

## The Influence of Education Level and Work Experience on Employee Performance in the Regional Technical Implementation Unit of Samsat Binjai City

Indah Christina Simanjuntak<sup>1\*</sup>, Rifqah Harahap<sup>2</sup>, Evi Novalin Bako<sup>3</sup>  
STIE IBMI Medan, Indonesia

**Corresponding Author:** Indah Christina Simanjuntak  
[indahsimanjuntak2020@gmail.com](mailto:indahsimanjuntak2020@gmail.com)

---

### ARTICLE INFO

*Keywords:* Education Level,  
Employee Performance,  
Work Experience

*Received :* 02, October

*Revised :* 18, October

*Accepted:* 28, October

©2025 Simanjuntak, Harahap, Bako :  
This is an open-access article  
distributed under the terms of the  
[Creative Commons Atribusi 4.0  
Internasional](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

This study aims to determine the effect of education level and work experience on employee performance at the Regional Technical Implementation Unit of the Samsat Office in Binjai City. This research uses a quantitative method. The results of the study show that the multiple linear regression equation obtained is:  $Y = 0.167 + 0.673X_1 + 1.345X_2 + e$ , which indicates that there is a positive and significant influence of education level and work experience variables on employee performance. The coefficient of determination ( $R^2$ ) is 0.670 or 67%, which means that the variables of education level and work experience explain 67% of the variation in employee performance, while the remaining 33% is influenced by other factors outside the model.

---

## **INTRODUCTION**

Human resources refer to resources related to the workforce or employees who work in an organization. Human resources include individuals who have the necessary skills, knowledge and abilities to achieve organizational goals. Therefore, the success of an agency is greatly influenced by effective human resource management so that it can improve performance.

Optimal performance in general can be achieved if an employee in carrying out his duties has a feeling of security, comfort and happiness when carrying out the tasks or work for which he is responsible. Therefore, it is important to understand the factors that affect employee performance, including education level and work experience. (Jumawan, 2021)

Education level is one of the factors that can affect a person's performance because it is directly related to the improvement of knowledge, skills, and attitudes needed to carry out tasks effectively. The higher the level of education that is passed, the more the skills and knowledge they have. (Meta Santi et al., n.d.)

Work experience is one of the most crucial factors that affect a person's performance because work experience is the best teacher in the professional world. Because work experience is obtained in employees who have more working hours. Experienced employees work better because they have a greater knowledge base and are more adept at organizing their knowledge. (Kitta et al., 2023)

The problem that is often encountered is that the performance of employees is not optimal, so that the work done is not in accordance with the agency's standards, therefore special attention is needed for agencies and workers to improve performance so that it can provide satisfaction and justice for all parties to achieve common goals. According to information obtained based on observations and interviews, there are several problems that occur that affect employee performance that is not optimal.

## **THEORETICAL REVIEW**

### ***Performance***

Performance is the result of work achieved by an employee in accordance with the work given to him in a certain time. Performance is also a manifestation of work carried out by employees which is usually used as a basis for assessing employees or organizations. Good performance is a major step towards achieving an organizational goal. (Fauzi & Nugroho, 2024)

### ***Education Level***

The level of education is the stage of education that is determined based on the level of development of the student, the goals to be achieved and the willingness to be developed. (Basyit et al., 2020)

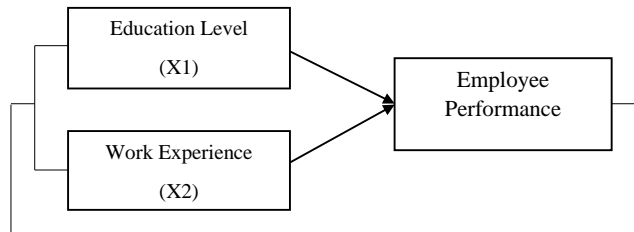
### ***Work Experience***

Work experience is the knowledge, skills, and insights that a person gains through their involvement in various jobs or projects during their career referred to as work experience, which can include various aspects, such as work already

done, work environment, responsibilities, achievements, and contributions to a particular company or project. (Suciati & Deswarta, 2024)

**Research Models and Hypotheses**

Hypothesis development based on exposure to variable concepts and research model drawings.



