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## Analysis of the Effect of Work Overload, Work Motivation, and Training of Employees in the Implementing Competency Pathway on Employee Work Productivity at PT PLN (Persero) UP3 Palu

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**Abstract:** Increasing productivity is the key as the Government's effort to increase economic growth in order to achieve the Vision of Advanced Indonesia 2045. This research discusses the Effects of Work Overload, Work Motivation and Training on Work Productivity in Employee Competency Line Executors at PT PLN (Persero) UP3 Palu. This research is to analyze Work Overload, Work Motivation, and Training effect on Work Productivity. The analytical method used is Evaluation of the Measurement Model (Outer Model), Convergent Validity, Discriminant Validity, Composite Reliability, and Second Order Confirmatory Analysis. and Testing of Structural Models, R-Square and Hypotheses using the SmartPLS 3 application. The results showed that partially Work Motivation and Training had a positive and significant effect on Work Productivity, while Work Overload had no significant effect on Work Productivity. Simultaneously Work Overload, Work Motivation, and Training affect Work Productivity for Employees in the Executing Competency Pathway at PT PLN (Persero) UP3 Palu.

**Key words:** Work Overload, Work Motivation, Training, Work Productivity.

### INTRODUCTION

#### Background

Humans are the main asset owned by a company. Human Resources (HR) plays an important role in the success of an organization or company. Companies or organizations really need competent human resources so that company or organizational goals can be achieved so that human resource management is something that must be done so that human resources can carry out their role to the fullest in order to achieve company or organization targets.

Mixed work overload of quantitative and qualitative workloads. Quantitative workload comes from multiple tasks. Meanwhile, qualitative workload is when individuals feel unable to work and do not use the abilities of workers (Susiarty et al., 2019).

According to Maruli (2020:58) Says that work motivation is everythingsomething that arises from a person's desire, by generating passion and desire from within a person who can influence, direct and maintain behavior to achieve goals or desires that are in accordance with the scope of work.

According to Dessler (2020) training is an internal processpursuing the skills needed by employees in carrying out their work, in which employee training provides practical knowledge and its application in the company's work world to increase work productivity in achieving the goals desired by the company organization.

Sukardi (2021) states that work productivity is a thingindividual success in carrying out their duties which can be seen in terms of the dimensions of engagement, planning skills, effort in work

and overall work productivity of employees.

PT PLN (Persero) is a State-Owned Enterprise (BUMN) engaged in the electricity sector. As the only company that has responsibility for electricity in Indonesia, PT PLN (Persero) always provides the best service to all people, which is also one of the values that PT PLN (Persero) practices, namely commitment to customers. PT PLN (Persero) has offices spread throughout Indonesia and one of them is located in Palu City, Central Sulawesi Province, namely PT PLN (Persero) Palu Customer Service Implementation Unit or abbreviated as PT PLN (Persero) UP3 Palu. Evaluation of the performance of employees of PT PLN (Persero) Customer Service Implementation Unit (UP3) Palu always evaluates employees where every year the employee's performance is checked by the leadership, along with PT PLN (Persero) UP3 Palu's Key Performance Indicators as follows:

**Table 1. Key Performance Indicators of PT PLN (Persero) UP3 Palu 2020-2022**

Year	Information	Key Performance Indicator		Total Weight
		I	II	
2020	Target Weight	70	30	100
	Realization	59.75	25.09	84,84
2021	Target Weight	40	60	100
	Realization	39,26	59,33	98.59
2022	Target Weight	40	60	100
	Realization	42.25	59,42	101.67

**Source: Data Processing (2022)**

Decree of the Board of Directors of PT PLN (Persero) Number 379.K/DIR/2010 Concerning the Human Capital Management System Article 2 paragraph 1. The purpose of the Human Capital Management System is to prepare professional, competent and high-integrity human resources in supporting operations, business continuity, improving performance and achieving the company's vision, as stated in the Decree of the Board of Directors of PT PLN (Persero) Number 379.K/DIR/2010 concerning the Human Capital Management System Article 2 paragraph 2.

Decree of the Board of Directors Number 379.K/DIR/2010 Concerning the Human Capital Management System Article 15 Paragraph 1 (a) reads: Recruitment participants with high school/vocational high school education qualification requirements are placed on the implementing competency path, which means employees with high school/vocational high school education are called employees. Executor Competency Pathway. Decree of the Board of Directors Number 379.K/DIR/2010 Concerning the Human Capital Management System Article 20 Paragraph 5 which reads: Employees on the executive competence path cannot be placed in functional positions of technical experts and specialists as well as structural positions, which means that since the issuance of the Directors' Decree in 2010, starting from that time employees on the executive line cannot occupy structural positions.

