



THE ROLE OF HUMAN RESOURCE DEVELOPMENT IN IMPROVING EMPLOYEE PERFORMANCE (Case Study of PDAM Tirtanadi Sunggal Branch)

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ABSTRACT

This study aims to determine the role of human resource development starting education and training and career development on the performance of employees of PDAM Tirtanadi Sunggal Branch. Data collection techniques with interviews and questionnaires. Analysis of data using quantitative descriptive analysis methods. From the results of the study it was found that education and training and career development at PDAM Tirtanadi Sunggal Branch in general was sufficient in accordance with needs. Because what is developed is theoretical and technical knowledge, ability and skills in managing work, while career development is in accordance with better actions, namely by motivating employee work, and helping employees in designing their careers in the future, both of these programs affect employee performance. In general, employees agree that employee performance can be seen from loyalty, level of knowledge, honesty, work performance, and a sense of responsibility towards work. T test results prove that the independent variable (education and training) at the 95% confidence level ($\alpha: 0.05$) is 0.774, while the t_{table} is 1.664, it means $t_{statistic} < t_{table}$, H_0 is accepted and rejects H_a .

KEYWORDS: Education and Training, Career Development, Performance

1. INTRODUCTION

The rapid development of technology has an impact on decreasing employee performance. This is due to the lack of understanding of the employees regarding these changes. In contrast to machines, raw materials, money and work methods which are inanimate objects which do not experience potential emotional touch; the labor factor is an active production tool that is needed to drive other factors of production that are undergoing many changes. For this reason, every company strives for its employees to be able to understand the developments or changes in existing technology so that their performance will improve.

One way is to conduct development of human resources owned, human resource development is considered one of the most effective ways to improve company performance and productivity. With the development of human

resources is expected to further enhance the technical skills and professional expertise of employees. However, the successful implementation of the program cannot be directly carried out during implementation, but can be seen from the results of the work of employees after following the development of human resources whether there is a change or not.

For this reason, human resource development must be carried out as efficiently as possible in order to truly play a role in improving employee performance. PDAM Tirtanadi Sunggal Branch is a State company providing clean water services. PDAM Tirtanadi Sunggal Branch is demanded to continue to improve the performance of its employees so that the services provided to consumers or the community are in line with their expectations. For this reason, it is necessary to develop human resources for employees so that they



can understand the technology needed to increase employee knowledge and skills. The development carried out by PDAM Tirtanadi Sunggal Branch includes education and training in accordance with the needs and expertise needed in the company and in accordance with education and training based on the type of employee's work.

Objective of the study

The purpose of this study was to determine the role of human resource development in improving the performance of employees of PDAM Tirtanadi Sunggal Branch.

2. RESEARCH METHODOLOGY

The data used in this study is quantitative data. Quantitative data is data that emphasizes numerical data (numbers) that are processed by statistical methods (Taniredja & Mustafidah, 2011).

Primary data were obtained through a series of questions posed to respondents in the form of questionnaires and interviews with employees, or company managers in this study. PDAM Tirtanadi Sunggal Branch located at Jl. Medan-Belawan Km 15,5 Medan. The population in this study were employees of PDAM Tirtanadi Sunggal Branch, totaling 82 people. In this study the sampling technique of Popability sampling is done by total sampling. So that the total population can be sampled. As for the sample in this study, there are 82 employees at PDAM Tirtanadi Sunggal Branch.

To find out the Role of Human Resource Development (X) in Improving Employee Performance (Y), simple linear regression analysis is used.

