THE EFFECT OF WORKLOAD AND WORK ENVIRONMENT ON EMPLOYEE PRODUCTIVITY AT THE OFFICE OF THE CENTRAL STATISTICS AGENCY OF TANAH DATAR REGENCY

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ABSTRACT

The purpose of this study is to determine the influence of workload and work environment on employee work productivity. The sample technique used in this study is saturated sampling, so the sample obtained amounted to 47 people. Data analysis was carried out in several stages, namely 1) Validity Test was tested with Pearson correlation (r count > r table). 2) Reliability tested with Cronbach Alpha (> 0.60 is considered reliable). 3) Normality Test to find out whether the data is normally distributed or not 4) T test to find out the influence of each independent variable on the dependent variable. 5) F test to determine the influence of workload and work environment simultaneously on employee productivity at the headquarters of the Central Statistics Agency of Tanah Datar Regency. 6) Coefficient of Determination (R^2) to find out how much contribution independent variables contribute in explaining dependent variables. Based on the results of the research and discussion that has been presented, the following conclusions can be drawn:. 1) Workload variables affect employee productivity at the Central Statistics Agency of Tanah Datar Regency. This means that the better the workload control, the higher the employee productivity level. 2) Work environment variables have a positive effect on employee productivity at the Central Statistics Agency of Tanah Data Regency. This means that the better the work environment for the institution, the more employee productivity will increase.3) Simultaneously, the workload, and the work environment have a positive effect on employee productivity at the Central Statistics Agency of Tanah Data Regency.

Keywords: Workload, Work Environment, Employee Productivity

INTRODUCTION

The Department of Culture and Tourism of Darmasraya Regency, one of the government agencies in Darmasraya, has involved its employees in various competencies so far, however The competencies provided are still not optimal, this can be seen from the achievement of work targets which are still not optimal. Other problems   What the employees also felt was that there were employees who already had the competence who were transferred by their superiors to other fields on the grounds that their performance at their current place of work did not match their field of expertise.

As one of the government organizations, namely non-departmental institutions that are directly responsible to the President, the Central Statistics Agency (BPS), which

is the only government agency that has the main purpose of being a reliable data provider, has implemented bureaucratic reform since 2010. BPS Tanah Datar Regency is one of the BPS representative institutions in the region. According to Law Number 16 of 1997 concerning Statistics, BPS Tanah Datar Regency has the main task, which is to provide basic statistical data. BPS Tanah Datar Regency as a public organization is supported by reliable human resources. Problems often faced by government organizations include the problem of human resource management. This problem does not rule out the possibility of occurring at the Central Statistics Agency of Tanah Datar Regency. Based on the BPS Performance Report of Tanah Datar Regency, the main problems in BPS Tanah Datar Regency include the lack of a plan for human resource needs based on competency mapping. Necessity. Various studies state that there are several main factors that affect employee performance. (Elvatiana et al., 2024) mentioned that there are several factors that affect employee performance, namely leadership, coaching, empowerment, participation, workload, work environment, work motivation, and job training. Of these factors, which directly affect are leadership factors and work motivation. Not only leadership and motivation, two important things that are suspected to affect employee performance within the Central Statistics Agency of Tanah Datar Regency are workload and work environment. Research results (Prayoga, 2022) Regarding the influence of workload on job performance, it is stated that there is a significant relationship between the incentive system and better job performance. Likewise with the work environment. According to research (Ambalele et al., 2022), the work environment such as lighting, noise, building color, air quality and equipment have an effect on employee performance.

Productivity is defined in several ways, among others, according to (Faridah & Sulistyowati, 2022), productivity is an increase in outcomes that are consistent with inputs. If productivity increases, this can only be achieved by improving efficiency (time, materials, labor) and work systems, production techniques, and labor skills. Because the progress of an organization depends heavily on the ups and downs of employee productivity. Employees who do certain types of work are sure to get results. The result is the output produced by work activities. Production is the effort to produce goods or

services, and productivity is closely related to the way in which that level of production is achieved. Work productivity is a comparison between the results of work with the materials, time, and labor used in producing goods or services by using existing resources effectively and efficiently, but maintaining the quality of the goods or services produced (Karauwan et al., 2024).