Decision of the Board of Directors of PT PLN (Persero) Number 1337.K/DIR/2011 concerning Amendments to the Decree of the Board of Directors of PT PLN (Persero) Number 379.K/DIR/2010 concerning the Human Capital Management System Article 21 which reads: Normal retirement of employees on the Implementing Competency Path is when they reach 46 years, which means that employees on the executive line only have a working period of 46 years. Based on the decision of the Board of Directors, it can be concluded that high school/STM employees with the Implementing Competency Path cannot occupy a structural level and have a retirement age of 46 years.

On July 1, 2022 PT PLN (Persero) issued Directors Regulation Number: 0030.P/DIR/2022 concerning the Human Experience Management System Strategic Policy which in Chapter IV

Point B Number 2 (C.4a) states: for educational qualifications equivalent to SMA/ D1 is given Person Grade 8, then in Chapter IV Point B Number 2 (C.5) states: Employee retirement age is set at 56 (fifty six) years. This means that since the issuance of the board of directors' decision on July 1 2022, employees in the implementing competence path, who in the previous regulations had a retirement age of 46 years, have changed to 56 years, but in Directors Regulation Number: 0030.P/DIR/2022 it has not stated that employees in the the competency of the executor has been able to occupy a structural position.

Based on the description above, the writer is interested in conducting research with the title: "Analysis of the Influence of Work Overload, Work Motivation and Training for Employees in the Implementing Competency Pathway on Employee Work Productivity at PT PLN (Persero) UP3 Palu".

### **Research purposes**

Based on the background of the problem and the formulation of the problem above, the researcher has a goal to be achieved in this study. The research objectives to be achieved are as follows:

1. To analyze the effect of work overload on the work productivity of Executive Competency Line Employees at PT PLN (Persero) UP3 Palu.
2. To analyze the effect of work motivation on the work productivity of Employees of the Executing Competency Path at PT PLN (Persero) UP3 Palu.
3. To analyze the effect of training on the work productivity of Employees of the Implementing Competency Path at PT PLN (Persero) UP3 Palu.
4. To analyze the effect of work overload, motivation and training simultaneously on the work productivity of Employees of the Implementing Competency Path at PT PLN (Persero) UP3 Palu.

## **LITERATURE REVIEW**

### **Human Resource Management**

Human resource management according to Dessler (2019) isa policy in practice required by a manager to run other people as human resources from a manager's position, including: recruiting, screening, training, returning, appraising or evaluating the work performance of employees working in the organization.

### **Work productivity**

Sedarmayati (2018) says that work productivity is a comparison of resultsachieved and the participation of employees per unit of time. Or a number of goods/services that can be produced by a person/group of people/employees in a certain period of time.

### **Workload (Work Overload)**

Workload is the average frequency of activity of each job over a period of timecertain. Workload includes physical and mental workload. Workload is also defined as the number of activities that must be carried out by a person or group of people within a certain period of time under normal circumstances (Haryono, 2014).

### **Work motivation**

According to Sunyoto (2018) motivation talks about howencourage one's work enthusiasm, so that they want to work by providing their abilities and expertise optimally in order to achieve organizational goals.

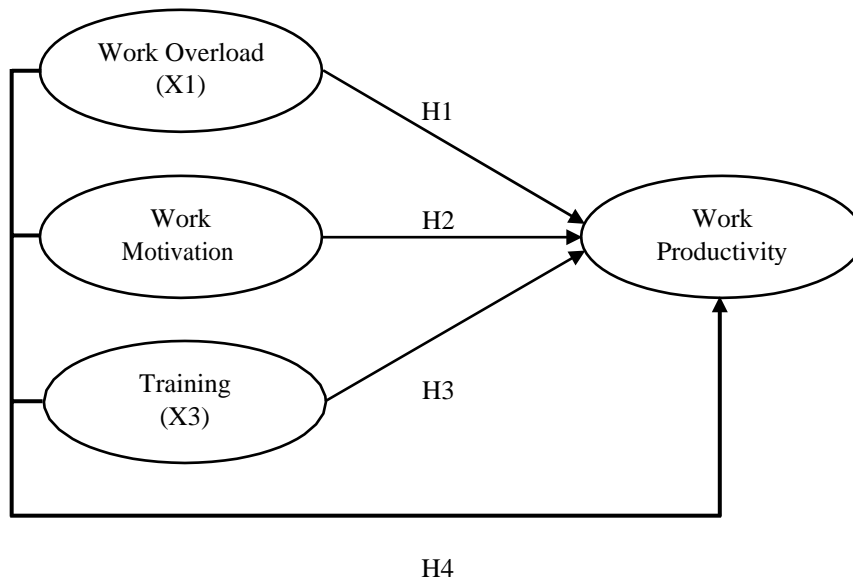
## Training

According to Widodo (2018:6) training is a process of improving systematically and in accordance with the needs of employees by increasing skills, knowledge and understanding as well as self-motivation.

