# The Impact of Performance Improvement on Productivity

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# ABSTRACT

The point of this study is to try and look into what happens to employee productivity at PT. Infomedia (Grahapena) Makassar when they get education and training to improve their performance. This study's group was made up of up to 60 people who worked at PT. Infomedia (Grahapena). In this study, a saturated sampling method was used to choose the sample, which meant that the whole community was used as the research sample. This study used first-hand information as its data source. A questionnaire filled out by PT workers was used to get primary data for this study. The news agency GRAhapena in Makassar. There are different types of tests used to look at data, such as validity tests, reliability tests, multiple linear regression analysis, partial tests, simultaneous tests, determination tests, and classical assumption tests (such as normality tests, heteroscedasticity tests, and multicollinearity tests). The study shows that training makes PT workers more productive, and the effect is big and positive. The news agency GRAhapena in Makassar. This means that training is a factor in figuring out how productive an employee is at work. On the other hand, schooling doesn't have a big effect on how much work people get done. This means that schooling is not a factor that affects how well employees do their jobs at PT. Infomedia (Graha Pena) Makassar.

# ABSTRACT

Inti dari penelitian ini adalah mencoba melihat apa yang terjadi terhadap produktivitas karyawan di PT. Infomedia (Grahapena) Makassar ketika mendapatkan pendidikan dan pelatihan untuk meningkatkan kinerjanya. Kelompok penelitian ini berjumlah 60 orang yang bekerja di PT. Infomedia (Grahapena). Dalam penelitian ini digunakan metode sampling jenuh untuk memilih sampelnya, artinya seluruh masyarakat dijadikan sebagai sampel penelitian. Penelitian ini menggunakan informasi tangan pertama sebagai sumber datanya. Kuesioner yang diisi oleh pekerja PT digunakan untuk mendapatkan data primer untuk penelitian ini. Kantor berita GRAhapena di Makassar. Ada berbagai jenis uji yang digunakan untuk melihat data, seperti uji validitas, uji reliabilitas, analisis regresi linier berganda, uji parsial, uji simultan, uji determinasi, dan uji asumsi klasik (seperti uji normalitas, uji heteroskedastisitas, dan uji multikolinearitas). Studi menunjukkan bahwa pelatihan membuat pekerja PT lebih produktif, dan pengaruhnya besar dan positif. Kantor berita GRAhapena di Makassar. Artinya, pelatihan merupakan salah satu faktor yang menentukan seberapa produktif seorang karyawan dalam bekerja. Di sisi lain, pendidikan tidak mempunyai pengaruh yang besar terhadap seberapa banyak pekerjaan yang diselesaikan seseorang. Artinya pendidikan bukan merupakan faktor yang mempengaruhi seberapa baik karyawan melakukan pekerjaannya di PT. Infomedia (Graha Pena) Makassar.



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### INTRODUCTION

Globalization is emerging as a new phenomenon that has been born by the progress of the times. The current of globalization has swept in various corners of the world. In this era, human life has also changed, where the world is increasingly unified. Technology and communication have stimulated changes in relations between nations that can no longer happen in a country closed to the outside world. In the economic field, the impact of globalization leads to increasing economic dependence between countries through increasing the volume and diversity of transactions between countries (cross-border capital flows), labor movements

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(human movement), and the rapid spread of information technology so that it can simply be stated that globalization is one of the forces that influence society, human life, the work environment, and business activities (Aspiyah &; Martono, 2016). The development of science and technology of an organization or company cannot avoid competition with other organizations or companies. This condition requires an organization or company to always make various innovations to anticipate increasingly fierce competition. Organizations or companies today are required to have a competitive advantage both in product quality, service, cost, and human resources (Indriyani, 2016).

Any organization cannot be successful without the people behind the organization. People are a vital part of the success and success of an organization. Humans, as a resource, in the organization must be arranged in such a way that it is well coordinated and can support the achievement of the organization's strategic plan (Akbar et al., 2018). Although the world of work has now begun to be automated, which means that some jobs that were once done by humans have now been replaced by machines, the role of humans in organizations cannot be eliminated.

