

## The Measurement of the Medical Personnel Emotional Condition In Relation to Service Performance

**Hardani Widhiastuti<sup>1</sup>**

Faculty of Psychology, Department of Psychology, Universitas Semarang, Indonesia  
dani\_fps@usm.ac.id

**Andi Kurniawan<sup>2</sup>**

Faculty of Engineering, Department of Electrical Engineering, Universitas Semarang, Indonesia  
andikn@usm.ac.id

**Titik Nurhayati<sup>3</sup>**

Faculty of Engineering, Department of Electrical Engineering, Universitas Semarang, Indonesia  
titiknur@usm.ac.id

**Yudi Kurniawan<sup>4</sup>**

Faculty of Psychology, Department of Psychology, Universitas Semarang, Indonesia  
yudikurniawan@usm.ac.id

### *Abstract*

*This study emphasizes on the service performance of medical personnel in hospitals, one of which is due to the emotional condition of the services of the medical personnel. The research method used is quantitative method related to the emotional condition of the medical personnel measured using Vital Sign. The research subjects consisted of 67 medical personnel, but only 50 returned the google forms. While the relationship between the two used SPSS version 22. The validity test showed that the service performance variable was appropriate or valid variable. The result of the statistical analysis of Non Parametric correlation shows that there is relationship with the result of the normality test of  $p(\text{sig}) < 0.01$ . It is proven that the Service Performance variable is not normal, so the test must use the non-parametric correlation test with Spearman-Rho with the correlation coefficient result of 0.562 with  $p(\text{sig}) 0.000$ . This means that there is significant relationship between the Emotional Condition variable and the Service Performance variable of the medical personnel. The results of this study prove that when the emotional condition of medical personnel increases, the service performance will decrease, which means that the responsibility for service quality decreases somewhat, dares to take risks for services that are slightly neglected, has service goal that is somewhat less attention, less planning for services, less thinking about feedback from the services provided, and the possibility of less thinking about getting the opportunity to realize services.*

**Keywords:** *service performance, emotional condition, vital sign*

## Abstrak

Penelitian ini menekankan pada kinerja pelayanan tenaga medis di rumah sakit yang salah satunya disebabkan oleh kondisi emosional terhadap pelayanan tenaga medis tersebut. Metode penelitian yang digunakan adalah metode kuantitatif yang berkaitan dengan kondisi emosional tenaga medis yang diukur dengan menggunakan Vital Sign. Subjek penelitian terdiri dari 67 tenaga medis, namun yang mengembalikan google form hanya 50 orang. Sedangkan untuk hubungan keduanya menggunakan SPSS versi 22. Uji validitas menunjukkan bahwa variabel kinerja pelayanan merupakan variabel yang tepat atau valid. Hasil analisis statistik korelasi Non Parametrik menunjukkan adanya hubungan dengan hasil uji normalitas  $p \text{ (sig)} < 0,01$ . Hal ini terbukti bahwa variabel Kinerja Pelayanan tidak normal, sehingga pengujian harus menggunakan uji korelasi non parametrik dengan Spearman-Rho dengan hasil koefisien korelasi sebesar 0,562 dengan  $p \text{ (sig)} 0,000$ . Hal ini berarti terdapat hubungan yang signifikan antara variabel Kondisi Emosional dengan variabel Kinerja Pelayanan Tenaga Medis. Hasil penelitian ini membuktikan bahwa ketika kondisi emosional tenaga medis meningkat maka kinerja pelayanannya akan menurun yang berarti tanggung jawab terhadap mutu pelayanan agak menurun, keberanian mengambil risiko terhadap pelayanan agak kurang diperhatikan, tujuan pelayanan yang agak kurang diperhatikan, kurang merencanakan pelayanan, kurang memikirkan umpan balik dari pelayanan yang diberikan, dan kemungkinan kurang memikirkan untuk mendapatkan kesempatan dalam merealisasikan pelayanan.

