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EFFECT ANALYSIS OF COMPENSATION, WORK ENVIRONMENT AND LEADERSHIP ON SHIP CREW LOYALTY WITH WORK MOTIVATION AS INTERVENING VARIABLE AT PT. SALAM PACIFIC INDONESIA LINES

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Abstract: The research aims to measure the effect of compensation, work environment and leadership on ship crew loyalty with motivation as an intervening variable at PT. Salam Pacific Indonesia Lines. This research is a quantitative research in which the object used is the ship's crew in the engine room. The number of samples used as many as 53 respondents. The design used is hypothesis testing using the structural equation model (SEM) – Smart PLS version 3.3.3. The results of this study indicate that compensation, leadership and motivation have a significant effect on ship crew loyalty. However, there is no evidence that the work environment effects the loyalty of ship crews. This study also shows that there is an indirect effect of compensation on ship crew loyalty through motivation, there is an indirect effect of leadership on ship crew loyalty through motivation, but there is no evidence of an indirect effect of work environment compensation on ship crew loyalty.

Keywords: Compensation, Leadership, Motivation, Ship Crew Loyalty, Work Environment

INTRODUCTION

PT. Salim Pacific Indonesia Lines (SPIL) is one of the companies engaged in shipping logistics which currently has 27 branches throughout Indonesia. Since its establishment in 1970, this company has been quite successful in providing goods or cargo shipping services by sea. Behind the current success, no doubt there are still several problems that are considered to still hamper the performance of the company. The problem they are currently facing is the unstable on time performance delivery, sometimes even not reaching the target set by management.

On time performance delivery is the level of accuracy of delivery of goods by ships owned by PT. SPIL. This has an impact on swelling operational costs, reduced customer satisfaction, etc. Since the beginning of 2021 on time performance delivery has been achieved by PT. SPIL did not hit the target. This can be seen in Figure 1.

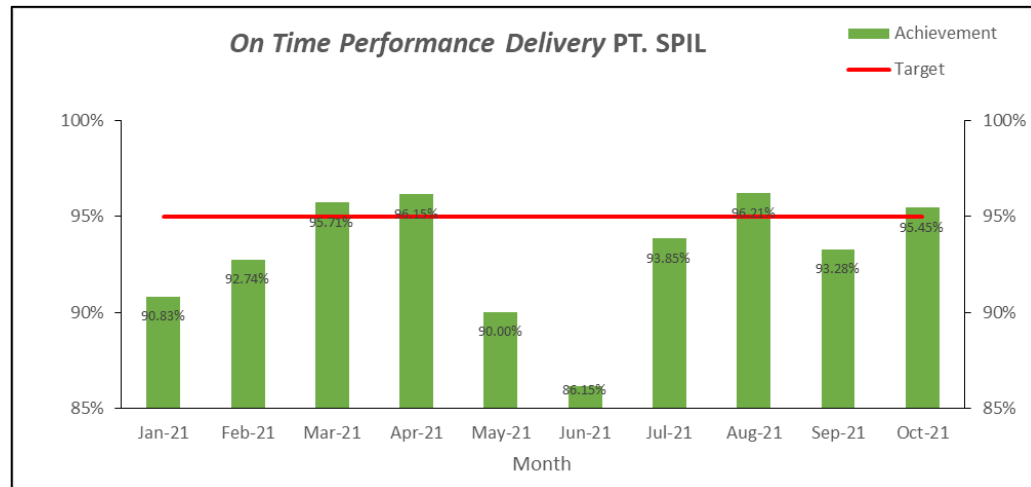


Figure 1. On Time Performance Delivery at PT. SPIL

One of the causes of not achieving on time performance delivery is the frequent changing of ship crews. The replacement of the ship's crew causes the loss of optimal conditions of performance and engine performance of ships because new crews generally do not know the engine settings to achieve optimum conditions. The replacement of the ship's crew is generally due to the old crew being less loyal to the company (Kurniawan, 2017)

Based on the above phenomenon, it is necessary to analyze the causes of the lack of loyalty from the ship's crew so that they decide to sign out from the company. The analysis that will be carried out is an analysis of compensation factors, work environment, leadership on ship crew loyalty with motivation as an intervening.