The existence of companies in any form, both on a large and small scale, is inseparable from the element of human resources. The resources in question are people who give their energy, thoughts, talents, creativity and efforts in the workplace. Employees are required to be able to carry out the tasks assigned to them more professionally, which means employees who have the view to always think, work hard, be disciplined, honest, be highly loyal and full of dedication for the success of their work. The management in the company always expects high employee work productivity, but the workload of an employee needs to be considered because humans have limitations in terms of psychological and mental, if employees are given the right workload according to their abilities, it can increase productivity and vice versa if given a workload beyond their ability then of course it will have a negative impact on productivity. The grammatical definition of workload means dependents, duties and responsibilities that must be carried out because of a job. According to (Nopitasari et al., 2025), work stress is an adaptive response to the external environment that produces physical, psychological, and behavioral biases for organizational participants. In the Handbook of Perception and Human Performance, Gopher and Donchin in Sugiyanto (1993:93) clearly state the difference between the capabilities and expectations of the information processing system needed to complete a task (called performance expectations) and the capabilities available at that time. (called actual performance expectations) this is called the workload According to (Trisnawaty & Parwoto, 2021) Job description is a list of duties, responsibilities, report relationships, working conditions, concern for the responsibilities of a position, and the product of position analysis. According to (Mahmudah et al., 2023), workloads are tasks that are assigned to the workforce or employees to be completed at a given time by using the skills and potential of the

workforce. According to (Manoppo et al., 2021), Workload is a process or. activities that must be completed immediately by a worker within the term. time. certain.

In addition to workload, the work environment is also one of the factors that determine the increase or decrease in employee productivity. An unconducive work environment will easily make employees sick, easily stressed, difficult to concentrate which results in decreased employee productivity, on the contrary, a good work environment will make employees feel comfortable at work and this comfort will have an impact on increasing employee productivity (Nugroho, 2021). The work environment is everything that surrounds workers and affects how they perform a given task. According to (Manoppo et al., 2021)"The work environment is everything around the worker that can affect the work including lighting arrangements, noise control, workplace hygiene settings and workplace safety settings". According to (Nopitasari et al., 2025) "A work environment is an environment where employees do their daily work." A supportive work environment will lead to increased performance for employees in a company. The indicators to measure the work environment according to (Elvatiana et al., 2024) are workplace buildings, adequate equipment, facilities, availability of transportation facilities, relationships with colleagues at the same level and relationships between superiors and subordinates

METHODE

This research was carried out at the Central Statistics Agency of Tanah Datar Regency. The subject of this study is an employee of the Central Statistics Agency of Tanah Datar Regency. The method of data collection in this study comes from primary data, namely by distributing questionnaires to respondents, namely civil servants within the Central Statistics Agency of Tanah Datar Regency, and secondary data derived from books, journals and electronic media related to the profile of the Central Statistics Agency of Tanah Datar Regency, and previous researches. The Population Sampling Method in this study is the Central Statistics Agency of Tanah Datar Regency.The location was chosen as the problem described in the background of this study. In addition, it has received approval from the head of the work unit so that the

implementation of research will be easier in the data collection process, both primary and secondary data. (Use, 2024). Saturated or census samples, which are the number of samples that reflect all populations, are an option for use in this analysis. In this analysis, the sample was 47 people. Data collection was carried out using a questionnaire to measure employees' perception of the workload and work environment of the Central Statistics Agency of Tanah Datar Regency. It is compiled based on the indicators of each variable using a Likert scale of 1–5. Data analysis was carried out in several stages, namely 1) Validity Test was tested with Pearson correlation (r count > r table). 2) Reliability tested with Cronbach Alpha (> 0.60 is considered reliable). 3) Normality Test to find out whether the data is normally distributed or not 4) T test to find out the influence of each independent variable on the dependent variable. 5) F test to determine the influence of workload and work environment simultaneously on the productivity of employees of the Central Statistics Agency of Tanah Datar Regency. 6) Coefficient of Determination (R^2) to find out how much contribution independent variables make in explaining dependent variables.

