

## THE INFLUENCE OF EDUCATION AND JOB TRAINING ON THE WORK COMPETENCE OF EMPLOYEES AT THE FISHERIES AND FOOD SERVICE OF TANAH DATAR REGENCY

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### ABSTRACT

This study aims to determine the effect of education and job training on employee competency at the Tanah Datar Regency Fisheries and Food Service. Employee competency is an important factor in supporting the achievement of public sector organizational performance. Education and job training are strategic efforts undertaken by organizations to improve employee capabilities, knowledge, and skills so they can carry out their duties effectively and efficiently. This study uses a quantitative approach with a survey method. The population in this study were all employees of the Tanah Datar Regency Fisheries and Food Service, with samples taken using a purposive sampling technique. Data collection was carried out by distributing questionnaires that had been tested for validity and reliability. The data analysis technique used was multiple linear regression. The results of the study indicate that education and job training have a positive and significant effect on employee competency. This finding indicates that the higher the quality of education and the more frequent job training provided, the better the employee competency. Therefore, organizations are advised to continue to improve targeted and sustainable education and training programs to create superior and professional human resources.

**Keywords:** Education, Job Training, Employee Work Competence

### INTRODUCTION

In today's modern era, every organization, both private and government, is required to have professional, loyal, and high-performance human resources (HR) in order to achieve organizational goals effectively and efficiently. Human resources are the most important element in an organization because human roles cannot be completely replaced by technology. Therefore, organizations must create a work environment that supports and encourages employees to make maximum contributions in carrying out their duties and responsibilities. Human resources (HR) in companies or agencies are very vital assets in determining the direction, development, and success of the organization. HR not only consists of individuals who work at various levels, but also includes their skills, knowledge, attitudes, and abilities (Fevila & Satriansyah, 2024). The importance of human resource management (HRD) cannot be ignored. MSDM is responsible for attracting, developing, motivating, and retaining talented employees.

This process involves a variety of functions, including recruitment and selection, training and development, performance management, compensation and benefits, and employee relations. Through effective recruitment and selection, organizations and departments can ensure that they get employees who have the necessary skills and competencies to achieve organizational goals (Kautzariana & Taruna, 2024). The PUPR Office stands for the Public Works and Spatial Planning Office. The PUPR Office of Tanah Datar Regency plays a role as the vanguard of infrastructure development and spatial planning, based on the principles of efficiency, professionalism, and integrity of 3C2DI work culture. The complete structure and comprehensive services—from licensing administration to implementation techniques—make it a coordination center in supporting the ideals of a civil and prosperous district.

The development of the fisheries and food security sectors is a strategic priority in supporting regional economic growth and improving community welfare. In this context, the role of local government officials is vital in implementing various policies and programs oriented towards strengthening the productivity of the primary sector, particularly in Tanah Datar Regency, which has significant potential for freshwater fisheries and local food resources. As a technical institution, the Tanah Datar Regency Fisheries and Food Service has a significant responsibility in carrying out government duties in the areas of guidance, service, supervision, and development of fisheries and food security. This task requires not only appropriate policies but also support from competent, adaptive, and professional officials (Jamal et al., 2022).

Therefore, competence Employees are a crucial factor in determining the success of implementing strategic programs. Employee competence is a combination of knowledge, skills, and work attitudes used to complete tasks with certain performance standards within the scope of the organization's work. (Dwinanda et al., 2023) defines competence as "the fundamental characteristics of an individual related to superior or effective work performance." (Dewangga & Rahardja, 2022) states that "ASN competence consists of technical, managerial, and socio-cultural competence, and can be improved through continuous education and training. Menpan-RB Regulation No. 38 of 2017 stipulates that ASN competence includes aspects, Technical (based on work

fields), Managerial (communication, leadership, planning), Socio-cultural (cooperation, cultural sensitivity, and work ethics).

