

## The Influence Of Education Level And Work Discipline On The Performance Of Pdam Tirta Bukae Employees North Luwu Regency

Faisal<sup>1\*</sup>, Muh Yusuf Q<sup>2</sup>, Muhamad Hadis Badewi<sup>3</sup>

<sup>1</sup>Departement of Economic Development, Faculty of Economics and Business, Universitas Muhammadiyah Palopo, 91922, Indonesia

<sup>2</sup>Departement of Economic Development, Faculty Economics and Business, Universitas Muhammadiyah Palopo, 91922, Indonesia

<sup>3</sup>Departement of Economic Development, Faculty of Economics and Business, Universitas Muhammadiyah Palopo, 91922, Indonesia

Corresponding Author Email: [faisal@student.umpalopo.ac.id](mailto:faisal@student.umpalopo.ac.id)

### Abstrak

This research aims to determine the effect of education level and work discipline on employee performance. This research was conducted at Jalan Meranti, Baloli Village, Masamba District, North Luwu Regional Government Area, Tirta Bukae, North Luwu Regional Drinking Water Company (PDAM). Education and work discipline influence employee performance in organizations. Companies need to evaluate the impact of education level and work discipline on employee performance in the context of globalization and intense business competition. This research uses quantitative methods using primary data by distributing questionnaires directly to employees, the population in this study. is an employee at the PDAM Tirta Bukae office. This sampling technique uses random techniques, the sample in this study was 59 people with an error rate of 10 percent. Data analysis in this study used multiple linear regression and data processing used the SPSS application. The results of this research show that the variables of education level and work discipline have a positive and significant effect on employee performance. Simultaneously testing the independent variable Employee Performance on Education Level and Work Discipline has a significant positive effect.

Keywords: education level, work discipline, performance

### 1. Introduction

Education and work discipline influence employee performance in the organization. The educational level is chosen based on student growth, goals and skills [1]. Strong discipline is necessary for worker mobilization and smooth running of tasks. Education is a crucial factor that influences the progress and decline of organizations [2]. Employee education level reflects intellectual abilities, knowledge and skills. Higher education is positively correlated with performance, as a strong educational background enhances analytical and communication skills [3].

Work discipline plays an important role in employee performance. A high level of discipline reflects employee responsibility and commitment [2]. Disciplined employees tend to comply with company rules, work efficiently, and have low absenteeism rates. Discipline is needed to maintain the smooth running of activities and prevent detrimental actions to the company [4]. Therefore, understanding the relationship between education level and work discipline can provide important insights for companies in managing and improving employee performance.

Companies need to evaluate the impact of education level and work discipline on employee performance in the context of globalization and intense business competition. Quality education if it meets standards [5]. Increasing employee performance is not only for

the benefit of the individual, but also determines the success of the organization. Performance must be considered as a preventative measure against a decline in individual or organizational team performance [6]. A person's productive work capacity increases along with the level of education [7]. Research on the relationship between education and work discipline and employee performance is relevant for identifying factors that can be improved for optimal results.

Education, as an effort to strengthen human quality, involves families, schools and society [5]. Understanding the influence of education level and work discipline on employee performance is the basis for companies to design training programs (Education et al., 2021). Through improving education and a work culture that supports discipline, companies can create an environment that supports employee growth and productivity. Good employee performance is the key to company productivity [8].

This research, therefore, aims to investigate and analyze in more depth how the level of education and work discipline contribute to employee performance in the context of an ever-evolving world of work. With a better understanding of the interactions between these factors, it is hoped that companies can optimize their human resource management strategies, create a supportive work environment and gain a competitive advantage in the market.

Formulation of the problem

How does the level of education influence employee performance and how does work discipline influence employee performance?

Research purposes

To find out the effect of education level on employee performance and to find out the effect of work discipline on employee performance.

## 2. Methodology

This research used quantitative methods, carried out on Jalan Meranti, Baloli Village, Masamba District, Tirta Bukae Regional Drinking Water Company (PDAM), North Luwu Regency. The time provided for conducting research is 2 (two) months, namely. January-February 2024. The types of data in this research are: primary data, namely information obtained from field research through distributing questionnaires, and secondary data is information obtained from company books/records, journals and articles as well as various other library references related to research This.

The population in this study were all employees from PDAM Tirta Bukae, North Luwu Region in Masamba District, North Luwu Regency, totaling 78 employees. The sample was 59 employees taken from a 10 percent error rate. The sample was selected using random techniques.