To increase the loyalty of ship's crew is motivate or encourage them. Motivation has a positive influence on employee loyalty to the company (Nadaek and Naibaho, 2020). Employee loyalty can be increased by the work motivation of the employees themselves (Mochklas, 2016).

Compensation indirectly has a positive influence on employee loyalty which is mediated by motivation (Aswar, 2020). Where the better the company in providing compensation for the work of its employees, it will make employees more motivated so that the nature of employee loyalty will appear to the company where they work.

Another factor that can affect a person's work loyalty is the work environment. Work environment has a positive effect on employee loyalty which is mediated by motivation (Pranavianti, 2020). This explains that the better the working environment conditions, the more motivated employees will be at work and increase employee loyalty.

Leadership factors in a company organization have a positive influence on employee work motivation (Aryono, 2017). The better the leadership possessed by the leader of a company, the higher the work motivation of employees. This will certainly encourage the creation of employee loyalty for the company.

Based on the description above, it is necessary to conduct further research related to the analysis of the relationship between compensation, work environment, leadership on employee loyalty which mediated by motivation.

LITERATURE REVIEW

Work loyalty is one of the elements used in employee assessment which includes loyalty to his job, position and organization. This loyalty is reflected by the willingness of employees to maintain and defend the organization inside and outside of work from the undermining of irresponsible people. Employee loyalty is an emotional attitude that is pleasant and loves his job. (Dessler, 2009). Loyalty can be interpreted as loyalty, devotion and trust given or addressed to a person or institution, in which there is a sense of love and responsibility to try to provide the best service and behavior. Thus, loyalty is the tendency of employees not to move to another company due to the suitability of the company's situation and conditions with the goals to be achieved (Simamora, 2015).

The loyalty indicators consist of obey the rules (every policy implemented in the company to expedite and regulate the execution of tasks by the company's management is adhered to and implemented properly), responsibility to the company (the characteristics of the job and the performance of its duties have consequences that are imposed on the employee), willingness to cooperate (working with people in a group will allow the company to achieve goals that are impossible for individual people to achieve), sense of belonging (existence of a sense of belonging to the employees of the company will make employees have the attitude to take care and be responsible for the company so that in the end it will lead to loyalty in order to achieve company goals), interpersonal relationship (employees who have high loyalty will have a flexible attitude towards interpersonal relationships. These personal relationships include: social relations between employees, harmonious relationships between superiors and employees, work situations and suggestions from coworkers) (Siswanto, 2013).

Motivation is defined as a set of energetic forces that originates both within and outside an employee, initiates work-related effort, and determines its direction, intensity, and persistence. Motivation is a critical consideration because effective job performance often requires high levels of both ability and motivation (Colquitt et al, 2015). Motivation in the context of a business and indicated that, motivation can be said to be about "the will to work". It can come from the enjoyment of the work itself and/or from the desire to achieve certain goals e.g. earn more money or achieve promotion. It can also come from the sense of satisfaction that we gain from completing something, or achieving a successful outcome after a difficult project or problem solved (Robbin, 2013).

In carrying out his work, people are influenced by two factors which are needs such as: maintenance factors (salary, physical working conditions, job security, pleasant supervision, various other benefits), motivation factors (these motivational factors are related to personal appreciation that is directly related to work likes a comfortable room, a soft chair, the right placement) (Herzberg, 1966).

Compensation is what employee receive in exchange of their work. Whether hourly wages or periodic salaries, the personnel department usually design and administers employee compensation (Hasibuan, 2017). The process of wage or salary administration (or, “compensation” as it is sometimes called) involves the weighing or balancing of accounts. A compensation is anything that constitutes or is regared as an equivalent or recompense. In the employment world, financial rewards are the compensation resources provided to employees for the return of their services. The term “remuneration”, “wage”, and “salary” also are used to describe this financial arrangement between employers and employees. A remuneration is a reward, payment, or reimbursements on occasion also may be nonfinancial in nature. Remunerations are usually in the form of comprehensive pay concepts than are the ideas of salary and wage that normally include a financial but not a nonfinancial dimension (Mangkunegara, 2015).

