

The Influence of Work Motivation, Compensation, Work Discipline and Work Environment on the Performance of Education Staff Employees

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ARTICLE INFO

Article history

Received : 27-02-2024

Revised : 23-05-2024

Accepted : 28-05-2024

Keywords

Work Motivation;

Compensation;

Work Environment;

Work Discipline;

Employee Performance;

ABSTRACT

The purpose of this research is to determine the influence of work motivation, compensation, work discipline and work environment on the performance of educational staff. The results of the linear regression test show that the independent variables work motivation, compensation, work environment and work discipline together influence the dependent variable of employee work performance at FEM IPB University Bogor by 39.1% while the remaining 61.9% is influenced by other variables which are not included in this study. Meanwhile, the F test results show that the calculated F value processed using SPSS is 7.256, while the F table value seen from the Table of Values for the F Distribution is 2.63. Thus, it can be said that the $F_{count} = 7.256 > F_{table} = 2.63$. This means that the independent variables consisting of work motivation, compensation, work environment and work discipline have a significant effect on employee work performance. The results of the t test (partial) show that two variables, namely compensation and work environment, have a significant effect on employee work performance, two more, namely work motivation and work discipline, do not have a significant effect on employee work performance at FEM IPB University Bogor.

1. INTRODUCTION

In Basically, the thing that plays the most important role in achieving a maximum goal is to start from the thing that most supports the achievement of that goal, namely Human Resources (HR). So it is necessary to carry out what is called management or development which aims to create productive human beings. By developing or managing good human resources so that an employee can complete tasks and demands both now and in the future so that human resource development is very influential in the effectiveness and efficiency of an organization.(Abdul et al., 2018; Azhad et al., 2019).

Public organizations in the education sector such as academies, colleges and universities in Indonesia must be able to compete to achieve universities with global standards or class so that they can survive in the midst of intense higher education competition. One way is to improve the performance of employees, especially administrative employees, who will help teaching staff such as lecturers who carry out Tri Dharma duties, which provide services to students who are pursuing education at higher education institutions, research and community service.(Harris, 2014).

The Faculty of Economics and Management (FEM) IPB University Bogor is a State University under the Department of National Education which operates in the field of education and teaching. In order to anticipate the possibility of undesirable things occurring, the Faculty of Economics and Management (FEM) IPB University Bogor pays special attention to developing employee performance from existing Human Resources (HR). This effort is obtained through appropriate policies and work programs from the leadership of the agency where the employee works, because employees are an important indicator in supporting the running of activities so their performance needs to be assessed.

As time went by, problems were discovered where the number of students, lecturers and educational staff increased. Performance assessment is an important part of an employee's activity process. Employee performance is the achievement achieved by an employee in carrying out his work in accordance with his responsibilities. Employee performance is measured based on standards or

criteria set by the company. Therefore, compensation will encourage employee dissatisfaction and can appear in the form of low performance. From this theory, the relationship between motivation, compensation, work environment, work discipline and employee performance can be described.(Hardina & Vikaliana, 2020; Leonardo & Andreani, 2015).

The Faculty of Economics and Management (FEM) is the 8th faculty at the Bogor Agricultural Institute (IPB). The establishment of FEM IPB is based on the philosophy that IPB is the only agricultural university in Indonesia which is given the mandate to develop agricultural science and technology holistically but does not have a faculty whose mandate is to develop economics and management science to support agricultural development in particular and Indonesia's economic development in generally. The formal foundation for the establishment of the Faculty of Economics and Management was stated in a plaque signed by the Vice President of the Republic of Indonesia at that time, Megawati Soekarnoputri on April 6 2001. In the inscription it was written "it is known that the main pillar of sustainable economic development is agricultural development which aims to improve welfare of the people and the state in an equitable manner. Therefore, the presence of the Faculty of Economics and Management, Bogor Agricultural Institute will strengthen Indonesia's micro and macro agricultural economy. Bogor 6 April 2001.