## Previous Research

1. Jumantoro, Farida and Santoso's research (2019) entitled: The Influence of Competence, Work Motivation, Workload, and Training on Work Productivity of Human Resources Multi-Business Cooperative Children Mandiri Ponorogo. The sampling technique used is saturated sampling. Multiple linear regression analysis techniques and hypothesis testing with a significant level of 5% are data analysis techniques used in this study. The test results show that: (1) between competency variables and human resource work productivity there is a positive and not significant effect; (2) between the variables of work motivation and work productivity of human resources there is a positive and significant influence; (3) between the workload variable and the work productivity of human resources there is a positive and not significant effect; (4) between the training variables and the work productivity of human resources there is a positive and significant effect. This shows that work motivation and training have a positive and significant impact on human resource work productivity, while competence and workload have a positive and not significant effect on human resource work productivity and the most dominant variable that affects human resource work productivity is variable work motivation.
2. Komarudin's research (2018) entitled: The Influence of Training and Motivation on Employee Productivity of PT Lion Mentari Airlines Soekarno Hatta Cengkareng Airport. This type of research is quantitative research analyzed using statistics. Data analysis using SPSS Version 22. The sampling test technique uses the census method and data collection techniques include validity testing, reliability testing, classical assumption testing and multiple linear regression testing and hypothesis testing. The results of the regression analysis of the motivational variable proved to have a positive and significant effect on employee work productivity of 0.510. These results answer the formulation of problem two and  $H_a$  is accepted and  $H_o$  is rejected. While the constant is 1,873, explaining that even though there are no training and motivation variables that affect work productivity, employees still have a work productivity value of 1,873.
3. Sinaga's research (2020) entitled: The Influence of Motivation and Work Experience on Employee Work Productivity at PT. Trikarya Cemerlang Medan. Methods of data analysis using multiple linear analyses. The results showed that the calculated F value of 71.132 was greater than the F table 3.20, and the significance level was smaller than 0.005, namely 0.000 ( $0.000 < 0.05$ ). And the t calculated value was greater than t table, namely  $4.404 > 2.01174$  so that it could be concluded motivation has a significant effect on employee work productivity, meanwhile, work experience partially has a significant effect on employee work productivity according to a significant value of  $0.000 < 0.05$ , and the calculated t value is greater than t table, namely  $3.902 > 2.01174$ . Based on the Adjusted R Square value obtained a value of 0.741.

## Research Model



**Figure 1. Research Model**

Source: Theoretical Studies and Empirical Studies (2022)

### hypothesis

Based on the previous description, the hypothesis can be formulated as follows:

H1: It is suspected that Work Overload (X1) partially affects Work Productivity (Y)

H2: It is suspected that work motivation (X2) partially influences work productivity (Y)

H3: Allegedly Training (X3) partially affects Work Productivity (Y)

H4: Allegedly Work Overload, Work Motivation and Training simultaneously affect Work Productivity.

## RESEARCH METHODS

The research method used in this research is a quantitative method. According to Sugiyono (2021) The quantitative research method is a type of research that is systematic, planned and clearly structured. Descriptive understanding is a method that functions to describe or give an overview of the object under study through data or samples that have been collected as they are, without conducting analysis and making generally accepted conclusions.

### Location and Research Object

The research was conducted at PT PLN (Persero) UP3 Palu which is located on Jl. RA. Kartini No.26 Palu City, Central Sulawesi, with a total of 40 employees. The data collection method in this study was a questionnaire, which is a data collection technique by giving a set of questions or written questions to the respondent to answer. This research was conducted by distributing questionnaires (online form) to Employees of the Executive Competency Line of PT PLN (Persero) UP3 Palu which will be measured using a Likert scale. This study uses descriptive analysis techniques and analysis of Structural Equation Modeling, Partial Least Square, Outer Model, and Inner Model.

### Population and Research Sample

The population is a generalization area consisting of objects/subjects that have certain quantities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2016: 135). Based on this definition, the population is the entire object within the scope to be studied. The population for this study is all employees of the Executing Competency Path at PT

PLN (Persero) UP3 Palu of 40 employees. The type of nonprobability sampling used in this research is saturated sampling or often called a census. According to Sugiyono (2017: 85) the meaning of saturated sampling is a sampling technique when all members of the population are sampled, this is done if the population is relatively small, less than 30, or research wants to make generalizations with very small errors. Another term for a saturated sample is a census, where the entire population is sampled.

