

**IMPROVING THE PERFORMANCE OF EDUCATIONAL STAFF THROUGH  
EDUCATION, TRAINING, AND WORK DISCIPLINE: AN EMPIRICAL STUDY  
AT FACULTY OF ENGINEERING UNIVERSITAS SEBELAS MARET**

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**Abstract:** *Employees have a significant impact on achieving organizational objectives, especially when they are competent and fulfill their duties effectively. It is crucial for companies and organizations to consider the factors influencing employee performance. This study aims to investigate the influence of education, training, and work discipline on the performance of academic staff at the Faculty of Engineering, Universitas Sebelas Maret. The sample comprises 78 individuals selected through sampling techniques. Analytical methods include exploratory testing, classical statistical mechanics testing, multiple regression analysis, and hypothesis testing. The findings indicate that education, professional training, and work discipline significantly contribute to the performance of education staff.*

**Keywords:** *Education, Educational Staff Performance, Job Training, Work Discipline*

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## **1. Introduction**

The introduction of the thesis acknowledges that human resources (HR) holds paramount importance in the realm of business operations. If there is a lack of employees with relevant skills, the organization's achievement of its goals will be encumber. Effective employee performance will go a long way in achieving corporate goals. Therefore, the organization inescapably to improve the performance of employees by taking into account the factors impactful it.

Prayogi et al. (2018) He aforesaid that employees must work in accordance with the average to achieve the goals of the association and solve various problems. Performance is a concept that includes various factors that determine the interpretation level of employees. If the results of employee performance are not good, it will affect the performance.

Many factors can increase employee performance, including education. Kowaas et al. (2016) Explain that education is a multifaceted effort to develop character and develop human potential throughout life, both in and out of school. The job will be easier and less nonautomatic if the organization has a sufficient number of employees with the appropriate level of education for the duties and responsibilities. Training is the next factor to consider when improving employee performance. Training is an initiative to develop employees, especially to improve the intelligence and personality of jobholder. According to Iqbal et al. (2022), Education is an educational activity related to the learning process of acquiring and increasing knowledge, and it takes place quickly, with an emphasis on education rather than teaching. Another issue that organizations should pay attention to is work discipline. According to Kowaas et al. (2016), Discipline is the attitude of respecting, complying with and implementing written and unwritten rules and not avoiding punishment.

The Faculty of Engineering, is one of the departments of Universitas Sebelas Maret. Teaching staff is one of the factors that contribute to the educational activities of the department. Training staff are responsible for administrative, management, development, monitoring and

technical services that support the training program. Educational staff responsible for administration have different educational backgrounds. However, some employees still have the ability to perform their duties. On the other hand, completing tasks correctly and on time is a measure of employee performance. Meanwhile, when we look at the training programs that employees must attend, we see that responsibilities are not distributed well and their skills need to be reviewed. It is common for employees to be sent to training programs that are not appropriate for the work they do. Discipline is an important factor in the functioning and organization of. In the last three years, the rate of tardiness and other unethical behavior among faculty members of the Faculty of Engineering of Universitas Sebelas Maret has increased significantly. Based on the questions asked, this research is expected to find solutions to improve the performance of educational employees through education, vocational training and work discipline.

## **2. Research Method**

### **2.1 Research Design**

This investigation will be conducted as a comprehensive investigation, that is, an orderly scientific investigation of events and their relations with other events. According to Sugiyono in Iqbal et al. (2022), quantitative research it can also be defined as a type of research that examines the cause-effect relationship between the variables included in the research.

### **2.2 Population, Sample, and Sampling Technique**

The data used in this study includes primary data, which means information sourced directly from original channels instead of intermediaries used for distributing information. The source of the data was obtained from the participants' responses to the survey. The sample size for this study comprises all 78 employees from the total population, thus encompassing the entire population as the sample. All sampling methods were used to design the sample in this study.

### **2.3 Methodology for Data Collection**

Data collection for this study is conducted through the administration of a questionnaire. According to Hertomo et al. (2020), Survey is a method of collecting data by creating a list of questions (questionnaire) prepared by the researcher and then developed by the researcher for the participants.

### **2.4 Definition of Operational Variable**

#### **Performance of Educational Staff**

According to Sri (2021), performance refers to the results produced by an individual when completing designated tasks, which are influenced by their skills, experience, capabilities, and time management. Mangkunegara, as cited in Iqbal et al. (2022), identifies key indicators of employee performance as including task volume, work quality, job-related knowledge, feedback reception, and planning endeavors.