The data obtained at the Faculty of Economics and Management, IPB University Bogor for the 2023 period is as follows:

Table 1. Data on the number of FEM IPBUniversity Tendik Employees 2023

No	Education Personnel	
1	Civil Servant Staff	40
2	Permanent Staff	4
3	Contract Tend	40
Amount		84

Source: admin FEM IPB University

From the table data above, it shows that there are still many employees who have not yet become Civil Servants (PNS) and Permanent Non-PNS Employees at the Faculty of Economics and Management, IPB University Bogor.

The data obtained at the Faculty of Economics and Management (FEM) IPB University for the salaries of Civil Servant (PNS) employees and Permanent Non-PNS Employees are equated with government regulations where they are domiciled.

The following are the salary levels for civil servants and non-civil servants at the Faculty of Economics and Management, IPB University:

Table 2. Salary amounts for civil servants and permanent non-civil servant employees at FEM IPB University

Golongan I		Golongan II	
I.A	Rp1.560.800–Rp2.335.800	IIA	Rp2.022.200–Rp3.373.600
I.B	Rp1.704.500–Rp2.474.900	IIB	Rp2.208.400–Rp3.516.300
I.C	Rp1.776.600–Rp2.557.500	IIC	Rp2.301.800–Rp3.665.000
I.D	Rp1.851.800–Rp2.686.500	IID	Rp2.399.200–Rp3.820.000
Golongan III		Golongan IV	
III.A	Rp2.579.400–Rp4.236.400	IV.A	Rp3.044.300–Rp5.000.000
III.B	Rp2.688.500–Rp4.415.600	IV.B	Rp3.173.100–Rp5.211.500
III.C	Rp2.802.300–Rp4.602.400	IV.C	Rp3.307.300–Rp5.431.900
III.D	Rp2.920.800–Rp4.797.000	IV.D	Rp3.447.200–Rp5.661.700

Source: admin FEM IPB University

The following is the salary for Non-PNS Contract Employees at the Faculty of Economics and Management, IPB University:

Table 3 Salary Amounts for Non-PNS Contract Employees at FEM IPB University

PK	Pendidikan				
	SLTP	SLTA/D1	D3	S1	S2
0	Rp. 1.136.380	Rp.1.348.200	Rp.1.534.610	Rp.1.719.690	Rp.1.792.420
1					
2	Rp.1.172.150	Rp.1.369.410	Rp.1.582.910	Rp.1.773.800	Rp.1.848.840
3					
4	Rp.1.209.110	Rp.1.412.530	Rp.1.632.750	Rp.1.829.660	Rp.1.907.080
5					
6	Rp.1.247.190	Rp.1.457.050	Rp.1.684.200	Rp.1.887.340	Rp.1.967.140
7					
8	Rp.1.286.460	Rp.1.502.900	Rp.1.737.260	Rp.1.946.770	Rp.2.029.090
9					
10	Rp.1.326.990	Rp.1.550.290	Rp.1.791.930	Rp.2.008.090	Rp.2.093.000
11					
12	Rp.1.368.780	Rp.1.599.080	Rp.1.848.420	Rp.2.071.300	Rp.2.158.940
13					
14	Rp.1.411.830	Rp.1.649.480	Rp.1.906.590	Rp.2.136.540	Rp.2.226.910
15					
16	Rp.1.456.350	Rp.1.701.420	Rp.1.966.650	Rp.2.203.810	Rp.2.297.050

Source: Chancellor's Decree Number 1/IT3/KP/2019

PK: Work experience at IPB without interruption

Employee work motivation can arise from within themselves and from outside the individual, motivation that arises from within, for example employees at the Faculty of Economics and Management (FEM) IPB University Bogor who have time discipline, work initiative and awareness of loyalty (Setiawan & Yulianti, 2018; Sutrisno et al., 2016; Syafrina, 2017). Meanwhile, motivation that arises from outside, including the character of the leader, compensation and co-workers, can foster employee enthusiasm for work (Izzah & Ardiani, 2018; P., 2018; Toba Ali, 2010).