Source: Data processed by researchers, 2025

**Figure 1. Theoretical Framework of Thought**

**METHODOLOGY**

The object of the research is the Regional Technical Implementation Unit of Samsat Binjai City which is located at Jalan Soekarno Hatta No.30, Dataran Tinggi, East Binjai District, Binjai City, North Sumatra 20735. The population and sample in this study are 32 employees with civil servant status from the Regional Technical Implementation Unit of Samsat Binjai City. This study uses a type of sampling technique, namely saturated samples. This type of research is quantitative research. This study also uses a data collection technique by distributing questionnaires or questionnaires, where respondents will fill out the questionnaire related to the research and then the answers to the questionnaire are analyzed using SPSS 25.

In this study, the research instrument can be seen in the following table:

Table 1. Variable Operational Definition

Variable	Variable Definition	Indicators	Scale Size
Education Level (X1)	The level of education is the stage of education that is determined based on the level of development of the student, the goals to be achieved and the willingness to be developed (Basyit et al., 2020)	1. Level of Education 2. Suitability of the Majors 3. Competence (Rosmawati, 2021)	Likert

Work Experience (X2)	Work experience is the time that a person uses to acquire knowledge, skills and attitudes according to the frequency and type of tasks (Basyit et al., 2020)	1. Length of time/working period 2. Level of knowledge and skills possessed 3. Mastery of the job (Basyit et al., 2020)	Likert
Employee Performance (Y)	Performance is a potential that must be possessed by every employee to carry out every task and responsibility given by the organization to employees (Jumawan, 2021) .	1. Quality (quality) 2. Quantity (quantity) 3. Time (Time Frame) 4. Cost Suppression 5. Supervision 6. Relationship between employees (EKA WIJAYA & Fauji, 2021)	Likert

Source: Data processed by researchers, 2025

## RESULTS

### *Data Analysis*

#### *Data Normality Test*

Table 2. Data Normality Test

N		32
Normal Parameters, b	Mean	.0000000
	Std. Deviation	5.11035753
Most Extreme Differences	Absolute	.072
	Positive	.049
	Negative	-.072
Test Statistic		.072
Asymp. Sig. (2-tailed)		.200c,d

Source: Data processed by researchers with SPSS ver 25, year 2025

Based on the table above, it can be seen that a significant value of 0.200 means that the significant value is  $0.200 > 0.05$ , it can be said that the distribution data is normal.

**Multicollinearity Test**

**Table 3. Multicollinearity Test**

nModel	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	T		Tolerance	VIF
1 (Constant)	.167	5.513		.030	.976		
Education level	.673	.192	.373	3.509	.001	.941	1.063
Work experience	1.345	.217	.658	6.183	.000	.941	1.063

a. Dependent Variable: Employee Performance

Source: Data processed by researchers with SPSS ver 25, year 2025

Based on the results of data processing in the table above, it shows that the VIF value and *tolerance* of all variables in this study do not experience multicollinearity. This is shown by the VIF value of the two variables which is less than 10 and the *tolerance* value far exceeds 0.01. These results show that in this regression model all independent variables do not have multicollinearity problems.

