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Influence of Workplace Environment, Occupational Health and Safety, and Organizational Dedication on Nurse Performance

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For information

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Abstract

Objective: This study aims to investigate the relationship between the work environment, occupational health and safety (OHS), organizational commitment, and nurse performance in a hospital setting.
Method: A quantitative approach was employed, gathering data from 83 nurse respondents at Madiun Hospital. Data analysis was conducted using the structural equation modeling (SEM) approach with the partial least squares technique through Smart PLS.
Findings: The findings reveal significant positive correlations between the work environment and organizational commitment, OHS and organizational commitment, OHS and nurse performance, as well as organizational commitment and nurse performance. However, no significant relationship was found between the work environment and nurse performance.
Novelty: This study contributes by highlighting the importance of a conducive work environment and OHS efforts in enhancing organizational commitment and nurse performance in hospitals.
Research Implications: The implications of this study underscore the need to focus on improving the work environment and OHS in hospitals to enhance organizational commitment and nurse performance. This can aid hospital management in developing strategies to improve service quality and patient satisfaction.

1. Introduction

Health is the cornerstone requisite for individuals to fulfill their duties and responsibilities effectively, rendering it a significant investment. Possessing good health enables individuals to generate valuable contributions, both personally and for their families. When health deteriorates, it's plausible that all wealth might be depleted in pursuit of restoration (Hadiyati, 2018). Not only does this apply to the general populace, but it also extends to public healthcare providers such as medical personnel, whose health and safety must be meticulously safeguarded. This is paramount for the seamless delivery of healthcare services to communities. However, within organizational management practices, there persists a concerning lack of emphasis on Health and Safety at Work (HSW), evident in the escalating incidence of occupational accidents in Indonesia, which surge annually.

An increasing trend also occurred in the number of JKM claims. The number of MFI claims in 2019 reached 31,324 cases. The number of claims then rose to 32,094 claims in 2020 and 104,769 claims in 2021. In 2022, 103,349 claims were recorded. During January - November 2023, the number of claims jumped to 121,531 cases. It's worth noting that these figures are based on the number of claims filed by workers affected by workplace accidents, implying that the actual incidence of workplace accidents could be considerably higher, considering the presence of many unregistered workers not covered by BPJS Employment. These statistics serve as a stark reminder of the urgent need for a more stringent implementation of Occupational Health and Safety (OHS) protocols. Apart from potential fatalities,

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material losses, and environmental damage, accidents can also exert profound impacts on productivity and community well-being (Faidah Umu, 2021).

According to data from the Ministry of Health of Indonesia (2020), workplace accidents in public spaces, notably hospitals, constitute approximately 9.7% of all reported incidents nationwide. Among various incident locations, the workplace ranks third at 9.4%, following incidents occurring at homes and surrounding environments (46.2%) and on roadways (33.4%). Apart from the inherent risks associated with handling COVID-19 patients, hospitals are particularly prone to workplace accidents. Within hospital premises, numerous hazards such as flammable materials, chemicals, ionizing radiation, and medical gases warrant serious attention to ensure the safety of patients, staff, and visitors. Common occurrences in hospitals include back pain, needlestick injuries, cuts, sprains, infections, and burns (Sarastuti, 2016). Data underscores the heightened risks faced by hospital workers, with reported compensable incidents including sprains and strains (52%), contusions and bruising (11%), cuts and punctures (10.8%), fractures (5.6%), thermal burns (2%), infections (1.3%), dermatitis (1.2%), and various others (12.4%) (Pinontoan et al., 2020).

