



(RESEARCH ARTICLE)



The influence of non-physical work environment, leadership style and work discipline on employee productivity with job satisfaction as an intervening variable at Pt. Bank Sumut Gunungsitoli Branch

Irmawati Hura *, Rasinta Ria Ginting, Hendry and Myrna Pratiwi Nasution

Management Study Program, Faculty of Economics, Prima Indonesia University, Indonesia.

International Journal of Science and Research Archive, 2023, 10(01), 068-076

Publication history: Received on 18 July 2023; revised on 30 August 2023; accepted on 01 September 2023

Article DOI: <https://doi.org/10.30574/ijrsra.2023.10.1.0705>

Abstract

PT Bank Sumut functions as a driver and driver of the pace of development in the region, acts as a Regional Cash Holder that carries out regional money storage and as one of the sources of Regional Original Revenue by conducting business activities as a Commercial Bank, this research was conducted at PT Bank Sumut Gunungsitoli Branch The sample used was 115 respondents. The data collection technique used is primary data in the form of questionnaires and secondary data obtained through documentation studies. The data analysis technique uses quantitative data processed with the SPSS program, namely the t test and the coefficient of determination (R²) Indirectly the leadership style variable through job satisfaction has no significant effect on work productivity. Non-physical work environment, leadership style has a positive and significant effect on employee work productivity, work discipline has a positive and significant effect on employee work productivity, indirectly work discipline variables through job satisfaction have no significant effect on work productivity. Job satisfaction variables partially and significantly affect the variable work productivity at PT Bank Sumut Gunungsitoli Branch.

Keywords: Non-physical work environment; Leadership style; Work discipline; Productivity; Job satisfaction

1. Introduction

There are many factors that influence the success of a company or organization. One of them is employees, because it is directly related to the activities of the company or organization. In this case employees are expected to provide maximum results so that the goals of the company or organization can be achieved. To survive, a company or organization must have employees who have a good attitude and high morale so that there is a sense of satisfaction with the company or organization. In a company or organization, employees are very important assets because without employees the company or organization will find it difficult to achieve its goals. The ability of an individual to do their job depends on what they do and what they get. However, to get the best results, of course, quality human resources are also needed.

PT Bank Sumut has a vision and mission to become a mainstay bank to assist and encourage economic growth and regional development in all fields and as a source of regional income in order to improve people's lives, in managing government and public funds in a professional manner based on compliance principles, headquartered in Medan and has several branches and one of them is the Gunungsitoli Branch Office Jalan Moh.Hatta No.1-A Gunung Sitoli, North Sumatra.

* Corresponding author: Irmawati Hura

The non-physical work environment greatly affects employee satisfaction and work productivity where if the circumstances or situation around the employee are conducive to work, colleagues are easy to work with and the relationship with superiors is good then employees will enjoy their work and feel safe working in that place.

If the employee likes the non-physical work environment where he works, then the employee will feel at home in his workplace, do his activities so that working time is used effectively. Conversely, an inadequate non-physical work environment will reduce employee productivity.

In the non-physical environment in the office at PT Bank Sumut Gunungsitoli Branch, where the relationship between coworkers at the same level is not good, the relationship is not harmonious, such as the occurrence of friction between employees due to misunderstandings between employees in providing information and receiving information may be due to differences in age and jabatan. from the concern of superiors with bawahan can be seen from supervision, there are several employees who feel that the lack of supervision from superiors is evidenced by the lack of emphasis on tasks so that a lot of time is wasted in the absence of these tasks so that the impact on the work atmosphere becomes no responsibility, not serious and not diligent. Treatment is also a problem where there are several employees, especially employees with low positions who feel they are treated unfairly both in terms of work placement facilities and so on, then relationships are also a problem, where the lack of supervision, atmosphere and treatment has an impact on the lack of good relations with superiors.

Table 1 Non-physical Work Environment at PT. Bank Sumut Cabaang Gunungsitoli in 2023

Numbers	Non-physical work environment	Descriptions
1	Supervisor-employee relationship	The relationship between employees and superiors is not going well, superiors who always decide decisions without paying attention to the subordinates' side which causes the non-physical environment to not go well so that it results in work.
2	Relationship between coworkers at the same level	Not well intertwined and mismatches with coworkers that are sometimes very visible
3	Cooperation between employees	With fellow colleagues so that there is no harmony at work.

