

The Job Stress, Work Environment, and Motivation Predicted the Staff Loyalty

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Abstract

Background: The intricate relationship between job stress, work environment, motivation, and staff loyalty has been a focal point of organizational studies for decades. **Objective:** This research aims to determine the relationship between work stress, work environment, and work motivation on staff loyalty. **Method:** This research is a quantitative study with a cross sectional approach involving 192 respondents. The research sample was taken using the Simple Random Sampling technique. Data was taken using a questionnaire. Data were analyzed using the Smart PLS version 3 program. **Result:** This research shows that there is a relationship between work stress and staff loyalty; work stress with work motivation; work environment with staff loyalty; work environment with work motivation; work environment with work stress; and work motivation with staff loyalty with a P value <0.05. **Conclusion:** in conclusion explained that job stress, work environment, and motivation was successfully predicting the staff loyalty in the hospital. **Recommendation:** The hospital staff need to consider those factors to influence the staff loyalty at hospital. Further research needs to conduct the mixed method study to explore the factors associated with staff loyalty in qualitatively.

Keywords: work stress, work environment, work motivation, staff loyalty



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Background

The intricate relationship between job stress, work environment, motivation, and staff loyalty has been a focal point of organizational studies for decades. Understanding these dynamics is crucial for organizations aiming to enhance employee satisfaction, productivity, and retention.

Job stress is a prevalent issue in the modern workplace, arising from various sources including high workloads, tight deadlines, and conflicting demands (1). The adverse effects of job stress on employee well-being and organizational outcomes are well-documented. High levels of stress can lead to burnout, decreased job satisfaction, and, ultimately, reduced loyalty towards the organization (1-2). Employees under constant stress are more likely to exhibit lower commitment levels and seek employment elsewhere, highlighting the need for effective stress management strategies within organizations.

The work environment encompasses the physical and psychological conditions under which employees operate. A positive work environment, characterized by supportive management, respectful interpersonal relationships, and adequate resources, can significantly enhance employee loyalty (3).

Conversely, a negative work environment, marked by poor communication, lack of support, and inadequate working conditions, can erode employee loyalty and increase turnover intentions (4). The physical aspects of the work environment, such as lighting, temperature, and ergonomics, alongside the psychosocial aspects, including organizational culture and management practices, play a critical role in shaping employee perceptions of their workplace and their loyalty to the organization.

Employee motivation is a critical driver of organizational success, influencing job performance, satisfaction, and loyalty (5-6). Motivated employees are more likely to be engaged with their work, exhibit higher levels of

job satisfaction, and demonstrate a stronger commitment to the organization (5,7).

The interplay between job stress, work environment, and motivation is complex, with each factor influencing staff loyalty in distinct ways. A positive work environment can mitigate the negative effects of job stress by providing employees with the support and resources they need to manage stress effectively. Therefore, organizations aiming to enhance staff loyalty must adopt a holistic approach, addressing job stress, cultivating a positive work environment, and fostering employee motivation simultaneously.

Eventhough a previous study proposes hypotheses regarding the direct and indirect effects of job-related and individual-related stressors on employee loyalty (8). However, there seems to be a lack of empirical data specifically addressing the indirect pathways through which these stressors influence loyalty.

METHOD

Design

This research uses quantitative research methods with a cross sectional approach to predict the association between pengaruh stres kerja, work environment, and motivation on employee loyalty.

Sample, sample size, and sampling technique.

The total research sample was 192 respondents. In this research, there are two independent variables, namely work stress (X1), work environment (X2); one intervening variable, namely work motivation (Z); and one dependent variable is employee loyalty (Y). The relationship between research variables is described in the following constellation:

The inclusion criteria in this study were the nursing profession, permanent employees who had worked at Siloam Kebon Jeruk Hospital and passed the probationary period, had worked for a minimum of 34 months (2.8 years), and were not on leave. Meanwhile, the exclusion criteria

include employees not willing to be respondents, outsourced employees, daily worker employees.

Data collection process

This research was conducted at Siloam Kebon Jeruk Hospital from December 2023 – January 2024. Data was collected using a questionnaire distributed via Google Form. All respondents who are willing to participate in this study signed the informed consent.

Several instruments have been used to measure the variables such as: Job stress questionnaire, work environment questionnaire, motivation questionnaire, and staff loyalty questionnaire. Details of the questionnaire are explained as follows.

Job stress questionnaire was developed based on the model from Cooper dan Marshall (9). This questionnaire consisted of five dimensions such 1) job intrinsic factors; 2) role in the organization; 3) career development; 4) relationship with work; and 5) organizational structure and climate. Likert scale with scoring system was used in this study such as 4=strongly agree, 3=agree, 2=disagree, and 1=strongly disagree. The total score was 24 which is highest score was high job stress and the lowest score showed the low job stress.