#### **Education**

According to Kowaas et al. (2016), Education is a multifaceted effort to develop character and develop human potential throughout life, both in and out of school. Educational standards include educational training, organizational development, instructional workforce development, and nonacademic workforce development. (Hasibuan in Iqbal et al., 2022).

### **Job Training**

According to Hertomo et. al. (2020) The responsibility for evaluating the effectiveness of job-related training now falls upon the individuals tasked with enhancing training and performance for a specific role. Parameters for assessing training effectiveness encompass training objectives, trainers, training materials, training methodologies, and trainee participation. (Mangkunegara in Iqbal et al., 2022).

### **Work Discipline**

According to Singodimedjo in Hustia (2020), Discipline refers to the mindset of adhering and being ready to follow the established rules of conduct within a given environment. According to Sastrohadiwiryono in Hustia (2020), Work standards include compliance with all company legislation, correct use of time, duties and responsibilities, and absenteeism.

## **2.5 Hypothesis**

### **Effects of Education on Performance of Educational Staff**

Education involves the transfer of knowledge, skills, and practices from one generation to the next through formal education, training programs, or research endeavors. The findings from the research conducted by Adam et al. (2020); Wardana (2018); Suriana et al. (2023); Kowaas et al. (2016); Iqbal et al. (2022); Pongoh et al. (2021); Handayani (2019) revealed a notable impact of education on performance. This leads to the formulation of the following hypotheses:

**H1:** Education significantly affects the performance of educational staff.

### **Effects of Job Training on Performance of Educational Staff**

Vocational training refers to the process of enhancing, acquiring, refining, and cultivating work capabilities, productivity, discipline, conduct, and professional ethics at a specific skill level, aligning with the requirements and duties of a job. Trijanuar (2019) training involves transferring knowledge, skills, and attitudes to enable employees to enhance their expertise and effectively carry out their duties while adhering to established work standards. Research by Muktiani (2019); Anisah (2017); Adam et al. (2020); Wardana (2018); Suriana et al. (2023); Kowaas et al. (2016); Septyandi et al. (2020); Trijanuar (2019); Manullang et al. (2020); Hertomo et al. (2020); Handayani (2019) stated that job training influences employee performance. The hypothesis that can be formulated:

**H2:** Training programs significantly affects the performance of educational staff.

### **Effects of Work Discipline on Performance of Educational Staff**

Work discipline is the attitude of complying with all regulations in the organization. Meanwhile, performance is the goal of an organization. If educational staff carry out work discipline, it will produce high performance (Septyandi et al., 2020). The cultivation of work discipline is crucial for a company's progress as it serves as a mechanism to encourage individuals and teams to maintain self-discipline while performing tasks. (Manullang et al., 2020). Research by Prayogi et al. (2018), Sinto et al. (2023), Muktiani (2019), Novita et al. (2020); Hustia (2020); Kowaas et al. (2016); Pongoh et al. (2021); Trijanuar (2019); Trijanuar (2019), states that work discipline influences employee performance. The hypothesis that can be formulated:

**H3:** Work discipline significantly affects the performance of educational staff.

## 2.6 Research Framework

A research framework defines relationships between concepts based on the problem being studied. Below are the basic principles that underpin this research.:

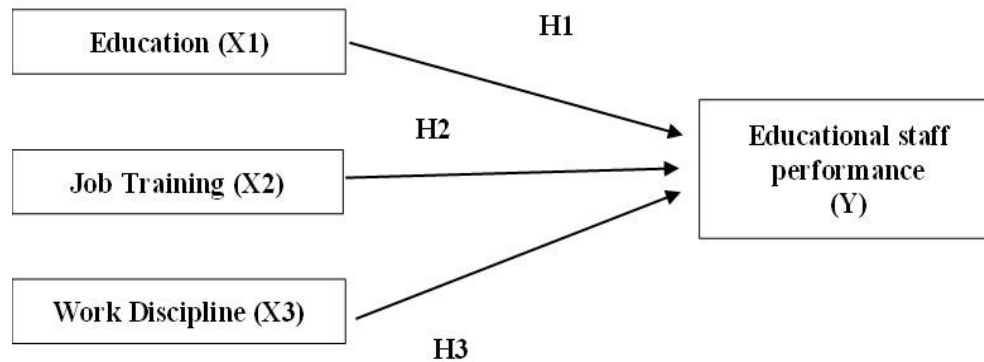


Figure 1. Research Framework

## 2.7 Data Analysis Method

The data analysis methods used in this study include, descriptive test, research instrument test, classical assumption test (normality test, multicollinearity test, heteroscedasticity test), multiple linear regression analysis, and hypothesis testing using the t test.