**Kata kunci:** kinerja pelayanan, kondisi emosi, vital *sign*.

## INTRODUCTION

The era of globalization demands competence in terms of service, so that people demand one stop quality services which include health services for the community easily, quickly, accurately at affordable costs (Underhill et al., 2001). This situation requires every hospital to further improve the quality of their respective services (Ivancevich & Konopaske, 2013). Therefore, the aspect of human resource development becomes the important part in the efforts to manage human resources as a whole in order to improve the competence of the service sector of a hospital. In addition, the employee performance is the most urgent thing (Ilyas, 2012). Related to institutions, the service sector puts Service Performance as the main element (Anderson & Oliver, 2007). In essence, the service performance of a health agency is something that must be measured and is a broad dimension that aims to increase the potential

possessed by human resources, in relation to increase professionalism in the organization (Gibson et al., 2012).

Service performance from directed and planned human resources accompanied by good management will be able to save other resources or at least the processing and the use of organizational resources can be efficient and effective (Ivancevich & Konopaske, 2013). Medical support services, clinical support services (CSS) in hospitals include diagnostic, therapeutic services, and activities in the public. The services referred to also include laboratory tests, medication, and surgical procedures (Fatima & Azam, 2017). Service performance is important in the service-based organizations such as health organizations, including hospitals, health clinics, pharmacies, etc. This has strong impact on consumer ratings consisting of patients and their families (Wu et al., 2020). Cases of neglect of patients during the early 2021 Covid Pandemic that occurred due to the unbalanced number of patients and the number of medical personnel, the service performance will clearly decline, and even the wider community can judge. Another possibility or suspected to have something to do with the emotional conditional of the workers, considering the tasks and workloads that automatically increase (Watmanlussy et al., 2020).

Thus, this study will explore the impact of the relationship between Emotional Condition variables and Service Performance on medical personnel in Roemani hospital Semarang, which is one of the private hospitals that has a large number of patients. The findings will be taken into consideration for human resource development. Specifically, the development of human resources which involves the increasing of all internal potential of human abilities is based on the fact that an employee will need a developed set of knowledge, skills and abilities to work well in a succession of positions encountered during his career. In this case it is a person's long-term career preparation (Werner, 2014). So that the scope of further human resource development is related to the career system implemented by the organization and how the existing human resources can access the existing system in order to support their work expectations (Sobur, 2003). The purposes of this research are: testing the emotional condition of the employees empirically by using vital sign detection tool, finding the models and service performance with the emotional condition of the medical personnel, developing a new tool for detecting vital signs and patented, in relation to the measurement of emotional condition.

Performance is the result achieved in quantity by employees in carrying out their duties in accordance with the responsibilities given to them (Kreitner et al., 2001). Performance according to another figure (Kotler, 2008) is the integral part of the organization or company. According to Mangkunegara (Nazeer et al., 2014), the notion of performance is the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. Another case according to Ivancevic (Hasibuan, 2009), performance is work achievement, namely the comparison between the work achieved and the standards set. The meaning of performance is the result of a certain work process in a planned manner at the time and place of the employee and the organization concerned. Robbins (Davis & Newstrom, 2003) said that there are several indicators to measure a person's performance: 1) Quality, namely the quality of work as measured from an employee's perception on the quality of the work produced, as well as the perfection of the task on the skills and abilities of the employees; 2) Quantity, namely the amount produced by an employee expressed in certain terms, such as; the number of units, the number of activity cycles completed; 3) Timeliness, namely the level of completed activities, viewed from the point of coordination with the output results, as well as maximizing the available time for other activities; 4) Effectiveness, namely the level of the use of the existing resources (money, labor, raw materials, technology) optimally to increase the results of each unit in the use of these resources; 5) Independence, namely the level of the ability and the commitment of an employee in carrying out his work function responsibly.

In general, the followings are the factors that affect performance: 1) Personal/ Individual factor, namely the factor from within a person that affects his performance, including: knowledge, skills, ability, confidence, motivation, and commitment; 2) Leadership factor, namely the support factor given by the superiors to someone, including: encouragement, motivation, and direction; 3) Team factor, namely the support factor given by the co-workers to someone, including: trust in fellow team members, cohesiveness of team members; 4) System factor, namely the factor that comes from the organization where a person works, including: work culture, work system, work facilities, and others; 5) Contextual (situational) factor, namely the factor originating from a person's internal and external environment, including: family environment, work environment, work pressure, and others.