Employee competence is not only determined by formal educational background but is also significantly influenced by ongoing education and on-the-job training (diklat) (Kurnia & Andi, 2022). In the modern workplace, education is a crucial investment in human resource development because it can enhance employees' knowledge, skills, and work attitudes to align with evolving job demands. Education is the process of developing human resources through structured and systematic formal programs to improve employees' knowledge, insight, and readiness to carry out their duties according to organizational demands. (NuzlehaHY, 2021) states that vocational education is an effort to empower employees through planned formal and non-formal education programs to support the implementation of official duties.. ((Yasin et al., 2021) explains that vocational education helps employees acquire the conceptual and theoretical competencies necessary for strategic thinking and understanding organizational work systems. According to (Peny et al., 2024), competency is a basic characteristic possessed by an individual that is related to effective or superior performance in a job or situation. Competence includes knowledge, skills, and attitudes that can be developed through education and training. Therefore, to develop competent employees, a structured, relevant, and sustainable education and training system is required.

Job training is a short-term, practical skill development activity based on real-world work needs, aimed at improving employee efficiency and effectiveness in completing their tasks. (Yanna, 2024) defines job training as a systematic effort to improve employee skills and attitudes relevant to job duties, typically conducted in the form of in-house training, workshops, or mentoring. (Maulana & Hermana, 2021) found that needs-based technical training (TNA) significantly improves the performance and competence of local government employees.

However, based on initial observations and informal interviews with several employees of the Tanah Datar Regency Fisheries and Food Service, it was discovered that not all employees had access to education and training appropriate to their field of

work. Some training was general in nature, lacked depth, and was not held regularly. Furthermore, there had been no measurable evaluation of the impact of the training on improving employee competency. Education and job training have two main functions: first, as a means to refresh understanding of duties and responsibilities; second, as a vehicle to adapt employee capabilities to constantly changing technological developments, policies, and service systems. With targeted training, employees gain not only theoretical understanding but also practical skills that can be directly applied in the field. This phenomenon indicates a gap between the need for competency improvement and the effectiveness of existing education and training programs. As a result, some employees have not been able to optimally carry out technical and administrative tasks according to expected professional standards. This condition can impact the effectiveness of public services and the achievement of organizational performance targets.

This research is important because until now there have been few scientific studies that specifically measure the influence of education and job training on employee competency at the Tanah Datar Regency Fisheries and Food Service. In fact, by understanding this influence empirically, the local government can take more accurate policies in designing and managing training programs for employees. Through this research, the author wants to examine and analyze whether the education and job training that has been provided so far has truly contributed to improving employee competency. In addition, this research is also expected to be able to provide recommendations for increasing the effectiveness of training to align with work needs in the modern bureaucratic era.

## METHODE

This study uses an associative quantitative approach, which aims to determine the influence or relationship between variables through statistically processed numerical data. This type of research is suitable for testing the influence of work education and job training (independent variables) on employee competency (dependent variable). The study was conducted at the Tanah Datar Regency Fisheries and Food Service Office

located in West Sumatra Province. The population in this study were all employees of the Tanah Datar Regency Fisheries and Food Service, both state civil servants (ASN) and active honorary workers. The population size was 50 people (assumed based on the structure of a small and medium-sized organization). Because the population size was relatively small and still affordable, the sampling technique used was census (total sampling), namely all members of the population were sampled. Thus, the sample size was 50 respondents. Primary data were obtained directly from respondents through the distribution of closed questionnaires with a Likert scale. Secondary data: obtained through organizational documents, personnel reports, and theoretical references such as journals, books, and regulations related to employee education, training, and competency. The main instrument is a questionnaire with a 5-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). The questionnaire is designed based on indicators of each research variable. Supporting data collection such as organizational structure, employee list, training summary, and training activity report. Data analysis is carried out in several stages, namely 1) Validity test is tested with Pearson correlation ( $r$  count  $>$   $r$  table). 2) Reliability is tested with Cronbach Alpha ( $>$  0.60 is considered reliable). 3) Normality test to determine whether the data is normally distributed or not 4) T test to determine the effect of each independent variable on the dependent variable. 5) F test to determine the effect of education and job training simultaneously on employee work competency. 6) Coefficient of Determination ( $R^2$ ) to determine how much the independent variable contributes to explaining the dependent variable.