Human resources are the main key and have a major role in every company activity. Quality human resources will determine the success of the company in preparing plans, carrying out operational activities and controlling the course of the company to achieve the goals that have been set. This relates to the company's maintenance of employee performance to optimize employees in carrying out the duties and responsibilities that have been given (Nababan et al., 2016). One of the determining factors for the success of a company or organization is employee performance and productivity. Every organization or agency in implementing a directed program is always effective to achieve organizational goals. One way is to improve employee performance (Francis, 2016). Strategy is a frame of reference that directs options to determine the form and direction of an organization's activities towards achieving its goals. Performance (work performance) is the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. Performance is basically what employees do or do not do so that they affect how much they contribute to the agency or organization including the quality services presented (Yudha et al., 2019). Performance improvement strategy is a way for companies or institutions to improve the performance of employees or educators so that company goals can be achieved. In order for the performance improvement strategy to be successful, the company needs to know the performance goals. Performance goals that set are specific individuals, in their fields, processes, routine and core activities that will be the responsibility of employees. If performance goals are grown from within the workforce, it will form a strength and if the work environment situation also supports, the achievement of performance will be easier (Kandou, 2016).

Performance is a description of the level of achievement of the implementation of an activity or program or policy in the goals, objectives, mission, and vision contained in the strategic planning of an organization (Aulia, 2016). According to Hasibuan (2016) Performance appraisal is an assessment made to the company's management, both employees and managers who have been doing their work. The assessment will later become input in assessing the performance carried out and then improvements can be made, or commonly called continuous improvement. According to Fahmi (2011), some of the benefits of performance appraisals are that they can provide information for consideration of promotion and salary determination. In addition, it can provide feedback for managers and employees to introspect and review behavior so far, both positive and negative to then be reformulated as behavior that supports the growth of overall organizational culture, needed for consideration of training and retraining (retraining)

and development, performance appraisal for every organization, especially business organizations is a must, Especially when you look at the high competition between companies.

Any organization or company will make every effort to maintain the viability of its organizational activities. One way is to improve the performance of its employees, namely by increasing the work productivity of the employees they display and trying to maintain it. Because as we know, the most important reason for the need for performance appraisal is to create an improvement in the quality of performance in the company and its further effect on increasing productivity and company profits (Basofi, 2016). According to Suwatno (2008), employee work productivity is a concrete result (product) produced by an individual or group, during a certain unit of time in a work process. Mangkunegara (2014) Productivity defines productivity as the ratio between the totality of expenditures at a given time divided by the totality of inputs over that period. It can be concluded that productivity is the value of the comparison of all expenses used compared to all income used during a period. With objective performance appraisals will provide appropriate feedback, and through the right feedback it is expected that there will be changes in behavior towards increasing expected work productivity (Hariandja, 2002).

The role of the company becomes very much needed to increase employee work productivity because employee work productivity is a measure of the extent to which humans or employees are used properly in a production process to produce the desired output. One of the company's roles in increasing employee work productivity is by rewarding and recognizing the existence of these personnel. According to Cormick (1979) There are two factors that affect labor productivity, namely factors from within the individual and factors from outside the individual. Factors from within the individual are age, temperament, physical state and level of fatigue as well as motivation, work discipline. While factors from outside the individual are physical conditions, lighting atmosphere, rest periods, length of work, wages and incentives, organizational forms and social and family environments.

In general, employees work because they are encouraged to meet their needs, so that employee performance is getting better. One form of reward that can be given by companies is incentives (Hanaysha, 2016). Incentives are defined as a form of payment attributed to performance, as the sharing of profits for employees due to increased productivity or cost savings. This system is another form of direct compensation beyond salary and wages which is fixed compensation, called the pay for performance plan (O. Perdana et al., 2016). Incentives are rewards given to motivate workers so that their work productivity is high, inappropriate or at any time. Therefore, incentives as part of profits, especially given to workers who perform well or who excel. For example, in the form of giving bonuses. In addition, it means that incentives can also be given in the form of goods (A. President, 2019). Meanwhile, according to Rivai (2004) suggests that incentives are associated with performance, as a share of profits One organization that implements a performance appraisal system is Infomedia Graha Pena Makassar. PT. Infomedia Graha Pena Makassar is one of Telkom Group's subsidiaries specializing in publishing and advertising media as a communication bridge between business people and also an information channel for Telkom telephone customers. One of the businesses developed by PT. Infomedia Graha Pena is in the field of contact center. One of PT. Infomedia Graha Pena which uses call center services, namely Telkomsel.