Kotler (Kline, 2013) stated that service performance is any action or activity offered by one party to another that results in the ownership of anything, every profitable activity in a

collection or entity in the form of a system, procedure or method that is given to others. On the other hand, service is an invisible action or activity that occurs as a result of interactions between consumers and employees or other things provided by the service providers to solve the consumer problems (Djati, 2009).

Discomfort related to long working hours in protective overalls and masks as well as fear of infection (Labrague & Santos, 2020). Among medical care employees, nurses are especially subjected to the above loads (YC Yip et al., 2021). The developing COVID-19 pandemic exercises a huge pressure on the work of nurses. A work environment where expectations are high, where there is an extreme physical and mental load, where there is a lack of time and social support may lead to the accumulation of work stress, which, in turn, causes fear, post-traumatic stress disorder, and professional burnout as well as mental and health problems. In situations where negative emotions are experienced, it is important to evaluate emotional control, which constitutes a subjective conviction of an entity about their ability to control their reactions. Emotional control depends on the ability to make decisions and conviction regarding the validity of the choice.

Service performance is the result achieved in quantity by employees in carrying out their duties in accordance with the responsibilities given, especially related to invisible actions or activities that occur as a result of interactions between consumers and employees or other matters provided by service providers to solve the consumers' problems (Nazeer et al., 2014). Thus, Service Performance is the result achieved in quantity by employees in carrying out tasks in accordance with the responsibilities given, especially related to the invisible actions or activities that occur as a result of interactions between consumers and employees or other things provided by service providers to solve consumers' problems. Service Performance Indicators (Kotler, 2008) include responsibility for service quality, dare to take risks for services, having service goal, there is service planning, feedback of the provided services, and opportunity for service realization

This study relates the effect of emotional condition and empathy on the service performance of medical personnel in hospitals. The emotional condition according to Lange J. (Sobur, 2003) is the perception on the changes in the body which is felt when someone feels sad, someone will cry, get angry, and even be afraid. Individuals react to situations and pay attention. It is possible for employees to experience work stress, so that it can trigger their emotional level. One of the causes is the workload (Widhiastuti, 2010). This perception is felt

to occur after the changes in the body made by the autonomic nervous system. Cognitive theory on emotion which views emotions as the result of cognitive interpretation of external stimuli in the body which is divided into two; a). Interpretation of stimuli from the environment and b). The information is then conveyed to the limbic system and autonomic nervous system which ultimately produces physiological response. This principle stated that everyone has subjective differences in emotions due to the differences in the way they interpret or perceive their psychological condition, this theory is based on physiological changes and cognitive interpretations (Goleman, 2009).