Occupational health and safety (OHS) factors are crucial determinants that significantly influence employee performance, ultimately shaping the attitudes, behaviors, thoughts, and sentiments of an organization towards achieving optimal performance (Edmund et al., 2023). Currently, OHS programs are widely discussed across various electronic and print media platforms. Many companies are actively implementing OHS initiatives to enhance workforce performance (Claxton et al., 2022). Efforts to address workplace accidents by healthcare providers such as hospitals aim to control, reduce, and ideally eliminate such incidents (Saines, 1999). Therefore, Hospital Occupational Health and Safety Management (SMK3) must be efficiently managed (Christiaans-Dingelhoff et al., 2011). SMK3 has emerged as a novel aspect and a key target in hospital accreditation assessments. Furthermore, SMK3 indirectly impacts patients but plays a crucial role in the quality of services provided by hospitals.

In the world of work, discussions about Occupational Health and Safety (OHS) and its impact on employee performance have attracted considerable interest and debate. Bayram & Ünğan, (2020) suggested a significant and positive correlation between OHS practices and employee performance, in contrast to the findings of Chan & Mak (2012) which concluded otherwise. This disparity reflects the broad spectrum of research examining the influence of work environment on employee performance (Nkrumah et al., 2021). While research (Fithri et al., 2019; Pawirosumarto et al., 2017; Widyaningrum, 2019) emphasizes the positive and significant impact of the work environment on employee performance, Fridan & Maamari, (2023) shows the opposite findings, that the work environment has no partial effect on employee performance.

In the midst of this scientific debate, the domain of hospital management, particularly regarding nurse performance, requires special attention (Rais & Viana, 2011). As highlighted Munyewende et al (2014), Nurse performance is critical in hospital management, given its correlation with patient satisfaction-a cornerstone in healthcare services that are largely delivered by nurses. This importance is further heightened amid the COVID-19 pandemic, where nurses play a key role in the delivery of healthcare services (Sami et al., 2021). However, amidst their physical engagement, nurses' spiritual engagement, as advocated by various healthcare professionals, including in Hospitals, is emerging as an important aspect in fostering organizational commitment (Vogus et al., 2020). This commitment, as explained by Albrecht (2012), Franco et al. (2002), reflects an individual's dedication to and alignment with the organization's goals and values, which ultimately influences their behavior and performance.

The purpose of this study is to investigate the relationship between Occupational Safety and Health (OSH) practices and employee performance, specifically in the hospital context. By gaining a better understanding of how OHS implementation affects employee performance, this study is expected to provide valuable insights for hospital management in designing policies and programs that focus on improving working conditions and employee well-being. The implications of this research can help strengthen the OHS culture in the workplace and improve the quality of health services provided by nurses. Socially, this research has the potential to reduce the risk of occupational accidents and occupational diseases, and improve employee productivity and job satisfaction, which in turn will have a positive impact on the overall well-being of society.

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2. Method Innovation

This study used a quantitative approach conducted at Madiun Hospital. The study population included all medical personnel and hospital employees, with a total of 622 people. The research sample focused on nurses, with a total of 83 respondents selected through the saturated sampling method. Primary data was collected using an open-ended questionnaire (Sugiyono, 2018) that used an interval scale based on the Agree-Disagree Scale technique. The questionnaire included statements with a range of answers from 1 to 10 (Ferdinand, 2014), where respondents chose a smaller number if they disagreed, with the lowest point being 1, and chose a larger number if they agreed, with the highest point being 10.

For data analysis, this study uses a multilevel structural model (SEM) with partial least square (PLS) analysis techniques through the VB-SEM program, Smart PLS 3.2. This method was chosen because of its ability to handle complex models with many variables and relationships between variables. SEM-PLS is very useful in testing theoretical models with empirical data, allowing simultaneous analysis between latent variable measurements and structural relationships between variables. Thus, this method provides an in-depth understanding of how the various factors in the study interact with each other and affect the performance of nurses in Madiun Hospital.

