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The Effect of Benefits and Work Discipline on Employee Productivity at The Geological Survey Center Bandung

Dara Umulkulsum

Faculty of Economics and Business, Widyatama University, Bandung, Indonesia
dara.umulkulsum@widyatama.ac.id

R. Achmad Drajat Aji Suaji

Faculty of Economics and Business, Widyatama University, Bandung, Indonesia
drajat.aji@widyatama.ac.id

Abstract. Performance productivity is a result of work that can be achieved by a person or group of people in an organization both quantitatively, according to their respective responsibilities and responsibilities, in an effort to achieve organizational goals, in which there is an intrinsic element that must be achieved first. in order to provide stimulation for increased performance. The intrinsic elements include the provision of allowances and work discipline. Providing allowances to employees is one of the main things that must be considered by the Bandung Geological Survey Center, because if employees do not get remuneration in accordance with the amount of sacrifice in work, then there is a potential for a decrease in discipline and an impact on performance productivity. This research is included in the category of causal associative research using a quantitative approach. Causal associative research is research that aims to determine the influence between two or more variables. This study will explain the relationship affecting and being influenced by the variables to be studied, namely the influence of allowances and work discipline variables on the productivity variables of the Bandung Geological Survey Center. The research design was carried out in a cross-sectional manner using a quantitative approach. This research was conducted at the Bandung Geological Survey Center. The results of hypothesis testing using the Structural Equation Model (SEM) with the smart PLS method found that the employee productivity variables at the Bandung Geological Survey Center were influenced by the influence of work discipline (27.34%) and the provision of allowances (9.07%) on employee productivity at the Bandung Geological Survey Center. The results of the study conclude that an expectation of productivity from performance which is influenced by discipline and provision of allowances is in accordance with the implementation of good governance as a form of bureaucratic reform that will further improve the performance of the Bandung Geological Survey Center itself.

Keywords. Work Discipline, Employee Benefits, Employee Productivity

1. Introduction

Managing an organization is no longer a form of choice but a form of necessity, especially if the organization is engaged in the government sector. Managing government organizations will be related to the role of human resources, because success or failure in carrying out tasks and administering government is influenced by how the productivity of its employees. To realize a work unit with good performance accountability with indicators of employee performance productivity, each institution needs to implement monitoring and

evaluation of matters relating to the encouragement of employee performance, including at the Bandung Geological Survey Center, Bandung Geology.

Previous research mentions several factors that affect employee productivity, including work discipline (Lasnoto, 2016). Work discipline will require employees to be able to work in accordance with the rules or regulations that have been set according to the company's vision and mission. At the Bandung Geological Survey Center, a vision of the realization of energy resilience and independence as well as an increase in the added value of energy and minerals with environmental insight to provide maximum benefit for the prosperity of the people. This vision, of course, demands the management of employee productivity in line with work discipline, because it requires the awareness and willingness of an employee to comply with all company regulations and applicable social norms.

This work discipline itself has been regulated in legislation, which is contained in Government Regulation Number 53 of 2010 concerning Civil Servant Discipline Regulations, namely as government officials and public servants, it is hoped that Civil Servants will always be ready to carry out the tasks that have become their responsibility properly for the sake of the realization of a clean and authoritative government begins with the enforcement of national discipline within the state apparatus (Ruauw, A., Lengkong, F. D., & Mandey, 2015).

Some of the preliminary findings place some picture of the differences among employees at the Bandung Geological Survey Center in terms of work discipline, among others, in the behavior and attitudes of respecting, appreciating, obeying and obeying all applicable work regulations such as provisions regarding working hours, mechanisms and procedures. work, punctuality in working hours. This problem has the potential to have an impact on public services, especially for the community, considering that the duties and functions of employees are to provide good service.

However, work discipline is suspected of having motivation in its implementation, one of which is the existence of an allowance in every work done. This is in line with the rolling of bureaucratic reform and breakthroughs of change, the government continues to strive and organize in encouraging the improvement of the performance of the bureaucratic apparatus, among others, by continuing to make improvements, one of which is the payroll system and provision of ASN allowances. Performance allowances or remuneration can provide additional income to each employee, so that employees can concentrate more on work. The remuneration system for each employee is part of the bureaucratic reforms implemented by the government. As civil servants who have only received remuneration in the form of pay for person and pay for position, through bureaucratic reform there has been an arrangement of the remuneration system from personal and occupational considerations to remuneration based on grading (class of position), bureaucratic reform is necessary and will be carried out gradually for the entire ASN range. Through allowances, the employee's income in addition to the salary based on class, is also given additional income as a contra-achievement of current performance.