Work environment questionnaire was developed based on the model from Haynes (10) which is consisted of physical work environment and non-physical work environment. Likert scale with scoring system was used in this study such as 4=strongly agree, 3=agree, 2=disagree, and 1=strongly disagree. The total score was 36. The highest score was the comfort work environment and the lowest score showed the uncomport work environment.

Measuring work motivation variables uses Chowdary's dimensions which consist of work desire, the effort of intensity, and permanence (11). Likert scale with scoring system was used in this study such as 4=strongly agree, 3=agree, 2=disagree, and 1=strongly disagree. The total score was 16 which is highest score was high motivation and the lowest score showed the low motivation.

The measurement of staff loyalty variables uses dimensions from Ouchi and Jaeger (12).

which consist of length of employment, decision making, responsibility, evaluation and promotion, control, career path specialization, and scope of concern. Likert scale with scoring system was used in this study such as 4=strongly agree, 3=agree, 2=disagree, and 1=strongly disagree. The total score was 24 which is highest score was high loyalty of the staff on hospital and the lowest score showed the low loyalty of the staff on hospital.

The level of validity and reliability of the research instrument was carried out by analyzing questionnaires distributed to 30 people. The Cronbach's Alpha of the questionnaire such as work stress = .759; work environment has = .866; work motivation .727; and staff loyalty .708.

Analysis data

Descriptive statistic was used to describe the characteristic of respondents by showing the mean, SD, frequency and percentage. Hypothesis testing, using the SmartPLS program, an alternative to Structural Equation Modeling (SEM). This analysis consists of two models: outer model (outside) and inner model (inside).

RESULT

Characteristic of respondents

Table 1 shows the characteristics of the respondents. The majority of respondents were women, 175 (91.1%); with the average age of respondents being 32.6 years and the median value being 29 years. Most respondents worked for 3-5 years (57.3%) with the average length of work in the hospital being 8.47 years. Respondents involved in this research came from 7 work units including critical area 16 people (8.3%), emergency department 10 people (5.2%), inpatient department 81 people (42.2%), outpatient department 56 people (29.2%), radiology 1 person (0.5%), treatment room 20 people (10.4%), and management 8 people (4.2%); and all respondents work as nurses.

Table 1. Characteristic of respondents

No	Variables	n	%
1	Gender		
	Men	17	8,9
	Women	175	91.1

2	Aged		
	23-29 years	99	51.6
	3-32 years	19	9.9
	>32 years	74	38.5
3	Duration of working		
	3-5 year	110	57.3
	6-8 year	11	5.6
	>8 year	71	37.1
4	Working unit		
	Critical area	16	8.3
	Emergency departement	10	5.2
	Inpatient departement	81	42.2
	Outpatient departement	56	29.2
	Radiology	1	0.5
	Action space	20	10.4
Management	8	4.3	

Direct effect among variables

Table 2 described the direct effect among variables. The result found that there are positive association between association between working stress with staff loyalty (p-value <.005) and motivation (p-value <.005). Another result found that association between working environment with staff loyalty (p-value <.005), motivation (p-value <.005), and working stress (p-value <.005). There is positive association between motivation with staff loyalty (p-value <.005).

Table 2. Direct effect among variables

Variables	Coefficient	T Statistics	p-value
Association between working stress with staff loyalty	0.169	2.472	.014
Association between working stress with motivation	0.202	2.770	.006
Association between working environment with staff loyalty	0.262	4.197	.000
Association between working environment with motivation	0.383	5.102	.000
Association between working environment with working stress	0.417	6.988	.000
Association between motivation with staff loyalty	0.349	6.853	.000

Indirect effect among variables

Table 3 showed the indirect effect among variables. The result found that there is

association between working stress with staff loyalty mediated by motivation (p-value <.005). Another result found that there is association between working environment with staff loyalty mediated by motivation

Table 3. Indirect effect among variables

Variables	Coefficient	T Statistics	p-value
Association between working stress with staff loyalty mediated by motivation	0.070	2.645	0.008
Association between working environment with staff loyalty mediated by motivation	0.134	3.953	0.000

Coefficient of Determination (R²)