Table 1. In the appendix, the descriptive shows the demographic characteristics of the respondents in this study, which totaled 83 nurses in Madiun Hospital. The majority of respondents were in the age range of 28-34 years (49.40%), followed by the 21-27 years age group (33.73%). Women dominated the sample with a percentage of 75.90%, while men were only 24.10%. Most of the respondents had a Bachelor's degree (63.86%), followed by Diploma (31.32%) and high school (4.82%). In terms of work experience, the majority of nurses had a working period between 6-10 years (53.01%), followed by 1-5 years (33.73%), and less than 1 year (7.23%). This data shows that the respondents of this study were dominated by relatively young and experienced nurses, with a fairly high level of education, which may influence their views on the implementation and effectiveness of Occupational Health and Safety (OHS) programs in hospitals.

3. Innvation Result and Dicution

In the PLS method, validity testing is divided into two: convergent validity and discriminant validity. Convergent validity is measured using the loading factor value of each indicator, which reflects the extent to which the indicator forms its construct. Indicators are considered valid if they have a loading factor value above 0.7 (Fornell & Larcker, 1981; Hair et al., 2014; Hair et al., 2011). Based on the PLS output results, of the 50 indicators tested, there are 9 indicators that do not meet these criteria. The indicators that did not pass on the Work Environment (LK) variable were LK2, LK3, LK4, LK5, and LK10, while on the Occupational Safety and Health (OHS) variable, the indicators that did not pass were KK9, KK10, KK17, and KK18. These indicators were eliminated because their loading factor values were below 0.7, so they did not meet the validity criteria and were removed from the analysis. In contrast, the other 41 indicators meet the convergent validity criteria and can be used to measure the intended construct. Therefore, the convergent validity of the four reflective variables in this study has been confirmed with a high value of.

For discriminant validity, the analysis is performed by comparing the square root of the Average Variance Extracted (√AVE) of each construct with its correlation to other constructs in the model. If the √AVE value for a construct is higher than its correlation with other constructs, then discriminant validity is considered adequate and in accordance with the criteria (Fornell & Larcker, 1981; Hair et al., 2016; Hair et al., 2014). The results of the Fornell-Larcker criteria analysis are presented in Table 2 below, which shows that the model has adequate discriminant validity.

To measure the reliability of a construct, the Composite Reliability measure is used. Composite Reliability overcomes the limitations of Cronbach's Alpha by more accurately capturing the internal consistency of indicators. The Composite Reliability value above 0.70 is considered to meet the reliability criteria (Hair et al., 2014; Hair et al., 2016). In SEM analysis using Smart PLS, reliability is tested through two methods: Composite Reliability and Cronbach's Alpha. Both of these measures are declared to meet the criteria if the value is above 0.70 (Hair et al., 2014; Hair et al., 2016). Based on Table 3 below, the four constructs in this study have met the reliability criteria, indicating that the measuring instruments used are consistent and reliable.

Therefore, this conclusion underscores the robust ability of the research model to elucidate variability in Organizational Commitment and Nurse Performance.

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$$Q-Square=1-[(1-R12)\times(1-R22) \quad (1)$$
$$Q-Square=1-[(1-0.750)\times(1-0.815) \quad (2)$$
$$Q-Square=1-[(1-0.750)\times(1-0.815) \quad (3)$$
$$Q-Square=1-(0.250\times0.185) \quad (4)$$
$$Q-Square=1-(0.250\times0.185) \quad (5)$$
$$Q-Square=1-0.04625 \quad (6)$$
$$Q-Square=1-0.04625 \quad (7)$$
$$Q-Square=0.953 \quad (8)$$
$$Q-Square=0.953 \quad (9)$$

To evaluate the strength of the structural model, we can pay attention to the R-squared (R^2) value, which reflects how strongly the independent constructs affect the dependent constructs (Hair et al., 2014). In addition, the variance in the model can also be seen from other constructs outside the study that obtained the R^2 value. According to Hair et al. (2016), there are three R^2 limit criteria: 0.19 for a weak influence, 0.33 for a moderate influence, and 0.67 for a significant influence.