Previous research states that benefits affect work discipline (Ruauw, A., Lengkong, F. D., & Mandey, 2015) and employee productivity. Indeed, employee performance is the result of a complex process, both from the employee's personal self (internal factors) and the company's strategic efforts. Internal factors such as motivation, provision of salaries and benefits, and discipline from employees themselves (Batubara, K., Pujanggoro, S., 2013). The factors of salary, wages and benefits are very influential in the company. Low employee performance at the Bandung Geological Survey Center is due to the salary, wages and benefits provided to employees.

In fact, not all employees at the Bandung Geological Survey Center have a good work ethic, this happens because their work discipline is different. The difference in work discipline as mentioned above is thought to have caused differences in the level of work productivity

between them. In addition, during the Covid-19 Pandemic, the provision of allowances was something very meaningful to increase motivation in line with employee productivity. The allowances given to employees are intended to be more motivating in improving their performance at the Bandung Geological Survey Center.

Providing employee benefits is considered very important, considering that there are too many needs for employees and it is hoped that the benefits received can improve the welfare of employees. Implementing a good benefits system will make employees feel valued so that they will be motivated to work. Employees who are motivated to work at work will improve their performance. The provision of benefits in general is related to the company's efforts to meet the employees' need for security, as a form of service to employees as well as demonstrating the company's social responsibility to its employees.

In following all current developments and in order to achieve the desired goals of the company, there is a need for a motivation so that employees are able to work well. Allowances are one component of the compensation provided by a company or organization to its employees. Where benefits are an indirect compensation given to employees in order to increase job satisfaction, enthusiasm and satisfaction (Fitria, F. N., & Sunuharyo, 2017).

Previous research always implied that after being given allowances, the performance was not optimal, seen from the many absent and late attendance levels of employees and their performance was not as expected, this sparked a research effort at the Bandung Geological Survey Center, in order to get an overview of the conditions. from the provision of allowances, level of discipline and employee productivity. Performance productivity with allowances will direct individual efforts to achieve organizational goals in a disciplined (obedient and orderly) manner so as to increase individual performance productivity. In addition, discipline is important for the organization because it will be obeyed by most employees and it is hoped that the work will be carried out effectively. Benefits, discipline and performance productivity are part of complex management to demonstrate and maintain working relationships between the company and its employees.

In its implementation, an analysis of allowances, level of discipline and productivity is needed in the office by testing the truth in the field and examining the existence of this relationship through a methodological study. Therefore, based on the description above, the research question is compiled as a whole, namely, how do benefits and work discipline affect employee productivity at the Bandung Geological Survey Center? In this study, it is necessary to find what causes this by linking the exposure to the above variables in order to find a form of intervention strategy as the research objective.

2. Theoretical Framework

Employment Benefits

By definition, incentives (performance allowances) are defined as direct benefits paid to employees because their performance exceeds the specified standards. This system is another form of direct wages other than wages and salaries which is a permanent compensation called a performance- based compensation system (pay for performance plan) (Rifai, 2013).

In fact, the concept of allowance is an indirect reward given to an employee or a group of employees as part of organizational membership. Allowance is something that will be received by someone from the environment where he works where something he will get is in accordance with his expectations. The rewards given to employees for their work performance or performance are called performance allowances. Employee benefits protect employees from risks that can endanger health and financial security (Amina, R., 2016). In general, allowances are one of the indirect compensation provided to companies to employees in order to foster satisfaction for their employees. The indicators used to measure the level of satisfaction with

job benefits in this study are satisfaction with health benefits, satisfaction with holiday allowances and satisfaction with transportation allowances (Wati, 2015).

Allowances in this study will be examined based on the element of remuneration given in rupiah value directly to individual employees and can be known with certainty. Allowances are given to these employees so that they can immediately increase work motivation and excitement for employees (Sofyani, H., & Akbar, 2013). Allowances are also an important factor in an effort to increase the productivity of employee performance and as a stimulant in encouraging employees to achieve the objectives of the program launched by the Bandung Geological Survey Center.

In this study, allowances refer to government regulations. Where it is stated, that the performance allowance is income other than salary which is given to active employees based on their competence and performance. In addition to performance appraisals, the amount of performance allowances received by employees is also adjusted to their position according to the Position Class regulations in the Regulation of the Minister of Administrative Reform and Bureaucratic Reform Number 34 of 2011 (Sumpeno, 2020). The provision of performance allowances is not an addition to the incentives that have been provided so far. Therefore, the performance allowance will be provided by calculating the various incentives that have been provided so far. Employees who have received performance allowances are no longer entitled to receive other incentives (Amina, R., 2016).