There are several indicators for compensation such as: wages (Wages are direct financial rewards paid to workers based on hours worked, number of goods produced, or number of services rendered), incentive (direct rewards paid to employees because their performance exceeds the specified standards), indirect compensation (additional compensation provided at the company's sole discretion) (Pangabean, 2002).

Work environment is the whole of tools and materials encountered, the surrounding environment in which a person works, his work methods, and work arrangements both as individuals and as groups. The factors that affect the work environment are lighting or light at work, temperature or air temperature at work, humidity at work, air circulation in the workplace, noise at work, and mechanical vibrations at work (Sedarmayanti, 2017).

Work environment has three dimensions which are physical environment (an environment that can cause a person to adjust his suitability to his place of work), mental environment (a condition experienced by a person at his place of work), social environment (the environment in which a person interacts with other people) (Jain and Kaur, 2014).

Leadership is about influencing, motivating, and enabling others to contribute towards the effectiveness and success of the organizations of which they are members. Leadership is the process of influencing and supporting others to work enthusiastically towards achieving goals (Wibowo, 2016). Understanding leadership leadership is all activities / activities to influence the willingness of others to achieve common goals. Robert Dubin stated that leadership is the activity of the holder of authority and decision making. Meanwhile, according to Ralph M. Stogdill explained that leadership is a process of influencing group activities in an effort to formulate and achieve goals (Sedarmayanti, 2017).

Leader in implementing his leadership must be able to maturely carry out maturity towards his agency or organization, leadership is divided into several indicators dimension: ability to build good cooperation and relationships, effective ability, participative leadership (Rivai, 2006).

Based on the theoretical explanation related to compensation, working environmental, leadership, motivation and loyalty, the following hypothesis can be drawn:

- H1: There is a direct effect of compensation on loyalty.
- H2: There is a direct effect of the work environment on loyalty.
- H3: There is a direct effect of leadership on loyalty.
- H4: There is a direct effect of motivation on loyalty.
- H5: There is an effect of compensation on loyalty through motivation.
- H6: There is an effect of the work environment on loyalty through motivation.
- H7: There is an effect of leadership on loyalty through motivation

RESEARCH METHODS

This research is a quantitative research in which the object used is the ship's crew in the engine room. The number of samples used as many as 53 respondents. The design used is hypothesis testing using the structural equation model (SEM) – Smart PLS version 3.3.3.

FINDINGS AND DISCUSSION

The variables used in this research: compensation (X1), work environment (X2), leadership (X3), motivation (Z) and loyalty (Y) with eight questions for each indicator. After validity and reliability test, any question is delete to comply with validity and reliability. Research model can be seen at figure 2.