Call Center PT. Infomedia Graha Pena in collaboration with Telkomsel is an organization formed to serve customers, especially in providing convenience and comfort in obtaining information, consultation, customer needs and problems anytime, anytime and anywhere that

can be accessed by telephone for 24 hours. In the implementation of these services, PT. Infomedia Graha Pena Makassar always tries to maintain the quality of call center services so that customers always get the right information and a satisfactory service attitude. To achieve these efforts, Caroline officers have been equipped with clear performance standards and periodic performance appraisals are carried out by a team with the aim that Caroline's service quality is maintained and can better display productive performance.

Based on the Performance Report of the Provision of Call Center Services of PT. Infomedia Graha Pena Makassar Year 2016 in July, August, September, October, November, and December showed the average percentage of Part Time Agent performance appraisal respectively of 78%, 59%, 63%, 74%, 65%, and 78% while for Full Time Agents respectively of 82%, 80%, 81%, 80%, 71%, and 79%. From these data that employees who serve as caroline still get a lot of values below the ideal standard that has been set, which is 100% or have not achieved maximum performance, of course this can cause problems with efforts to realize increased employee work productivity and can also have a negative impact on customers who use the call center service. Productivity that is still not good even though performance appraisal has been good can be seen from the percentage above, this proves that the productivity produced by call center agents is still unstable and not good, this is contrary to the theory described earlier regarding performance appraisal has a positive effect on productivity.

Research on work productivity has been carried out a lot, such as research (Akbar et al., 2018; Aqsa, 2018; Francis, 2016; Utomo, 2018) which found that education and training had a positive and significant effect on employee work productivity. In contrast to research (Dimas &; Simanjuntak, 2017; Yudha et al., 2019) who found that education had no significant effect on work productivity. The focus in this study is how the effect of performance development on employee work productivity, this is based on the purpose of researchers to know and explain the picture of performance development and work productivity to find out and analyze the effect of performance development on employee work productivity.

According to Mangkunegara (2014) The term performance comes from the word job performance or Actual Permormanse (work performance or actual achievement achieved by a person). Understanding performance is the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him (Soetrisno, 2016). Performance is the result of a process that refers to and is measured over a certain period of time based on predetermined terms or agreements (Suwatno, 2008). In general, performance can be interpreted as the entire work process of an individual whose results can be used as a foundation to determine whether the individual's work is good or vice versa (Supomo &; Nurhayati, 2018). There are approximately 2 (two) main requirements needed to conduct an effective performance appraisal, namely: a. The existence of performance criteria that can be measured objectively; and b. The existence of objectivity in the evaluation process (Bamford et al., 2003). While from the point of view of the usefulness of the performance itself, Sondang (2008) Explains that for individuals performance appraisals act as feedback on various things such as their abilities, fatigue, shortcomings and potential which in turn is useful for determining their goals, paths, plans and career development.

According to Simamora (2004) Performance appraisal is a process by which an organization evaluates the conduct of individual work. This activity can improve personnel decisions and can provide feedback to employees about their work performance and allow the company to know how well an employee is working compared to organizational standards. According to Damanik (2016) Performance dimensions consist of: a. Targets. Target is an

indicator of the fulfillment of the number of goods, work, or the amount of money made. b. Quality. Quality is an important element, because the resulting quality becomes a force in maintaining customer loyalty. c. Time to complete. Timely completion makes the certainty of distribution and delivery of work certain. This is the capital to create customer trust. d. Obey the principle. Not only must it meet targets, quality and on time but it must also be done in a correct, transparent and accountable way.

According to Mangkunegara (2006), the characteristics of people who have high performance are as follows: a. Have high personal responsibility. b. Dare to take and bear the risks faced. c. Have realistic goals. d. Have a thorough work plan and strive to realize its goals. e. Utilize concrete feedback in all work activities carried out. f. Look for opportunities to realize the plan that has been programmed.

Gumilar (2018) states that factors affecting performance include: a. Ability Factors. Psychologically, the ability (abilty) of employees consists of potential abilities (IQ) above average (IQ 110-120) with adequate education for their position and skilled in doing daily work, then he will more easily achieve the expected performance. Therefore, employees need to be placed in jobs that are in accordance with their skills (the right man in pleace, the man on the right job). b. Motivational Factors. Motivation is in the form of an employee's attitude in dealing with a situation (situation) motivation is a condition that moves from employees who are directed to achieve organizational goals (work goals).