In order to obtain factors that influence work performance at FEM IPB University Bogor and as an effort to make improvements in the future, the author is interested in conducting this research.

2. METHOD

The type of research used is explanatory research with a research method in the form of data collection using a questionnaire. The data analysis model used is multiple linear regression analysis. Sample selection uses saturated samples (census). The sample consisted of 40 respondents, using multiple linear regression analysis (Nurhasanah & Vikaliana, 2021). SPSS is used to help process data research (Vikaliana & Irwansyah, 2019).

3. RESULT AND DISCUSSION

Data Quality Test

The next step taken after knowing the various responses from respondents was to carry out a data quality test. This test is carried out to find out whether the various statement items or indicators used are valid or not and reliable or not. This is important because one of the conditions for data to be able to be tested for a hypothesis is that it must be valid and reliable. Below are presented the results of data quality tests in the form of validity tests and reliability tests.

1. Validity test

Table 4. Validity Test Results of Work Motivation Variables

No	Indicators	Rcount	Conclusion	Information
1	Spirit at work	0.502	Valid	Because the calculated r value is > 0.3
2	The Drive to Achieve Goals	0.576	Valid	Because the calculated r value is > 0.3
3	Initiative	0.635	Valid	Because the calculated r value is > 0.3
4	Responsibility	0.423	Valid	Because the calculated r value is > 0.3

The data above shows that all the calculated r values presented in the Corrected Item-Total Correlation column calculated using SPSS (attached) are greater than the r table values so it can be said that all statement items are completely valid.

Table 2. Compensation Variable Validity Test Results

No	Indicators	Rcount	Conclusion	Information
1	Wages	0.873	Valid	Because the calculated r value is > 0.3
2	Bonus	0.777	Valid	Because the calculated r value is > 0.3
3	Incentives	0.615	Valid	Because the calculated r value is > 0.3
4	Insurance	0.308	Valid	Because the calculated r value is > 0.3

The data above shows that all the calculated r values presented in the Corrected Item-Total Correlation column calculated using SPSS are greater than the r table values so it can be said that all statement items are completely valid.

Table 3. Validity Test Results for Work Environment Variables

No	Indicators	Rcount	Conclusion	Information
1	Workplace Building	0.516	Valid	Because the calculated r value is > 0.3
2	Work equipment	0.758	Valid	Because the calculated r value is > 0.3
3	Facilities	0.724	Valid	Because the calculated r value is > 0.3
4	Coworker Relations	0.461	Valid	Because the calculated r value is > 0.3
5	Superior Relations	0.385	Valid	Because the calculated r value is > 0.3
6	Employee Collaboration	0.500	Valid	Because the calculated r value is > 0.3

The data above shows that all the calculated r values presented in the Corrected Item-Total Correlation column calculated using SPSS (attached) are greater than the r table values so it can be said that all statement items are completely valid

Table 4. Validity Test Results for Work Discipline Variables

No	Indicators	Rcount	Conclusion	Information
1	Presence	0.715	Valid	Because the calculated r value is > 0.3
2	Regulatory Compliance	0.757	Valid	Because the calculated r value is > 0.3
3	Compliance with Work Standards	0.681	Valid	Because the calculated r value is > 0.3
4	Level of Alertness	0.570	Valid	Because the calculated r value is > 0.3

The data above shows that all the calculated r values presented in the Corrected Item-Total Correlation column calculated using SPSS (attached) are greater than the r table values so it can be said that all statement items are completely valid.

