



## **THE INFLUENCE OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR (OCB) ON EMPLOYEE PERFORMANCE MEDIATED BY EMPLOYEE ENGAGEMENT IN NURSES AT DIAN HUSADA HOSPITAL, MOJOKERTO**

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<b>ABSTRACT</b>	<b>Keywords</b>
<p>This research aims to analyze the Organizational Citizenship Behavior (OCB) possessed by nurses at Dian Husada Hospital Mojokerto, whether it is able to influence Employee Engagement and Employee Performance so that it improves the performance of Dian Husada Hospital Mojokerto. The sample used in this research was 80 nurses taken using the convenience sampling technique. Meanwhile, the data analysis technique used is Structural Equation Modeling (SEM) which is adapted to the research conceptual framework. The results of this research are that OCB has a positive and significant effect on Employee Engagement, OCB has a positive and significant effect on Employee Performance, Employee Engagement has no effect on Employee Performance, and OCB has no significant effect on Employee Performance mediated by Employee Engagement.</p>	<p><b>Organizational Citizenship Behavior, Employee Engagement, Employee Performance</b></p>

### **INTRODUCTION**

Improving the quality of hospital services is a necessity that cannot be ignored in health development. One of the key aspects that plays a central role in determining the quality of the service is performance (Hut-Mossel et al., 2021). Hospital performance does not only include aspects of operational efficiency, but also involves dimensions of quality of service to patients (Johnson & Bament, 2002). The importance of focusing on performance is

becoming increasingly clear in an effort to ensure that every patient receives optimal and quality service. The importance of performance in the context of health services not only has a positive impact on the sustainability of hospital operations, but also contributes to fulfilling the broader public health mission. Hospitals that have good performance can become the backbone of the public health system, making a real contribution to improving public health and preventing disease.

Good performance in a hospital cannot be separated from Employee Performance possessed by all employees who contribute to the development of the hospital. Employee Performance is a form of evaluation, identification, assessment and improvement of employee achievement results in the company structure and culture which includes important components needed to evaluate so that they become more effective (Jarlier & Charvet-Protat, 2000). The role of managers in assessing performance is needed because it reshapes employee productivity through changes in specific aspects of the organization (Vuong & Nguyen, 2022).

Dian Husada Hospital Mojokerto continues to improve Employee Performance because it is known that negative assessments are still found at the hospital. One of the patients stated that Dian Husada Hospital Mojokerto had a long service. Therefore, so that Employee Performance at Dian Husada Hospital Mojokerto can continue to improve, changes are needed by increasing Organizational Citizenship Behavior (OCB) and Employee Engagement (Rawlings et al., 2019).

Organizational Citizenship Behavior (OCB) is important for organizational performance, so the task of Human Resources practitioners is to identify behavior in job analysis and consider it as part of job success. Organizational Citizenship Behavior (OCB) among employees will be an important management practice that must be encouraged in order to respond to community demands, especially in public services. In addition, to operationalize OCB and public service motivation, future research should be able to explore other forms of leadership style (Mahfudz et al., 2019). Meanwhile, Employee Engagement projects how employees can change from previously lacking involvement to a state of high

commitment to the organization, both emotionally and intellectually (Bae et al., 2020)

. Employee Engagement is very important for companies because employees who do not have changes in work involvement will have an impact on increasing operational costs, so Employee Engagement is very important because it is able to show the employee's state of mind in meeting basic psychological needs (physical, cognitive and emotional) (Syara & Syah, 2022). If the OCB possessed by employees at Dian Husada Hospital Mojokerto increases, it is hoped that this will result in increased Employee Performance which is also influenced by high Employee Engagement.

## THEORETICAL BASIS

Organizational Citizenship Behavior (OCB)

Organizational Citizenship Behavior (OCB) is important for organizational performance, so the task of Human Resources practitioners is to identify behavior in job analysis and consider it as part of job success. Organizational Citizenship Behavior (OCB) among employees will be an important management practice that must be encouraged in order to respond to community demands, especially in public services. In addition, to operationalize OCB and public service motivation, future research should be able to explore other forms of leadership style (Mahfudz et al., 2019). Therefore, through this research, we will explain in depth the application of Organizational Citizenship Behavior in the reality of Human Resources according to previous researchers so that it can provide information for organizations about how to implement OCB appropriately so as to produce OCB that is effective in increasing employee productivity (Howladar & Rahman, 2021).