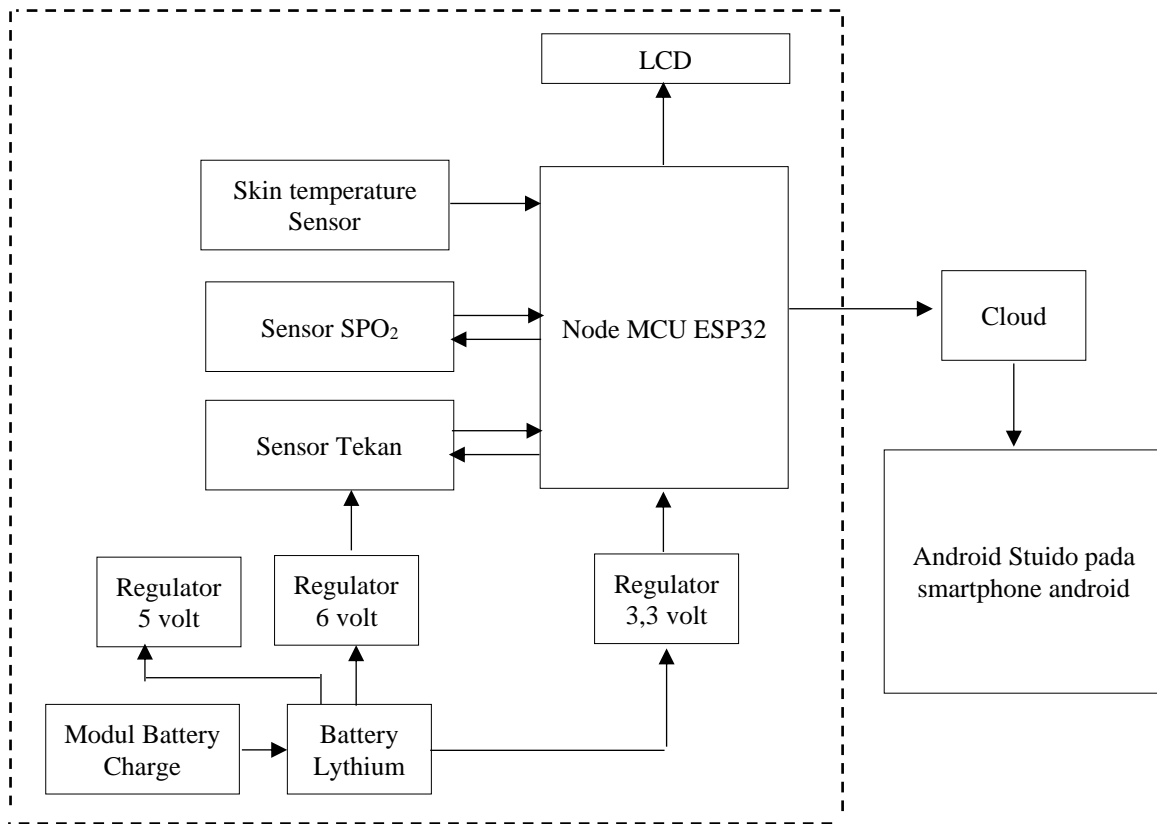
What has been explained above is in line with the Opposite-Process theory developed by Richard Solomon. He argues that the human brain functions to trigger emotions. Two opposing emotions, such as happy and unhappy, will always appear in a series of events. If emotion A occurs then it is referred to primary emotion, then emotion B is the opposite and is referred to secondary emotion. Emotion and motivation are often described together or concomitant in the literature because of the very close relationship between the two. In fact, one theory of emotion places emotions as a series of motivations. Emotions and motives are the same, in the sense that emotions are part of motives (urges) (Eisenberger et al., 2001).

Carl Lange from Denmark (Sarwono, 2010) suggests that emotions are synonymous with changes in the blood circulatory system. This opinion was later developed by William James from the United States saying that emotions are the result of a person's perception of the changes that occur in the body in response to external stimuli. This theory emphasizes emotion as a response to physiological changes that occur in a person (Greer, 1995).

## **METHOD**

This research will be conducted at a partner company, namely Roemani hospital Semarang. We all know that something related to the duties of medical personnel on duty in hospitals requires good body condition as well as the workers' knowledge on the importance of service performance and its relation to emotional conditions. This study uses quantitative research methods with the dependent variable is Service Performance and the independent variable is the Emotional Condition of the medical personnel at Roemani Hospital Semarang.