### **Research Instrument Scale**

The measurement scale used in this study is the Likert scale. According to Sugiyono (2018: 93) the Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. The questionnaire or questionnaire uses a Likert scale in the form of a checklist. With a Likert scale, the measured variables are translated into variable indicators. Then these indicators are used as a starting point for compiling instrument items which can be in the form of statements or questions.

### **Research Instruments**

#### **Validity test**

According to Rahmawati (2019), testing the validity of a questionnaire or questionnaire is tested by a validity test. Questionnaire items are declared valid if the outer loading value is  $> 0.50$ .

#### **Reliability Test**

Cronbach's Alpha is a reliable coefficient that can show how well the items in the assessment have a positive correlation with each other (Sekaran, 2005).

### **Descriptive Analysis**

#### **Structural Equation Modeling (SEM) Analysis**

The data processing method in this study is the Structural Equation Modeling (SEM) modeling equation. SEM modeling is a further development of path analysis, in the SEM method the causal relationship between exogenous variables and endogenous variables can be determined more fully, Abdullah (2015).

#### **Partial Least Square (PLS)**

This study uses a quantitative approach that adopts Partial Least Square (PLS). PLS is a powerful analytical method because it is not based on many assumptions, Abdullah (2015). The advantages of the PLS method are that the data does not have to be normally distributed multivariate, the sample size does not have to be large, and PLS can not only be used to confirm theory, but can also be used to explain whether or not there is a relationship between latent variables.

#### **Evaluation of the Measurement Model (Outer Model)**

The measurement model (outer model) is used to assess the validity and reliability of the model. The validity test was carried out to determine the ability of the research instrument to measure what it should measure, Abdullah (2009). While the reliability test is used to measure the consistency of a measuring instrument in measuring a concept or it can also be used to measure the consistency of respondents in answering question items in a questionnaire or research instrument. The measurement model (outer model) uses Convergent Validity, Discriminant Validity, and Composite Reliability tests.

#### **Evaluation of the Structural Model (Inner Model)**

The inner model, namely the specification of the relationship between latent variables (structural model), also known as the inner relation, describes the relationship between latent variables based on the substantive theory of research. Without losing its generality, it is assumed that the latent variables and their indicators or manifest variables are equal to one on a scale of zero means and unit variance, so that location parameters (constant parameters) can be removed from the model

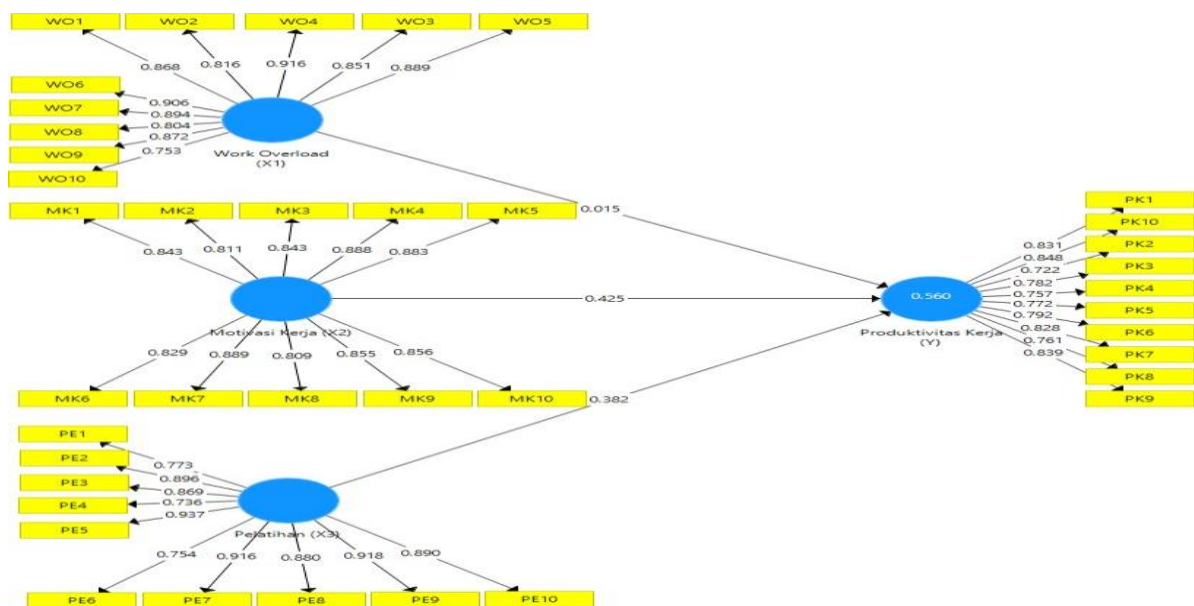
(Jaya, 2008). R-Square, Q2 Predictive Relevance, Goodness of fit or Gof index, Bootstrapping Hypothesis.