Source PT Bank Sumut Gunungsitoli Branch 2023

From table 1 above shows that the non-physical work environment has not gone well starting from the relationship between superiors and employees, the relationship between coworkers at the same level and cooperation between employees and where there is no justice at work where each employee does not have the same opportunity to advance so that competition between employees arises which has an impact on less harmonious relationships.

If PT Bank Sumut Gunungsitoli Branch reaches the peak of success it is because it is inseparable from the intervention of a leader in influencing subordinates in carrying out the objectives of Bank Sumut Gunungsitoli Branch and mobilizing subordinates to work in accordance with predetermined rules. For this reason, the existence and good coordination between a leader and subordinates will facilitate the implementation of activities. As a leader knows the activities that have gone well and the activities that are felt to be less running in Bank Sumut Gunungsitoli Branch What are the obstacles in working,

The leadership that occurs at Bank Sumut Gunungsitoli Branch has begun to run neutrally, where the leadership has tried to direct each subordinate to work according to the main tasks and functions of each employee. However, the problem that occurs is that the leadership does not have a good ability to motivate employees, so that employees further improve their abilities and skills both to face greater challenges in the future or to provide ideas or ideas in carrying out tasks to be more effective and efficient. A good leader will always control direct and continue to sympathize with the work situation of employees both externally and internally so that employees feel more comfortable and enthusiastic at work.

Good discipline reflects the magnitude of a person's sense of responsibility for the tasks assigned to him. This encourages work passion, work enthusiasm, the realization of company, employee and community goals. maintaining

and improving good discipline is difficult because there are many factors that influence work discipline activities carried out to encourage employees to follow various standards and rules, so that fraud can be prevented.

Work discipline at PT Bank Sumut Gunungsitoli comes to the office on time, is present every working day, carries out tasks according to his duties then productivity increases in the company Bank Sumut Gunungsitoli. With work discipline in expected employees have a sense of responsibility to carry out the assigned tasks in accordance with company procedures. However, the discipline regulated by PT Bank Sumut Gunungsitoli there are still some employees lack of awareness about the importance of employee work discipline is evidenced by the fact that there are still many jobs that have been piled up that have not been completed, there are still employees who come late to the office, there are employees who are late after break time, besides that there are still employees who are not in the room during working hours even though there is still a lot of work to be done including carrying out tasks that are their responsibility so that it can result in employee productivity in achieving company goals.

Employee productivity in the company PT Bank Sumut Gunungsitoli is strongly influenced by employee work discipline. If employees have ignored work discipline then it can be ascertained that employee productivity at work will decrease. Whereas to get satisfactory employee productivity is very necessary work discipline of the employees themselves.

Job satisfaction either directly or indirectly will increase employee productivity, job satisfaction is the result of evaluating the attitude of building or deviating employees towards their work. High job satisfaction will increase employee productivity. Employees who are less satisfied with the work that is too much delegated and the relationship between fellow employees and the work environment with existing facilities have problems, where the workspace and archive place are inadequate, as well as computer specifications that are still not updated, the available personal car is so minimal that it slows down the work of air fresheners that do not fill all rooms and laptop units that have not been updated so that this disturbs employee job satisfaction. From the description above, employee productivity is influenced by several factors including the non-physical work environment, leadership style and work discipline which makes the author interested in conducting a study entitled "The Effect of Non-Physical Work Environment, Leadership Style and Work Discipline on Employee Productivity with Job Satisfaction as an Intervening Variable at PT. Bank Sumut Gunungsitoli Branch".