Based on Table 4, the model elucidates a substantial portion of the variance in Organizational Commitment (OC) by 75.0% and Nurse Performance (NP) by 81.5%. Thus, the R-squared (R^2) results for Organizational Commitment (OC) and Nurse Performance (NP) can be classified as substantial. To evaluate the goodness of fit, the Q-Square value is employed, indicating the model's adequacy with the data. A higher Q-Square value suggests a better fit between the model and the data. As per the calculation, the Q-Square value is 0.953, indicating that the model explains 95% of the research data's diversity. The remaining 4.7% can be attributed to constructs not modeled in this study. This outcome indicates a highly favorable goodness of fit for the research model, consistent with the high Q-Square value of 95.3%.

The hypothesis testing is preceded by the coefficient line values to assess the statistical significance of the formulated hypotheses. In calculating and obtaining the t-value, the Smart PLS 3.2 program is executed with the "Bootstrapping" option. The bootstrap option is another nonparametric scheme to determine accurate PLS estimations (Hair et al., 2014). As partial least squares regression is an independent technique in its distribution, the sample size of 83 data points in this study is an indicative size for the appropriate research sample. In developing this research, it is necessary to set up bootstrap prior to bootstrapping, with a general setting for the number of samples being 500. This can describe the results of the evaluation of estimation from parameter significance (Hair et al., 2016).

The relationship between Work Environment and Organizational Commitment shows a positive correlation of 0.346. The statistical test results show a t-value of 2.239 with a p-value of 0.023. With a p-value less than alpha (0.05), the hypothesis is accepted, indicating that the relationship between Work Environment and Organizational Commitment is statistically significant. Therefore, it can be concluded that Work Environment has a positive and significant influence on Organizational Commitment. This confirms that nurses in Madiun Hospital tend to have a higher level of commitment when they perceive a comfortable and good working environment. Conversely, if the work environment is considered inadequate, nurses' level of commitment may decrease. These results indicate that a conducive work environment can be a determining factor in shaping organizational commitment among hospital nurses.The acceptance of the first hypothesis in this study indicates that the management of Madiun Hospital has successfully implemented the principles of an effective work environment, in line with the findings of previous research. Previous studies by Caesarianty et al. (2017), Pupiati (2020), and Arsuta & Mashyuni (2021) also support these findings, showing that a conducive Work Environment can contribute positively to individual employee performance. Thus, the results of this study provide additional evidence that a good Work Environment can be an effective strategy in increasing organizational commitment in the healthcare environment.

The correlation between Work Environment and Nurse Performance shows a very low number, only 0.019. The statistical test results show a t-value of 0.117 with a p-value of 0.907, indicating that this relationship is not statistically significant. Therefore, the hypothesis that there is an effect of Work Environment on Nurse Performance is rejected. This indicates that the Work Environment factor does not significantly affect the performance of nurses at Madiun Hospital. Some factors that may cause the rejection of this hypothesis are hospital policies related to the work environment, such as the prohibition of placing green plants or open green areas in the treatment room. In addition, the lack of air circulation and temperature instability caused by the full use of air conditioning can also affect nurses' comfort and performance. This study is consistent with previous findings by Nabawi (2019), who also concluded that Work Environment factors do not affect employee performance. This shows that it is important to pay more attention to the conditions of the work environment in hospitals, especially in an effort to improve nurses' comfort and productivity.

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Thus, these findings make an important contribution to the understanding of the factors that influence nurses' performance in a hospital environment.

The correlation between Occupational Safety and Health (OHS) and Organizational Commitment shows a positive and strong relationship, with a correlation value of 0.547. The statistical test results show a t-value of 3.394 with a p-value of 0.002. With a p-value smaller than alpha (0.05), the hypothesis can be accepted, indicating that the relationship between OHS and Organizational Commitment is statistically significant. Therefore, it can be concluded that Occupational Safety and Health (OHS) has a positive and significant effect on Organizational Commitment among nurses in Madiun Hospital. This finding indicates that the greater the hospital's attention to OHS factors for all nurses and other medical personnel, the higher the level of organizational commitment felt by them. This result is consistent with the findings of previous studies by Pupiati (2020) and Gea & Zuraida (2020), which also found that Occupational Safety and Health (OSH) has a positive and significant influence on Organizational Commitment. Thus, this study provides additional support to the understanding of the importance of OHS in improving organizational commitment in the healthcare environment.