**Variable Operational Definitions**

1. James L. Gibson (2011) there are 2 things that can affect workload, namely responsibilityresponsibility and self-esteemself-esteem). Indicators:Time Pressure, Work schedule or working hours, Role ambiguity and conflict models, Noise, Information overload, Temperature extremes or heat overload, Repetitive action, Ergonomics aspects in workplace layout, Responsibility, Self-esteem
2. Dewi and Hanjoyo (2019) Motivation as an inner process or psychological process within a person is strongly influenced by several factors. Indicators:Working environment conditions, adequate compensation, good supervision, job security, status and responsibility, flexible rules, desire to live, desire to be able to have, desire to be rewarded, desire to be recognized.
3. Larasati (2018:11) Motivation as an inner process or psychological process within a person is strongly influenced by several factors. Indicators: Management support, Commitment of specialists and management of human resources, Technological developments, Organizational complexity, Learning styles, Performance of HRM functions.
4. Sutrisno (2014) argued thatWork productivity is the ratio of the overall work results that have been determined to produce a product of labor. Indicators: Capability, Results achieved, Morale, Self-development, Quality, and Efficiency.

**RESEARCH RESULTS AND DISCUSSION**

**Research result**



**Figure 2. Outer Model Test Results**

Source: Data processed SmartPLS 3 (2023)

The results of the analysis shown in Figure 2 show that as many as 40 of all variables, as many as 40 have a value greater than 0.7.

**Discriminant validity**

It is the value of the cross loading factor that is useful for knowing whether a construct has adequate discriminant, that is, by comparing the cross loading value on the intended construct it must be greater than the other values. By default the value for each construct must be greater than 0.7.

Table of Cross Loading Values

	Work Overload (X1)	Work motivation (X2)	Training (X3)	Work Productivity (Y)
WO1	<b>0.868</b>	0.207	0.240	0.114
WO2	<b>0.816</b>	0.091	0.280	0.135
WO3	<b>0.851</b>	0.169	0.131	0.180
WO4	<b>0.916</b>	0.197	0.150	0.200
WO5	<b>0.889</b>	0.168	0.299	0.198
WO6	<b>0.906</b>	0.139	0.155	0.156
WO7	<b>0.894</b>	0.236	0.132	0.114
WO8	<b>0.804</b>	0.153	0.124	0.088
WO9	<b>0.872</b>	0.215	0.090	0.154
WO10	<b>0.753</b>	0.153	0.071	0.028
MK1	0.050	<b>0.843</b>	0.563	0.490
MK2	0.100	<b>0.811</b>	0.770	0.643
MK3	0.168	<b>0.843</b>	0.550	0.668
MK4	0.287	<b>0.888</b>	0.594	0.604
MK5	0.230	<b>0.883</b>	0.743	0.672
MK6	0.137	<b>0.829</b>	0.502	0.566
MK7	0.237	<b>0.889</b>	0.545	0.573
MK8	0.076	<b>0.809</b>	0.624	0.503
MK9	0.255	<b>0.855</b>	0.531	0.607
MK10	0.121	<b>0.856</b>	0.547	0.548
PE1	-0.010	0.486	<b>0.773</b>	0.457
PE2	0.154	0.684	<b>0.896</b>	0.622
PE3	-0.002	0.651	<b>0.869</b>	0.568
PE4	0.182	0.358	<b>0.736</b>	0.367
PE5	0.168	0.647	<b>0.937</b>	0.590
PE6	0.041	0.495	<b>0.754</b>	0.514
PE7	0.050	0.629	<b>0.916</b>	0.621
PE8	0.115	0.652	<b>0.880</b>	0.668
PE9	0.199	0.656	<b>0.918</b>	0.679
PE10	0.260	0.692	<b>0.890</b>	0.682
PK1	0.222	0.676	0.557	<b>0.831</b>
PK2	0.154	0.479	0.494	<b>0.722</b>
PK3	-0.002	0.514	0.612	<b>0.782</b>
PK4	0.182	0.495	0.482	<b>0.757</b>
PK5	0.168	0.507	0.532	<b>0.772</b>
PK6	0.041	0.515	0.586	<b>0.792</b>
PK7	0.050	0.546	0.451	<b>0.828</b>
PK8	0.115	0.555	0.425	<b>0.761</b>
PK9	0.199	0.619	0.679	<b>0.839</b>
PK10	0.260	0.595	0.569	<b>0.848</b>

Source: Data processed SmartPLS 3 (2023)

Based on table 2, the cross loading value for each construct has a value of more than 0.7. This shows that the manifest variables in this study have properly explained the latent variables and proved that all of these items are valid.