RESEARCH RESULTS AND DISCUSSION

In this study, the normality test was carried out to test the residual value in the normal distributed regression mode or not, the test used was a non-parametric statistical test of Kolmogorov Smirnov by looking at if Asymp. Sig. (2-tailed) < 0.05 then the data is distributed abnormally, whereas if Asymp. Sig. (2-tailed) > 0.05 then the data is normally distributed(Mention, 2022). The results of the data normality test can be seen in the table below:

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			47
Normal Parametersa,b	Mean		.0000000
	Hours of deviation		7.83301955
Test Statistic			.229
Asymp. Sig. (2-tailed)c			.200
Monte Carlo Sig. (2-tailed)d	Itself.		.000
	99% Confidence Interval	Lower Bound	.000
		Upper Bound	.000

Based on the results of the SPSS output for the normality test in table 1.3 above, it can be seen that the value of Asymp. The sig. (2-tailed) obtained is 0.200 which means that it is greater than 0.05 so that it can be concluded that the data is distributed normally.

The T test is used to see the degree of significance of independent variables affecting dependent variables partially or individually. The test was carried out using a significance level of 0.05.To test the influence of each variable, a partial independent

variable was used. (Cahyani et al., 2024) If t calculates > t table, then there is an influence between the independent variable and the dependent variable. If t calculates < t table, then there is no influence between the independent and dependent variables, or if the sig value < 0.05 then the independent variable has a significant effect on the bound variable. If the sig value > 0.05, then the free variable has no significant effect on the bound variable.

Table 2. T Test Results (Partial)

Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	T	Itself.
	B	Std. Error	Beta		
(Constant)	91.235	18.437		4.949	.000
Workload	.027	.177	.024	.655	.000
Working environment	.066	.196	.052	.339	.000

a. Dependent Variable: employee productivity

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

Testing the hypothesis of the effect of Workload on Employee Productivity

Based on the results of the t-test above, the result of the calculation value of the Workload is 0.655 > the ttable value is 0.2377 with a significance value of 0.000 which is < of the value of α which is 0.05. Therefore, it can be concluded that the workload has a significant effect on employee productivity.

Testing the hypothesis of the influence of the Work Environment on Employee Productivity

Based on the results of the t-test above, the result of the tcal value of the variable of the Work Environment is 0.339 > the ttable value is 0.2377 with a significance value of 0.000 which is < of the value of α which is 0.05. So it can be concluded that the Work Environment has a significant effect on employee productivity.

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

Table 3. Test F Results (simultaneous)

ANOVA

Model	Sum of Squares	df	Mean Square	F	I tself.
Regression	7.828	2	3.914	62.145	.001b
Residual	2822.385	44	64.145		
Total	2830.213	46			

a. Dependent Variable: employee productivity

b. Predictors: (Constant), working environment, workload

Based on table 3. above, it shows that the significance value of the F test is 0.001, which is smaller than the significance value used which is 0.05. Decision making can also be done by comparing the value of Fcal with the value of Ftable. Where the Fcal value is 62,145 while the Ftable value is 2,802. So that the value of Fcal is greater

than Ftable. So, it can be concluded that Workload and Work Environment have a simultaneous effect on Employee Productivity.

The determinant coefficient (R2) is a tool used to measure how far the model is able to explain independent variable variations. The value of the determination coefficient is between 0-1, if the value of r2 is close to 1 then the independent variable provides almost all the information needed to predict the variation of the dependent variable.

Table 4. Determination Test Results (R2)

Model Summaryb

od el	R	R Squar e	A djusted R Square	St d. Error of the Estimate
	. 053a	. 003	.7 43	8. 00906

a. Predictors: (Constant), working environment, workload

b. Dependent Variable: employee productivity

Based on the results of the determination coefficient test in table 4, an adjusted r2 value of 0 was obtained. 743 or 74.3% Therefore, it can be concluded that the ability of independent variables, namely Service Quality and Facilities in explaining the variation of the variable Satisfaction of the patient is 74.3%.