Work Discipline

Work discipline is a tool used by managers to communicate with employees so that they are willing to change a behavior and as an effort to increase one's awareness and willingness to obey all company regulations and applicable social norms (Nursidiq, 2016). The differences in individual backgrounds and characteristics certainly affect their attitudes and work behavior towards work discipline. Work discipline is also defined as (Patmarina, H., & Erisna, 2012) an attitude, behavior and actions in accordance with the regulations of the company, both written and unwritten.

Work discipline is the most important operational function of human resource management, because the better the employee's work discipline, the higher the work performance they can achieve, whereas if there is no application of good work discipline it will be difficult for the company to achieve optimal results (Yusrianti, H., & Safitri, 2015). Work discipline is not only beneficial for achieving company goals, but also for employees because work discipline can encourage employee morale and enthusiasm. Discipline is also useful for educating employees in complying with and obeying existing regulations, procedures and policies so as to produce good performance (Tyas, R. D., & Suharyono, 2018).

Several indicators of work discipline, one of which can be measured from the level of absenteeism, obedience to work regulations and responsibility. Discipline is a management action to encourage organizational members to meet various requirements. The factor of a close work relationship and mutual help among employees, and between employees and leaders will have a good influence on employee job satisfaction and lead to good performance output as well (Febiani, I., Irianto, G., & Purwanti, 2016). This factor is expected to be able to provide excellent service so that it has added value for the services of the agency. In its application, discipline is more emphasized on the element of individual awareness to follow the regulations that apply in the organization (Pangarso, A., & Susanti, 2016).

With work discipline, all existing work will be done well and will greatly save time. A job that is done properly and correctly and without repetition will not take much time, and according to the principles of effectiveness and efficiency (Badruzaman, J., & Chairunnisa, 2012). Conversely, if employees have low discipline then it will have a negative impact on the

company. Employees will work not in accordance with existing regulations and will have an impact on employee performance. Employees who are less or not disciplined will make many mistakes in their work.

Productivity Performance

Productivity can be measured through two dimensions that lead to the achievement of maximum work, namely first the achievement of targets which are measured based on quality, quantity and time. Second, efficiency relating to efforts to compare inputs with the realization of the work is carried out (Indriyani, 2016).

Meanwhile, there are 5 factors used to measure performance productivity, namely knowledge from employees, skills from employees, abilities or abilities that are formed from a number of competencies owned by employees, ttitude as a patterned behavior from employees and behaviors as a form of habit that is embedded from within. Employees (Khaslinawati, 2016).

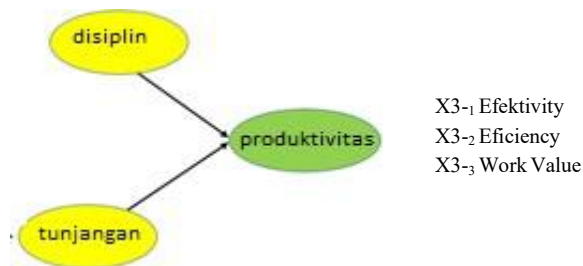
Productivity has two dimensions, namely effectiveness and efficiency. The effectiveness dimension relates to achieving maximum work results, in terms of achieving targets related to quality, quantity and time. Meanwhile, the efficiency dimension relates to the effort to compare inputs with the realization of their use or how the work is carried out (Kamuli, 2012). Theoretically, many factors influence the work productivity of employees in an organization, including: the quality of human resources, available facilities and infrastructure, and the organizational environment, both external and internal in nature. But the main control is in the human element. The quality of human resources needs to be continuously improved, especially for employees as public servants.

The work productivity of employees in public organizations in reality cannot be measured materially or financially, but can be seen in the completion of existing work volume and workload, and timeliness in addition to the quality of service they provide (Rosliyati, 2014). Furthermore, the extent to which tasks can be carried out according to the field of work by utilizing various existing resources including human resources, so that goals can be achieved. Increasing employee work productivity cannot be separated from work discipline and the provision of allowances at the Bandung Geological Survey Center.

Conceptual Framework

Based on the previous description, the conceptual framework in this study is as follows:

X1-1 Time discipline
X1-2 Work discipline
X1-3 Responsible



X3-1 Efektivty
X3-2 Eficiency
X3-3 Work Value

X2-1 Professional Allowances
X2-2 Health benefits
X2-3 Transportation Allowance

Figure 1. Research conceptual framework

Within this framework, it is divided into things that affect productivity (Y) through dimensions of efficiency and effectiveness for the value of the company or the Bandung Geological Survey Center, namely the level of discipline (X1) as measured by indicators of time discipline, job discipline and responsibility and measurement of giving allowance (X2) as measured by satisfaction with professional / position allowances, health benefits and transportation allowances.