2. Material and methods

2.1. Path Analysis Model

The statistical analysis used in this research is path analysis. The main analysis carried out is to test the path construct whether it is empirically tested or not. According to Ghozali (2016) path analysis is used to determine whether there is an indirect effect of the independent variable on the dependent variable through the intervening variable. Further analysis is carried out to find direct and indirect effects using correlation and regression so that it can be known to arrive at the last dependent variable, must go through the direct path or through mediating variables. The following are the steps for testing path analysis:

$$\text{Substructure II model equation, } Y = \rho_3 X_1 + \rho_4 X_2 + \rho_5 Z + e_2$$

Description:

- P = Path Coefficient
- Y = Productivity
- Z = Satisfaction
- X1 = Non-physical work environment
- X2= Leadership style
- X3= Discipline
- e=error

3. Results and discussion

3.1. Multiple Linear Regression Analysis

Table 2 Multiple Linear Regression

Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.076	1.706		1.217	0.226
2	LK_NON_PHYSICAL	0.401	0.083	0.379	4.844	0.000
3	LEADERSHIP_STYLE	0.467	0.109	0.327	4.292	0.000
4	WORK DISCIPLINE	0.612	0.091	0.314	6.717	0.000

Dependent Variable: PRODUCTIVITY_WORK Source: primary data processed (SPSS 2022)

Based on Table 2 the regression equation that can be formulated into the form of sub-structural equation II is as follows:

$$Y = 2.076 + 0.401X_1 + 0.467 X_2 + 0.612 X_3$$

The results of the regression equation above can be interpreted as follows:

- The constant value shows work productivity which is 2.076, it is assumed that the non-physical work environment variables, leadership style and work discipline with a value equal to 0.226.
- The regression coefficient value (b1) is 0.401, indicating that there is a unidirectional influence of the non-physical work environment variable on work productivity, if the value of the non-physical work environment increases by one scale, work productivity will increase by 0.401.
- The regression coefficient value (b2) is 0.467, indicating that there is a unidirectional effect of the leadership style variable on work productivity, if the value of the leadership style increases by one scale, work productivity will increase by 0.467.
- The regression coefficient value (b3) is 0.612, indicating that there is a unidirectional influence of the work discipline variable on work productivity, if the value of work discipline increases by one scale, work productivity will increase by 0.612.

3.2. Hypothesis Test

3.2.1. T test (Partial test)

Table 3 Test t (Partial test)

Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.076	1.706	-	1.217	0.226
2	LK_NON_PHYSICAL	0.401	0.083	0.379	4.844	0.000
3	LEADERSHIP_STYLE	0.467	0.109	0.327	4.292	0.000
4	WORK DISCIPLINE	0.612	0.091	0.314	6.717	0.000

Dependent Variable: PRODUCTIVITY_WORK Source: primary data processed (SPSS 2022)

Table 3 is the result of the t-test processing where:

- Non-physical work environment with a significant value of 0.000, it is stated that $\text{sig } 0.000 < \alpha 5\% (0.000 < 0.01)$ and the value *thitung* $4.844 > \text{ttabel } 1.981$. From these results it is concluded that H_a is accepted and states that partially the non-physical work environment has a significant effect on work productivity.
- Leadership style with a significant value of 0.000, it is stated that $\text{sig } 0.000 < \alpha 5\% (0.000 < 0.01)$ and the value of *thitung* $4,292 > 77$ states that partially leadership style has a significant effect on work productivity.

- Work discipline with a significant value of 0.000, it is stated that $\text{sig } 0.000 < \alpha 5\% (0.000 < 0.01)$ and the value of *thitung* $6.717 > \text{ttabel } 1.981$. From these results it is concluded that *Ha* is accepted and states that partially work discipline has a significant effect on work productivity.

3.2.2. Test Coefficient of Determination (R2 Test)

Table 4 Test Coefficient of Determination (R2 Test)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.940 ^a	0.884	0.881	1.36505

Source: primary data processed (spss 2022)

Based on the output table above, the coefficient of determination or R Square is 0.884. This R Square value of 0.884 comes from squaring the value of the correlation coefficient or "R". $(0,940 \times 0,940 = 0,884)$. 0.884 or equal to 88.4%. Where this figure means that the independent variables (non-physical work environment, leadership style and work discipline) together affect the independent variable (work productivity) by 88.4%, while the remaining $(100\% - 88.4\% = 11.6\%)$ 11.6% is influenced by other variables outside this regression equation or variables not examined in this study.