Al-Zu'bi (2011) explained that Altruism, Courtesy, Sportsmanship, Conscientiousness, and Civic Virtue are the dimensions that make up Organizational Citizenship Behavior (OCB).

1. Altruism is behavior that shows concern and kindness for the welfare of others without expecting personal reward.

2. Courtesy is an action that reflects respect, attention and polite behavior towards other people.

3. Sportsmanship is fair, honest and ethical behavior by accepting defeat with sportsmanship, respecting fellow colleagues and maintaining good ethics.

4. Conscientiousness is the behavior of alertness, thoroughness and responsibility in carrying out tasks or obligations.

5. Civic Virtue is an individual's positive qualities and behavior in the context of active participation and contribution to the life of society or the state.

### **Employee Engagement**

Employee Engagement projects how employees can change from previously lacking involvement to a state of high commitment to the organization both emotionally and intellectually (Qalati et al., 2022). Employee Engagement is always related to positive thoughts and fulfilling work needs which results in a pleasant experience for employees and comes together with enthusiasm, dedication and absorption (Pri & Zamralita, 2018). Employee Engagement is very important for companies because employees who do not have changes in work involvement will have an impact on increasing operational costs, so Employee Engagement is very important because it is able to show the employee's state of mind in meeting basic psychological needs (physical, cognitive and emotional) (Syara & Syah, 2022).

Employee Engagement among employees can be measured using indicators

developed by Tsaur, Hsu, and Lin (Wijaya, 2022):

1. Vigor is the enthusiasm that employees have that originates from positive thoughts and successful fulfillment of work needs which creates a pleasant experience for employees.

2. Dedication is dedication made by employees to the company so that it brings many changes and improvements to the company's performance.

3. Absorption is a form of absorption or appreciation by employees of feelings of high commitment to the organization both emotionally and intellectually

### **Employee Performance**

Employee Performance is a form of evaluation, identification, assessment and improvement of employee achievement results in the company structure and culture which includes important components needed to evaluate so that they become more effective (Andrade & Neves, 2022)

. The role of managers in assessing performance is needed because it reshapes employee productivity through changes in specific aspects of the organization (Vuong & Nguyen, 2022).

The indicators used to measure Employee Performance include (Vuong & Nguyen, 2022):

1. Creativity and Innovation is the ability to produce new ideas and innovative solutions, involving creative thinking processes and the ability to adapt to change.

2. Learning and Growing Ability is a person's ability to continue learning, develop new skills, and develop professionally and personally.

3. Obligation and Responsibility are a person's responsibilities and obligations towards work, co-workers and the organization. This includes discipline, work ethics, and compliance with organizational rules.

4. Planning and Actions is the ability to plan the steps necessary to achieve goals, as well as the ability to implement and evaluate previously prepared plans.

5. Communication Skills is the ability to convey ideas clearly, listen effectively, and communicate efficiently with employees.

## METHOD

The method used in this research is a quantitative research method, namely a research approach that uses data in the form of numbers or statistics to answer research questions (Sciberras & Dingli, 2023). This method is considered easier and requires a relatively short time to carry out, and is often used in various scientific disciplines (Kurniawan, 2018).

The researcher chose the population of nurses at Dian Husada Hospital, Mojokerto, as the research object, totaling 80 nurses. Next, based on this population, samples were taken using the Convenience Sampling technique, namely a non-probability sampling method where units are selected to be included in the sample based on availability and convenience, without paying attention to random or representative considerations. Therefore, the number of samples used was also 80 nurses.

Furthermore, based on the variables used, namely OCB, Employee Engagement, and Employee Performance and the direction of the correlation formed, the analysis technique used is Structural Equation Modeling, namely a multivariate statistical analysis technique used to analyze the structural relationship between observed variables and latent variables (Sciberras & Dingli, 2023). SEM combines factor analysis, regression analysis, and path analysis to build complex theoretical models and allows researchers to examine direct and indirect effects between variables (Hamid & Anwar, 2019).

## RESULTS

### Convergent Validity

Convergent Validity is a test with Loading Factor to see the extent to which indicators or measurement variables are valid or valid. Convergent Validity is able to evaluate the level of consistency between indicators (Hamid & Anwar, 2019). Loading Factor is said to be valid if it has a value greater than 0.6. If the Loading Factor value is less than 0.6 then it must be deleted to prevent problems in subsequent testing.