3. LITERATURE REVIEW

Human Resource Development

According to Wilkinson & Leifer (2007), human resource development is an effort to improve the technical, theoretical, conceptual, and moral abilities of employees according to the needs of the job or position through education and training. Kammeyer-Mueller (2015) illustrates the impact of competitive strategies on all employees through a framework that connects human resource management practices (HRM) with competitive strategies. They provide examples of hypothetical relationships between competitive strategies, required employee role behavior, and HRM practices, and analyze problems that occur in their implementation. Bloom & Van Reenen (2011), analyzes the relationship between Human Resource Management (HRM) and productivity. HRM includes incentive pay (individual and group) as well as many non-wage aspects of employment relations such as matching (recruitment and dismissal) and work organization

(eg teamwork, autonomy). The author places HRM more generally in the literature on management practices and productivity. Starting with some facts about HRM levels and trends and productivity and the main economic theories of HRM. As for some of the determinants of risk-HRM are competition, ownership and regulation.

Efforts to improve the ability of employees to deal with various assignments, as follows:

1. Education

According to the Law of the Republic of Indonesia Number 20 Year 2003 concerning the National Education System, education aims to develop the potential of students to become human beings who believe and be devoted to God Almighty, of good morality, healthy, knowledgeable, capable, creative, independent, and become citizens democratic and responsible (Article 3). Wilkinson & Leifer (2007) states that adding value to an organization usually means using its people effectively. Staff recruitment, training and development procedures are important for getting the right people and keeping them motivated and fully utilized.

To overcome the challenges of knowledge and competence related to new technology and Industry 4.0 processes, a new strategic approach to holistic human resource management in manufacturing companies is needed. Because of the continuous automation of the simple production process, the amount of workspace with a high level of complexity will increase, resulting in the need for a high level of education from the staff. The challenge is to make employees qualified to shift their capacities to workspaces with more complex processes and ensure job retention in a changing work environment (Hecklau, Galeitzke, Flachs & Kohl, 2016).

2. Training

According to Salas et. al (2001), using the D. L. Kirkpatrick (1976) framework to evaluate training, we reviewed 58 participants who were published from a CRM (crew resource management) training to determine its effectiveness in flight. The results show that CRM training generally results in positive reactions, increased learning, and promotes desirable behavior changes.

Saks & Belcourt (2006) investigated the extent to which organizations carry out training activities to facilitate the transfer of training before, during and after training and the relationship between these activities and the transfer of training across organizations. Training professionals from 150 organizations report that 62%, 44%, and 34% of employees directly apply training material at work, six months, and one year after training. In addition, their organizations are significantly more likely to use



training activities to facilitate transfers during training than before or after training. Furthermore, training activities before, during, and after training are significantly related to training transfer; However, activities in the work environment before and after training are more strongly related to transfers than activities during training. The practical and research implications of these findings are discussed to enhance the transfer of training in organizations.

3. Career development

Barnett & Bradley (2007) examined the relationship between organizational support for career development (OSCD) and employee career satisfaction. Based on an extended model of social cognitive career theory (SCCT) and an integrative model of proactive behavior, this study proposes that career management behavior will mediate the relationship between OSCD and career satisfaction, and between proactive personality and career satisfaction. De Vos, et. al (2011) supports the idea that employee participation in competency development initiatives as well as perceived support for competency development are positively related to workers' perceptions of work abilities and also discusses the processes by which individuals and organizations can influence subjective career success.

HR Development Goals

The purpose of developing its nature involves the following matters: (1) Work productivity, (2) increasing the efficiency of labor, time, raw materials, and reducing the wear of machines, (3) reducing damage to goods, production, and machinery because employees are increasingly experts and skilled in carrying out their work, (4) reduce the accident rate of employees, (5) improve better service from employees to consumers, (6) employee morale will be better because their expertise and skills are in accordance with their work so they are enthusiastic to complete their work, (7) the opportunity to improve employee career is greater, (8) managers are more capable and faster in making better decisions, (9) leadership of a manager will be better, human relations are more flexible, motivation is more free so that coaching cooperation vertical and horizontal are more harmonious, (10) employee benefits (salary,

incentive pay, and benefits) will increase due to performance an increasingly large scale, (11) provides good benefits to the consumer community because they will obtain higher quality goods or services (Dundon, et. al, 2004)

Limitations of human resource management system

Development constraints relate to participants, trainers / instructors, development facilities, curriculum, and development funds.