Hypothesis

There is a direct or indirect influence between the provision of allowances and employee work discipline on productivity at the Bandung Geological Survey Center.

H1: It is suspected that there is a significant influence between work allowances on employee productivity.

H2: It is suspected that there is a significant influence between discipline on employee productivity.

H3: It is suspected that there is a simultaneous influence between allowances and work discipline on employee productivity.

3. Research Methods

This research is included in the category of causal associative research using a quantitative approach (Angelina, S., & Nugraha, 2020; Ayunitha, 2020; Nugraha, N. M., & Riyadhi, 2019). Causal associative research is research that aims to determine the influence between two or more variables. This study will explain the relationship affecting and being influenced by the variables to be studied, namely the influence of allowances and work discipline variables on the productivity variables of the Bandung Geological Survey Center.

The research design was carried out in a cross-sectional manner using a quantitative approach. This research was conducted at the Bandung Geological Survey Center. The population in this study were internal parties from the entire Bandung Geological Survey Center, such as staff, staff, technical implementers to field staff from the Bandung Geological Survey Center to support participatory and objective data. Participants are only limited to being willing to fill out the form through the Google Form application (due to the Covid-19 pandemic period). The sample is participants who are internal and external who are willing to fill out the online questionnaire as many as 40 respondents who come from internal employees. The number of samples was taken according to the sample size rule in the PLS (Partial Least Squares) guidelines.

To obtain the necessary data using a questionnaire. The way to measure the level of productivity is through the provision of allowances and the level of employee discipline by using a questionnaire with a semantic differential scale, namely a scale to measure attitudes and others, but the form is not a multiple choice or a checklist and is arranged in one continuum line where the positive answer is located on the right side of the line. , and the negative answer is to the left of the line, or vice versa. The data obtained through measurement with a semantic differential scale is interval data and is used to measure certain attitudes or characteristics a person has (Nugraha, N. M., & Susanti, 2019; Nugraha, N. M., Anwar, A., Priadana, M. S., & Firdaus, 2017). Example:

Tidak	Selalu
Selalu	1	2	3	4	5	

Respondents can provide answers in the range of positive to negative answers. This depends on the perception of the respondent being assessed. Respondents who gave an assessment of 5, means that the measurement of employee productivity at the Bandung Geological Survey Center is positive and vice versa. The measurement exposure is presented as follows.

Table 1. Variables and their measurements

No	Variable	Measurements	Results	Scala
1.	Employee productivity	Questionnaire	Questionnaire scoring 15-60	Interval
2	Work Discipline	Questionnaire	Questionnaire scoring 15-60	Interval
3.	Provision of Allowances	Questionnaire	Questionnaire scoring 15-60	Interval

The data obtained from the questionnaire was recapitulated using Excel with the CSV extension and then processed using the SmartPLS program. Data analysis uses two models, descriptive analysis and Structural Equation Model (SEM), in which the descriptive analysis model is used to quantify the value of the work discipline factor as X1 and the provision of allowances as X2, on employee productivity and describes a description of research variables based on the answers to each questionnaire by providing score for each answer.

4. Result and Discussion

Result

The Geological Survey Center was founded in the mid-19th century, since the time of the Dutch East Indies, which was named the Directorate of Geology. Since its establishment until now, this institution has undergone many changes. Both the name, place, and organizational structure. In the course of its history, the Geological Survey Center which is known today has evolved through three time periods. Starting from Dienst van het mijnwezen during the reign of the Dutch East Indies (1820).

After the proclamation of independence of the Republic of Indonesia this institution became the Directorate of Geology which later in 1979 changed to the Center for Geological Research and Development, and since 2006 it has become the Center for Geological Survey. The vision of the Bandung Geological Survey Center is "The realization of energy resilience and independence as well as an increase in the added value of energy and minerals with environmental insight to provide maximum benefits for the prosperity of the people".

In line with the vision above, the missions of the Bandung Geological Survey Center are:

- a. Improve the security of domestic energy and mineral supplies.
- b. Increase public accessibility to energy, minerals and geological information.
- c. Encouraging the economics of energy and mineral prices by considering the economic capacity of the community
- d. Encouraging increased domestic capacity in energy, mineral and geological management.
- e. Increase the added value of energy and minerals.
- f. Improve the development, management and control of energy and

mineral business activities.

