, 14(4), 1145–1150.
- Oktaviani, M. H., Hartiti, T., & Hasib, M. (2019). Supervisi Untuk Meningkatkan Kemampuan Perawat dalam Timbang Terima: Literature Review. *Jurnal Kesehatan Masyarakat*, 12.
- Okyere, E., Mwanri, L., & Ward, P. (2017). Is task-shifting a solution to the health workers' shortage in Northern Ghana? *PLoS ONE*, 12(3), 1–22. <https://doi.org/10.1371/journal.pone.0174631>
- Oxyandi, M. (2018). Analisis Faktor yang Berhubungan Dengan Kinerja Perawat Pelaksana dalam Pelaksanaan Asuhan Keperawatan di Instalasi Rawat Inap Rumah Sakit Islam Siti Khadijah Palembang. 7, 1–25.
- Parr, A. D., & Bernthal, P. (2017). Personality Profiles of Effective Leadership Performance in Assessment Centers. 29(2), 143–157. <https://doi.org/10.1080/08959285.2016.1157596>
- Patterson, F. (2019). Theoretical research: Supervising the supervisors: What support do first-line supervisors need to be more effective in their supervisory role? *Aotearoa New Zealand Social Work*, 31(3), 46–57.
- Pertiwi, B., & Hariyati, R. T. S. (2019). The impacts of career ladder system for nurses in hospital. *Enfermeria Clinica*, 29, 106–110. <https://doi.org/10.1016/j.enfcli.2019.04.016>
- Qvistgaard, M., Lovebo, J., & Almerud-Österberg, S. (2019). Intraoperative prevention of Surgical Site Infections as experienced by operating room nurses. *International Journal of Qualitative Studies on Health and Well-Being*, 14(1). <https://doi.org/10.1080/17482631.2019.1632109>
- Rahiman, H. U., & Kodikal, R. (2017). Impact of employee work related attitudes on job performance. *British Journal of Economics Finance and Management Sciences*, 93(2), 93–105.
- Reshetnikov, V. A., Tvorogova, N. D., Hersonskiy, I. I., Sokolov, N. A., Petrunin, A. D., & Drobyshev, D. A. (2020). Leadership and Emotional Intelligence: Current Trends in Public Health Professionals Training. *Frontiers in Public Health*, 7(January), 1–7. <https://doi.org/10.3389/fpubh.2019.00413>

- Ro, C. S. (2018). Leadership and Motivation. July. <https://doi.org/10.1007/978-3-319-31036-7>
- Russell, D., Dowding, D. W., McDonald, M. V., Adams, V., Rosati, R. J., Larson, E. L., & Shang, J. (2018). Factors for compliance with infection control practices in home healthcare: findings from a survey of nurses' knowledge and attitudes toward infection control. *American Journal of Infection Control*, 46(11), 1211–1217. <https://doi.org/10.1016/j.ajic.2018.05.005>
- Sahiledengle, B., Gebresilassie, A., Getahun, T., & Hiko, D. (2018). Infection Prevention Practices and Associated Factors among Healthcare Workers in Governmental Healthcare Facilities in Addis Ababa. *Ethiopian Journal of Health Sciences*, 28(2), 177–186. <https://doi.org/10.4314/ejhs.v28i2.9>
- Silalahi, K. L. (2021). *Supervisi Keperawatan terhadap Kinerja dan Kepuasan Kerja*. PUBLISH BUKU UNPRI PRESS ISBN, 1(1).
- Sinaga, M., & Riyanto, S. (2021). Training And Development To Improve Employee Performance. *Ecobisma (Jurnal Ekonomi, Bisnis Dan Manajemen)*, 8(2), 66–71. <https://doi.org/10.36987/ecobi.v8i2.2153>
- Singh, C., & Kumar, P. (2017). Affect of Personality on Work Performance 1.. 6(6), 77–79.
- Sulistiyawati, W., Ika, K., Rahayu, N., Pratiwi, A. Y., Dhanti, R., Studi, P., Keperawatan, I., Kesehatan, F., & Kadiri, U. (2020). Hubungan Komunikasi Sbar Pada Saat Handover Dengan Kinerja Perawat Dalam Melaksanakan Asuhan Keperawatan Di Ruang Rawat Inap (the Relation of Sbar Communication At Handover Time With Nurses Performance in Implementing Nursing Care At Inpatient Room). *Jurnal Ilmu Kesehatan*, 9(1), 74–79.
- Suratno, K., Ariyanti, S., & Kadar, I. (2018). The Relationship between Transformational Leadership and Quality of Nursing Work Life in Hospital. *International Journal of Caring Sciences*, 11(3), 1416–1422.
- Tran, K. T., Nguyen, P. V., Dang, T. T. U., & Ton, T. N. B. (2018). The impacts of the high-quality workplace relationships on job performance: A perspective on staff nurses in Vietnam. *Behavioral Sciences*, 8(12). <https://doi.org/10.3390/bs8120109>
- Trigantara, R., Anggorowati, A., & Santoso, A. (2019). Pengawasan Klinis Model Proctor untuk Meningkatkan Kemampuan dalam Melakukan Asuhan Keperawatan. *Fundamental and Management Nursing Journal*, 2(2).
- Xue, Y., & Tuttle, J. (2017). Clinical productivity of primary care nurse practitioners in ambulatory settings. *Nursing Outlook*, 65(2), 162–171. <https://doi.org/10.1016/j.outlook.2016.09.005>
- Yulandasari, V., Sutomo, S. Y., Suhamdani, H., & Mastuty, A. (2020). Kepuasan Pasien Terhadap Pelayanan Keperawatan (Caring) Di Ruang Rawat Inap. *Jurnal Kesehatan Qamarul Huda*.
- Yunita Panjaitan, La Ode Abdul Rahman, Rr. Tutik Sri Hariyati, Y. S. N. (2022). Optimalisasi Supervisi Kepala Ruangan Terhadap Peningkatan Pelayanan Bermutu Di Rumah Sakit. *Journal of Telenursing (JOTING)*, 4, 197–204.