Figure 1. IoT-based Vital Sign Tool Block Diagram



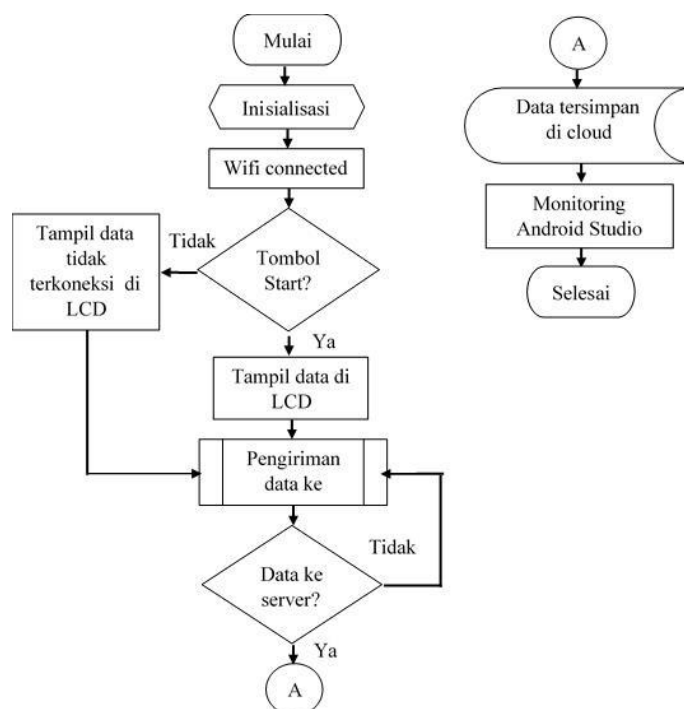
Lithium battery supplies DC voltage of 7.4 VDC which is then reduced to several voltages by the regulator. Among them there are 3.3 volts DC, 5 volts DC, and 6 volts DC. If the battery is low, there is a charger module that can be used to charge the battery again. 3.3 Volt DC supply to the Node MCU ESP32 board, skin temperature sensor, Nellcor SPO2 sensor. Nextion 7" LCD gets supply voltage of 5 volts DC, while the Omron pressure module gets supply voltage of 6 volts DC. Omron pressure module, this blood pressure sensor is in the form of a sensor kit from Omron. The working principle of this sensor is when the pump fills the air in the cuff, the sensor reads the air pressure in the cuff. While also detecting blood flow / heart rate, this pulse will be read later as systole and diastole. The basis for the calculation of the Joint National Committee VII normal heart rate is < 120 for DDS while TDD is < 80. After the pump has finished pumping to a certain pressure, this pressure is determined by the absence of a pulse of blood flow. If the pulse is not detected, then the pump stops pumping the cuff. After that the air comes out little by little, at this time the sensor also detects the location of the systole at what pressure. Systole is the first beat when the air pressure in the cuff is gradually reduced.

Then the sensor also detects diastole, which is the last pulse that can still be detected by the sensor because it uses Tx and Rx serial communication with the Node MCU ESP32 microcontroller (Melyana & Sarotama, 2020).

Nellcor SPO2 sensor measures the patient's oxygen saturation (SPO2). Then the skin temperature sensor with the working principle reads the patient's body temperature. The data from the sensor is processed by the Node MCU ESP32 microcontroller and the data are displayed on the Nextion 7" LCD. The advantage of the Node MCU ESP32 is that apart from being a microcontroller, it can also connect to a wi-fi network by transferring data with an internet connection.

Data from sensor readings are processed by the Node MCU ESP32 and then sent to the server via the internet. The server is commonly referred to as cloud computing. The cloud used in this design is Firebase. Then the data from these sensors can be monitored using an application that has been made from the Android Studio software, where this application is already installed on an Android smartphone. In this application, notifications can be displayed when there are data or values that do not match the normal conditions that have been set. Don't forget that this tool can also provide results from data measurements that have been previously collected on a data logger stored on an Android smartphone as shown in Figure 2.

Figure 2. Flowchart of IoT-based Vital Sign Tools





When pressing the power button, the tool will adjust the supply of current and voltage throughout the circuit. Then the microcontroller initializes the connection with Wi-Fi. Next, before the time is used for the NIBP examination, it can be set in advance as needed. There is a start button and when pressed it will start taking data in the form of NIBP, heart rate, SPO2, and body temperature. If the data are collected, it will appear on the Nextion LCD screen. If not, it will also appear on the Nextion LCD screen. The value data will be sent to the cloud and forwarded to the server. If it is not sent to the server, it will return to cloud delivery. Here the cloud used is Firebase. Data from parameters that are already stored on the cloud server will be accessible with the Android Studio application that has been created. In this application, notifications can be displayed when there are data or values that do not match the normal conditions that have been set. Do not forget that this tool can also provide results from measuring data that has been previously collected on data logger stored on an Android smartphone.