## RESEARCH RESULTS AND DISCUSSION

In this study, a normality test was conducted to determine whether the residual values in the regression mode were normally distributed or not. The test used was the non-parametric Kolmogorov-Smirnov statistical test. If Asymp. Sig. (2-tailed)  $<$  0.05, the data is not normally distributed. If Asymp. Sig. (2-tailed)  $>$  0.05, the data is normally distributed (Mainita, 2022). The results of the data normality test can be seen in the table below:

**Table 1. Normality Test Results**

### One-Sample Kolmogorov-Smirnov Test

		Unstandar dized Residual
N		50
Normal	Mean	.00000870
Parameters <sup>a,b</sup>	Std. Deviation	5.8287
Test Statistic		.087
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>

Based on the SPSS output results for the normality test in table 1 above, it can be seen that the Asymp. Sig. (2-tailed) value obtained is 0.200, which means it is greater than 0.05, so it can be concluded that the data is normally distributed.

The T test is used to see the level of significance of the independent variable affecting the dependent variable partially or individually. The test is carried out using a significance level of 0.05. To test the influence of each independent variable partially, the t test is used. (Larosa et al., 2022) If  $t_{\text{count}} > t_{\text{table}}$ , then there is an influence between the independent variable and the dependent variable. If  $t_{\text{count}} < t_{\text{table}}$ , then there is no influence between the independent and dependent variables, or if the sig value  $< 0.05$  then the independent variable has a significant effect on the dependent variable. If the sig value  $> 0.05$  then the independent variable does not have a significant effect on the dependent variable.

**Table 2. T-Test (Partial)**

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients	Standardiz ed Coefficien ts	T	Sig.

		B	Std. Error	Beta		
1	(Constant)	13.437	8.318		2.765	.121
					6	
	pendidikan	.508	.069	.600	6.094	.000
	pelatihan kerja	.498	.126	.322	5.797	.000

a. Dependent Variable: kompetensi kerja pegawai

Based on the results of the t-test in table 2 above, it can be interpreted that:

1. Hypothesis testing of the influence of education on employee work competency

Based on the results of the t-test above, the calculated t-value of the education variable is 6.094 > the t-table value of 1.67591 with a significance value of 0.000 which is < the  $\alpha$  value of 0.05. Therefore, it can be concluded that education has no significant effect on employee work competence.

2. Hypothesis testing of the influence of job training on employee work competency

Based on the results of the t-test above, the calculated t-value of the job training variable is 5.797 > the t-table value of 1.67591 with a significance value of 0.000 which is < the  $\alpha$  value of 0.05. Therefore, it can be concluded that job training has no significant effect on employee work competence.

The F-test aims to examine whether independent variables have a simultaneous or joint influence on the dependent variable. The decision-making criteria are: if the sig value is <0.05, then all independent variables simultaneously influence the dependent variable in the study. However, if the sig value is >0.05, it means that all independent variables simultaneously have no influence on the variable in the study.

**Table 3. F-Test Results (simultaneous)**

**ANOVA<sup>a</sup>**

	Sum of		Mean		
Model	Squares	Df	Square	F	Sig.

1	Regressi	643.432	2	2621.716	52.547	.000 <sup>b</sup>
	on					
	Residual	5243.432	47	34.807		
	Total	7679.945	49			

a. Dependent Variable: kompetensi kerja pegawai

b. Predictors: (Constant), pelatihan kerja, Pendidikan

Based on Table 3 above, it shows that the significance value of the F test is 0.000, which is smaller than the significance value used, which is 0.05. Decision making can also be done by comparing the calculated F value with the F table value. Where the calculated F value is 52.547 while the F table value is 2.790. So the calculated F value is greater than the F table. Therefore, it can be concluded that education and job training have a simultaneous effect on employee work competence.

The coefficient of determination ( $R^2$ ) is a tool used to measure the extent to which a model can explain variations in the independent variable. The coefficient of determination ranges from 0 to 1. If the  $r^2$  value is close to 1, the independent variable provides almost all the information needed to predict variations in the dependent variable.