3.3. Path Analysis Model

Table 5 Path Analysis Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.545	2.827	-	0.900	0.370
2	LK_NON_PHYSICAL	0.581	0.137	0.577	4.229	0.000
3	LEADERSHIP_STYLE	0.174	0.180	0.128	0.966	0.336
4	WORK DISCIPLINE	0.267	0.151	0.144	1.771	0.007

Dependent variable: job satisfaction source: primary data processed (spss 2022)

Based on Table 5, the regression equation can be formulated into an equation as follows:

$$Z = 2.545 + 0.581X_1 + 0.174 X_2 + 0.267 X_3$$

The results of the regression equation above can be interpreted as follows:

- The constant value shows job satisfaction which is 2.545, it is assumed that the non-physical work environment variables, leadership style and work discipline with a value equal to 2.545 have a unidirectional effect from the non-physical work environment variable on work productivity, if the value of the non-physical work environment increases by one scale, work productivity will increase by 0.581.
- The regression coefficient value (ρ_2) is 0.174, indicating that there is a unidirectional effect of the leadership style variable on work productivity, if the value of the leadership style increases by one scale, work productivity will increase by 0.174.
- The regression coefficient value (ρ_3) is 0.267, indicating that there is a unidirectional influence of the work discipline variable on work productivity, if the value of work discipline increases by one scale, work productivity will increase by 0.267.

Table 5 is the result of t-test processing where:

- Non-physical work environment with a significant value of 0.000, it is stated that $\text{sig } 0.000 < \alpha 5\% (0.000 < 0.05)$. From these results it is concluded that *Ha* is accepted and states that partially the non-physical work environment has a significant effect on job satisfaction.
- Leadership style with a significant value of 0.336, it is stated that $\text{sig } 0.336 > \alpha 5\% (0.336 > 0.05)$. From the results partially leadership style has no significant effect on job satisfaction.

- Work discipline with a significant value of 0.007, it is stated that $\text{sig } 0.007 < \alpha 5\% (0.007 < 0.05)$. From these results it is concluded that H_a is accepted and states that partially work discipline has a significant effect on job satisfaction.

4. Discussion

4.1. The Effect of Non-Physical Work Environment, Leadership Style, and Work Discipline on Work Productivity

Based on the research results, it is known that the hypothesis is accepted, where the non-physical work environment, leadership style and work discipline simultaneously have a positive and significant effect on work productivity at PT Bank Sumut Gunungsitoli Branch. This can be proven based on the F test, where the F sig value is $0.000 < \alpha 5\%$.

4.2. Effect of non-physical work environment on work productivity

Based on the results of the study, it is known that the hypothesis is accepted, where the non-physical work environment partially and significantly affects work productivity at PT Bank Sumut Gunungsitoli Branch. This can be proven based on the t test, where the t sig value is $0.000 < \alpha 5\%$.

4.3. Effect of leadership style on work productivity

Based on the results of the study, it is known that the hypothesis is accepted, where the leadership style partially has a significant effect on work productivity at PT Bank Sumut Gunungsitoli Branch. This can be proven based on the t test, where the t sig value is $0.000 < \alpha 5\%$.

4.4. Effect of work discipline on work productivity

Based on the results of the study, it is known that the hypothesis is accepted, where work discipline partially and significantly affects work productivity at PT Bank Sumut Gunungsitoli Branch. This can be proven based on the t test, where the t sig value is $0.000 < \alpha 5\%$.

4.5. Total Effect

In determining whether there is a mediating or intervening effect in the model, it can be seen from the following criteria:

- If the indirect effect value of the path coefficient $>$ the direct effect value, then there is an intervening / mediating relationship.
- If the indirect effect value of the path coefficient $<$ the direct effect value, then there is no intervening/mediating relationship.
- If the value of the indirect effect of the path coefficient $<$ the value of the direct effect, then there is no intervening / mediating relationship

4.5.1. The effect of non-physical work environment on work productivity through job satisfaction

The effect of non-physical work environment variables on work productivity through job satisfaction can be calculated using the total path coefficient method. Total effect of path coefficient = direct effect + indirect effect

$$\begin{aligned} ((\rho_4 + (\rho_1 \times \rho_7)) &= ((0,279 + (0,581 \times 0,862))) \\ &= 0,279 + 0,500 \end{aligned}$$

Based on the results of the above calculations, the direct effect value is 0.279 and the indirect effect is 0.500, which means that indirectly the non-physical environment variable through job satisfaction has a significant effect on work productivity.