## 3. Results And Discussion

### 3.1 Results

#### Respondent Description

The following description of participants by gender means that there were 58 participants or 74% female employees and 20 participants or 26% male employees. Meanwhile, in terms of age, most of the employees are in the 41 to 50 age group with 34 respondents (44%); The lowest rate is in the 20 to 30 age group with 6 participants (8%). Regarding educational attainment, the majority of respondents, comprising 32 individuals (41%), hold a high school diploma, followed by 31 respondents (40%) with a bachelor's degree. Thirteen respondents have a diploma (D3), one participant holds a bachelor's degree, and one participant has a doctorate degree. In terms of tenure, 54 respondents (69%) have worked for more than fifteen years, while eight respondents (10%) have tenure ranging from one to five years. The remaining employees have tenure between five and fifteen years.

#### Research Instrument Test

##### a. Validity Test

The validation test affirmed that all mentioned items fulfilled the criteria, as indicated by the calculated r-value (r-count) compared to the tabulated r-value (r-table) at a significance level of 0.05. These results are elaborated in Table 1.

**Tabel 1. Results of the Validity Test**

Statement Item	r-count	r-table	Description	Statement Item	r-count	r-table	Description
PD1	0,625	0,22	Valid	DK3	0,454	0,22	Valid
PD2	0,674	0,22	Valid	DK4	0,851	0,22	Valid
PD3	0,684	0,22	Valid	DK5	0,786	0,22	Valid
PD4	0,611	0,22	Valid	DK6	0,322	0,22	Valid
PD5	0,600	0,22	Valid	DK7	0,443	0,22	Valid
PL1	0,646	0,22	Valid	KK1	0,329	0,22	Valid
PL2	0,696	0,22	Valid	KK2	0,474	0,22	Valid
PL3	0,655	0,22	Valid	KK3	0,362	0,22	Valid
PL4	0,648	0,22	Valid	KK4	0,469	0,22	Valid
PL5	0,709	0,22	Valid	KK5	0,545	0,22	Valid
PL6	0,483	0,22	Valid	KK6	0,522	0,22	Valid
DK1	0,393	0,22	Valid	KK7	0,486	0,22	Valid
DK2	0,673	0,22	Valid	KK8	0,368	0,22	Valid

Source: primary data processed, 2024

**b. Reliability Test**

The reliability assessment shows that the Cronbach's Alpha value is above 0.60 for all variables, signifying their dependable nature. The following section presents the results of the reliability assessment:

**Table 2. Results of the Reliability Test**

Variable	Cronbach's Alpha	Description
Education (X1)	0,641	Reliable
Job Training (X2)	0,713	Reliable
Work Discipline (X3)	0,801	Reliable
Educational Staff Performance (Y)	0,810	Reliable

Source: primary data processed, 2024

**Classical Assumption Test**

**a. Normality Test**

The normality evaluation in this study employed the Kolmogorov-Smirnov test. If the asymptotic significance value (Asymp. Sig.) is greater than 0.05, it signifies that all variables adhere to a normal distribution. The results of this analysis are presented in Table 3.

**Table 3. Results of the Normality Test**  
**One-Sample Kolmogorov-Smirnov Test**

One-Sample Kolmogorov-Smirnov Test	
Unstandardized Residual	
N	78
Test Statistic	0,092
Asymp. Sig. (2-tailed)	0,957

Source: primary data processed, 2024

**b. Multicollinearity Test**

The evaluation of multicollinearity indicated that the tolerance value is above 0.10, and the Variance Inflation Factor (VIF) is under 10. Consequently, it can be inferred from these results that multicollinearity is absent. More detailed outcomes are available in Table 4.

**Table 4. Results of the Multicollinearity Test**

<b>Independent Variable</b>	<b>Tolerance</b>	<b>VIF</b>
Education (X1)	0,867	1,153
Job Training (X2)	0,771	1,296
Work Discipline (X3)	0,838	1,193

Source: primary data processed, 2024

c. Heteroscedasticity Test

The Glejser test was employed to assess heteroscedasticity, with specific criteria indicating the absence of heteroscedasticity when the calculated t-value is below 0.05 and the significance level exceeds 0.05. The analysis indicates no signs of heteroscedasticity, as detailed in Table 5.

**Table 5. Results of the Heteroscedasticity Test**

<b>Independent Variable</b>	<b>t-value</b>	<b>Sig.</b>
Education (X1)	1,169	0,246
Job Training (X2)	0,086	0,932
Work Discipline (X3)	0,861	0,392

Source: primary data processed, 2024

**Multiple Linear Regression Analysis**

Analysis was performed to investigate the relationships among variables. The results of this analysis can be seen in Table 6.