**Tabel 1. Convergent Validity**

	Employee Engagement (Z)	Employee Performance (Y)	Organizational Citizenship Behaviour (X)
EE.1	0.905		
EE.2	0.869		
EP.1		0.646	
EP.2		0.861	
EP.3		0.839	
EP.4		0.759	
EP.5		0.791	
OCB .1			0.657
OCB .2			0.842
OCB .3			0.894
OCB .4			0.826
OCB .5			0.676

Source: SmartPLS Data Processing, 2024

In the first test, the Loading Factor value obtained for the EE.3 indicator was 0.584, meaning it was invalid. Therefore, in order not to interfere with further testing, the variable EE.3 was deleted and retested on the Loading Factor, then the results obtained were that all indicators were valid because they had a value of more than 0.6

### Discriminant Validity

Discriminant Validity relates to the extent to which a latent variable can be differentiated from other latent variables in the model. It tests whether a construct is truly different from other constructs, and is often measured by comparing the correlation between constructs with the square root of the AVE (Average Variance Extracted) (Hamid & Anwar, 2019). In this second validity test, it is said to be valid if all constructs below the diagonal construct have a value that is smaller than the value of the construct on the diagonal line (Henseler et al., 2015).

**Tabel 2. Discriminant Validity**

	Organizational Citizenship Behavior (X)	Employee Engagement (Z)	Employee Performance (Y)
Organizational Citizenship Behavior (X)	0.785	0.826	0.841
Employee Engagement (Z)		0.887	
Employee Performance (Y)			0.783

Source: SmartPLS Data Processing, 2024

In the second validity test, it can be seen that all constructs under the diagonal construct have a smaller value than the value of the construct on the diagonal line, so it can be said that in this second test all variables are valid.

### Composite Reliability

Composite Reliability is a measure of the reliability of a construct or latent variable in SEM (Moonen-van Loon et al., 2013). This test reflects the extent to which the indicators measuring these variables are consistent, feasible and reliable (Hamid & Anwar, 2019). In this reliability test, it is

said to be appropriate if the Cronbach's Alpha, Composite Reliability and AVE values are more than 0.6.

**Table 3. Composite Reliability**

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Employee Engagement (Z)	0.731	0.742	0.787
Employee Performance (Y)	0.841	0.862	0.613
Organizational Citizenship Behavior (X)	0.839	0.855	0.616

Source: SmartPLS Data Processing, 2024

This test shows that the Cronbach's Alpha, Composite Reliability, and AVE values are more than 0.6 so that all variables are reliable or suitable for use in further testing.

### R-Square

R-Square aims to measure the proportion of variation in a latent variable that can be explained by other latent variables in the model. The higher the R-Square value, the greater the contribution of the independent variable to the variation in the dependent variable (Hamid & Anwar, 2019).

**Tabel 4. R-Square**

	R Square	Adjusted R Square
Employee Engagement (Z)	0.683	0.679
Employee Performance (Y)	0.734	0.727

Source : Data SmartPLS, 2024

In the table, it can be seen that the R-Square Employee Engagement (Z) value is

0.683, meaning that 68.3% of the Employee Engagement variable can be influenced by the OCB variable. Furthermore, the R-Square value of the Employee Performance (Y) variable is 0.734, meaning that 73.4% of the Employee Performance variable is able to be influenced by the OCB and Employee Engagement variables.

**F-Square**

F-Square is a measurement of the effectiveness of model predictions on latent variables which reflects how well the model can explain the magnitude of correlation in variables and can be used to compare the model with alternative models (Hamid & Anwar, 2019).

- a. If the F-Square value is less than or equal to 0.02 then the correlation formed is low.
- b. If the F-Square value is between 0.03 – 0.15 then the correlation formed is moderate
- c. If the F-Square value is more than 0.15 then the correlation formed is high.

**Tabel 5. F-Square**

	Employee Engagement (Z)	Employee Performance (Y)
Employee Engagement (Z)		0.100
Employee Performance (Y)	2.151	0.433
Organizational Citizenship Behavior (X)		

Source: SmartPLS Data Processing, 2024

Based on this table, the results and analysis show that:

1. OCB on Employee Engagement has an F-Square value of 2.151, meaning that the

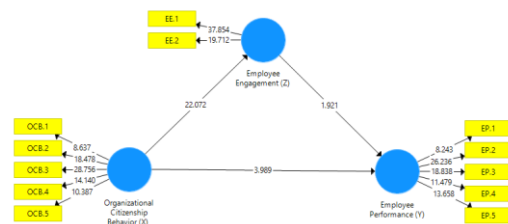
correlation or influence formed between OCB on Employee Engagement is high.