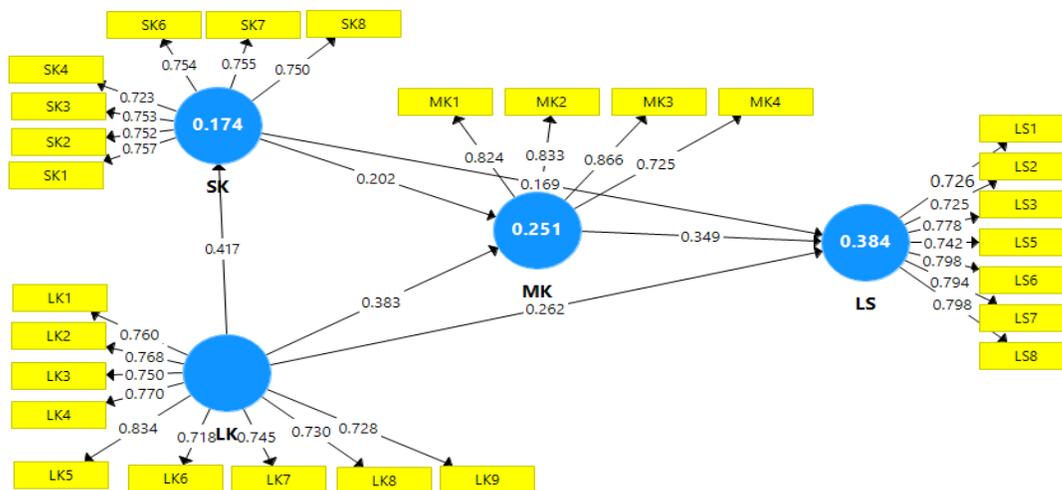
The Coefficient of Determination (R²) is the measure most commonly used to evaluate structural models as a measure of predicting the model which explains the influence of certain exogenous latent variables on endogenous latent variables.

The results show that the R² value for the staff loyalty variable is 0.374. This means that the variables work stress, work environment and work motivation influence staff loyalty by 37.4% and the remaining 62.6% is influenced by other variables. The three endogenous variables have an R squared value below 0.5, which indicates a moderate level.

Variables	R Square	R Square Adjusted
Loyalitas Staff loyalty	0.384	0.374
Working motivation	0.251	0.243
Working stress	0.174	0.169

Goodness of Fit (GoF) Model

Goodness of Fit (GoF) evaluation is another integral component. The results show that the SRMR value meets the fit criteria, namely <0.08. The NFI value is still above the fit criteria, namely <0.9 and rms Theta is still above the maximum fit limit, namely 0.12. The NFI value is quite high (closer to 1) and the RMS Theta is not too far from the fit limit.



With one of the indices, namely SRMR, which clearly meets the fit criteria, the model can be declared feasible or acceptable for analyzing the relationship between variables in the model (overall the model has a fairly good level of goodness of fit).

	Score
SRMR	0.066
NFI	0.773
Rms Theta	0.134
Chi-Square	673.480

DISCUSSION

The research results show that work stress has a positive impact on staff loyalty. This shows that with good work stress conditions at Siloam Kebon Jeruk Hospital, staff loyalty will increase.

In this research, it was found that the level of work stress was quite low and the level of staff loyalty was sufficient. These results are in accordance with the theory put forward by Meschke (2021) where the better the level of work stress, the greater the loyalty of staff (13).

The findings were consistent with a previous study mentioned that work stress has a significant impact on employee loyalty (14-16). This shows that the reduced/smaller the level of staff work stress will increase the staff's loyalty

in the organization. Work stress also has a positive and significant influence on work motivation. This shows that the better the staff's work stress level, the higher the level of work motivation. The results of this research showed that staff stress levels were quite low and staff work motivation was high. These results are in accordance with the theory put forward by Sanali et al (2013) (17). The negative work stress conditions will have a negative impact on employee motivation. The results of this research are supported by a previous study stated that work stress has a significant relationship with work motivation (17-18).

The work environment has a positive and significant influence on staff loyalty, this shows that with good work environment conditions at Siloam Kebon Jeruk Hospital, staff loyalty will increase. The results of this research showed that although many renovations were carried out and this had an impact on the noise of the work area, the working environment conditions of the Siloam Kebon Jeruk Hospital staff were still quite good with moderate staff loyalty.

These results are in accordance with the employee loyalty research model theory proposed by Meschke where the work environment is one of the indicators that will influence employee loyalty. The better the working conditions of the staff, the higher the staff loyalty (19).

It was consistent with a previous study found positive relationship between the work environment and cooperation between colleagues and staff loyalty (20). Creating a good work environment and collaboration with colleagues is important, because the workplace provides an overview of how the people who come to work live their days, do their work, and live within company regulations. Likewise, Yulianti et al found that the work environment has a positive and significant impact on employee loyalty (21).