**Tabel 4. Hasil Uji Determinasi ( $R^2$ )**

**Model Summary<sup>b</sup>**

		R		Std. Error
Model	R	Square	Adjusted R Square	of the Estimate
1	.826 <sup>a</sup>	.893	.648	5.65789

a. Predictors: (Constant), pelatihan kerja, pendidikan

b. Dependent Variable: kompetensi kerja pegawai

Based on the results of the determination coefficient test in table 4, the adjusted  $r^2$  value was obtained as 0.648 or 64.8%. So it can be concluded that the ability of the independent variables, namely education and job training, to explain the variation in employee work competency variables is 64.8%.



## DISCUSSION

### **The Influence of Occupational Education on Employee Competence**

The data analysis results show that vocational education has a positive and significant effect on employee competency. This means that the higher the level of vocational education an employee has—whether formal education, civil service education, or structural training—the higher the competency they demonstrate in carrying out their daily tasks. This finding aligns with (NuzlehaHY, 2021), who stated that education is an investment in human resources that directly contributes to increased productivity and competency. Formal education helps employees acquire the necessary foundational knowledge, while structural education and functional training instill technical understanding and administrative aspects in carrying out tasks. This research is also supported by (Yasin et al., 2021), who show that vocational education contributes significantly to the technical and managerial competency of ASN in local government agencies. In the context of the Fisheries and Food Service, employees with relevant educational backgrounds such as fisheries, animal husbandry, biology, or food technology are more likely to understand the processes of supervision, cultivation, and food supply chain management. However, the influence of education does not necessarily guarantee superior competency without direct application in the field. Therefore, education must be relevant and accompanied by ongoing work experience to truly impact work competencies.

### **The Influence of Job Training on Employee Competence**

Job training has also been shown to have a positive and significant impact on employee competency. The training included technical workshops, in-house training, field studies, extension training, data digitization training, and food sanitation training. The results showed that employees who attended training more frequently and were able to apply the training results in their jobs showed greater competency improvement. This finding aligns with the Training Transfer theory (Baldwin & Ford, 1988), which emphasizes that training will have a positive impact if participants have a high level of readiness to learn and if the work environment supports the implementation of the

training results. In the Department of Fisheries and Food, training provides a space for employees to update their knowledge, hone their skills, and build professional networks across agencies. Furthermore, this study supports the findings (Yanna, 2024) which state that needs-based training (Training Needs Assessment) is highly effective in improving employee technical competency. Training provided according to task areas such as food sanitation, fishery product quality control, and local food product processing has a significant impact on work performance. However, the effectiveness of training is highly dependent on the quality of the facilitator, training methods, and post-training follow-up. Without post-training monitoring and evaluation, the knowledge employees gain tends not to be firmly embedded in daily work practices.

### **The Effect of Simultaneous Education and Training on Employee Competence**

Simultaneously, education and job training significantly influence employee competency. This indicates that competency is not developed solely through formal education or technical training, but rather through a complementary combination of theory and practice.

The f-test results indicate that these two variables have a significant effect on the competency variable. The coefficient of determination ( $R^2$ ) indicates that the proportion of employee competency that can be explained by education and training is in the strong range, thus statistically supporting the significance of the relationship. This finding suggests that a continuous learning model (lifelong learning) is an appropriate approach for civil servants, especially in technical fields such as fisheries and food. Within the Kirkpatrick Model framework, it can be concluded that well-designed training and education will result in improvements in learning levels, work behavior, and work outcomes. Furthermore, these results align with the view (Yasin et al., 2021) that competency is a combination of knowledge, skills, and character acquired through a continuous learning process. In a bureaucratic context, strong competency will support the implementation of government programs effectively, efficiently, and results-oriented.

## CONCULASION

Based on the results of data analysis, discussion, and research findings, the following conclusions can be drawn:

1. Occupational education has a positive and significant impact on employee competency. Formal and vocational education provide a foundation of knowledge and theoretical understanding that supports employee performance in the fisheries and food sector.
2. Job training also has a positive and significant impact on employee competency. Training conducted by agencies or technical institutions has helped improve employee skills, technical abilities, and preparedness for practical tasks in the field.
3. Simultaneously, education and job training significantly influence employee competency. This means that the combination of education and training together can significantly contribute to employee competency improvement.

Thus, to build optimal employee competency, the Department of Fisheries and Food needs to integrate education and job training in a synergistic, planned, and sustainable manner.

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