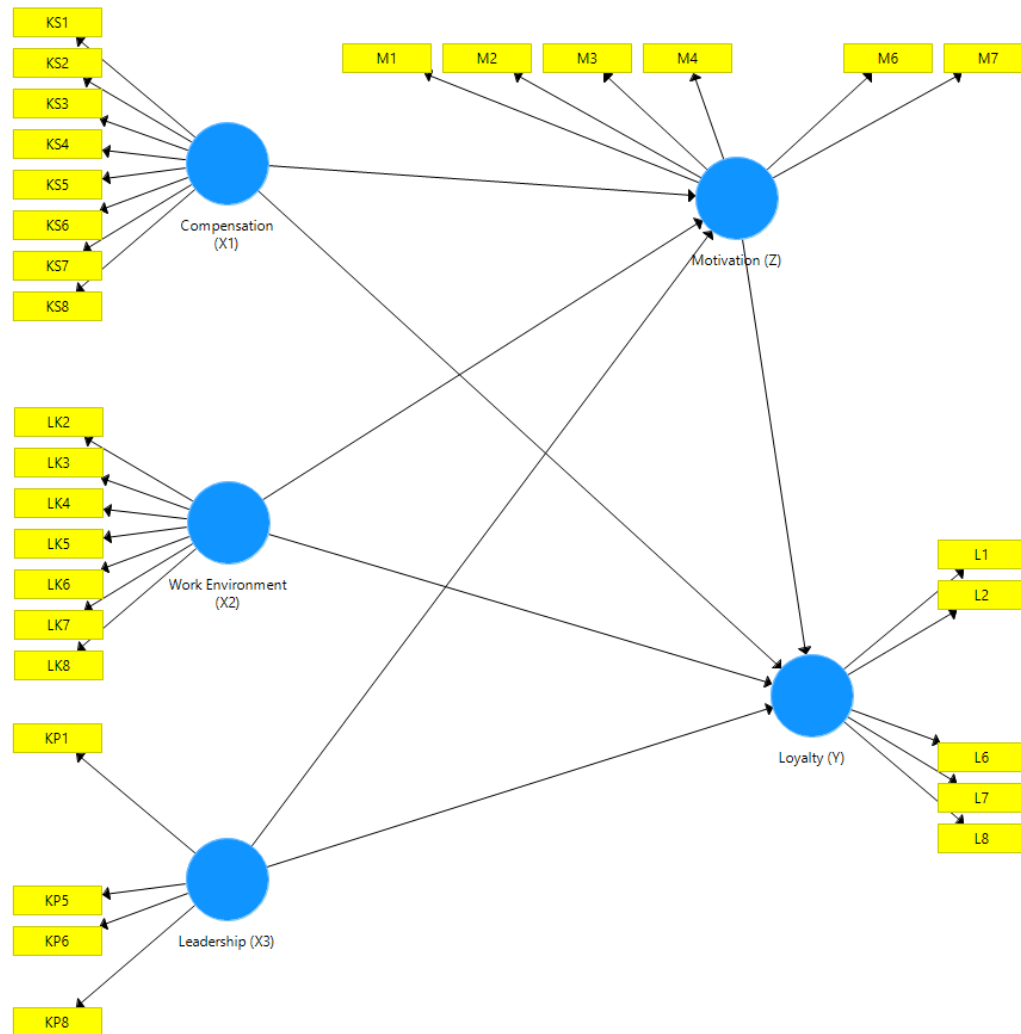


Figure 2. Research model
(Source: Smart PLS 3.3.3)

Validity and Reliability Test

Validity test on the Smart PLS 3.3.3 application is described by the outer loading value. The variable is belong to be valid if the outer loading value is > 0.7 (Hair et al, 2014). The reliability is indicated by the composite reliability value. The variable is belong to reliable if composite reliability value > 0.7 (Hair et al, 2014).

Analysis result of model at figure 2 has any some question that no valid and reliable, some question will delete to process the data valid and reliable only. The question indicators omitted in the Smart PLS 3.3.3 calculation are as follows: KP4, M5, KP2, L5, KP3, LK1, M8, L4, KP7. After deleting some of the question indicators above, the results of the validity and reliability met the criteria. Validity and reliability test result can be seen at figure 3.

Construct Reliability and Validity					
Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (...)	Copy
	Cronbach's Al...	rho_A	Composite Reliability	Average Variance Extracted (AVE)	
Compensation (X1)	0.930	0.932	0.943	0.674	
Leadership (X3)	0.791	0.794	0.864	0.614	
Loyalty (Y)	0.851	0.857	0.894	0.629	
Motivation (Z)	0.891	0.894	0.917	0.648	
Work Environment (X2)	0.897	0.899	0.919	0.618	

Figure 3. Validity and Reliability Test Result
(Source: Smart PLS 3.3.3)

Outer Model

Outer model test describes the relationship between each indicator and its latent variables. Structural model for outer model to predict the feasibility of the indicators. Outer model test consist of discriminant validity test, average variance extracted, and cronbach's alpha.

1. Discriminant validity

Discriminant validity aims to describe an indicator that is not represented by other indicators. It is measured by cross loading value. The variable is belong to be valid if the cross loading value > 0.7 and the cross loading value must be greater than other variables (Hair et al, 2016). Discriminant validity test result can be seen at table 1, it show that all variable is valid.