According to Seels & Richey, development means the process of translating or describing design specifications into physical features. Development specifically means the process of producing learning materials (Meutia, 2015). According to Tessmer and Richey, development focuses its attention not only on needs analysis, but also broad issues of end-to-end analysis, such as contextual analysis (Butters > 2016). The development aims to produce products based on field test findings. Indonesia's National Productivity Council has formulated a complete definition of productivity (Omar, 2002), namely: 1) Productivity is basically a mental attitude that always has the view that the quality of life today is better than yesterday and tomorrow is better than today. 2) In general, productivity contains the definition of a comparison between the results achieved (output) with the overall resources used (input). 3) Productivity has two dimensions, namely effectiveness that leads to the achievement of maximum performance, namely the achievement of targets related to quality, quantity and time. The second efficiency relates to the effort of comparing inputs with the realization of their use or how the work is carried out.

There are several factors that determine the size of productivity (Dalimunthe &; Young, 2017; Teguh &; Rosidah, 2004), among others: 1) Knowledge. Knowledge is the accumulation of the results of the educational process both obtained formally and informally that contributes to someone in problem solving, inventiveness, including in doing or completing work. With extensive knowledge and high education, an employee is expected to be able to do a good and productive job. 2) Skils. Skills are operational technical abilities and mastery of certain fields, which are creative. Skills are acquired through the process of learning and practice. Skills relate to a person's ability to perform or complete technical jobs. With the skills possessed by an employee is expected to be able to complete work productively. 3) Abilities. Abilities or abilities are formed from a number of competencies possessed by an employee. This concept is much broader, as it can include a number of competencies. Knowledge and skills include factors that form abilities. Thus, if someone has high knowledge and skills, it is expected to have high ability as well. 4) Attitude. Attitude is a patterned habit. If the habit has positive implications in relation

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to one's work behavior, it will be beneficial. This means that if employee habits are good, then it can guarantee good work behavior as well. It can be exemplified that an employee has a habit of being punctual, disciplined, simple, then work behavior is also good, if given responsibility will keep the rules and agreements. 5) Behaviors. Likewise, human behavior will also be determined by habits that have been embedded in employees so that they can support effective work or vice versa. With the condition of these employees, productivity can certainly be realized (Anam Amin & Lodhi, 2018; Halawi & Haydar, 2018).

According to Faruk (2018) The benefits of measuring work productivity are as follows: 1) Feedback on work implementation to improve employee work productivity. 2) Evaluation of labor productivity is used for settlement e.g.: awarding bonuses and other forms of compensation. 3) For decision making, for example: promotion, transfer and demotion. 4) For training and development needs. 5) For career planning and development. 6) To find out the irregularities of the staffing process. 7) To find out informal inaccuracies. 8) To provide fair employment opportunities. Based on the problem that has been raised, and as a temporary answer to the problem raised, the author can propose a hypothesis, namely:

H1: Education has a significant effect on employee work productivity.

H2: Training has a significant effect on employee work productivity.

### **RESEARCH METHOD**

This research is a type of quantitative research. The population in this study was all employees of PT. Infomedia (Grahapena) as many as 60 people. Sample determination in this study uses saturated sample techniques so that the entire population is used as a research sample. Thus, the sample of this study amounted to 60 people. The source of data used in this study is primary data. The primary data from this study was obtained from questionnaires filled out by employees of PT. Infomedia (Grahapena), including identity and responses according to the results of filling out the questionnaire. The statements in the questionnaire for each of the variables in the study were measured using an ordinal scale. This scale is designed to see how strongly subjects agree or disagree with statements on a 5-point scale, where a score of 5 (SS= Strongly Agree), a score of 4 (S= Agree), a score of 3 (KS= Disagree), a score of 2 (TS= Disagree) and a score of 1 (STS= Strongly Disagree). The data that has been collected will be analyzed through several stages of testing. The first stage is to perform a descriptive statistical test. The second stage is a data quality test consisting of (validity test, reliability test). The third stage is the classical assumption test which consists of (normality test, multicollinearity test, heteroscedasticity test). The fourth stage is to test all hypotheses proposed in this study and will be proven through partial tests (t tests), simultaneous tests and determination coefficient tests.