The relationship between Occupational Safety and Health (OHS) and Nurse Performance shows a positive and strong correlation, with a correlation value of 0.500. The t-value of 3.445 with a p-value of 0.000 indicates that this relationship is statistically significant. Therefore, the hypothesis is accepted. Occupational Safety and Health (OSH) has a positive and significant influence on Nurse Performance at Madiun Hospital, as measured by a p-value of 0.001 and a T Statistic value of 3.440, with a positive coefficient of 0.500. With a p-value smaller than 0.05 and a statistical T-value greater than 2.58 ($\alpha = 0.01$; two-sided test), the hypothesis is accepted. This indicates that there is a positive and significant effect of Occupational Safety and Health (OHS) on Nurse Performance in hospitals. The results of the fourth hypothesis test show that nurses in Madiun Hospital have an attachment to their work environment. This feeling of pride encourages them to carry out their duties and responsibilities with full trust. This finding is consistent with previous research by Fajri et al. (2017), Reynaldo Endhika Putra (2018), Qurbani & Selviyana (2019), and Parashakti & Putriawati (2020), who also found that Occupational Safety and Health (OHS) has a positive and significant impact on nurse performance.

The positive correlation between Organizational Commitment and Nurse Performance, indicated by a correlation coefficient of 0.421, is statistically significant with a t-value of 3.617 and a p-value of 0.000. Hence, the hypothesis is accepted. Therefore, H5 is accepted, demonstrating that Organizational Commitment positively and significantly influences Nurse Performance. The high level of Organizational Commitment, as evidenced by the acceptance of hypotheses H3 and H4 above, directly reflects the high level of responsibility of nurses in completing their tasks. Further examination in the field revealed instances where nurses had to postpone breaks to adjust to work conditions and situations to sustain their energy levels through food and beverages (Sitterding et al., 2014). Some nurses even forego breaks or meals while working due to tasks that require immediate completion for patient safety (Reed et al., 2018). Employees who prioritize organizational needs and exhibit positive attitudes are those with high organizational commitment. This study supports prior research conducted Al-Ahmadi, (2009), Sami et al (2021), which empirically demonstrate that organizational commitment positively influences nurse performance.

4. Conclusion

In conclusion, this study investigated the relationship between work environment, occupational health and safety (OHS), organizational commitment, and nurse performance in a hospital setting. The findings revealed significant positive correlations between work environment and organizational commitment, OHS and organizational commitment, OHS and nurse performance, as well as organizational commitment and nurse performance. However, the study found no significant correlation between work environment and nurse performance. These results underscore the importance of fostering a conducive work environment and prioritizing occupational health and safety measures to enhance organizational commitment and nurse performance. The findings contribute to the existing body of literature on healthcare management and provide valuable insights for hospital administrators aiming to improve employee well-being and performance.

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5. Table and Image

Table 1. Descriptive of Research Respondents

Respondent Var	Deskriptif	Total	Persentase (%)
Age	< 20 years	1	1,20
	21-27 years	28	33,73
	28-34 years	41	49,40
	35-41 years	4	4,82
	42-55 years	9	10,84
	Total	83	100
Gender			
	Male	20	24,10
	Female	63	75,90
	Total	83	100
Last Education			
	High School / Equivalent	4	4,82
	Diploma	26	31,32
	Bachelor	53	63,86
	Total	83	100
Length of Service			
	< 1 tahun	6	7,23
	1-5 tahun	28	33,73
	6-10 tahun	44	53,01
	11-20 tahun	2	2,41
	21-25 tahun	3	3,61
	Total	83	100