The research design, research methods, and research indicators are as follows; Stage I, data collection on Service Performance and Emotional Condition; Stage II, 1. Making vital sign tools and calibrating tools, 2. Socialization to employees and the use of vital sign tools as well as data recording, 3. Application of service performance models and emotional conditions, 4. FGD with management; Stage III, 1. Evaluation on the application of IoT-based vital sign tools, 2. Implementing the results in the policy.

In data analysis, in the first stage, a mapping of the population was carried out, which in this case was in Central Java. The statistics used for data analysis in the first year were descriptive statistics, which were useful for identifying problems of the Emotional Condition System of Health Workers at Roemani Hospital. Meanwhile, the statistical analysis was used to conclude the data results. The sizes used for this descriptive statistics are by classifying it into two groups, namely the size of the mean value and the size of the deviation. The size of the mean value consists of the average (mean), median and modus. While the size of the deviation consists of variance, standard deviation, coefficient of variation, and the value of the distance (range).

In this study, the dependent variable is service performance and the independent variable is emotional condition. This research was conducted using quantitative research method. The data analysis technique uses the Moment Product, with the following formula:

$$r_{xy} = \frac{n \sum X_i Y_i - (\sum X_i)(\sum Y_i)}{\sqrt{(n \sum X_i^2 - (\sum X_i)^2)(n \sum Y_i^2 - (\sum Y_i)^2)}}$$

The calculation using Product Moment analysis begins with the calculation of the assumption test consisting of the Normality Test and Linearity Test.

## RESULTS AND DISCUSSION

The research method used in this research is quantitative. The subjects of this research are health workers who work in Romani hospital Semarang. The data retrieval in this study was carried out through the google form from February 2 to April 2, 2022. The reason for using the google form was because this research was carried out during the Corona Virus pandemic, the alternative media used in data collection.

It functions as an introduction, before testing the validity using SPSS. Validity test is a test that serves to see whether a measuring instrument is valid (appropriate) or invalid. The measuring instrument referred to here is the questions contained in the questionnaire. A questionnaire is said to be valid if the question on the questionnaire can reveal something that is measured by the questionnaire and the results are valid for all measurement scales. The following table shows the validity of the Service Performance scale:

Table 1. Employee Performance Scale Validity Test

No. Aitem	r-aitem	Sig. (2-tailed)
X1	0,334	0,018
X2	0,659	0,000
X3	0,509	0,005
X4	0,787	0,000
X5	0,634	0,001
X6	0,778	0,000

Related to the independent variable is the emotional condition variable, which has been transformed to a scale, which the results of the transformation to a scale are valid. Here are the results of the calculation:

Table 2. Emotion Scale Validity Test

No. Aitem	r-aitem	Sig. (2-tailed)	Testing	Conclusion
X1	0,319	0,024	Sig. < 0,05	Valid
X2	0,640	0,000	Sig. < 0,05	Valid
X3	0,395	0,005	Sig. < 0,05	Valid
X4	0,661	0,000	Sig. < 0,05	Valid
X5	0,460	0,001	Sig. < 0,05	Valid

Meanwhile, the reliability test for the measuring instrument is declared reliable by using Cronbah Alpha analysis. The results of the reliability measurement of service performance are as follows:

Table 3. Service Performance Scale Reliability Test

N Resp.	N Aitem	Cronbach's Alpha	Conclusion
50	6	0,640	Because the coefficient of Cronbach's Alpha ( $\alpha$ ) count is 0.640, in the interval of $0,6 \leq \alpha < 0,7$ , it can be concluded that the instrument item is Acceptable. <i>Acceptable</i>

Based on the calculation of the reliability test of the Service Performance variable, the result obtained is 0.640 in the Acceptable classification.