Table 5. Validity Test Results for Employee Performance Variables

No	Indicators	Rcount	Conclusion	Information
1	Work Quantity	0.559	Valid	Because the calculated r value is > 0.3
2	Work quality	0.645	Valid	Because the calculated r value is > 0.3
3	Cooperation	0.398	Valid	Because the calculated r value is > 0.3
4	Responsibility	0.671	Valid	Because the calculated r value is > 0.3
5	Initiative	0.319	Valid	Because the calculated r value is > 0.3

The data above shows that all the calculated r values presented in the Corrected Item-Total Correlation column calculated using SPSS (attached) are greater than the r table values so it can be said that all statement items are completely valid.

2. Reliability Test

Reliability testing is used to test the consistency of respondents' answers. Reliability is expressed in numerical form, usually as a coefficient, the higher the coefficient, the higher the reliability or consistency of the respondent's answers. It is said to be reliable if it has a reliability coefficient or Cronbach's alpha of 0.6 or more. Below the author presents a list of Cronbach Alpha for all existing research variables, both independent and dependent variables, based on calculations using SPSS.

Table 6. Reliability Test Results

No	Variables	Cronbach's A	Conclusion	Information
1	Work motivation	0.739	Reliable	Because Cronbach α > 0.6
2	Compensation	0.797	Reliable	Because Cronbach α > 0.6
3	Work environment	0.796	Reliable	Because Cronbach α > 0.6
4	Work Discipline Employee	0.830	Reliable	Because Cronbach α > 0.6
5	Performance	0.736	Reliable	Because Cronbach α > 0.6

The data above shows that all Cronbach Alpha values listed in the Reability Statistics Table (attached) as a result of calculations using SPSS for each variable are greater than 0.6 so it can be said that all research instruments are reliable (reliable) and can be used for next test

Classic Assumption Test Results

After the data quality test has been carried out, the next step is to carry out the classical assumption test. After the data has been processed and is feasible, the classical assumption test must be carried out to check the normality of the data before carrying out linear regression analysis. The classical assumption tests carried out in this research are: (1) normality test (2) multicollinearity test and (3) heteroscedasticity test.

1. Normality test

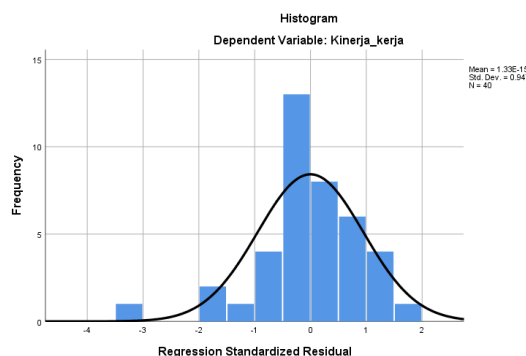


Figure 1. Normality Test Results

In the histogram graph above, it can be seen that the variables are normally distributed. This is shown by the histogram image not sloping to the right or left so that the regression model is suitable for predicting customer loyalty.

2. Multicollinearity Test

Table 6. Multicollinearity Test Results

Variables	Collinearity Statistics			
	Tolerance		Vif	
	Results	Conclusion	Results	Conclusion
Work motivation	0.724	> 0.1	1,382	< 5
Compensation	0.865	> 0.1	1,156	< 5
Work environment	0.744	> 0.1	1,344	< 5
Work Discipline	0.693	> 0.1	1,443	< 5

The data above shows that all the tolerance values for the independent variables are above 0.1 and the VIF values for the independent variables are all below 5, which means that there is no multicollinearity.