**Composite Reliability**

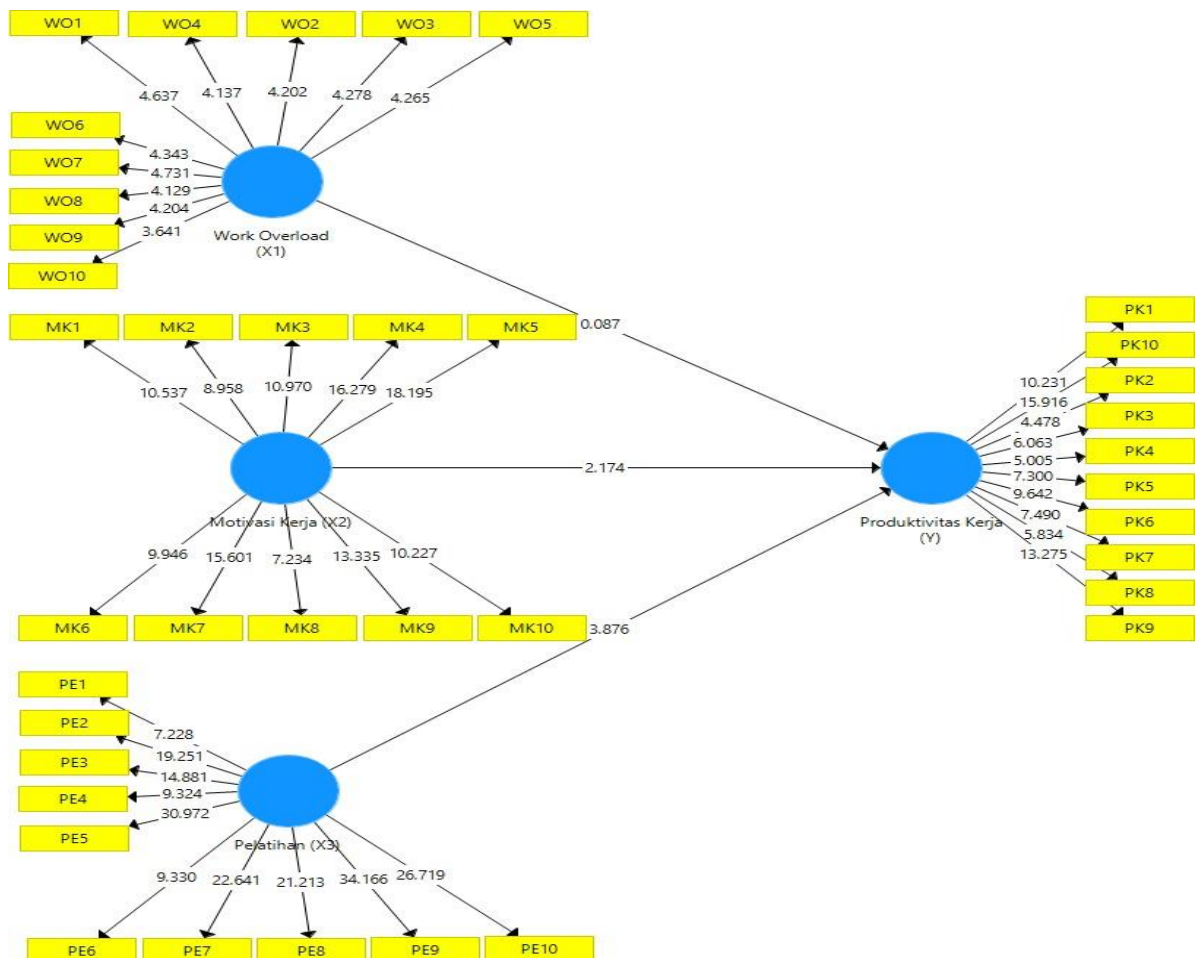
To measure the reliability of a construct in PLS-SEM with the SmartPLS application, two methods are used, namely Cronbach's Alpha and Composite Reliability. However, the assessment using Cronbach's Alpha gives a lower score, so it is recommended to use Composite Reliability and the value must be greater than 07.