**Statistical Test Results**

**Multiple Linear Regression Analysis**

**Table 4. Multiple Linear Regression Test Results**

Type	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	T		Tolerance	VIF
1 (Constant)	.167	5.513		.030	.976		
Education level	.673	.192	.373	3.509	.001	.941	1.063
Work experience	1.345	.217	.658	6.183	.000	.941	1.063

a. Dependent Variable: Employee Performance

Source: Data processed by researchers with SPSS ver 25, year 2025

The results can be seen in the following description:

1. The constant of 0.167 indicates that if the variables of education level and work experience are considered non-existent (value 0), then the employee's performance still has a value of 0.167 units. This means that there are other factors outside of the model that still contribute to employee performance.
2. The regression coefficient of the variable level of education (X1) of 0.673 shows a positive influence on employee performance. This means that every time there is an increase in the level of education by one unit, the performance of employees will increase by 0.673 units, assuming other variables remain the same.
3. The regression coefficient of the work experience variable (X2) of 1.345 shows a positive influence on employee performance. This means that every time

there is an increase in work experience by one unit, employee performance will increase by 1,345 units, assuming other variables remain the same.

**Partial test (t-test)**

Table 5. Partial Test Results (t-test)

Type	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	T		Tolerance	VIF
1 (Constant)	.167	5.513		.030	.976		
Education level	.673	.192	.373	3.509	.001	.941	1.063
Work experience	1.345	.217	.658	6.183	.000	.941	1.063

a. Dependent Variable: Employee Performance

Source: Data processed by researchers with SPSS ver 25, year 2025

Based on the table above, the following results were obtained:

- a. The significance value for the education level variable was 0.001, smaller than alpha 5% (0.05) or  $t_{table}$  ( $3.509 > 2.045$ ) ( $n-k=32-3=29$ ). Based on these results,  $H_{a1}$  was accepted and  $H_{01}$  was rejected, which means that there is a partial and significant influence of education level variables on employee performance in the Regional Technical Implementation Unit of Samsat Binjai City. In other words, the higher the level of education, the higher the performance produced by the employee.
- b. The significance value for the work experience variable was 0.000, smaller than the alpha 5% (0.05), but the  $t_{calcul} < t_{table}$  value ( $6.183 > 2.0452$ ) ( $n-k=32-3=29$ ). Based on these results,  $H_{a2}$  was accepted and  $H_{02}$  was rejected, which means that there is a partial and significant influence of work experience variables on employee performance in the Regional Technical Implementation Unit of Samsat Binjai City. In other words, the longer the work experience, the higher the performance produced by the Employee.

**Simultaneous Test (F Test)**

Table 6. Simultaneous Test Results (F Test)

Type	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1813.912	2	906.956	32.488	.000b
Residual	809.588	29	27.917		
Total	2623.500	31			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Work Experience, Education Level

Source: Data processed by researchers with SPSS ver 25, year 2025

In the results of the regression test in this study, a significance value of 0.000 was known. Where it is required that the significance value of F is less than 5% or 0.05 or the value of  $F_{\text{calcul}} > F_{\text{table}}$  ( $32.488 > 3.33$ ) ( $df_1 = k - 1 = 3 - 1 = 2$ ) while ( $df_2 = n - k = 32 - 3 = 29$ ). Based on the results obtained receiving  $H_{a3}$ ,  $H_{03}$  was rejected for the variables of Education Level and Work Experience. Thus, it can be concluded that simultaneously there is a positive influence between the level of education and work experience on the performance of employees in the Regional Technical Implementation Unit of Samsat Binjai City.

**Determination Coefficient Test (R Square)**

Table 7. Determination Coefficient Test Results (R Square)

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832a	.691	.670	5.284
a. Predictors: (Constant), Work Experience, Education Level				
b. Dependent Variable: Employee Performance				

Source: Data processed by researchers with SPSS ver 25, year 2025

Based on Table IV.17 it is obtained:

1. The correlation regression value was 0.832, which means that together the level of education and work experience on employee performance has a contribution to a close and positive level.
2. For more than one independent variable, use adjusted R Square. Where the value ( $R^2$ ) is 0.670 (67%). So it can be said that 67% of the variation of independent variables, namely Education Level and Work Experience in this model, can explain Employee Performance while the remaining 33% is explained by other variables outside the model.
3. *Standard Error Of The Estimated* is a measure of prediction error. *Standard Error Of The Estimated* is called standard deviation. In this study, the score was 5.284. The smaller the standard deviation means the better the model.