**Table 1. Operational Variables** 

Variable	Items	Indicator	Reference
Education	X1.1	Material	(Damanik, 2016; A. Prime,
(X1)	X1.2	Evaluation	2019)
	X2.1	Method	
Training (X2)	X2.2	Means	(Gumilar, 2018; Meutia, 2015)
<b>G</b> . ,	X2.3	Participants	
	Y1.1	Quality	
Employee Work	Y1.2	Quantity	(Basofi, 2016; Damanik, 2016;
Productivity (Y)	Y1.3	Timeliness	Meutia, 2015)
	Y1.4	Effectiveness	

Source: Researcher, 2023

### RESULTS AND DISCUSSION

This study was conducted by distributing questionnaires to 60 respondents. Based on the results of data collection obtained through questionnaires, it can be known the characteristics of each employee, which are grouped based on gender, age, last education and length of work.

Table 2. Demographic Data

Variables	Measurement	n	0/0
Gender	Man	37 people	61,7%
Gender	Woman	23 people	38,3%
A ~~	≥30 Years	26 people	43,3%
Age	34 people	56,7%	63,3%
Education	S1	44	73,3%
Last	S2	16	26,7%
Longth of Work	≥10 Years	9	15%
Length of Work	<10 Years	51	85%

Source: Primary data processed, 2023

Based on descriptive data from Table 2, it can be seen that the number and percentage of respondents who are male are 37 people with a percentage of (61.7%) percent, while women are 23 people with a percentage of (38.3%) percent. Based on age group, dominated by the  $\geq$ 30 years age group as many as 26 people (43.3%). The remaining 34 people (56.7%) were respondents aged < 30 years. While the number and percentage of respondents with the last S1 education was 44 people with a percentage of (73.3%) percent, while for the last S2 education as many as 16 people with a percentage of (26.7%). With the percentage of the S1 final education category (73.3%). Based on length of work, dominated by the group of working  $\geq$ 10 years as many, 9 people (15%). The remaining 51 people (85%) were respondents with a length of work of <10 years.

The second stage is the test of research data instruments consisting of validity and reliability tests. An instrument is said to be good if the research instrument meets the main requirements, namely valid (valid) and reliable (reliable). If r-count > r-table, then the question is said to be valid. As well as a variable that is stated to have consistent questionnaire answers, if it has a Cronbach Alpha value greater than 0.60. The results of the analysis can be seen in table 4.

Table 3. Validity and Reliability Test Results

Variables	Instrument	r-calculated	Cronbach Alpha	Information
	X1.1	0.423 > 0.254		Valid and reliable
	X1.2	0.718 > 0.254		Valid and reliable
X1	X1.3	0.642 > 0.254	0,613	Valid and reliable
ΛI	X1.4	0.699 > 0.254	0,013	Valid and reliable
	X1.5	0.636 > 0.254		Valid and reliable
	X1.6	0.434 > 0.254		Valid and reliable
	X2.1	0.590 > 0.254		Valid and reliable
	X2.2	0.445 > 0.254		Valid and reliable
X2	X2.3	0.559 > 0.254	0,564	Valid and reliable
ΛΖ	X2.4	0.490 > 0.254	0,364	Valid and reliable
	X2.5	0.647 > 0.254		Valid and reliable
	X2.6	0.626 > 0.254		Valid and reliable
	Y1.1	0.464 > 0.254		Valid and reliable
Y	Y1.2	0.541 > 0.254	0,666	Valid and reliable
ĭ	Y1.3	0.531 > 0.254	0,000	Valid and reliable
	Y1.4	0.650 > 0.254		Valid and reliable

Y1.5	0.798 > 0.254	Valid and reliable
Y1.6	0.647 > 0.254	Valid and reliable

Source: SPSS output, 2023

The results of the validity test show that all question items in the questionnaire are valid and can be used as a research measurement tool. This is evidenced by the value of Corrected Item – Total > 0.254. Based on the results of reliability testing, it shows that all variables used as instruments in research are and can be used as data collection tools. So based on the results of the reliability test above, it shows that the instrument has a high level of reliability, this is evidenced by the value of the alpha coefficient > 0.60, so the measurement results that will be obtained can be trusted.

The third stage to be carried out is the classical assumption test. The classical assumption test in this study consists of a normality test, a multicollinearity test, and a heteroscedasticity test. A normality test is performed to see whether in the regression model the dependent variable and the independent variable both have a normal distribution or not. Based on the normal probability plot graph, it can be seen that the point spreads around the diagonal line and the spread follows the diagonal line, so it can be said that the distribution pattern is normal.