2. OCB on Employee Performance has an F-Square value of 0.433, meaning that the correlation or influence formed between OCB and Employee Performance is high.

3. Employee Engagement on Employee Performance has an F-Square value of 0.100, meaning that the correlation or influence formed between Employee Engagement on Employee Performance is moderate.

Source: SmartPLS Data Processing, 2024

Figure 1. Inner Model



**Path Coefficient**

Path Coefficient is a coefficient that measures the strength and direction of the relationship between two variables in the model. The path coefficient value reflects the direct impact of the independent variable on the dependent variable (Hamid & Anwar, 2019).

- a. The hypothesis will be accepted if the P-Value value is greater than 0.05, which shows that there is an influence between the independent variable and the dependent variable and intervening variables.
- b. The hypothesis will be rejected if the P-Value value is smaller than 0.05, which shows that there is no influence between the independent variable and the dependent variable and intervening variables.

**Tabel 6. Path Coefficient**

Origin	Standard	Standard Deviation	T-Statistics	P-Value
Organizational Citizenship Behavior (X)	0.22072	0.100	2.151	0.033
Employee Engagement (Z)	0.1921	0.100	1.921	0.058
Organizational Citizenship Behavior (X)	0.3989	0.100	3.989	0.000

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Employee Engagement (Z) ->	0.289	0.283	0.153	1.892	0
Employee Performance (Y)					59
Organizational Citizenship Behavior (X) -> Employee Engagement (Z)	0.826	0.827	0.040	20.797	0
Organizational Citizenship Behavior (X) -> Employee Performance (Y)	0.602	0.608	0.153	3.929	0

Source: SmartPLS Data Processing, 2024

Based on this table, the results and analysis show that:

1. OCB on Employee Engagement has a P-Value of 0.000 which is smaller than 0.005, meaning the hypothesis is accepted so it is stated that OCB has a positive and significant effect on Employee Engagement. This indicates that the OCB carried out by nurses at Dian Husada Hospital Mojokerto greatly influences Employee Engagement, meaning that when nurses' OCB increases, Employee Engagement also increases.

2. OCB on Employee Performance has a P-Value of 0.000 which is smaller than 0.005, meaning the hypothesis is accepted so it is stated that OCB has a positive and significant effect on Employee Performance. This indicates that the OCB carried out by nurses at Dian Husada Hospital Mojokerto greatly influences Employee Performance, meaning that when nurses' OCB increases, Employee Performance also increases.

3. Employee Engagement on Employee Performance has a P-Value of 0.059 which is greater than 0.005, meaning the hypothesis is rejected so it is stated that

Employee Engagement has no effect on Employee Performance. This indicates that the Employee Engagement possessed by nurses at Dian Husada Hospital Mojokerto is still very low so that it is unable to influence Employee Engagement, meaning that it is necessary to increase Employee Engagement, one of which is by carrying out Change Management, which builds more intense communication and relationships with each nurse. and provide motivation for nurses to be able to solve problems and think creatively and strategically through team work.

### Specific Indirect Effects

Specific Indirect Effect measures the specific indirect influence of an independent variable on the dependent variable through a certain mediator. This provides insight into the mechanisms of indirect relationships in the model (Hamid & Anwar, 2019).

a. The hypothesis will be accepted if the P-Value value is greater than 0.05, which shows that there is an influence between the independent variable and the dependent variable which is mediated by the intervening variable.

b. The hypothesis will be rejected if the P-Value value is smaller than 0.05, which shows that there is no influence between the independent variable and the dependent variable which is mediated by the intervening variable.

**Tabel 7. Specific Indirect Effect**

	Origi- nal Sa- mp- le (O )	Sam- pling M- ea- son (M )	Stan- dard Dev iati- on (ST DE V)	T- Stat isti- cs ((O/ ST DE V)	P- Value
Organizational Citizenship Behavior (X) -	0.239	0.233	0.126	1.898	0

> Employee Engagement (Z) -> Employee Performance (Y)	5 8
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Source: SmartPLS Data Processing, 2024

Based on the table, the results and analysis show that OCB on Employee Performance mediated by Employee Engagement has a P-Value of 0.058 which is greater than 0.005, meaning the hypothesis is rejected so it is stated that OCB has no significant effect on Employee Performance mediated by Employee Engagement. This indicates that even though the OCB of nurses at Dian Husada Hospital, Mojokerto is high, if their Employee Engagement is still very low, it will not be able to influence Employee Engagement, meaning that it is necessary to increase Employee Engagement, one of which is by implementing Change Management, which builds communication and a more intense relationship with each nurse and providing motivation for nurses to be able to solve problems and think creatively and strategically through team work.