Table 4. Reliability Coefficient Classification

Reliability Coefficient Classification	
Cronbach's Alpha	Internal Consistency
$\alpha \geq 0,9$	<i>Excellent (High-Stakes testing)</i>
$0,7 \leq \alpha < 0,9$	<i>Good (Low-Stakes testing)</i>
$0,6 \leq \alpha < 0,7$	<i>Acceptable</i>
$0,5 \leq \alpha < 0,6$	<i>Poor</i>
$\alpha < 0,5$	<i>Unacceptable</i>

Source (15)

Meanwhile, for the reliability test related to the Emotional Condition variable which is the independent variable, the results are obtained as shown in the table 5.

Table 5. Emotional Condition Scale Reliability Test

N Resp.	N Aitem	Cronbach's Alpha	Conclusion
50	6	0,244	Because the calculated Cronbach's Alpha ( $\alpha$ ) count coefficient is 0.244, in the interval of $\alpha < 0,5$ , it can be concluded that the instrument item is Unacceptable.

Based on the results of the reliability test, it can be concluded that the instrument items are at the Unacceptable level. That is, the results of the measurement of Emotional Conditions are not in the form of a scale, but are a transformation of the Vital Sign measurement which consists of measurements of diastolic, systolic, BPM, and the results of measuring body temperature. So the size is not fixed.

Table 6. Reliability Coefficient Classification

Reliability Coefficient Classification	
Cronbach's Alpha	Internal Consistency
$\alpha \geq 0,9$	<i>Excellent (High-Stakes testing)</i>
$0,7 \leq \alpha < 0,9$	<i>Good (Low-Stakes testing)</i>
$0,6 \leq \alpha < 0,7$	<i>Acceptable</i>
$0,5 \leq \alpha < 0,6$	<i>Poor</i>
$\alpha < 0,5$	<i>Unacceptable</i>
Source (15)	

Based on the results of the Normality test using the Kolmogorov Smirnov method, it is stated that the data should be normally distributed if  $p > 0.05$ . Based on the table below, it is stated that the results of the calculation of variable Y have abnormal data, which is indicated by a result of 0.153 with  $p$  (sig) of 0.005. While the variable X data are normally distributed with statistical value of 0.119 with  $p$  (sig) of 0.076.

Table 7. Normality Test Results

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	df	Sig.
Emotion	.119	50	.076	.970	50	.228
Performance	.153	50	.005	.941	50	.014

#### Lilliefors Significance Correction

Theoretically, the results of the linearity test are stated to be linear if  $p < 0.05$ . This is in accordance with the results of tests that have been carried out that the magnitude of the linearity test is by looking at the results of the correlation between the Service Performance variable and the Emotional Condition variable of the Health workers at Roemani Hospital, with F Linear value of 20,055 with  $p$  (sig) 0.000.

Table 8. Linearity Test Results

			Sum of Squares	df	Mean Square	F	Sig
Emotional Performance	Between Groups	(Combined)	160.115	9	17.791	2.945	.009
		Linearity	121.168	1	121.168	20.055	.000
		Deviation from Linearity	38.947	8	4.868	.806	.601
	Within Groups		241.665	40	6.042		
	Total		401.780	49			

Based on the results of data analysis using the non-parametric correlation formula with the results that there is relationship with the results of the normality test of  $p$  (sig)  $< 0.01$ . However, when doing the Assumption Test about seeing the normality of the data, it is proven that the Service Performance variable is not normal. Then the test must use non-parametric correlation test with Spearman-Rho with correlation coefficient of 0.562 with  $p$  (sig) 0.000, meaning that there is a significant relationship between the Emotional Condition variables and Service Performance variables. This can be seen in the table below.

Table 9. Non Parametric Correlations

Spearman's Rho			Emotion	Performance
Spearman's rho	Emotion	Correlation Coefficient	1.000	.562**
		Sig. (2-tailed)		.000
		N	50	50
	Performance	Correlation Coefficient	.562**	1.000
		Sig. (2-tailed)	.000	
		N	50	50

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result is that the emotional condition of medical personnel is related to the service performance. This is because in general, medical personnel have more emotional conditions when carrying out their duties. This can be seen in terms of the average results of the diastolic test of 80.24 (normal measurement 60-90), followed by the average results of the physiological measure of body temperature test indicators of 35.30 (normal measurement 36.1-37.5), Beat test results per minute (BPM) an average of 81.88 (normal measurement 60-80), and oxygen test results (SPO2) an average of 98.1 (95%-100% normal measurement), and an average Systolic test of 126.34 (normal measurement 90-140).