On the other hand, the work environment also has a positive and significant influence on work motivation. This shows that with good working environmental conditions at Siloam Kebon Jeruk Hospital, staff work motivation would increase.

From the results of this research, it was found that the working environment conditions of Siloam Kebon Jeruk Hospital staff were quite good even though there were many renovation projects which produced noise in several work areas and the staff's work motivation was quite high. It was consistent with a previous study stated that the work environment is one of the determining indicators of work motivation and will influence individual and organizational performance (22).

CONCLUSION

A research conducted at Siloam Kebon Jeruk Hospital, West Jakarta with the aim of analyzing the influence of work stress, work environment and work motivation on staff loyalty. In this research, a positive and significant influence was found between work stress and staff loyalty, work stress and work motivation, work environment and staff loyalty, work environment and work motivation, work environment and work stress, work motivation and staff loyalty. In this research it was also found that there was a positive and significant influence of work stress on staff loyalty and the work environment on staff loyalty with work motivation as an intervening variable.

From a theoretical point of view, this research model strengthens existing theoretical

The results of this research are supported by research conducted by Setiayni et al which is a relationship between the work environment and employee motivation, a good work environment would increase employee work motivation (23). Likewise, a study stated that there is a positive and significant relationship between the work environment and work motivation (24).

Work motivation has a positive influence on staff loyalty. This shows that there is high work motivation at Siloam Kebon Jeruk Hospital. The results of this research showed that the work motivation of Siloam Kebon Jeruk Hospital staff was quite high and staff loyalty was in the medium category.

These results are in accordance with the theory of Park and Rainey (2012) where someone becomes loyal and committed to their company due to reasons (motivation) (25).

The results of this research are supported by research conducted by Khuaong et al (2020) where employee motivation has a direct relationship with employee loyalty (26). Thanos et al (2015) suggests employee motivation has a positive relationship with employee loyalty. When employees give their commitment to the company, they are willing to give their time and energy to the company (27)

concepts by providing empirical support for previous research results. From a managerial perspective, this study emphasizes the importance of creating good working environmental conditions and monitoring staff stress levels to increase staff work motivation which increases staff loyalty resulting in a decrease in turnover rates.

There is a need to train/increase staff's ability to do their work, there is a need to carry out joint activities to build staff interpersonal relationships, provide rewards to staff who have good performance, and evaluate the staff appraisal system (slowing down the staff appraisal schedule).

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References

- (1) Omar MW, Jusoff K, Hussin H. Employee Motivation and its Impact on Employee Loyalty. *World Applied Sciences Journal* 8 (7): 871-873, 2010
- (2) Nuryanto UW, Warman C, Suharno, Febrianata E. The Roles of Employee Loyalty between Work Motivation, Job Satisfaction, Leadership Against Employee Performance. *IOSR Journal of Business and Management (IOSR-JBM)*. Volume 23, Issue 2. Ser. II (February 2021), PP 15-25
- (3) Abd-El-Salam EM. Exploring factors affecting Employee Loyalty through the relationship between Service Quality and Management Commitment a case study analysis in the iron and steel industry Al Ezz Dekheila Steel Company in Egypt. *Cogent Business & Management*. 2023; 10 (2): 2212492
<https://doi.org/10.1080/23311975.2023.2212492>
- (4) Rahmat, A., & Rasyidi, F. . (2023). The Effect of Job Satisfaction, Work Environment and Workload on Employee Loyalty at PT True Prime Jakarta: English. *Dinasti International Journal of Management Science*, 4(5), 957-969.
<https://doi.org/10.31933/dijms.v4i5.1741>
- (5) Al Balushi K, Aulia S. A Study on Motivation and its Relationship with Employee Loyalty and Commitment: A Case study of Nama Group Sultanate of Oman. *International Journal of Managerial Studies and Research (IJMSR)* Volume 7, Issue 4, April 2019, PP 112-122
- (6) Omar MW, Jusoff K, Hussin H. Employee Motivation and its Impact on Employee Loyalty. *World Applied Sciences Journal* 8 (7): 871-873, 2010
- (7) Nuryanto UW, Warman C, Suharno, Febrianata E. The Roles of Employee Loyalty between Work Motivation, Job Satisfaction, Leadership Against Employee Performance. *IOSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 23, Issue 2. Ser. II (February 2021), PP 15-25
- (8) Mai Ngoc Khuong and Ung Doan Thuy Linh Influence of work-related stress on employee motivation, job satisfaction and employee loyalty in hospitality industry. *Management Science Letters*. 2020;10: 3279-3290
- (9) Cooper CL, Marshall J. (2018). Occupational sources of stress: A review of the literature relating to coronary heart disease and mental ill health. In *Managerial. Occupational and Organizational Stress Research*, (pp. 3-20)
- (10) Haynes BP. (2008). An evaluation of the impact of the office environment on productivity. *Facilities*, 26 (5/6). 178-195
- (11) Chowdary NV. (2014). Cost of employee loyalty. *Effective Executive*, 17(4), 5-6=
- (12) Ouchi WG, Jaeger AM. 1978. Type Z organization: Stability in the midst of mobility. *Academy of Management Review*, 3 (2): 305-314
- (13) Meschke S. (2021). Employee Loyalty Intercultural Comparison of European and East Asian Approaches. Switzerland, Springer, 27-59.
- (14) Amalina P, Winoto TH, Tecoalu M. (2023). The Effect of Work Culture and Work Environment on Employee Loyalty Through Work Stress as a Media Variable at PT. OMFI. *Institute of Computer Science*, 13(3), 2153-65
- (15) Putra IWS, Sriathi AAA. (2019). Pengaruh Lingkungan Kerja, Stress Kerja, dan Kompensasi Terhadap Loyalitas Karyawan. *E-Jurnal Manajemen*. 8(2), 7746-74.
doi: <https://doi.org/10.24843/EJMUNUD.2019.v8.i2.p8>
- (16) Reddy DM, Ramya P. (2020). The Effect of Organizational Culture and Stress on Employee Loyalty: A Study from IT Industries. *SSRG International Journal of Economics and Management Studies*, 7(2),