## DISCUSSION

The results showed that nurses' perceptions of the ability to increase motivation and expectations in hypertensive patients found that the distribution of respondents' answers was of the opinion that the average was quite high. Nurses act as people who help clients to assess appropriate behavior without convincing and persuading clients, but with the client's own judgment so that they can determine the extent to which the behavior is beneficial (Yusof, 2011). Individual perceptions are influenced by functional and structural factors. Functional factors are factors that are personal (Robbins, 2003), for example, individual needs, age, past experience,

personality, gender, and other things that are subjective. Structural factors are factors outside the individual, for example, the environment, culture, and social norms greatly influence a person in perceiving something (R, 2023).

Based on work experience, data shows that respondents have an average work experience of 12.4 years. The lowest work experience of 3 years and a maximum of 52 years. Eysenck in (Asrori, 2009) states that perception actually requires a process of learning and experience. The results of a person's learning and interaction process will provide experience for him to be able to compare the situation at hand. the experience of nurses in dealing with hypertensive patients will greatly help and determine the success of nursing care in hypertensive patients (Lee et al., 2019).

In this study, 90.5% of nurses had the perception that creating a humorous and relaxed atmosphere in dealing with hypertensive patients was important (Ghasemi et al., 2017). A patient is physically a person who has a lot or little- feel that he is made to be passive or better made to be inactive especially if he is hospitalized (J.L.Ch.Abineno, 2002). In principle, "all patients expect a friendly attitude from nurses, want to feel safe in their care and get healing" (Gunarsa, 2003). In a study explaining that communication between nurses and hypertensive patients showed that hypertensive patients and nurses most often met at the same level of communication in their conversations. This means that nurses are friendly, attractive, so hypertensive patients respond appropriately, feel comfortable, and are willing to cooperate (Lee et al., 2019). But nurses do not explore the concerns of hypertensive patients in depth (Drevenhorn, 2006). Perception is a process that is learned through interaction with the surrounding environment. Someone's perception arises



through interaction with other humans. Patients are overwhelmed by fear, worry, a disappointment because of illness, family problems, economic pressures and so on. The fact shows that the needs of patients who are hospitalized are different or not the same.

There are those who need conversation, counseling or guidance, entertainment and so on. The duty of a nurse is not only to maintain or control patients, but also to provide services and treatment to the community as a whole, establish good relationships with patients and families, colleagues, who have different personalities and do not discriminate against patients based on religion, race, socio-cultural, and economic. Nurses must have the ability to interact with others, treat patients as humans who need help (Si et al., 2017).

## CONCLUSIONS

Based on the results of the analysis and discussion, the following conclusions can be formed:

1. OCB on Employee Engagement has a P-Value of 0.000 which is smaller than 0.005, meaning the hypothesis is accepted so it is stated that OCB has a positive and significant effect on Employee Engagement.
2. OCB on Employee Performance has a P-Value of 0.000 which is smaller than 0.005, meaning the hypothesis is accepted so it is stated that OCB has a positive and significant effect on Employee Performance.
3. Employee Engagement on Employee Performance has a P-Value of 0.059 which is greater than 0.005, meaning the hypothesis is rejected so it is stated that Employee Engagement has no effect on Employee Performance.
4. OCB on Employee Performance mediated by Employee Engagement has a P-Value of 0.058 which is greater than

0.005, meaning the hypothesis is rejected so it is stated that OCB has no significant effect on Employee Performance mediated by Employee Engagement.

The Employee Engagement of Dian Husada Hospital Mojokerto nurses is still very low to influence changes in Employee Performance. Therefore, it is necessary to increase Employee Engagement, one of which is by implementing Change Management, which builds more intense communication and relationships with each nurse and provides motivation for nurses to be able to solve problems and think creatively and strategically through team work.