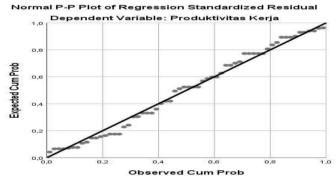


Figure 1. Normal P-P Plot

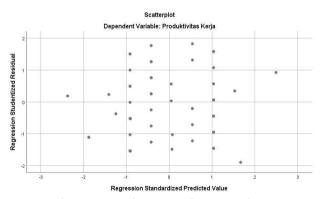


Figure 2. Diagram Scatterplot

Based on the scatterplot diagram, it can be seen that the data is scattered randomly and does not form a certain pattern, this shows that there is no heteroscedasticity. Thus it can be concluded that there is a difference in variance from residual from one observation to another.

Furthermore, the multicolonicity test aims to test whether in the regression model there is a correlation between independent variables. To test the presence or absence of

multicollinearity in the regression model can be seen from the value of tolerance and its opposite, namely by looking at the variance inflation factor (VIF). The commonly used cut-off value is a tolerance value of 0.01. If the value of VIF>10 then multicollinearity occurs.

**Table 4. Multicollinearity Test Results** 

#### Coefficientsa

Variable	VIF	Information
Education (X1)	1,001	There is Multicollinearity
Training (X2)	1,001	There is Multicollinearity

Source: Ouput SPSS, 2023

Based on table 4, it can be concluded that the regression model for the independent variable proposed by the researcher for study is free of multicollinearity. This can be proven by looking at the table above which shows the VIF value of each independent variable <10, and can be used to determine its effect on work productivity.

After the results of the classical assumption test are carried out and the overall results show that the regression model meets the classical assumptions, the fourth stage is to evaluate and interpret the multiple regression model. Multiple linear regression tests are performed to determine the functional relationship between independent variables to dependent variables. The test results can be seen in table 5.

Table 5. Multiple Linear Regression Test Results

Coefficientsa

Туре			dardized icients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	3,047	,783		3,891	,000
	Education	-,143	,143	-,131	-1,000	,236
	Training	,473	,146	,426	3,240	,000

a. Dependent Variable: Work Productivity

Source: SPSS output, 2023

Based on the Coefficients table of SPSS output results, the regression equation is known as follows:

$$Y = 3.047 - 0.143X1 + 0.473X2$$

In the multiple linear regression equation, it can be explained in detail that the value of the constant is 3.047, with a positive value. This means that if there is no change in the variables of education and training, employee work productivity is 3,047.

The value of the regression coefficient for education is -0.143. In this study it can be stated that education does not have a negative effect on employee work productivity. Each increase in education will have an impact on increasing work productivity by -0.143.

The regression coefficient value for Training was 0.473. In this study it can be stated that Training has a positive effect on employee work productivity. Each increase in training will have an impact on increasing work productivity by 0.473

Furthermore, a partial test, used to determine whether the independent variable (X) has a significant effect on the dependent variable (Y). The test was conducted with a significance level of 0.05. If Sig>0.05 then the proposed hypothesis is rejected. Conversely, if Sig.< 0.05, then the proposed hypothesis is accepted. The test results are presented in table 6.

Table 6. t-statistical Test Results

Variable	Sig. <a< th=""><th>Information</th><th>Hipotesis</th></a<>	Information	Hipotesis
Education (X1)	0.236 > 0.05	Insignificant	Rejected
Training (X2)	0,000 < 0.05	Significant	Accepted

Source: SPSS output, 2023

Based on the results of partial tests that have been conducted between education and training on work productivity, it is known that only training has a significant effect on work productivity. Conversely, education does not have a significant effect on the performance of PT. Infomedia (Grahapena).

The F test is used to determine the simultaneous effect of all independent variables (X) on the dependent variable (Y). The test was conducted with a significance level of 0.05. If Sig>0.05 then the proposed hypothesis is rejected. Conversely, if Sig.< 0.05, then the proposed hypothesis is accepted. The test results are presented in table 7.

**Table 7. F-Statistical Test Results** 

# **ANOVA**

	Model	Sum of Squares	Df	Mean Square	F	Say.
1	Regression	1,485	2	,743	6,599	,001b
	Residual	6,413	57	,113		
	Total	7,885	59			

a. Dependent Variable: Work Productivity

Source: SPSS output, 2023

Based on the results of simultaneous tests that have been conducted between Education and Training on work productivity, it is known that the Sig value of education and training is 0.001. This value is less than the degree of error ( $\alpha$ =0.05) (0.001<0.05). Thus, silmultan education and training affect work productivity.