**Table 3 Reliability and Validity Constructs**

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Work Overload (X1)	0.961	0.982	0.965	0.737
Work Motivation (X2)	0.958	0.961	0.963	0.724
Training (X3)	0.960	0.969	0.966	0.739
Work Productivity (Y)	0.935	0.938	0.945	0.631

**Source: Data processed SmartPLS 3 (2023)**

In table 3 it can be seen that all variable values in the reliability test using either Cronbach's Alpha or Composite Reliability have a value above 0.7, and validity testing uses AVE with a value of more than 0.5. Therefore, it can be concluded that the variables tested are valid and reliable, so that structural model testing can be carried out.



**Second Order Confirmatory Analysis**

**Figure 3. Outer Model Test Results After Re-estimation**

Source: Data processed SmartPLS 3 (2023)

Figure 3 shows that in assessing the significance of the effect between variables, a bootstrapping procedure was carried out. The bootstrap procedure uses all of the original samples for later resampling. In the bootstrap resampling method, the significance value used (two-tailed) t-value is 1.96 (significance level 5).

### R-Square (R<sup>2</sup>)

R-Square used to measure the predictive power of a structural model. R-Square explains the effect of certain exogenous latent variables on endogenous latent variables whether choosing a substantive effect.

**Table 4. R Square**

	R Square	Adjusted R Square
Work Productivity (Y)	0.560	0.523

Source: Data processed SmartPLS 3 (2023)

Based on the test results in table 4 above, the R-Square value is 0.560. this value indicates that the variables work overload, work motivation and training have an effect on the work productivity variable in the study of employee competency pathways at PT PLN (Persero) UP3 Palu by 56%. And the rest is influenced by other variables outside the variables in this study.

### Goodness of Fit (GoF) Test Results

The results of the GoF test are obtained by multiplying the average root value of the communalities with the average root value of AVE and R-square, which can be seen from tables 3 and 4. From the results of the GoF calculation above, a value of 0.629 is obtained so that it can be concluded that the model has a large GoF and the greater the GoF value, the more suitable it is in describing research sample. The formula for calculating the GoF value is shown as follows:

$$\text{GoF} = \sqrt{\overline{R^2} \times \overline{AVE}}$$

$$\text{GoF} = \sqrt{0,560 \times 0,707}$$

$$\text{GoF} = 0,629 \text{ Kategori } \textit{large}$$

### Hypothesis Test Results

**Table 5. Statistical T Results**

	Original Sample (O)	Sample Average (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Work Overload (X1) -> Work Productivity (Y)	0.015	0.075	0.181	0.083	<b>0.934</b>
Work Motivation (X2) -> Work Productivity (Y)	0.425	0.396	0.203	2088	<b>0.037</b>
Training (X3) -> Work Productivity (Y)	0.382	0.368	0.105	3,647	<b>0.000</b>

Source: Data processed SmartPLS 3 (2023)

Based on table 5, determining whether the hypothesis is accepted or rejected is explained as follows:

1. The Work Overload variable (X1) has no significant effect on Work Productivity (Y) with a t-statistic value of 0.083 less than 1.96 and p-values obtained from = T.DIST.2T (0.083;36) 0.934 greater than 0,05. Therefore, the first hypothesis which states that Work Overload has no significant effect on the Work Productivity variable is not proven.
2. Work motivation variable (X2) has a positive and significant effect on work productivity variable (Y) with a t-statistic value of 2.088 greater than 1.96 and p-values obtained from = T.DIST.2T (2.088; 36) 0.037 smaller from 0.05. Therefore, the second hypothesis which states that work motivation has a positive and significant effect on the work productivity variable is proven.
3. The Training variable (X3) has a positive and significant effect on the Work Productivity variable (Y) with a t-statistic value of 3.647 greater than 1.96 and p-values obtained from = T.DIST.2T (3.647;36) 0.000 less than 0.05. Therefore, the third hypothesis which states that training has a positive and significant effect on work productivity is proven.

## Discussion

### Effect of Work Overload on Work Productivity

Hypothesis 1 direct effect concludes that the Work Overload variable (X1) has no significant effect on the performance variable (Y) where the effect of the X1 variable on Y has a P-Values (0.934)  $> \alpha$  (0.05), so H0 is accepted, meaning the effect of Work Overload ( X1) on Work Productivity (Y) is not significant. So that H1 which presents the effect of Work Overload on Work Productivity is not supported. This result is in line with the research findings of Jumantoro, Farida and Santoso (2019) which states that workload has a positive and not significant effect on the work productivity of human resources at KSU KSU Multi-Purpose Cooperative Independent Children Ponorogo. While these results are not in line with Satrini's research findings,

This means that the workload given by PT PLN (Persero) UP3 Palu to its human resources is in accordance with their capabilities, and also human resources feel not burdened with the tasks and authority given, so that the work assignments given can be completed.