Definition of Performance

Something that results from functions and indicators in a job or profession over a certain period of time is performance (Wirawan, 2009). Pabowo (2005) performance is a form that is produced by a worker or employee who has been charged with duties or obligations based on one's ability, excellence and dexterity in carrying out these tasks. Handoko Handoko (2000) argues that basically performance is an activity and results that can be achieved or continued by a person or group of people in carrying out a task or job well or even exceeding the standards set by an organization in a certain period.

According to Prawirosentono (2008), the factors affecting employee performance are as follows: (1) Effectiveness and efficiency, (2) Authority and responsibility, (3) Discipline, (4) Initiative. According to Hasibuan (2006) there are 5 (five) benchmarks for employee performance, namely: (1) Loyalty, (2) Work performance, (3) Honesty, (4) Discipline, (5) Responsibility

4. RESULT

Training and Education

Theory oriented education, conducted in class, lasts a long time, and usually answers Why. Practice-oriented exercises, conducted in the field, are short-lived, and usually answer how. Therefore, the importance of education and training is to direct employees to what they want.

**Table 1**
Training and Education

No	Statement	Alternative Answers			
		SA	A	D	SD
1.	Theoretical knowledge is largely determined by the education that has been implemented by the company in accordance with company needs will affect employee performance	15	66	1	-
2.	Improvements provided in training and education by the company in accordance with employee needs	8	69	5	-
3.	Improved theoretical and technical capabilities of education and training that have been implemented by the company is a tangible form	19	62	1	-
4.	company in applying the needs of the company with the needs of employees				
4.	The application of education and training programs can be seen in the development of the ability of employees in managing their work, which is greatly influenced by their level of knowledge and experience	19	59	4	-
5.	Education and training generally takes a variety of time, employees who get education and training will have an impact on the quality and quantity of work	15	64	3	-
Total		76	320	14	-
Percentage		18.54%	78.05%	3.42%	-

Based on the results of research on the items of respondents' statements regarding education and training depicted in general recapitulation it can be concluded that the respondents agreed if the education and training program greatly affects the work and performance of employees.

Career development

Career development aims to carry out career development and promotion that clearly motivates

employees to do their jobs well, while the impact of a career development program impacts employee attitudes and behavior, career development program planning by companies helps employees design and determine their careers in the future, and with Career development programs are expected to be able to influence employee work effectiveness. As for the assessment items in the development activities can be seen in the following table.

Table 2
Career Development

No	Statement	Alternative Answers			
		SA	A	D	SD
1.	Transparent career development planning will increase the willingness and desire of employees to do good work.	16	63	3	-
2.	Clear career development and promotion goals motivate employees to do their jobs well	10	67	5	-
3.	The career development programs have an impact on attitudes and behavior of employees in the application between needs	20	60	2	-
4.	The career development program planning by the company, really helps employees design and determine their careers in the future	18	58	6	-
5.	Career development programs have a significant impact on the effectiveness of work	18	61	3	-
Total		82	309	19	-
Percentage		20.00%	75.36%	4.63%	-



In general, the respondents indicated that the attitude of agreement with the career development program was very helpful for employees.

In this study the assessment indicators included employee loyalty to the company, employee level of knowledge and ability to perform work, integrity, accomplishment and employee responsibilities in the conduct of work.

Performance

Table 3
Performance

No	Statement	Alternative Answers			
		SA	A	D	SD
1.	Employee's performance is measured by the level of employee loyalty to the company.	16	62	4	-
2.	Employee performance is measured by the level of knowledge and ability of employees in the company	11	65	6	-
3.	Employee performance is measured by honesty in taking actions, especially those related to work	18	61	3	-
4.	Employee performance is measured by high work performance	16	59	7	-
5.	Employee performance is measured by a sense of responsibility	17	61	4	-
Total		78	308	24	-
Percentage		19.02%	75.12%	5.85%	-

Based on the description of the respondents' statements in the performance tables above, the respondents generally agreed that if the indicators measuring employee performance could be followed by loyalty, work performance, knowledge and ability to carry out work, honesty and responsibility of employees.