**DISCUSSION**

***The Influence of Education Level on Employee Performance in the Regional Technical Implementation Unit of Samsat Binjai City***

Based on the results of the t-test, the variable level of education obtained (0.001) was smaller than that of alpha 5% (0.05) or  $t_{\text{calcul}} > t_{\text{table}}$  ( $3.509 > 2.045$ ) ( $n - k = 32 - 3 = 29$ ). So it can be concluded that there is a significant influence between education levels on employee performance. The results of this study are in line with the research that became a reference for the researcher entitled *The Influence of Education Level and Work Experience on Employee Performance (a study on ASN employees of Ciamis Regency Hospital)*. The results of the study show that the level of education has a significant effect on employee performance by getting a Sig score of  $0.001 > \text{Sig } 0.05$ . It can be concluded that the level of education has a

positive and significant effect on employee performance (a study on ASN employees of Ciamis Regency Hospital). (Hayati et al., 2020)

***The Effect of Work Experience on Employee Performance in the Regional Technical Implementation Unit of Samsat Binjai City***

The significance value for the work experience variable (0.000) was smaller than that of alpha (5%) or  $t_{\text{calcul}} < t_{\text{table}}$  ( $6.183 > 2.045$ ) ( $n-k=32-3=29$ ). Based on the results obtained, accepting  $H_{a2}$  will reject  $H_{02}$  for the work experience variable. Thus, partially that the work experience variable has a positive and significant effect on the performance of employees in the Regional Technical Implementation Unit of Samsat Binjai City. The results of this study are in line with the previous research that became a reference for researchers conducted by with the title *The Influence of Education Level and Work Experience on the Performance of Palembang City Bank Employees* which concluded that work experience has a significant effect on the performance of Palembang City Bank employees. (Febyyana Halim et al., 2023)

***The Influence of Education Level on Employee Performance in the Regional Technical Implementation Unit of Samsat Binjai City***

Based on the results of simultaneous tests (F test) in multiple linear analysis in this study, a significance value of 0.000 is known. Where it is required that the significance value of F is less than 5% or 0.05 or the value of  $F_{\text{calcul}} > F_{\text{table}}$  ( $32.488 > 3.33$ ) ( $df_1=k-1 = 3-1=2$ ) while ( $df_2 = n-k = 32-3 = 29$ ). Based on the results obtained receiving  $H_{a3}$ ,  $H_{03}$  was rejected for variables of education level and work experience. Thus, it can be concluded that all independent variables, namely the level of education and work experience, have a positive and significant effect on the performance of employees in the Regional Technical Implementation Unit of Samsat Binjai City. The results of this study are strengthened by the results of previous research that became a reference for researchers in conducting research, namely those conducted by the one entitled *The Influence of Education Level and Work Experience on Employee Performance*. The results of the study show that the level of education and work experience has a significant effect on employee performance by getting a Sig value of  $0.000 > \text{Sig } 0.05$ . (Basyit et al., 2020)

**CONCLUSIONS AND RECOMMENDATIONS**

The results of the analysis can be concluded that there is an influence between the level of education and work experience on the performance of employees in the Regional Technical Implementation Unit of Samsat Binjai City. For the Regional Technical Implementation Unit of Samsat Binjai City, it is recommended to create a training program for all employees whose level of education and work experience is still low in order to increase the value of these employees which can improve the performance of employees in the agency and to the next researcher, it is better to study more deeply what problems will be used as research in order to better understand what will be discussed through references from books or from previous research that The discussion resembles both variables and research methods

## FURTHER STUDY

Future researchers are encouraged to explore additional variables that may influence employee performance, such as motivation, leadership style, job satisfaction, and organizational culture. Expanding the research to include other Regional Technical Implementation Units or government agencies could provide a broader perspective on how education and work experience impact performance in the public sector. Furthermore, employing longitudinal or mixed-method approaches may help capture dynamic changes and deeper insights into employee development over time.