Table 1. Discriminant Validiy
(Source: Smart PLS 3.3.3)

	Compensation (X1)	Work Environment (X2)	Leadership (X3)	Motivation (Z)	Loyalty (Y)
KS1	0.829	0.732	0.649	0.756	0.671
KS2	0.794	0.737	0.710	0.759	0.766
KS3	0.872	0.742	0.618	0.772	0.730
KS4	0.771	0.669	0.661	0.761	0.710
KS5	0.867	0.754	0.630	0.764	0.793
KS6	0.791	0.638	0.540	0.663	0.663
KS7	0.853	0.714	0.643	0.783	0.739
KS8	0.781	0.728	0.600	0.697	0.622
LK2	0.584	0.703	0.598	0.572	0.582
LK3	0.653	0.750	0.569	0.661	0.581
LK4	0.676	0.800	0.573	0.640	0.667

LK5	0.671	0.818	0.626	0.644	0.590
LK6	0.738	0.833	0.678	0.726	0.589
LK7	0.716	0.795	0.627	0.679	0.677
LK8	0.742	0.799	0.754	0.770	0.688
KP1	0.653	0.683	0.806	0.682	0.646
KP5	0.608	0.643	0.766	0.703	0.590
KP6	0.547	0.574	0.760	0.599	0.548
KP8	0.604	0.626	0.802	0.696	0.661
M1	0.761	0.787	0.691	0.781	0.740
M2	0.712	0.640	0.696	0.815	0.721
M3	0.616	0.528	0.680	0.714	0.643
M4	0.824	0.813	0.742	0.862	0.781
M6	0.714	0.676	0.710	0.821	0.739
M7	0.747	0.663	0.618	0.830	0.700
L1	0.607	0.559	0.648	0.648	0.723
L2	0.713	0.633	0.604	0.731	0.806
L6	0.627	0.468	0.516	0.634	0.750
L7	0.725	0.686	0.588	0.750	0.842
L8	0.764	0.782	0.736	0.781	0.837

2. Average Variance Extracted

Average Variance Extracted aims to evaluate discriminant validity for each construct and latent variable. The variable is belong meet the requirements if the AVE value > 0.5 (Hair et al, 2016). Discriminant validity test result can be seen at figure 3, it show that all variable is valid.

3. Cronbach's Aplha

Cronbach's Aplha aims to This test aims to strengthen the results of the composite reliability of a variable. The variable is belong to be eligible if cronbach's alpha value > 0.7 (Hair et al, 2016). Cronbach's Aplha test result can be seen at figure 3, it show that all variable is reliable.

Inner Model

Inner model aims to predict a relationship between the variables used in this research. Inner model test consist of discrimination coefficient, predictive relevance, effect size criteria.

1. Discrimination Coefficient (R^2)

Discrimination coefficient aims to assess the level of predictions accuracy for endogenous constructs. The value of R^2 can be declared as strong if the value is more than 0.7, as moderate if the value is > 0.5, as weak if the value is > 0.25 (Hair et al, 2016). Discrimination coefficient test result can be seen at table 2, it show that loyalty and motivation strong prediction accuracy for endogenous constructs.

Table 2. Discriminant Coefficient

(Source: Smart PLS 3.3.3)

Variabel	R^2
Loyalty (Y)	0.823
Motivation (Z)	0.887

2. Predictive Relevance (Q^2)

Predictive relevance aims to measure how well the resulting observations value. The observation is belong to relevance if the value of $Q^2 > 0$ (Hair et al, 2016). Predictive relevance test result as below:

- Q^2 Loyalty = 0.677
- Q^2 Motivation = 0.787

3. Effect Size Criteria (f^2)

Effect size criteria aims to measure the relative impact of an independent variable that affects to dependent variable. The value of f^2 can be declared as strong if the value is more than 0.35, as moderate if the value is > 0.15 , as weak if the value is > 0.02 (Hair et al, 2016). Effect size criteria test result can be seen at figure 4, it show that (a). Compensation and leadership has a strong effect to customer satisfaction, meanwhile work environment has a weak effect to motivation, (b). Compensation, work environment, and motivation has a weak effect to loyalty, meanwhile motivation has a strong effect to loyalty.