DISCUSSION

The Effect of Workload on Employee Productivity

Based on the results of the t-test, it was found that the t-value of the calculation was 0.655, which is greater than the table t-value of 0.2377, with a significance level of 0.000, which is smaller than 0.05. Therefore, the hypothesis that the workload has a positive and significant influence on the productivity of employees of the Central Statistics Agency of Tanah Datar Regency is accepted. It can be interpreted that

workload has a significant influence on employee work productivity. Employees are often faced with the demands of completing tasks simultaneously, which require time, effort, and other resources. However, limited available resources can cause a high workload to have an impact on decreased employee performance. If employee performance decreases, then their work productivity will also decrease. This can cause employees to feel weak and depressed. On the other hand, if the workload is too small, employees may feel bored in carrying out daily tasks. Therefore, it is important to strike a balance between a workload that is not too heavy and too light. The Central Statistics Agency of Tanah Datar Regency has still not succeeded in regulating the balance of workload for its employees so that the existing workload affects work productivity. This research is in line with research conducted by (Armiani et al., 2022), which found that workload has an influence on the productivity of employees of the Central Statistics Agency of Tanah Datar Regency.

The Influence of the Work Environment on Employee Productivity

Based on the results of the t-test, it was found that the Work Environment variable had a calculated t-value of 0.339, which is greater than the table t-value of 0.2377, with a significance level of 0.000, which is smaller than 0.05. Therefore, the hypothesis that the work environment has a positive and significant influence on the work productivity of employees of the Central Statistics Agency of Tanah Datar Regency is accepted. The work environment is one of the factors that is a priority for employees. The work environment is a place where employees can develop their potential and skills. The work environment tends to be dynamic and influenced by the individuals who are in it. The work environment at the Central Statistics Agency of Tanah Datar Regency can be said to be conducive and pays attention to the career and personal lives of employees. The work environment is also a very important factor and affects the organization's operations. The work environment has an impact on organizational productivity, because a good and satisfying work environment will improve employee performance. Employees of the Central Statistics Agency of Tanah Datar Regency feel happy and comfortable with their working conditions, so that they feel at home working and carrying out activities effectively. These findings are in line with research

conducted by (Manoppo et al., 2021), which concludes that the work environment has a positive and significant influence on work productivity.

The Influence of Workload and Work Environment on Employee Productivity

The results of the F test obtained the results of the variable workload and work environment with a calculation number of 62.1445 > a table of 2.802 and a significance level of 0.001 < 0.05. Based on these findings, it can be concluded that the hypothesis, This study shows that workload, and work environment together have a positive and significant influence on employee work productivity. The Central Statistics Agency of Tanah Datar Regency, has been proven to be accepted. This means that the belief that employees of the Central Statistics Agency of Tanah Datar Regency are able to affect employee productivity if added to the tasks or work charged to employees. These two things can affect the level of work productivity of employees of the Central Statistics Agency of Tanah Datar Regency, not forgetting the situation and office conditions. The conditions and situations that exist at the Central Statistics Agency of Tanah Datar Regency have an influence on the work productivity of employees which automatically, In a broader perspective, these findings indicate that when viewed together, this research is consistent with previous findings conducted by (Manoppo et al., 2021), which shows that workload has a positive and significant impact on employee work productivity. In addition, the results of this study are also in line with previous research showing that workload, work environment, and work integrity together affect employees with positive and significant effects.

CONCLUSION

The findings in this study show that partially or simultaneously the workload and the work environment have a significant effect on employee productivity. This means that if the workload and work environment are regulated as best as possible, then employee productivity will also increase. Theoretically, these findings provide an understanding of the importance of the influence of workload and work environment on employee productivity. Based on the results of the research and discussion that has been stated above, several conclusions can be drawn as follows:

1. Workload variables affect employee productivity at the Central Statistics Agency of Tanah Datar Regency. This means that the better the workload control, the higher the employee productivity level.

2. Work environment variables have a positive effect on employee productivity at the Central Statistics Agency of Tanah Data Regency. This means that the better the work environment for an institution, the more employee productivity will increase.

3. Simultaneously, workload, and work environment have a positive effect on employee productivity at the Central Statistics Agency of Tanah Data Regency.

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