### Effect of Work Motivation on Work Productivity

Hypothesis 2 direct effect concludes that the work motivation variable (X2) has a positive and significant effect on the work productivity variable (Y) where the effect of the X2 variable on Y has a P-Values (0.037)  $< \alpha$  (0.05), so H0 is rejected, meaning the influence of motivation work (X2) on work productivity (Y) is significant. So that H2 which presents the effect of service orientation on performance is supported. This result is in line with the research findings of Jumantoro, Farida and Santoso (2019) which states that work motivation has a positive and significant effect on the work productivity of human resources at KSU KSU Multi-Business Cooperative, Ponorogo independent children. These results are also in line with the findings of Sinaga's research (2020) which states that work motivation has a positive and significant effect on employee work productivity at PT. Trikarya Cemerlang Medan.

Human resources at PT PLN (Persero) UP3 Palu have high motivation to work so they can increase their work productivity. Therefore, increasing employee work productivity is a company priority to build strong work motivation. This is because strong work motivation can help companies in their efforts to increase the ability and willingness of employees to produce satisfactory work results, so that they can provide benefits for companies in efforts to increase productivity.

### Effect of Training on Work Productivity

Hypothesis 3, direct effect concludes that the training variable (X3) has a positive and significant effect on the work productivity variable (Y) where the effect of the X3 variable on Y has a P-

Values  $(0.000) < \alpha (0.05)$ , so  $H_0$  is rejected, meaning the effect of training ( $X_3$ ) on work productivity ( $Y$ ) is significant. So that  $H_3$  which presents the effect of training on work productivity is supported. These results are in line with the research findings of Kustini and Sari (2020) which state that training has a positive and significant effect on employee work productivity at PT. Bumen Redja Abadi - BSD. This result is also in line with the findings of Komarudin's research (2018) which states that training has a positive and significant effect on the work productivity of employees of PT Lion Mentari Airlines Soekarno Hatta Cengkareng Airport.

Training as part of education which concerns the learning process to acquire and improve skills outside the applicable education system in a relatively short time. Training is a vehicle for building Human Resources towards the era of globalization which is full of challenges. Therefore, training activities cannot be ignored, especially in entering an era of increasingly fierce, sharp and tough competition in this century. In this regard, we realize that training is fundamental to employee productivity.

### **Effect of Work Overload, Work Motivation, and Training on Work Productivity**

Hypothesis 4 influences simultaneously that the variables work overload, work motivation and training have an effect with the obtained R-Square value of 0.560 or 56% on work productivity in the study of employee competency pathways at PT PLN (Persero) UP3 Palu. This result is in line with the research findings of Komarudin (2018) which states that work motivation and training have a simultaneous and significant effect on the work productivity of employees of PT Lion Mentari Airlines Soekarno Hatta Cengkareng Airport. These results are also in line with the findings of Jumantoro, Farida and Santoso (2019) which stated that work motivation, workload and training had a simultaneous and significant effect on the work productivity of human resources at KSU KSU Multi-Purpose Cooperative Independent Children Ponorogo.

Employee work productivity is a very important thing for a company organization or company engaged in the service sector or the production of goods. The existence of adequate employee work productivity will be able to assist the company in achieving company goals or expanding. Work productivity can be used as a benchmark for the success of a company to find out the comparison between the results achieved (output) and the overall resources used (input). (Pawastri, et al, 2018).

### **Conclusion**

1. Partially, Work Overload does not have a significant effect on Work Productivity for Implementing Competency Line Employees at PT PLN (Persero) UP3 Palu.
2. Partially, work motivation has a positive and significant effect on work productivity for employees in the Executive Competency Pathway at PT PLN (Persero) UP3 Palu.
3. Partially, training has a positive and significant effect on work productivity for employees in the Executive Competency Pathway at PT PLN (Persero) UP3 Palu.
4. Simultaneously Work Overload, Work Motivation, and Training have a simultaneous and significant effect on Work Productivity for Implementing Competency Line Employees at PT PLN (Persero) UP3 Palu.

### **Suggestion**

1. *Work Overload* is a variable that has an influence but is not significant on work productivity in Employee Competency Path Executors at PT PLN (Persero) UP3 Palu. In fact, human resources do not feel burdened with the work assignments and authority that has been given, but to maintain the morale of existing human resources, it is necessary to provide refreshments, such as picnic holidays held by cooperatives regularly so that human resources do not feel bored and bored with his job.

2. It is also recommended to increase work productivity at PT PLN (Persero) UP3 Palu, one of which is by paying attention to the problem of Work Overload, Work Motivation, and Training.

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