Thus the results of this study prove that when the emotional condition of medical personnel increases, the service performance will decrease, which means that the responsibility for service quality decreases somewhat, dares to take risks for services that are slightly neglected, has service goal that is somewhat less attention, less planning for services, less thinking about feedback from the services provided, and the possibility of less thinking about getting the opportunity to realize services (George, 2011). Although the results of this measurement are on average small, there is an improvement. The results of this study are in line with the research conducted by Wu et al. that even though the Covid-19 Pandemic period has passed, the hospital remains the first referral when someone experiences symptoms that indicate an emergency, and the emotional level of these medical personnel will also have an impact on health which will indirectly affect health services (Wu et al., 2020).

The results of this study indicate that the emotional condition of medical personnel has a significant relationship with the quality of service provided. Measurement of physiological parameters, such as body temperature, BPM (beats per minute), and SpO2 (oxygen saturation), is used as an indirect indicator to identify emotional conditions. This method refers to the psychophysiological approach, where physiological changes often reflect certain emotional responses. For example, an increase in BPM and body temperature followed by a decrease in SpO2 can indicate stress or anxiety. These data are in line with previous studies showing that acute stress can cause physiological dysregulation, which has the potential to disrupt focus and decision-making during medical service tasks. The implications of these measurement results for service quality can be seen from the negative correlation between poor emotional conditions and patient satisfaction. When medical personnel experience increased stress, they tend to show less empathetic behavior and experience decreased communication skills. Conversely, stable physiological conditions, such as BPM in the normal range (60-100 bpm) and SpO2 above 95%, correlate with more effective services. This underscores the importance of maintaining the emotional balance of healthcare workers to ensure they can provide optimal care, especially in high-pressure situations such as emergencies or during a pandemic.

Furthermore, these findings provide a basis for the development of physiology-based stress management strategies, such as biofeedback and mindfulness. For example, wearable devices that can monitor real-time changes in BPM and SpO2 can be used to identify early signs of stress in healthcare workers. With appropriate interventions, such as breathing relaxation techniques or short breaks, healthcare workers can manage their emotions before

they affect care. This study also supports the importance of emotion regulation training programs to improve healthcare workers' resilience in dealing with work stress.

In a broader context, this relationship between physiological and emotional states provides new insights for human resource management policies in the healthcare sector. Healthcare providers need to consider implementing physiological measurement tools as part of their work evaluation and healthcare workers' well-being management. With this approach, organizations can mitigate the risk of burnout while improving overall service quality. These results confirm that emotional states not only affect healthcare workers' well-being, but also patient satisfaction and the effectiveness of the services they receive.

## CONCLUSION

Based on the statistical tests between the variables of Emotional Condition and Service Performance of medical personnel to patients at Roemani Hospital, the result is that according to the indicators of the Emotional Condition of the Medical staff at Roemani Hospital by using physiological detection that appears with Vital Sign tools, including heart rate, availability O2, systolic and diastolic, BPM and body temperature with Service Performance, it is obtained that the two variables are proven to be related and significant. The result is that the emotional condition of medical personnel increases, causing service performance to decrease.

The suggestions from this study are that hospital managers should provide flexibility to medical personnel by increasing work shifts, so that the emotion caused by one of them is the workload of medical personnel can be reduced, which is expected that medical personnel to serve patients without emotion.

This emotional condition is built into the IoT system, making it even more in-depth, as a complement to the results using a questionnaire or scale. Thus, it is hoped that the results of this research will be specific regarding deepening the use of IoT detection. The results can be seen in more detail and can describe more accurate results rather than just measuring or seeing more detailed results.

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