Data processed by author 2024

Table 2. Fornell-Lacker Criteria Analysis

Variable	OHS	Performance Nurse Performance PNP	Commitment Organization (CO)	Environment Work
K3	0.875			
Nurse Performance	0.866	0.903		
Organizational Commitment	0.851	0.832	0.942	
Work Environment	0.862	0.811	0.821	0.910

Data processed by author 2024

Table 3. Validity and Reability Analysis

Variable	Cronbach's Alpha	RHO_A	CR	(AVE
K3	0.977	0.976	0.978	0.746
Nurse Performance	0.978	0.977	0.976	0.824
Organizational Commitment	0.975	0.976	0.977	0.825
Work Environment	0.971	0.976	0.975	0.657

Data processed by author 2024

Table 4. R Square Analysis

Variabel	R Square	Adjusted R Square
Nurse Performance	0.814	0.808
Organizational Commitment	0.753	0.750

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Table 5. Hypothesis Test Results

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Variables corelations	Original Sample (O)	Sample Mean (M)	(STDEV)	(O/STDEV)	P Values	Result of Hypothesis
Work Environment -> Organizational Commitment	0.346	0.334	0.157	2.239	0.023	Accepted
Work Environment -> Nurse Performance	0.019	0.024	0.168	0.117	0.907	Rejected
OHS->Organizational Commitment	0.547	0.554	0.159	3.394	0.002	Accepted
OHS-> Nurse Performance	0.500	0.476	0.147	3.445	0.000	Accepted
Organizational Commitment -> Nurse Performance	0.421	0.428	0.123	3.617	0.000	Accepted

Data processed by author 2024

Feedback and suggestions

To improve patient care, it is important to pay attention to the welfare of nurses in order to avoid mistakes that can harm both patients and nurses themselves. Hospitals have a responsibility to provide a safe and healthy working environment for nurses, which in turn will improve the quality of care provided. Nurses need to consider six goals to improve patient safety, which also impacts the overall standard of nursing care.

Refrence

Al-Ahmadi, H. (2009). Factors affecting performance of hospital nurses in Riyadh Region, Saudi Arabia. *International Journal of Health Care Quality Assurance*, *22*(1), 40–54. https://doi.org/10.1108/09526860910927943

Albrecht, S. L. (2012). The influence of job, team and organizational level resources on employee well-being, engagement, commitment and extra-role performance. *International Journal of Manpower*, *33*(7), 840–853. https://doi.org/10.1108/01437721211268357

Bayram, M., & Ünğan, M. C. (2020). The relationships between OHS prevention costs, OHSMS practices, employee satisfaction, OHS performance and accident costs. *Total Quality Management and Business Excellence*, *31*(11–12), 1325–1344. https://doi.org/10.1080/14783363.2018.1480897

Chan, S. C. H., & Mak, W. (2012). High performance human resource practices and organizational performance. *Journal of Chinese Human Resources Management*, *3*(2), 136–150. https://doi.org/10.1108/20408001211279238

Christiaans-Dingelhoff, I., Smits, M., Zwaan, L., Lubberding, S., van der Wal, G., & Wagner, C. (2011). To what extent are adverse events found in patient records reported by patients and healthcare professionals via complaints, claims and incident reports? *BMC Health Services Research*, *11*(1), 49. https://doi.org/10.1186/1472-6963-11-49

Claxton, G., Hosie, P., & Sharma, P. (2022). Toward an effective occupational health and safety culture: A multiple stakeholder perspective. *Journal of Safety Research*, *82*, 57–67. https://doi.org/https://doi.org/10.1016/j.jsr.2022.04.006

Edmund, N. N. K., Suxia, L., Ebenezer, L., & Kachie, A. D. T. (2023). Emotional intelligence as a conduit for improved occupational health safety environment in the oil and gas sector. *Scientific Reports*, *13*(1), 19698. https://doi.org/10.1038/s41598-023-46886-3

Fithri, P., Mayasari, P. A., Hasan, A., & Wirdianto, E. (2019). *Impact of Work Environment on Employee Performance in Local Government of Padang City*. *100*(Icoi), 21–25. https://doi.org/10.2991/icoi-19.2019.5