The study will include 80 participants who work at the Bandung Geological Survey Center. The assessment is filled in by respondents to assess the direct or indirect effect of work discipline and allowances on employee productivity at the Bandung Geological Survey Center 2020. Characteristics of respondents including age, education and work are presented as follows:

Table 2. Characteristics of respondents

Characteristics	f	%	
Ages	26 – 35	16	40%
	36 - 45	19	49%
	≥ 46	5	11%
Graduation	Academy	28	70%
	Bachelor	12	30%

The characteristic categories of answers per variable from 40 respondents were then processed into an assessment of ranges based on variable descriptive statistics, namely:

1. Work Discipline Variable (X1)

Work discipline variables in this study were measured through 15 statement items with an assessment of 1-5. So that the questionnaire scores ranged from 15-75 and the actual scores ranged from 48-68.

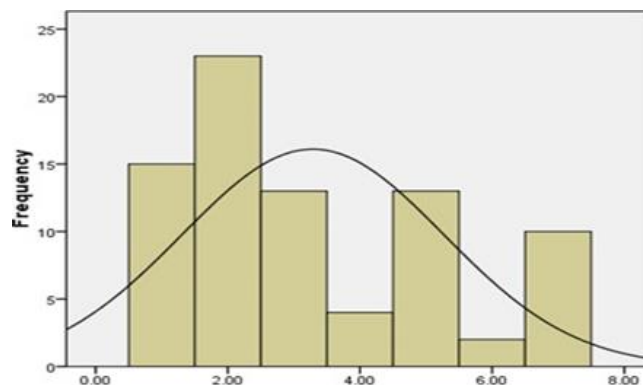


Figure 3. Histogram of Frequency Score of Work Discipline

The frequency distribution of respondents' answers to the Work Discipline variable is as follows:

Table 3. Descriptive Distribution of Respondents' Answers to Work Discipline Variables at the Bandung Geological Survey Center

Interval	f	Std. Dev	Mean	Median	%
48 - 50	8	5.64	55.96	54	18.75%
51 - 53	11	5.64	55.96	54	28.75%
4 - 56	7	5.64	55.96	54	16.25%
57 - 59	2	5.64	55.96	54	5.00%
60 - 62	6	5.64	55.96	54	16.25%
63 - 65	1	5.64	55.96	54	2.50%
66 - 68	5	5.64	55.96	54	12.50%

The distribution is then analyzed using the bivariate test of the respondent's characteristics on the work discipline variable, resulting in the following data:

Table 4. Test of Variations in Total Answers to Work Discipline Variables

Characteristic	Chi Square Test($\alpha = 5\%$) p-value (Asymp. Sig)	Information
Ages	0,147	p-value > 0,05/ no corr
Graduation	0,363	p-value > 0,05/ no corr

2. Variable Allowance (X2)

The variable of provision of allowances in this study is measured through 15 statement items with an assessment of 1-5. So that the questionnaire scores ranged from 15-75 and the actual scores ranged from 23-43.

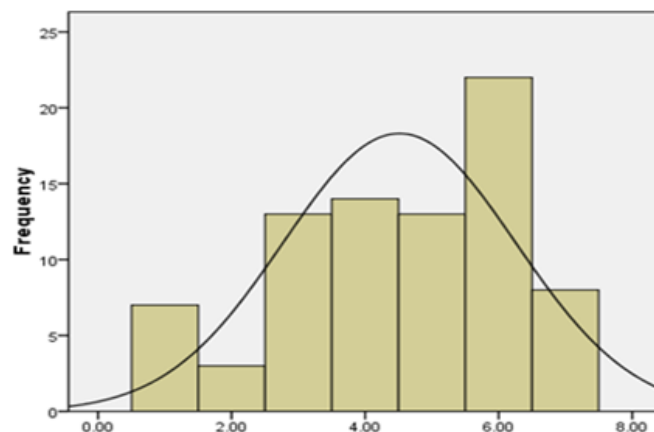


Figure 4. Histogram of the Frequency of Allowance Scores

The frequency distribution of respondents' answers to the Allowance variable is as follows:

Table 5. Descriptive Distribution of Variable Respondents' Answers Providing Allowances at the Bandung Geological Survey Center

Interval	F	Std. Dev	Mean	Median	%
23 - 25	3	5.30	34.71	35	8.75%
26 - 28	2	5.30	34.71	35	3.75%
29 - 31	6	5.30	34.71	35	16.25%
32 - 34	7	5.30	34.71	35	17.50%
35 - 37	6	5.30	34.71	35	16.25%
38 - 40	11	5.30	34.71	35	27.50%
41 - 43	5	5.30	34.71	35	10.00%