Data collection in this research uses two methods which are used as benchmarks to analyze the influence of education level and work discipline on employee performance using literature and questionnaire methods as follows: The library method is a method for obtaining information or written materials for this research from books, notes, literature and tutorials from the internet. Most references are obtained from various sources. A questionnaire is a method used to ask questions or statements to other people who are used as respondents.

The Likert scale measurements in this study are as follows:

- a. SS = Strongly Agree with a score of 5
- b. S = Agree with a score of 4
- c. KS = Disagree is given a score of 3
- d. TS = Disagree is given a score of 2
- e. STS = Strongly Disagree is given a score of 1

### 1. Validity and Reliability Test

Test this validity using the SPSS program. The testing technique that researchers often use to test validity is using Bivariate Pearson correlation (Pearson Moment Product). This analysis is done by correlating each item score with the total score. The total score is the sum of all items. Question items that correlate significantly with the total score indicate that these items are able to provide support in revealing what is valid to be revealed. If  $r_{count} \geq r_{table}$  (2-sided test with sig. 0.05) then the instrument or question items have a significant correlation with the total score and are declared valid [9].

Reliability testing is carried out to determine how far the measurement results remain consistent if measurements are made twice or more on the same symptom using the same measuring instrument.

### 2. Data Analysis Method

Data analysis is carried out as an effort to process data into information, so that the data can be easily understood and is useful for answering problems related to research activities. while hypothesis testing is carried out to obtain an idea of how much influence the application of the independent variable has on the dependent variable.

Multiple Linear Regression Analysis aims to predict the size of the dependent variable (employee performance) using data from the independent variable, namely (work environment), whose size is already known. Hypothesis testing is used to determine whether a hypothesis is accepted or rejected. To carry out hypothesis testing, this research uses a partial significant test (t test), a simultaneous significant test (F test) and a coefficient of determination test. t test (partial test).

## 3. Result and Discussion

Simultaneous test results in the table above show that the sig value is  $0.000 < 0.05$  and  $F_{count} > F_{table}$  ( $40.269 > 3.16$ ). It can be concluded that the level of education and work discipline simultaneously have a positive effect on employee performance.

### 3.1. Result

#### 1. Classic Assumption Test

##### a) Normality Test

		Unstandardized Residual
N		60
Normal Parameters <sup>a,b</sup>	Mean	0E-7
	Std. Deviation	2.37474235
	Absolute	.094
Most Extreme Differences	Positive	.094
	Negative	-.079

Kolmogorov-Smirnov Z	.726
Asymp. Sig. (2-tailed)	.667

The normality test aims to determine whether the dependent and independent variables in the regression model are normally distributed. The ideal regression model has a normal or close to normal distribution [10]. From the table above, it can be concluded that if the sig value for the variable is greater than 0.5, it is declared normal.

## 2. Uji Heteroskedastisitas

Model	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients Beta		
(Constant)	4.306	2.788		1.544	.128
1 Level of education	-.185	.218	-.126	-.849	.400
Work discipline	-.007	.077	-.013	-.086	.932

In this study, the Glejser test was used, if the significant value is greater than 0.05, then the research is limited by heteroscedasticity. Based on the table above, it can be concluded that the results of the heteroscedasticity test using the Glejser test, the results above show that there is no significant relationship between the independent variable and the dependent variable. So, it can be said that this research is limited by heteroscedasticity.

## 3. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.132 <sup>a</sup>	.017	-.017	1.58664	1.599

Based on the test results, the DW value was 1.599, while the size of the DW table with a total of 60 data and 3 independent variables with  $\alpha = 0.05$  (5%), then the value of  $dL = 1.514$  and  $dU = 1.652$ . So the value obtained is  $4-dU = 2,348$ , and the value  $4-dL = 2,486$ . Thus the DW value lies between  $dL < d < dU$ ,  $1.514 < 1.599 < 1.652$ . With decision making, namely if the value of  $d$  (Watson's durbin) lies between  $dL$  and  $dU$ , then it does not produce a definite conclusion. It can be concluded that the tests carried out in this study did not produce definite conclusions, which is the same as there was no autocorrelation in this study.

## 4. t test

The t test is basically carried out to find out whether there is a partial influence of the independent variables (level of education X1) and (Work Discipline X2) on the dependent variable (Performance).

### a. Level of education

The table above explains that the sig value of 0.000 is smaller than 0.05 ( $0.000 < 0.05$ ) and tcount of 4.224 is greater than ttable 1.672 ( $4.224 > 1.672$ ). This proves that there is a relationship between education level and employee performance.