f Square		
	Loyalty (Y)	Motivation (Z)
Compensation (X1)	0.084	0.668
Leadership (X3)	0.006	0.388
Loyalty (Y)		
Motivation (Z)	0.200	
Work Environment (X2)	0.001	0.006

Figure 4. Effect Size Criteria Test Result
(Source: Smart PLS 3.3.3)

Hypothesis Testing Result

Hypothesis testing is done by analyzing the bootstrapping on the Smart PLS 3.3.3 program. To assess the relationship between variables can be defined by Tstatistic or p-Value. The variable can be declared to have a significant effect on other variables if it has a T-statistic greater than T-table or p-Value is lower than 0.5 (Manurung and Budiastuti, 2019). T-table for this research is 1.299 (research model: one tailed, 53 sample, and 5 variabel).

1. Direct Effect

Research result for direct effect can be seen at figure 5. It can be conclude that (a). Compensation has a significant effect to motivation, compensation has a significant effect to loyalty (b). Work environment has no effect to motivation, Work environment has no effect to loyalty (c). Leadership has a significant effect to motivation, meanwhile leadership has no effect to loyalty (d). Motivation has a significant effect to loyalty.

Path Coefficients					
Mean, STDEV, T-Values, P-Val...	Confidence Intervals	Confidence Intervals Bias Cor...	Samples	Co	
	Original ...	Sample ...	Standard ...	T Statistics (O/STDEV)	P Values
Compensation (X1) -> Loyalty (Y)	0.331	0.351	0.153	2.164	0.015
Compensation (X1) -> Motivation (Z)	0.575	0.571	0.084	6.873	0.000
Leadership (X3) -> Loyalty (Y)	0.068	0.074	0.125	0.544	0.293
Leadership (X3) -> Motivation (Z)	0.365	0.360	0.100	3.646	0.000
Motivation (Z) -> Loyalty (Y)	0.560	0.526	0.185	3.028	0.001
Work Environment (X2) -> Loyalty (Y)	-0.026	-0.041	0.137	0.188	0.426
Work Environment (X2) -> Motivation (Z)	0.061	0.058	0.107	0.568	0.285

Figure 5. Direct Effect Result
(Source: Smart PLS 3.3.3)

2. Indirect Effect

Research result for indirect effect can be seen at figure 6. It can be conclude that (a). Compensation has a significant effect to loyalty through motivation (b). Work environment has no effect to loyalty through motivation (c). Leadership has a significant effect to loyalty through motivation (d). Motivation is good mediating variable to connect compensation and leadership to loyalty, but it not good enough connecting work environment to loyalty.

Specific Indirect Effects					
Mean, STDEV, T-Values, P-Val...	Confidence Intervals	Confidence Intervals Bias Cor...	Samples	Copy to Clipboard:	
	Original Sa...	Sample Me...	Standard ...	T Statistics (O/STDEV)	P Values
Compensation (X1) -> Motivation (Z) -> Loyalty (Y)	0.322	0.298	0.110	2.925	0.002
Leadership (X3) -> Motivation (Z) -> Loyalty (Y)	0.204	0.191	0.079	2.571	0.005
Work Environment (X2) -> Motivation (Z) -> Loyalty (...)	0.034	0.036	0.056	0.611	0.271

Figure 6. Indirect Effect Result
(Source: Smart PLS 3.3.3)

CONCLUSION

From the research that has been done, it is found that only the work environment does not directly effect to the loyalty of the ship's crew. In addition, the motivation function to mediate the work environment on ship crew loyalty is not able to make the work environment effect to ship's crew loyalty. Specifically, the conclusions from this research are as follows:

1. There is a significant effect of compensation on loyalty.
2. There is no effect of the work environment on loyalty.
3. There is a significant effect of leadership on loyalty.
4. There is a significant effect of motivation on loyalty.
5. There is a significant effect of compensation on loyalty through motivation.
6. There is no effect of the work environment on loyalty through motivation.
7. There is a significant effect of the work environment on loyalty through motivation.