**Table 6. Results of Multiple Linear Regression Analysis**

<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>t-value</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>		
Constant	14,218	2,673	5,319	0,000
Education (X1)	0,102	0,114	0,891	0,004
Job Training (X2)	0,282	0,094	3,008	0,004
Work Discipline (X3)	0,419	0,262	1,599	0,001
R	0,474			
R <sup>2</sup>	0,552			
Adjusted R Square	0,193			
F-count	7,143			
Sig,	0,000			

Source: primary data processed, 2024

Based on the analysis results shown in Table 6, a regression model can be formulated as follows:

$$Y=14,218 + 0,102X_1 + 0,282X_2 + 0,419X_3 + e$$



The model description is as follows:

1. The constant value stands at 14.218, indicating that when education, licensed vocational nurse training, and work discipline are all zero, the predicted performance score for educational staff is 14.218.
2. The regression coefficient for the education variable is 0.102 with a significance level of 0.004, indicating that a one-unit increase in education is associated with a 0.102 increase in performance for educators.
3. The regression coefficient for the vocational education variable is 0.282 with a significance level of 0.004, suggesting that a one-unit increase in vocational education is linked to a 0.282 improvement in performance for educators.
4. The regression coefficient for the work discipline variable is 0.419 with a significance level of 0.001, indicating that a one-percent increase in work discipline results in a 0.419 increase in performance for faculty members.

According to the F-test results, the results were 7.143 with a significance of 0.000, as seen in Table 6. This indicates that partial tests can continue. Meanwhile, the coefficient of determination ( $R^2$ ) was given a value of 0.552, that is, education, job training and work discipline variables explain the performance of education employees by 0.552 or 55.2%, while other variables outside the model explain the remaining 44.8%.

### **Hypothesis Test**

Hypotheses are tested using t tests. The objective of the test is to establish the partial correlation among variables. The results show that education, vocational training and work discipline have a greater t-count than the significance of the t-table below 0.05, as shown in Table 6.

### **3.2 Discussion**

#### **Effects of Education on Performance of Educational Staff**

The result shows a t-calculation of 0.891 and a value of  $0.004 < 0.05$ , thus  $H_0$  that educational changes have a significant impact on teaching staff performance was rejected and the first hypothesis ( $H_1$ ) was confirmed. These results are in line with research from Sri (2021). The higher the education level, the more they will master the tasks given to improve their performance.

#### **Effects of Job Training on Performance of Educational Staff**

The analysis shows a value of 3.008 with a mean value of  $0.004 < 0.05$ , indicating a significant influence of changes in professional education on the performance of teaching staff. As a result, the null hypothesis ( $H_0$ ) is rejected, supporting the second hypothesis ( $H_2$ ). These findings are consistent with the research by Hertomo et al. (2020); Iqbal et al. (2022); Septyandi et al. (2020). Therefore, it can be inferred that training programs for educational staff can enhance their performance by improving job competencies, capabilities, productivity, and overall well-being.

#### **Effects of Work Discipline on Performance of Educational Staff**

The result shows a t-value of 1.599 with a significance level of  $0.001 < 0.05$ , resulting in the rejection of the null hypothesis ( $H_0$ ) and verifying a substantial influence of the work discipline variable on the performance of educational staff. This confirms the validation of the third hypothesis ( $H_3$ ). These findings are consistent with research by Harmawati et al. (2022); Sri

(2021); Kowaas et al. (2016). Adherence to rules and norms demonstrates dedication in fulfilling their.

#### **4. Conclusions and Suggestions**

##### **Conclusions**

Based on the findings of the study, the following conclusions can be made:

1. Education significantly influences the performance of academic staff at the Faculty of Engineering, Universitas Sebelas Maret in Surakarta.
2. On-the-job training significantly impacts the performance of academic staff at the Faculty of Engineering, Universitas Sebelas Maret in Surakarta.
3. Work discipline has a significant effect on the performance of academic staff at the Faculty of Engineering, Universitas Sebelas Maret in Surakarta.

##### **Suggestions**

Based on the outcomes achieved, the following observations were noted:

1. It would be better if employee training and work motivation could be taken into consideration when formulating a policy to improve the staff performance
2. There must be attention from the Head of Human Resources to pay attention to time discipline issues in employee work discipline by giving strict penalties or sanctions to employees who do not comply with office work times

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