3. Heteroscedasticity Test

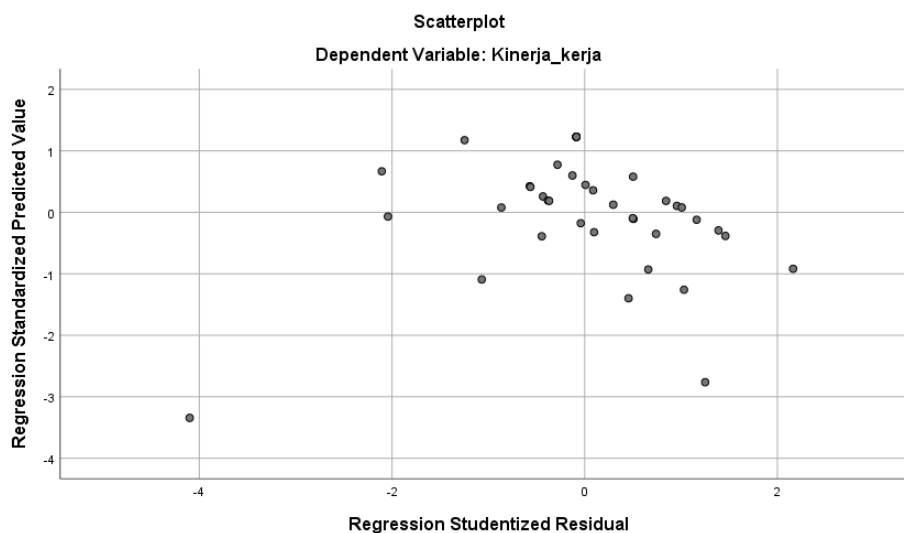


Figure 2. Heteroscedasticity Results Using a Graphical Approach

The Scatterplot graph above shows that the points spread randomly do not form a clear pattern and are spread both above and below zero on the Y axis. This means that heteroscedasticity does not occur in the regression model, so the multiple linear regression model can be continued .

HYPOTHESIS TESTING

The final step taken is to test the hypothesis. This test aims to answer the problem formulation as well as provisional guesses regarding the answer to the problem formulation as stated in the hypothesis. Several things included in this hypothesis test include the regression equation, F test (simultaneous test), coefficient of determination (R2) and t test (partial test).

Table 7. Multiple Regression Test Results
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5,050	4,012		1,259	,217		
	Work motivation	,257	,228	,166	1,127	,268	,724	1,382
	Compensation	,208	,085	,328	2,444	,020	,865	1,156
	Work environment	,307	,116	,383	2,644	,012	,744	1,344
	Work_discipline	,079	,166	,072	,477	,637	,693	1,443

Looking at the Unstandardized Coefficients Beta value above, the multiple linear regression equation resulting from this research can be determined as follows:

$$Y = 5.050 + 0.257X_1 + 0.208X_2 + 0.307X_3 + 0.079X_4$$

Which means that:

- The constant is 5.050, which means that if the variables of work motivation, compensation, work environment and work discipline are considered zero then the employee work performance variable is 5.050.
- The regression coefficient for the work motivation variable obtained a value of 0.257, which means that if the work motivation variable increases by one unit while compensation, work environment and work discipline are assumed to be zero, employee work performance will also increase by 0.257.
- The regression coefficient for the compensation variable obtained a value of 0.208, which means that if the compensation variable increases by one unit while work motivation, work environment and work discipline are assumed to be zero, employee work performance will also increase by 0.208.
- The regression coefficient for the work environment variable obtained a value of 0.307, which means that if the work environment variable increases by one unit while work motivation, compensation and work discipline are assumed to be zero, employee work performance will increase by 0.307.
- The regression coefficient for the work discipline variable obtained a value of 0.079, which means that if the work discipline variable increases by one unit while work motivation, compensation and work environment are assumed to be zero, employee work performance will increase by 0.079.

Table 8. F Test Results
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85,579	4	21,395	7,256	,000b
	Residual	103,196	35	2,948		
	Total	188,775	39			

The table above shows that the calculated F value processed using SPSS is 7.256, while the F table value seen from the Table of Values for the F Distribution is 2.63. Thus, it can be said that the $F_{count} = 7.256 > F_{table} = 2.63$. This means that the independent variables consisting of work motivation, compensation, work environment and work discipline have a significant effect on employee work performance at FEM IPB University Bogor.