Based on the research results, the researcher suggests that PT. SPIL should prioritize improvements in compensation and leadership factors in order to increase the loyalty of the ship's crew so that the loyal ship crew can improve the achievement of delivery on time performance. On the other hand for the future research, researcher suggest to replace work environment variables with other variables such as competence, performance, training, etc.

BIBLIOGRAPHY

- Aryono, I.A. 2017. Pengaruh Kepemimpinan dan Lingkungan Kerja Terhadap Kinerja Karyawan Pada PT. KAI DAOP 6 Yogyakarta Dengan Variabel Motivasi Sebagai Intervening. Repository Universitas Islam Indonesia 2017.
- Aswar, et al. 2020. Motivasi Sebagai Variabel Intervening Gaya Kepemimpinan dan Kompensasi Terhadap Kinerja Karyawan Assembly 2 PT. Noble Batam. *ejournal.ymbz.or.id* Volume 3, Nomor 1, Maret 2020.
- Colquitt, J. A. et al. 2015. *Organizational Behavior: Improving Performance and Commitment in the Workplace* 4th edition. New York, McGraw-Hill Education.

- Dessler, G. 2009. *Manajemen Sumber Daya Manusia* (9th ed.). Jakarta, Indeks.
- Hair, J. F. 2014. *A Primer On Partial Least Square Structural Equation. Modeling PLS-SEM*. SAGE Publication Inc.
- Hasibuan, M.S. 2009. *Manajemen Sumber Daya Manusia*. Jakarta, Bumi Aksara.
- Herzberg F. 1966. *The Motivation to Work*. New York, John Willey and Sons, Inc.
- Jain, R. and Kaur, S. 2014. Impact of Work Environment on Job Satisfaction. *International Journal of Scientific and Research Publications*, Vol. 4 Issue 1, 2014.
- Lavinia, D. 2018. Pengaruh Kompensasi Terhadap Loyalitas Karyawan Melalui Motivasi Kerja Sebagai Variabel Intervening Pada PT. Ehya Purwa Raharjo Gresik. *AGORA* Vol. 6, No. 1, (2018) 1-6.
- Mangkunegara, A.P. 2015. *Manajemen Sumber Daya Manusia Perusahaan*. Bandung, Remaja Rosdakarya.
- Mochklas et al. 2016. Influence of Leadership Style, Organizational Culture, Work Motivation, Employee Loyalty (Study at PT. Hilon Surabaya). *The International Journal Of Business & Management* Vol.4 Issue 8 August 2016.
- Nadaek, B. dan Naibaho, L. 2020. Motivation and HRM Factors Relation to The Employee Loyalty. *Polish Journal of Management Studies*, Vol 22 No. 2.
- Panggabean, M.S. 2002. *Manajemen Sumber Daya Manusia*. Jakarta, Ghalia Indonesia.
- Pranavianti., et al. 2020. Pengaruh Kompensasi dan Lingkungan Kerja Terhadap Loyalitas Karyawan Dengan Motivasi Sebagai Variabel Intervening di Resto Madiun. *The 13th Forum Ilmiah Pendidikan Akuntansi Program Studi Pendidikan AKuntansi-FKIP Universitas PGRI Madiun*.
- Rivai, V. 2006. *Manajemen Sumber Daya Manusia untuk Perusahaan : dari Teori Ke Praktik Edisi Pertama*. Jakarta, Raja Grafindo Persada..
- Robbins, et al.. 2013. *Organizational Behavior*. New Jersey, Pearson Education.
- Sedarmayanti. 2017. *Manajemen Sumber Daya Manusia (Reformasi Birokrasi dan Manajemen Pegawai Negeri Sipil)*. Bandung, Refika Aditama.
- Simamora, H. 2015. *Manajemen Sumber Daya Manusia*. Yogyakarta, STIEY.
- Siswanto. 2013. *Manajemen Tenaga Kerja Indonesia (Pendekatan Administrasi dan Operasional)*. Jakarta, PT. Bumi Aksara.
- Sutrisno, E. 2016. *Manajemen Sumber Daya Manusia*. Jakarta, Kencana Prenada Media Group.