The distribution is then analyzed by using the bivariate test for the characteristics of the respondents on the variable of Allowance, resulting in the following data:

Table 6. Test of Variation on Total Variable Answers to Allowances

Characteristic	Chi Square Test ($\alpha = 5\%$) p-value (Asymp. Sig)	Information
Ages	0,213	p-value > 0,05/ no corr
Graduation	0,617	p-value > 0,05/ no corr

3. Employee productivity variable (Y)

Employee productivity variables in this study were measured through 15 statement items with an assessment of 1-5. So that the questionnaire scores ranged from 15-75 and the actual scores ranged from 46-67.

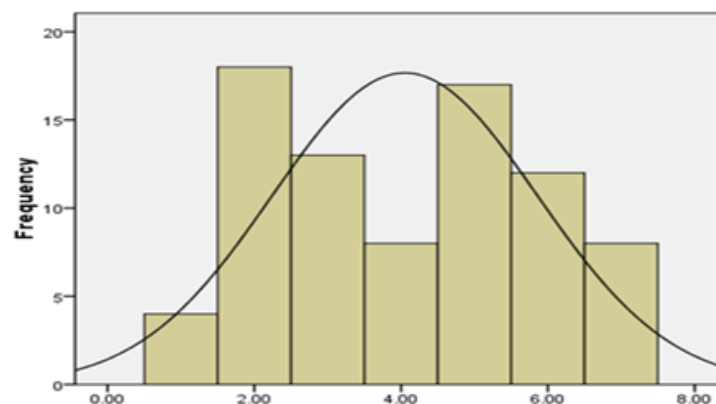


Figure 5. Histogram of Frequency Score of Employee Productivity

The frequency distribution of respondents' answers to the employee productivity variable is as follows:

Table 7. Descriptive Distribution of Respondents' Answers Variable productivity of employees at the Geological Survey Center Bandung

Interval	Frek	Std. Dev	Mean	Median	%
46 - 48	2	5.70	56.44	57	5.00%
49 - 51	9	5.70	56.44	57	22.50%
52 - 54	7	5.70	56.44	57	16.25%
55 - 57	4	5.70	56.44	57	10.00%
58 - 60	8	5.70	56.44	57	21.25%
61 - 63	6	5.70	56.44	57	13.75%
64 - 67	4	5.70	56.44	57	10.00%

The distribution is then analyzed by using the bivariate test of the respondent's characteristics on the employee productivity variable, which produces the following data:

Table 8. Test of Total Variable Answers to Employee Productivity



Characteristic	Chi Square Test ($\alpha = 5\%$) p-value (Asymp. Sig)	Information
Ages	0,315	p-value > 0,05/ no corr
Graduation	0,414	p-value > 0,05/ no corr

Chi Square test results on employee productivity variables (Y), Work Discipline (X1), Allowances (X2), performance data management (X3), performance reporting (X4), performance report review (X5), performance evaluation (X6) with the 5% significance levels are all greater than 0.05. This shows that all of these variables have no relationship with the characteristics of the respondent.

Validity of Indicators

The validity of the indicators can be measured by evaluating the results of cross loading (discriminant validity) for all variables shown as follows:

Table 9. Test the Validity of Indicator Measure of Variables by Evaluating the Value of Cross Loading (Discriminant Validity)

Validity and Reliability	Indicator	Latent Variable						
		X1	X2	X3	X4	X5	X6	Y
Cross Loading (Discriminant Validity)	(X1-1)	0.8 525 42	0.6 120 17	- 0.8 44 45	0.8 322 36	0.7 605 71	0.8 296 21	0.7 488 37
	(X1-2)	0.7 751 7	0.5 426 61	- 0.4 72 93	0.5 476 58	0.4 700 04	0.4 982 88	0.5 831 77
	(X1-3)	0.8 626 27	0.5 071 75	- 0.6 28 76	0.6 748 84	0.7 013 38	0.6 243 67	0.7 745 08
	(X2-1)	0.6 882 71	0.7 282 31	- 0.6 47 55	0.6 263 22	0.6 224 53	0.6 383 25	0.6 027 6
	(X2-2)	0.4 993 08	0.9 215 3	- 0.5 85 08	0.6 247 25	0.6 568 78	0.6 994 41	0.6 536 42
	(X2-3)	0.5 473 7	0.9 441 67	- 0.6 32 8	0.6 402 9	0.6 805 48	0.7 407 26	0.6 847 82
	Employee productivity	0.8 542 77	0.7 483 73	- 0.8 42 77	0.8 376 49	0.8 457 39	0.8 449 46	1

An indicator is declared valid if it has the highest loading factor for the intended construct compared to the loading factor for other constructs. The table above shows that the loading factor value for (X1-1) - (X1-3) is the highest for the Work Discipline variable compared to other variables, so that the Work Discipline variable is able to predict the factor loading value (X1-1) to (X1-3) more the height of the other variables.