- 92-8, doi: <https://doi.org/10.14445/23939125/IJEM-S-V7I2P115>
- (17) Sanali, Syukri, Bahron A, Dousin O. (2013). Job Rotation Practices, Stress, and Motivation: An Empirical Study Among Administrative and Diplomatic Officers (ADO) in Sabah, Malaysia. *International Journal of Research in Management & Technology*, 3(6). 160-6
- (18) Wani SK. (2013). Jos Stres and Its Impact on Employee Motivation: A Study of A Select Commercial Bank. *International Journal of Business and Management Invention*, 2(3), 13-8
- (19) Meschke S. (2021). *Employee Loyalty Intercultural Comparison of European and East Asian Approaches*. Switzerland, Springer, 27-59
- (20) Omar MW, Jusoff K, Hussin H. (2010). Employee Motivation and Its Impact on Employee Loyalty. *World Applied Sciences Journal*, 8(7), 817-73
- (21) Yulianti, Susita D, Saptono A, Susono J, Rahim A. (2020). The Effect of Career Development and Work Environment on Employee Loyalty with Work Satisfaction as Intervening Variables. *The International Journal of Social Sciences World*, 2(2), 20-31, doi: <https://doi.org/10.5281/zenodo.3999430>
- (22) Sekhar C, Patwardhan M, Singh RK. (2013). A Literature Review on Motivation. *Glob Bus Perspect*, 1, 471-87. doi: [10.1007/s40196-013-0028-1](https://doi.org/10.1007/s40196-013-0028-1)
- (23) Setiyani A, Djumarno, Riyanto S, Nawangsari LC. (2019). The Effect of Work Environment on Flexible Working Hour, Employee Engagement and Employee Motivation. *International review of management and marketing*, 9(3), 112-6, doi: <https://doi.org/10.32479/irmm.8114>
- (24) Lis EY, Wahyuddin, Thoyib A, Ilham RN, Sinta I. (2023). Pengaruh perkembangan karir dan lingkungan kerja terhadap kinerja pegawai dengan motivasi kerja sebagai variabel intervening di kantor pertanian dan peternakan di Aceh. *International Journal of Economic Business Accounting Agriculture Management and Sharia Administration*, 2(2), 227-36, doi: <https://doi.org/10.54443/ijebas.v2i2.191>
- (25) Park S, Rainey HG. (2012). Work motivation and social communication among public managers. *International Journal of Human Resource Management*, 23(13), 2630-60. doi:10.1080/09585192.2011.637060
- (26) Khuong MN, , Linh UDT. (2020). Influence of Work-Related on Employee Motivation, Job Satisfaction, and Employee Loyalty in Hospitality Industry. *Growing Science*, 10. P3279-90. doi: [10.5267/j.msl.2020.6.010](https://doi.org/10.5267/j.msl.2020.6.010)
- (27) Thanos AT, Pangemanan SS, Rumokoy FS. (2018). The Effect of Job Satisfaction and Employee Motivation on Employee Loyalty. *Jurnal Berkala Ilmiah Efisiensi Manado*, 15(4), 313-21.