## ACKNOWLEDGMENT

The author would like to express heartfelt gratitude to the management and staff of the Regional Technical Implementation Unit of Samsat Binjai City for their cooperation and willingness to provide the necessary data and information for this research. Special appreciation is also extended to the academic supervisors for their valuable guidance, constructive feedback, and continuous support throughout the study. Finally, sincere thanks are conveyed to family, friends, and colleagues for their encouragement, patience, and moral support during the completion of this research.

## REFERENCES

- Basyit, A., Sutikno, B., & Dwiharto, J. (2020). PENGARUH TINGKAT PENDIDIKAN DAN PENGALAMAN KERJA TERHADAP KINERJA KARYAWAN. *Jurnal EMA*, 5(1). <https://doi.org/10.47335/ema.v5i1.44>
- EKA WIJAYA, D. W., & Fauji, D. A. S. (2021). Determinan Kinerja Karyawan Pada Dinas Pemberdayaan Masyarakat Dan Desa Kabupaten Nganjuk. *Journal of Law, Administration, and Social Science*, 1(2). <https://doi.org/10.54957/jolas.v1i2.103>
- Fauzi, A., & Nugroho, G. (2024). Pengaruh Kompetensi terhadap Kinerja Pegawai dengan Motivasi Kerja sebagai Variabel Intervening. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, 18(1). <https://doi.org/10.35931/aq.v18i1.3016>
- Febyyana Halim, A., Vionika, A., & Sekar Ningrum, F. (2023). PENGARUH TINGKAT PENDIDIKAN DAN PENGALAMAN KERJA TERHADAP KINERJA KARYAWAN BANK KOTA PALEMBANG. *Jurnal DIALOGIKA : Manajemen Dan Administrasi*, 5(1). <https://doi.org/10.31949/dialogika.v5i1.7702>
- Hayati, I., Kusniawati, A., & Kader, M. A. (2020). Pengaruh Tingkat Pendidikan Dan Pengalaman Kerja Terhadap Kinerja Pegawai (Studi pada Pegawai ASN RSUD Kabupaten Ciamis). *Business Management and Entrepreneurship Journal*, 2(3).

- Jumawan, J. (2021). PENGARUH PENGALAMAN KERJA DAN TINGKAT PENDIDIKAN TERHADAP KINERJA PEGAWAI DAN TUNJANGAN KINERJA SEBAGAI VARIABEL INTERVENING. *Media Mahardhika*, 19(2). <https://doi.org/10.29062/mahardhika.v19i2.258>
- Kitta, S., Nurhaeda, N., & Idris, M. (2023). Pengaruh Kompetensi, Pengalaman Kerja, Lingkungan Kerja, dan Disiplin Kerja Terhadap Kinerja Pegawai. *Jesya*, 6(1). <https://doi.org/10.36778/jesya.v6i1.933>
- Meta Santi, C., Kabul Mahi, A., & Magister Manajemen Universitas Sang Bumi Ruwa Jurai, P. (n.d.). *Dikombis : Jurnal Dinamika Ekonomi, Manajemen Dan Bisnis Pascasarjana Saburai* THE EFFECT OF EDUCATION LEVEL AND WORK EXPERIENCE ON EMPLOYEE PERFORMANCE AT REGENCY FINANCIAL AND ASSETS MANAGEMENT. <https://doi.org/10.24967/xx.v8i>
- Rosmawati. (2021). Pengaruh Tingkat Pendidikan Terhadap Kinerja Pegawai Di Kecamatan Sinoa Kabupaten Bantaeng. <https://Medium.Com/>.
- Suciati, T. A., & Deswarta, D. (2024). Pengaruh Pelatihan Kerja, Tingkat Pendidikan, dan Pengalaman Kerja terhadap Kinerja Karyawan Generasi Z di Selat Panjang. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, 18(1), 58. <https://doi.org/10.35931/aq.v18i1.3008>