Table 10. Test the Validity of the Measure Indicator of Variables by Evaluating the Outer Loading (Convergent Validity) Value

Validity	Leverage	Result	Criteria > 0,5
<i>Outer Loading (Convergent Validity)</i>	(X ₁₋₁)	0.852542	Valid
	(X ₁₋₂)	0.77517	Valid
	(X ₁₋₃)	0.862627	Valid
	(X ₂₋₁)	0.728231	Valid
	(X ₂₋₂)	0.92153	Valid
	(X ₂₋₃)	0.944167	Valid
	Productivity	1	Valid

The results of the data processing analysis show that the construct used to form a research model, in the confirmatory factor analysis process, has met the predetermined goodness of fit criteria. The probability value in this analysis shows a value above the significance level of 0.05. From the results of the data processing above, it is also seen that each indicator or dimension forming latent variables shows good results, namely with a high loading factor value where each indicator is greater than 0.5. With these results, it can be said that the indicators for forming latent variables in the construct of work discipline and the provision of allowances for employee productivity have shown good results..

Another way to test discriminant validity is through the square root of average variance extracted (AVE) value. The expected value is above 0.50. Below is the AVE table and its root results:

Table 11. Variable Validity Test by Evaluating the Value of AVE (Average Variance Extracted)

Variable	AVE	AVE root	criteria > 0,5
Dicipline	0.674559	0.821315	Valid
Allowances	0.756997	0.870056	Valid
Productivity	0.78672	0.67239	Valid

From the table above, it can be seen that all variables are declared valid because they provide an AVE value above 0.5. So it can be concluded that the measurement evaluation model has a validity discriminant that is good or valid. Another method to assess discriminant validity is to compare the square root of average variance extracted (AVE) value of each construct with the correlation between constructs and other constructs in the model, so it is said to have a good validity discriminant value.

After being tested for validity and it is stated that the variables and indicators are valid, then the reliability test is carried out. Reliability test is done by looking at the value of the composite reliability of the indicator block that measures the construct of the composite reliability results will show a satisfactory value if it is above 0.70. The results of the outer model reliability evaluation can be seen in the table by evaluating the value of Cronbach's Alpha and composite reliability. Here are the values:

Table 12. Reliability Test of Variables
by Evaluating the Value on the Outer Model

Validity	Results		Criteria > 0,70
	Lev	Loading	
Cronbach's Alpha	Dicipline	0.759466	Reliabel
	Allowances	0.831204	Reliabel
	Productivity	0.779891	Reliabel
Composite Reliability	Dicipline	0.861400	Reliabel
	Allowances	0.902244	Reliabel
	Productivity	0.869822	Reliabel

Based on the table above, it shows that all variables are declared reliable because the value of Cronbach's Alpha and Composite reliability is above 0.70 so it can be said that the construct has good reliability.

Furthermore, the Inner Model test is carried out, testing the structural model is carried out by looking at the R-Square which is the Goodness-fit model test. The following are the results of measuring the R-Square value, which is also the good-fit model value.

Table 13. Evaluation of the value of R Square Model
of the Influence of Work Discipline and Providing Benefits
on employee productivity

Results	
Variable	R Square
Dicipline	0.860953
Allowances	0.447206

Based on the table above, it can be seen that the most dominant r square value is when the discipline component and performance allowances have an effect on employee productivity by 86.1% and the remaining 13.9% is influenced by other factors.

The results of the significant evaluation of the inner model are set in the Smart PLS output below by evaluating the reflection of the T Statistical indicator value against the variable.

Table 14. Evaluation of the Reflection of the Value of T Statistics
on the Indicators of Each Variable

Sig Test	Indicator	T-statistic	Reflection > 1.96
T Statistic	(X ₁₋₁)	67.80642	Significant
	(X ₁₋₂)	74.20645	Significant
	(X ₁₋₃)	86.15656	Significant
	(X ₂₋₁)	72.04405	Significant
	(X ₂₋₂)	189.9301	Significant
	(X ₂₋₃)	324.7929	Significant

From the table above states that the T statistical value reflected on the variable is mostly > 1.96, so it shows that the indicator block has a positive and significant effect to reflect the variable.