Table 9. Coefficient of Determination Test Results (R2)
Model Summary b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.673a	.453	.391	1.71710

The table above shows that the adjusted R Square value is 0.391 or 39.1%. This means that the independent variables of work motivation, compensation, work environment and work discipline together influence the dependent variable of employee work performance at FEM IPB University Bogor by 39.1% while the remaining 61.9% is influenced by other variables not included in this research, for example leadership, work ability, working conditions and so on.

Table 10. t test results

Variables	T		Sig.		Conclusion
	tcount	ttable	RESULTS	$\alpha = 5\%$	
Work motivation	1,127	< 2,030	0.268	> 0.05	No significant effect
Compensation	2,444	> 2,030	0.020	< 0.05	Significant influence
Work environment	2,644	> 2,030	0.012	< 0.05	Significant influence
Work Discipline	0.477	< 2,030	0.637	> 0.05	No significant effect

In order to determine whether H0 or H1 is rejected or accepted, the tcount value above can be compared with the ttable value at a significance level of 5% ($\alpha = 0.05$). The ttable value at the 5% significance level ($\alpha = 0.05$) is 2.030. By comparing tcount and ttable, the following conclusions can be drawn:

- Partially, work motivation has a positive and insignificant effect on employee work performance at FEM IPB University Bogor because tcount (1.127) < ttable (2.030) and the significance value is above 0.05.
- Partially, compensation has a positive and significant effect on employee work performance at FEM IPB University Bogor because tcount (2.444) > ttable (2.030) and the significance value is below 0.05.
- Partially, the work environment has a positive and significant effect on employee work performance at FEM IPB University Bogor because tcount (2.644) > ttable (2.030) and the significance value is below 0.05.
- Partially, work discipline has a positive and insignificant effect on employee work performance at FEM IPB University Bogor because tcount (0.477) < ttable (2.030) and the significance value is above 0.05.

Discussion

In accordance with the background that was presented at the beginning, until now there are still obstacles encountered at the Faculty of Economics and Management (FEM) IPB University Bogor, especially regarding employee work performance, so research needs to be carried out, including using the variables of work motivation, compensation, work environment and work discipline. This problem is the least starting to be answered. Of the four independent variables used, there are two variables that have a significant influence on FEM IPB University Bogor, namely compensation and work environment. Meanwhile, the variables of work motivation and work discipline do not have a significant effect on employee work performance at FEM IPB University Bogor. The results of this study are in line with previous research which showed the same results (Poluakan et al., 2019; Sutrisno et al., 2016).

The research above shows that the adjusted R Square value is 0.391 or 31.1%. This means that the independent variables work motivation, compensation, work environment and work discipline together influence the dependent variable of employee work performance at FEM IPB University Bogor by 31.1% while the remaining 69.9% is influenced by other variables not included in this research, for example leadership, work ability, working conditions and so on. To find out the independent variable that has the most dominant influence on the dependent variable, you can look at the value of the Standardized Coefficient Beta. The results show that the independent variable that has the largest

Standardized Coefficient Beta value is the work environment variable of 0.383, which means that the work environment variable is the most important variable. dominant influence on employee work performance at FEM IPB University. Previous research related to the work environment(Hermiyanty, Wandira Ayu Bertin, 2017; Latunreng et al., 2021; P., 2018; Rahmadani, 2019),also obtained the same results as this study, which strengthens the results of this study.

4. CONCLUSION

In accordance with the descriptions above as well as the results of the data analysis and interpretation previously explained, the following conclusions can be drawn:

1. Simultaneously, work motivation, compensation, work environment and work discipline have a significant effect on the work performance of contract staff at FEM IPB University Bogor.
2. Partially, work motivation does not have a significant effect on the work performance of contract staff at FEM IPB University Bogor.
3. Partially, compensation has a significant effect on the work performance of contract staff at FEM IPB University Bogor.
4. Partially, the work environment has a significant effect on the work performance of contact staff employees at FEM IPB University Bogor.
5. Partially, work discipline does not have a significant effect on the work performance of contract staff at FEM IPB University Bogor.

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