Franco, L. M., Bennett, S., & Kanfer, R. (2002). Health sector reform and public sector health worker motivation: a conceptual framework. *Social Science & Medicine*, *54*(8), 1255–1266. https://doi.org/https://doi.org/10.1016/S0277-9536(01)00094-6

Fridan, A. A. A., & Maamari, B. E. (2023). Impact of organizational positive and negative culture on employee performance. *International Journal of Organizational Analysis*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/IJOA-05-2023-3778

Munyewende, P. O., Rispel, L. C., & Chirwa, T. (2014). Positive practice environments influence job satisfaction of primary health care clinic nursing managers in two South African provinces. *Human Resources for Health*, *12*(1), 27. https://doi.org/10.1186/1478-4491-12-27

E-mail address: ristavindu@gmail.com

Received 26 March 2024; Received in revised form 29 March 2024; Accepted 16 April 2024

Nkrumah, E. N. K., Liu, S., Doe Fiergbor, D., & Akoto, L. S. (2021). Improving the safety–performance nexus: A study on the moderating and mediating influence of work motivation in the causal link between occupational health and safety management (ohsm) practices and work performance in the oil and gas sector. *International Journal of Environmental Research and Public Health*, *18*(10), 1–23. https://doi.org/10.3390/ijerph18105064

Pawirosumarto, S., Sarjana, P. K., & Gunawan, R. (2017). The effect of work environment, leadership style, and organizational culture towards job satisfaction and its implication towards employee performance in Parador Hotels and Resorts, Indonesia. *International Journal of Law and Management*, *59*(6), 1337–1358. https://doi.org/10.1108/IJLMA-10-2016-0085

Rais, A., & Viana, A. (2011). Operations Research in Healthcare: a survey. *International Transactions in Operational Research*, *18*(1), 1–31. https://doi.org/https://doi.org/10.1111/j.1475-3995.2010.00767.x

Reed, C. C., Minnick, A. F., & Dietrich, M. S. (2018). Nurses' responses to interruptions during medication tasks: A time and motion study. *International Journal of Nursing Studies*, *82*, 113–120. https://doi.org/https://doi.org/10.1016/j.ijnurstu.2018.03.017

Saines, J. C. (1999). Violence and aggression in A&E: Recommendations for action. *Accident and Emergency Nursing*, *7*(1), 8–12. https://doi.org/https://doi.org/10.1016/S0965-2302(99)80094-0

Sami, S. A., Marma, K. K. S., Chakraborty, A., Singha, T., Rakib, A., Uddin, M. G., Hossain, M. K., & Uddin, S. M. N. (2021). A comprehensive review on global contributions and recognition of pharmacy professionals amidst COVID-19 pandemic: moving from present to future. *Future Journal of Pharmaceutical Sciences*, *7*(1), 119. https://doi.org/10.1186/s43094-021-00273-9

Sitterding, M. C., Ebright, P., Broome, M., Patterson, E. S., & Wuchner, S. (2014). Situation Awareness and Interruption Handling During Medication Administration. *Western Journal of Nursing Research*, *36*(7), 891–916. https://doi.org/10.1177/0193945914533426

Vogus, T. J., Gallan, A., Raton, B., Rathert, C., Louis, S., El-manstrly, D., & Strong, A. (2020). *Whose experience is it anyway ? Toward a constructive engagement of tensions in patient-centered health care*. https://doi.org/10.1108/JOSM-04-2020-0095

Widyaningrum, H. M. E. (2019). The Influence of the Work Environment, Organizational Commitment and Organizational Citizenship Behavior on Employee Performance and Motivation as Intervening (Studies in the Matahari Department Store Tbk. Tunjungan Plaza in Surabaya, Indonesia). *European Journal of Business and Management*, *11*(35), 60–68. https://doi.org/10.7176/ejbm/11-35-08

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