In the results of this study, several significant findings were found to describe the relationship between variables, namely:

The findings of this study are:

1. There is a direct influence and the amount between Work Discipline, on employee productivity at the Bandung Geological Survey Center of 27.34%, the indirect effect is 0.51% and the T statistic value is 11.096286 and significant at 5% alpha.
2. There is a direct influence and the amount between the provision of allowances on employee productivity at the Bandung Geological Survey Center is 9.07%, the indirect effect is 0.01% and the T statistic value is 6.264146 and significant at 5% alpha

Hypothesis

After analyzing the data, a hypothesis is tested on these variables, in which the testing method is carried out by bootstrapping. The statistical test used is the t test.

Table 15. Results of Measurement Path Coefficients and T Statistic Relationship between variables in the Structural Model

Relationship Between Variables	Original Sample (Rho)	Nilai T (>1,96)	H ₀	Conclusion
Dicipline > Allowances	0.439188	10.540451	Rejec ted	There is a Positive And Significant Effect
Dicipline > Productivity	0.320058	11.096286	Rejec ted	There is a Positive And Significant Effect
Allowances > Produktivity	0.108239	6.264146	Rejec ted	There is a Positive And Significant Effect

Based on the table above, it can be seen that all variables have a t-statistic value greater than 1.96%, namely the influence of the Work Discipline variable on performance data management of 31.757915, so that H₀ is rejected because the T-Statistic value is far above the critical value (1, 96) so it is significant at 5%.

Effect of Direct and Indirect Variables

The percentage of influence between variables will then be presented as follows:

Table 15. Percentage of Influence Between Variables on Variable employee productivity

No	Source	LV	Direct Path	Indirect Path	Total	Direct %	Indirect %	Total
	(1)	(2)	(3)	(4)	(5) 3 + 4	(6) 2 x 3 x 100	(7)	(8) 6 + 7
1	Dicipline	0.854	0.320	0.551	0.871	27.34%	0.51%	27.86%
2	Allowances	-0.843	-0.199	-0.130	-0.330	16.81%	0.06%	16.86%
	Total					80.0%	0.7%	80.7%

Based on the table above, it states that Work Discipline has a direct and indirect effect on employee productivity. The result of the parameter coefficient test between Work Discipline on employee productivity shows that there is a direct effect of 27.34%, the provision of allowances on employee productivity shows that there is a direct effect of 9.07%.

The method of calculating the direct effect of Work Discipline on employee productivity is by multiplying the path coefficient (path) of Work Discipline on employee productivity with the latent variable, which also applies to the calculation of other variable path coefficients. The results of the direct effect are:

Direct effect of work discipline on employee productivity

Direct Path (Work Discipline → Employee productivity) x LV Correlation
(Work Discipline → Employee productivity)
= (0.320058) x (0.854277) x 100% = 27.34%

The direct effect of providing allowances on employee productivity

Direct Path (Allowances → Employee productivity) x LV Correlation
(Allowances → Employee productivity)
= (0.108239) x (0.837649) x 100% = 9.07%

So that from each of the direct effects of these exogenous latent variables, if together it shows conformity with the R square, or in other words it states that the variable work discipline and allowances are (27.01% + 9.07%) = 36, 08%. Whereas for the indirect effect of work discipline on employee productivity by 0.51%, the provision of allowances for employee productivity was 0.01%.

Employee productivity is influenced by the work discipline factor of 0.270, the allowance factor of 0.169 and the remaining 0.170 is influenced by other factors not examined in this study. This means that there is a direct and positive effect of work discipline and the provision of benefits. The better work discipline and provision of allowances, the better employee productivity at the Bandung Geological Survey Center.

5. Conclusion

The results of hypothesis testing using the Structural Equation Model (SEM) with the smartPLS method found that the employee productivity variables at the Bandung Geological Survey Center were influenced by the influence of work discipline (27.34%) and the provision of allowances (9.07%) on employee productivity at the Bandung Geological Survey Center. .

The results of the study conclude that an expectation of productivity from performance which is influenced by discipline and provision of allowances is in accordance with the implementation of good governance as a form of bureaucratic reform which will further improve the performance of the Bandung Geological Survey Center itself so that progress and benefits will be felt for society and government

Based on these findings, it can be concluded that work discipline is the dominant factor affecting employee productivity at the Bandung Geological Survey Center. Work discipline is based on predetermined performance indicators to achieve goals so that it can indirectly increase employee productivity. The better the role of Work Discipline, the increasing productivity of employees at the Bandung Geological Survey Center.

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