### b. Work Discipline

Model	Unstandardized Coefficients		Standardized	t	Sig.	
	B	Std. Error	Coefficients			
1	(Constant)	7.339	3.630	2.022	.048	
	Work discipline	.920	.107	.749	8.603	.000

The table above explains that the sig value of 0.000 is smaller than 0.05 ( $0.000 < 0.05$ ) and tcount of 8.603 is greater than ttable 1.672 ( $8.603 > 1.672$ ). This proves that there is a relationship between work discipline and employee performance.

### 5. F test

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	470.125	2	235.063	40.269	.000 <sup>b</sup>
	Residual	332.725	57	5.837		
	Total	802.850	59			

Simultaneous test results in the table above show that the sig value is  $0.000 < 0.05$  and Fcount and Ftable ( $40.269 > 3.16$ ). It can be concluded that the level of education and work discipline simultaneously have a positive effect on employee performance.

## 3.2. Discussion

### 1. Education Level

Based on the research results above, the level of education (X1) turns out to have a positive and significant effect on employee performance (Y). Based on the results of the hypothesis test, it can be seen that the education level variable (X1) has a calculated t value ( $t_{hit} = 4.224 > t_{table} = 1.672$ ) and a significant value of  $0.000 < \alpha 0.05$ . This shows that the level of education is one of the factors that improves and supports the optimal performance of employees at the PDAM Tirta Bukae office, North Luwu Regency.

According to Sastrohadiwiry [7], a person's level of education is determined by how far he has studied from elementary school to university. An employee needs training because training can have a positive influence on him and the company where he works.

Research on the influence of job satisfaction, training and level of education on employee performance was conducted by [11] to find out how the performance of regional disaster management employees in North Sulawesi province is related to the level of education and job satisfaction. Analysis was carried out using multiple linear regression. The results of this research show that the amount of education, training and job satisfaction have a positive and significant effect on employee performance.

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	17.461	4.986		3.502	.001
	Level of education	1.679	.397	.485	4.224	.000

## 2. Work Discipline

The results of the research above show that work discipline (X2) is capable of having a positive and significant impact on employee performance (Y). This can be seen from the results of hypothesis testing that the variable (X2) has a t value ( $t_{hit}$ ) = 8,603  $t_{table}$  ( $t_{tab}$ ) = 1.672 and a significance value (sig) of 0.000 < 0.005, this shows that the variable is positive and significant Work discipline influences employee performance at the PDAM Tirta Bukae office, North Luwu Regency.

According to Amran's research in 2009 [12] [13], "The Influence of Work Discipline on the Performance of Gorontalo Regency Social Service Employees", discipline has a good and significant effect on how well employees in the Gorontalo Regency Social Service perform. Based on the findings, data processing using the direct regression method shows a strong relationship between disciplinary characteristics and employee performance at the Gorontalo Regency Social Service, which is in the high group, although the impact of inconsistent discipline (X) on output (Y) is also included in this category. Performance accounted for 51.5% of the effect, with other unstudied factors influencing the remaining 48.5 percent.

## 4. Conclusion

The results of the research that has been carried out can be stated that the level of education and work discipline have a positive and significant effect on employee performance. For PDAM Tirta Bukae Luwu Utara employees, it lies in their ability to improve employee performance through utilizing the level of education and work discipline and how to apply them. This empirically opens up great opportunities for the level of education in terms of managing performance which has the potential to be not just an ordinary worker but also has other skills. The research also confirms that both the level of education and work discipline play an important role in improving the performance of PDAM Tirta Bukae North Luwu employees, but based on the results of data analysis and discussion of the influence of each variable that has been explained 1.) Simultaneously testing the independent variables on employee performance on The dependent variable education level and work discipline variable have a significant positive effect. 2.) The level of education has a positive and significant impact on employee performance. 3.) The work discipline variable has a positive and significant effect on employee performance at the PDAM Tirta Bukae office, North Luwu Regency

Apart from that, there are several limitations in our research, namely the first is that we only used a sample of around 59 samples, while the population was 78 with an error rate formula of 10 percent. So it is recommended for further research to add a more representative sample according to the figures above. Both of our studies only focused on one area, namely PDAM Tirta Bukae, North Luwu Regency. It is hoped that future researchers will expand the

research area to include the province of South Sulawesi and other provinces in Indonesia for a more comprehensive picture of understanding.