Furthermore, the analysis of the coefficient of determination is used to determine the percentage of the magnitude of the influence of the independent variable on the independent variable. This test used the hypothesis of R-Square values ranging from 0 to 1 ( $0 \le R^2 \le 1$ ). The closer to 1, the better the model. The test results are presented in table 8.

**Table 8. R-Square Results** 

Model Summary<sup>b</sup>

			Model Sullillary	<del>/ c</del>	
Model	R	R Square	Adjusted R	Std. Error of the	Durbin-Watson
			Square	Estimate	
1	,431a	,280	,193	,33510	1.898

a. Predictors: (Constant), Training, Education

b. Predictors: (Constant), Training, Education

b. Dependent Variable: Work Productivity

Based on the results of the determination coefficient test in table 8, it is known that the variable of work productivity can be explained by education and training by 28.0%. The remaining 72% was explained by other variables not included in the study.

# Discussion

# The Effect of Education on Work Productivity

From the results of the study, it was found that the variable Education did not have a significant effect on employee productivity at PT. Infomedia (Graha Pena) Makassar. This means that education is not one of the variables that affect employee performance at PT. Infomedia (Graha Pena) Makassar which is a company engaged in the information media sector. The education factor that had the second greatest influence on employee performance in this study. This study also does not strengthen or does not prove previous research, namely research from (Aqsa, 2018), where the study and this study have nothing in common that they found that education affects employee productivity. This research indicates that education is less important and not a factor in increasing employee productivity at PT. Infomedia (Graha Pena) Makassar. The results of this study are in line with (Aliya & Tobari, 2019; Dimas & Simanjuntak, 2017) which found that education had no significant effect on employee work productivity.

# The Effect of Training on Work Productivity

From the results of the study, it was found that the training variable had a positive and significant effect on employee productivity at PT. infomedia (Graha Pena) Makassar. This indicates that training is a determining factor for whether or not employee work productivity is good. This is because the research respondents who are employees of PT. Infomedia (Graha Pena) Makassar stated that in their work they prioritize the principles of training. In this case, of all the variable indicators that have been discussed and explained above, only training can be said to have a significant effect on employee work productivity variables. Simamora (2004) said training and development is aimed at maintaining and improving the work performance of employees. Training is aimed at improving current work performance, while development is aimed at improving current and future achievement. Training is geared towards helping employees perform their current jobs better. Development represents an investment in the future of development in employees. Both managerial and non-managerial employees may receive more technical training than managers who receive more development in the form of conceptual or analytical skills and human relations skills to deepen their horizons to bring recruitment to strategic and specific goals. Rivai (2004) states that, "Training is the process of systematically changing employee behavior to achieve organizational goals. Training relates to the skills and abilities of employees to carry out current work. Therefore, every company strives to continue to increase the work productivity of its employees. And to increase work productivity, one way that can be taken is by training and development. This research indicates that training is important and a major factor in increasing employee productivity at PT. Infomedia (Graha Pena) Makassar. The results of this study are in line with (Ed, 2019 and 2019; The Future, 2016; Nababan et al., 2016) who found that training had a significant effect on work productivity.

### **CONCLUSIONS**

Based on the results of the analysis and discussion that has been stated earlier, several conclusions can be drawn that the variables of Performance Development have a simultaneous influence, on the dependent variables, where these variables are variables of employee work productivity at PT. Infomedia (Graha Pena) Makassar. While from the results of the t (Partial) test, the most significant variable that has a tount greater than the ttable is the training variable. Based on the conclusions of the study, the suggestions given from this study are as follows: 1. For PT. Infomedia (Graha Pena) Makassar, it is expected that the management always strives to provide maximum support for the training activities carried out so far. Real efforts that can be made are by carrying out training activities continuously in the hope that they can provide maximum benefits in an effort to increase employee work productivity. 2. In providing training to employees, it is expected to always use trainers who have reliable qualities. With the hope that the training activities carried out can provide assurance that the programs set can run or be implemented according to the standards set by the company. 3. Management is expected to evaluate work results after the training process is carried out so that policies related to employee performance development efforts can be realized. 4. In the process of recruiting or recruiting workers, company leaders should pay more attention, in terms of education of prospective workers in accordance with established company standards. Because based on this study it is known that educational variables do not have a significant influence on increasing employee work productivity.

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