The cronbach's value of the independent variable (education and training and career development) is 0.605 and 0.619 while the dependent variable (performance) is 0.637, so it can be concluded that the variable is reliable because of > 0.60 .

The results of the SPSS version 17 validity test are shown by comparing the $r_{\text{statistic}}$ with a value of 0.217 (r_{table}), if the $r_{\text{statistic}} > 0.217$ then the item or variable under study is valid.

5. ANALYSIS

Validity and Reliability Test

Table 4
Validity Result

	Variable		
	Training and education	Career development	Performance
$r_{\text{statistic}}$	0.459	0.478	0.456
	0.264	0.304	0.365
	0.335	0.351	0.382
	0.376	0.371	0.403
	0.370	0.364	0.353

It can be concluded that all items of respondents' statements for the variables of education and training, career development and performance are valid.



Classic assumption test

Table 5
Multicollinearity Tests

Model	Collinierity Statistic		Status
	Tolerance	VIF	
Training and education	0.885	1.130	There are no symptoms multicollinearity
Career development	0.885	1.130	There are no symptoms multicollinearity

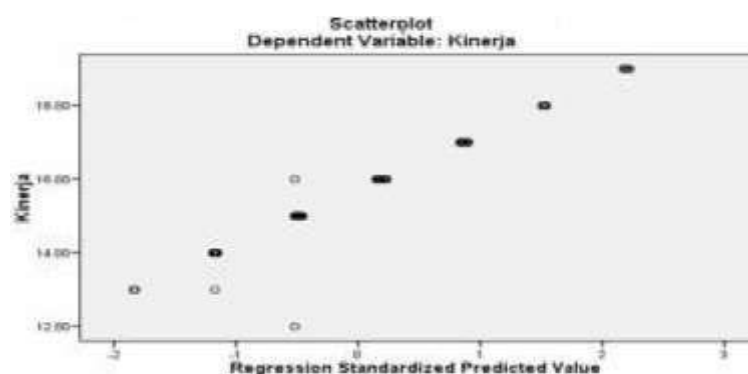


Figure 1
Heteroscedasticity test results

Based on the scatterplot graph above shows the points of accumulation then H_0 is rejected, so it can be concluded that the occurrence of

heteroscedasticity means that there are similarities in variance from the residuals of one observation to another.

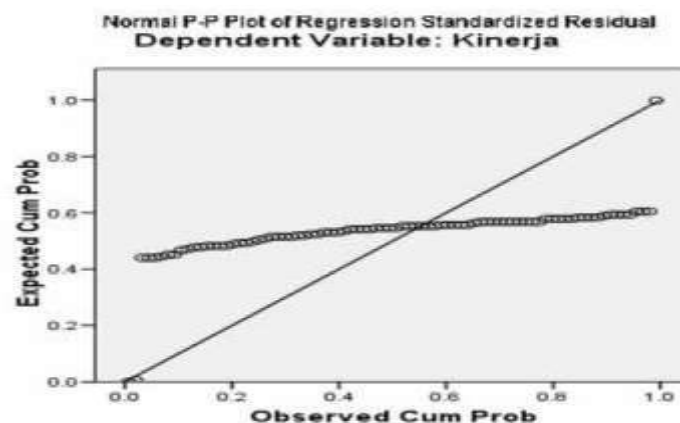


Figure 2
Normality test results

The figure 2 above shows the data spread away from the diagonal line and away from the diagonal line, so H_0 is rejected, thus it can be concluded that the residual value model is not normally distributed. Thus the classic normality

assumption test for multiple regression analysis is not met or the residual value is not normally distributed.