## 5. Acknowledgement

Praise and gratitude, the researcher would like to express the presence of Allah SWT, for all His blessings, mercy and grace which has given the researcher the knowledge, experience, strength, patience and opportunity to be able to complete this article. However, the researcher actually realizes that without help and support from various parties, the preparation of this article could not run well. Until the completion of writing this article, I have received a lot of help with time, energy and thoughts from many parties. In this regard, on this occasion, please allow the researcher to express my deepest gratitude to my parents for always providing support and assistance, and to my supervisor and to my friends, I would like to thank them for their support and assistance. And I would also like to thank the director of PDAM Tirta Bukae for giving me permission to conduct research in his office and I would also like to thank the employees of PDAM Tirta Bukae who gave their time.

## 6. Reference

- [1] Putra, I. W. I., Suwendra, I. W., & Bagia, I. W. (2016a). Pengaruh Tingkat Pendidikan dan Disiplin Kerja terhadap Kinerja Karyawan. In e-journal Bisma Universitas Pendidikan Ganesha (Vol. 4, Issue 1, pp. 1–11).
- [2] Maryadi, K. Y., Firman, A., Hidayat, M., Teknologi, I., & Indonesia, N. (2021). Journal of Applied Management and Business Research ( JAMBiR ) Pengaruh Pendidikan , Disiplin , dan Sarana Prasarana Terhadap Kinerja Aparatur Sipil Negara Pada Dinas Pekerjaan Umum Provinsi Papua Barat. 1(3).
- [3] Astuti, R. (2015). Terhadap Produktivitas Karyawan Pada Pt . Karya Plasindo Medan. 148–154.
- [4] Sabban, Y. A., & E-mail, S. A. M. (n.d.). Pengaruh tingkat pendidikan dan disiplin kerja terhadap kinerja karyawan pada hotel dalton makassar. 445–454.
- [5] Marpaung, N. N. (2021). Pengaruh Tingkat Pendidikan Terhadap Kinerja Pegawai ( Studi Kasus Disdukcapil Kota Bekasi ). 6(2), 81–95.
- [6] Ihsanuddin, Meirinaldi, & Hasibuan, M. (2022). Pengaruh Tingkat Pendidikan dan Disiplin Kerja terhadap Kinerja Pegawai pada Dinas Sosial Pemerintah Kota Padang Sidempuan. Formosa Journal of Multidisciplinary Research, 1(6), 1329–1340. <https://doi.org/10.55927/fjmr.v1i6.1573>
- [7] Asa, R., & Wahida, A. (2023). SEIKO : Journal of Management & Business Tingkat Pendidikan dan Disiplin Kerja Terhadap Kinerja Pegawai. 6(1), 598–604. <https://doi.org/10.37531/sejaman.v6i1.3736>
- [8] Sugiarto, A., & Ramadhan, I. (2021). Pengaruh Insentif dan Disiplin Kerja terhadap Produktivitas Kerja Karyawan pada PT. Infomedia Nusantara. Jesya (Jurnal Ekonomi & Ekonomi Syariah), 4(2), 1227–1237. <https://doi.org/10.36778/jesya.v4i2.491>
- [9] Mariana, L. (2019). Pengaruh Pendidikan Dan Disiplin Kerja Guru Terhadap Kinerja Guru Sma Negeri 2 Majene. Jurnal Ekonomi Balance Fakultas Ekonomi Dan Bisnis, 15, 113–131. <https://journal.unismuh.ac.id/index.php/balance>

- [10] Barzuwa, T. G. (2021). Analisis Faktor-Faktor Yang Mempengaruhi Pengangguran Terdidik Kalimantan Barat. *Jurnal Ekonomi Pembangunan*, 2(1), 1–20.
- [11] Mamahit, R. (2013). Tingkat Pendidikan, Pelatihan Dan Kepuasan Kerja Pengaruhnya Terhadap Kinerja Pegawai Di Badan Penanggulangan Bencana Provinsi Sulawesi Utara. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 1(4), 936–945.
- [12] Vallennia, K., Atikah, A., & Azijah, F. N. (2016). Pengaruh Disiplin Kerja Terhadap Kinerja Karyawan (Studi Kasus PT.Sinar Sosro Rancaekek). *E-Jurnal Equilibrium Manajemen*, 6(2), 39–49.
- [13] Suhardi, A., Ismilasari, I., & Jasman, J. (2021). Analisis Pengaruh Loyalitas dan Komitmen Organisasi terhadap Kinerja Karyawan. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(2), 1117–1124. <https://doi.org/10.36778/jesya.v4i2.421>