## REFERENCES

- Al-Zu'bi, H. A. (2011). Organizational Citizenship Behavior and Impacts on Knowledge Sharing: An Empirical Study. *International Business Research*, 4(3). <https://doi.org/10.5539/ibr.v4n3p221>
- Hamid, R. S., & Anwar, S. M. (2019). *Structural Equation Modeling (SEM) Berbasis Varian*. Jakarta Pusat: PT. Inkubator Penulis Indonesia.
- Kurniawan, A. (2018). *Metode Penelitian*. Bandung: PT. Remaja Rosdakarya.
- Mahfudz, Made Sukresna, I., Dhani Laksana, R., & Shaferi, I. (2019). Organizational Citizenship Behavior on Public Organizational Performance. *Journal of International Conference Proceeding*, 129–139.
- Vuong, T. D. N., & Nguyen, L. T. (2022). The Key Strategies for Measuring Employee Performance in Companies: A Systematic Review. *Sustainability*, 14(21), 1–21. <https://doi.org/10.3390/su142114017>
- Andrade, C., & Neves, P. C. (2022).

- Perceived Organizational Support, Coworkers' Conflict and Organizational Citizenship Behavior: The Mediation Role of Work-Family Conflict. *Administrative Sciences*. <https://doi.org/10.3390/admsci12010020>
- Bae, J. A., Curtis, L. H., & Hernandez, A. F. (2020). National Hospital Quality Rankings: Improving the Value of Information in Hospital Rating Systems. In *JAMA - Journal of the American Medical Association*. <https://doi.org/10.1001/jama.2020.11165>
- Ghasemi, M., Ghadiri Nejad, M., & Bagzibagli, K. (2017). Knowledge management orientation: An innovative perspective to hospital management. *Iranian Journal of Public Health*.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-014-0403-8>
- Howladar, M. H. R., & Rahman, M. S. (2021). The Influence of Servant Leadership on Organizational Citizenship Behavior: The Mediating Effect of Organizational Commitment. *South East European Journal of Economics and Business*. <https://doi.org/10.2478/jeb-2021-0006>
- Hut-Mossel, L., Ahaus, K., Welker, G., & Gans, R. (2021). Understanding how and why audits work in improving the quality of hospital care: A systematic realist review. In *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0248677>
- Jarlier, A., & Charvet-Protat, S. (2000). Can improving quality decrease hospital costs? *International Journal for Quality in Health Care*. <https://doi.org/10.1093/intqhc/12.2.12>
- 5
- Johnson, A., & Bament, D. (2002). Improving the quality of hospital services: how diverse groups of consumers prefer to be involved. *Australian Health Review : A Publication of the Australian Hospital Association*. <https://doi.org/10.1071/AH020194>
- Lee, D. H., Yu, S., & Yoon, S. N. (2019). Analysis of hospital management based on the characteristics of hospitals: Focusing on financial indicators. *Global Business and Finance Review*. <https://doi.org/10.17549/gbfr.2019.24.3.1>
- Moonen-van Loon, J. M. W., Overeem, K., Donkers, H. H. L. M., van der Vleuten, C. P. M., & Driessen, E. W. (2013). Composite reliability of a workplace-based assessment toolbox for postgraduate medical education. *Advances in Health Sciences Education*. <https://doi.org/10.1007/s10459-013-9450-z>
- Qalati, S. A., Zafar, Z., Fan, M., Sánchez Limón, M. L., & Khaskheli, M. B. (2022). Employee performance under transformational leadership and organizational citizenship behavior: A mediated model. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2022.e11374>
- R, D. (2023). Hospital Management System. *INTERANTIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*. <https://doi.org/10.55041/ijrem24469>
- Rawlings, D., Devery, K., & Poole, N. (2019). Improving quality in hospital end-of-life care: Honest communication, compassion and empathy. *BMJ Open Quality*. <https://doi.org/10.1136/bmjoq-2019-000669>

Sciberras, M., & Dingli, A. (2023).  
Quantitative Research. In *Lecture  
Notes in Networks and Systems*.  
[https://doi.org/10.1007/978-3-031-  
19900-4\\_11](https://doi.org/10.1007/978-3-031-19900-4_11)

Si, S. L., You, X. Y., Liu, H. C., & Huang,  
J. (2017). Identifying key performance

indicators for holistic hospital  
management with a modified  
DEMATEL approach. *International  
Journal of Environmental Research  
and Public Health*.

[https://doi.org/10.3390/ijerph1408093  
4](https://doi.org/10.3390/ijerph14080934)