**Data Test Results****Table 6**

Model	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
(Constant)	-.583	.555		-1.052
Education and Training	.024	.032	.022	.774
Career Development	1.010	.029	.965	34.380

Source: 2019 processed data results

Based on the table above, multiple regression equations can be arranged, as follows:

$$Y = a + X_1b_1 + X_2b_2 + e$$

$$Y = -0.583 + 0.024 b_1 + 1.010 b_2 + e$$

The equation above shows that there is an influence between education and training and career development programs on the performance of employees of PDAM Tirtanadi Sunggal Branch. The influence of education and training programs and career development programs on employee performance is assumed that education and training programs are given a score of 10 and career development, then the influence of the program education and training and career development for Y (employee performance) are as follows:

$$Y = -0.583 + 0.024b_1 + 1.010b_2 + e$$

$$Y = -0.583 + 0.024(10) + 1.010(10) + e$$

$$Y = -0.583 + 0.24 + 10.1 + e$$

$$Y = 9.757 + e$$

From the above assumptions, the magnitude of the effect of education and training programs and career development on employee performance is 9,757 units.

T-test results

From the t-test table it is known that the t-statistics of education and training is 0.774, career developments are 34.380, while the t-table with a confidence level of 95% or (α : 0.05) is 1,664 because $t_{\text{statistic}} < t_{\text{table}}$ of education and training then H_0 is accepted (H_a rejects), while career development is statistic $> t_{\text{table}}$ then H_0 is rejected (H_a accepts). Thus education and training have a negative effect on employee performance and career development has a positive effect on PDAM Tirtanadi Sunggal Branch.

Table 7
F Test
ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	184.627	2	92.313	678.307	.000(a)
	Residual	10.751	79	.136		
	Total	195.378	81			

Dari tabel 7 shows that the overall value of the $F_{\text{statistic}}$ is 678,307 while the F_{table} is at a significant level (α) 5%, d.f: 82-2-1; 2 is 7.17 then $F_{\text{statistic}} > F_{\text{table}}$. Or the ANOVA table shows the significance value of 0,000 for all variables, so that H_0 is rejected. Thus it can be concluded that jointly education and

training and career development significantly influence the performance of employees of PDAM Tirtanadi Sunggal Branch.

**Table 8**
Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.972 ^a	.945	.944	.36891	2.072

Source: 2019 processed data results

From Table 8 shows that the percentage of education and training and career development variables explained by the independent variable (coefficient of determination) is indicated by the value of R Square (R^2) that is equal to 0.945 using R^2 because the independent variable in this study is more than 1, in this case it can be interpreted that Employee performance can be explained by the influence of education and training and career development with a value of 94.50% while the remaining 5.50% is explained by other variables not examined in this study.

6. CONCLUSION

Education and training and career development at PDAM Tirtanadi Sunggal Branch in general are sufficient according to theoretical knowledge needs as well as technical, ability and skills as well as managing work, career development in accordance with better work actions, motivating employee work, helping employees design their future careers, both of these programs affect the performance of employees of PDAM Tirtanadi Sunggal Branch.

In general, employees of PDAM Tirtanadi Sunggal Branch agree that employee performance can be seen from loyalty, level of knowledge, honesty, work performance, and sense of responsibility based on:

- T test results prove that the independent variable (education and training) at the 95% confidence level ($\alpha: 0.05$) is 0.774, while t table is 1.664 meaning $t_{\text{statistic}} < t_{\text{table}}$ then H_0 is accepted and rejects H_a . Thus it can be concluded that education and training have a negative effect on the performance of employees of PDAM Tirtanadi Sunggal Branch. While career development 34,380 means $t_{\text{statistic}} > t_{\text{table}}$ then H_0 is rejected (accepts H_a). Thus it can be concluded that career development has a positive effect on the performance of employees of PDAM Tirtanadi Sunggal Branch
- From the calculation results R^2 is 0.945. This shows that 94.50% of education and training and career development influence the performance of employees of PDAM

Tirtanadi Sunggal Branch, while the rest is determined by other factors not included in this research.

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