4.5.2. Effect of leadership style on work productivity through job satisfaction

The effect of leadership style variables on work productivity through job satisfaction can be calculated using the total path coefficient method. Total effect of path coefficient = direct effect + indirect effect

$$((\rho_5 + (\rho_2 \times \rho_7)) = ((0,430 + (0,174 \times 0,862)))$$

$$= 0,430 + 0,149$$

$$= 0,586$$

Based on the results of the above calculations, the direct effect value is 0.430 and the indirect effect is 0.149, which means that indirectly the leadership style variable through job satisfaction does not have a significant effect on work productivity.

4.5.3. Effect of work discipline on work productivity through job satisfaction

The effect of leadership style variables on work productivity through job satisfaction can be calculated using the total path coefficient method. The total effect of the path coefficient = direct effect + indirect effect.

indirect effect

$$((\rho_6 + (\rho_3 \times \rho_7)) = ((0,556 + (0,267 \times 0,862)))$$

$$= 0,556 + 0,230$$

$$= 0,786$$

Based on the results of the above calculations, the direct effect value is 0.556 and the indirect effect is 0.230, which means that indirectly the work discipline variable through job satisfaction does not have a significant effect on work productivity.

4.5.4. Effect of Job Satisfaction on Work Productivity

Based on the results of the study, it is known that the hypothesis is accepted, where job satisfaction partially and significantly affects work productivity at PT Bank Sumut Gunungsitoli Branch. This can be proven based on the t test, where the t sig value of $0.000 < 5\% \alpha$.

5. Conclusion

Based on the results of the analysis in this study, the following conclusions were obtained:

- Non-physical environment, leadership style and work discipline have a positive and significant effect on job satisfaction of PT Bank Sumut Gunungsitoli Branch employees. This means that this condition proves that the better the non-physical work environment, leadership style and work discipline can increase work productivity.
- Non-physical work environment has a positive and significant effect on work productivity at PT Bank Sumut Gunungsitoli Branch. This means that this condition proves that the better the non-physical environment can increase work productivity.
- Leadership style has a positive and significant effect on performance at PT Bank Sumut Gunungsitoli Branch. This means that this condition proves that the better the leadership style can increase work productivity.
- Work discipline has a positive and significant effect on performance at PT Bank Sumut Gunungsitoli Branch. This means that this condition proves that the more work discipline increases can increase work productivity.
- Indirectly non-physical work environment variables through job satisfaction have a significant effect on work productivity.
- Job satisfaction does not have a significant effect on work productivity.
- Indirectly variable work discipline through job satisfaction does not have a significant effect on work productivity.
- Job satisfaction variables partially and significantly affect the variable work productivity at PT. Bank Sumut Gunungsitoli Branch.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] A. Muri Yusuf. 2014. "Quantitative, Qualitative & Combined Research Methods". Jakarta: prenadamedia group.
- [2] Agustin, R. P. 2014. The relationship between work productivity and career development in employees of PT Bank Mandiri Tarakan. *eJournal of Psychology*.
- [3] Alfatha Yusuf Muhamad & Yuniawan Ahyar. 2018. Analysis of the effect of the non-physique work environment and the quality of information on employee productivity with adaptive behavior as an intervening variable. *Diponegoro journal of Managemet* Vol 7, No. 4.
- [4] Andika rindi, widjarnoko bambang, ahmad rizal. 2019, The Effect of Work Motivation and Job Competition on Productivity Through Job Satisfaction as an Intervening Variable in Panca Budi Development University Medan Employees. *Journal of Management Tools*, Vol 11no 1 June.
- [5] Andri Feryanto and Endang Shyta Triana. 2015. "Introduction to Management". Kebumen: Mediatera.
- [6] Anggunsari Noorma. 2018. The Effect of Discipline and Job Stress on Productivity with Job Satisfaction as an Intervening Variable at PT.borneo melintang buana export Yogyakarta. Indonesian Islamic University
- [7] Anwar Sanusi. 2011, *Business Research Methods*, Salemba Empat, Jakarta
- [8] Anwar, Rani. 2019. The Effect of Work Environment and Work Motivation on Employee Performance of PT. Bank Perkreditan Rakyat (BPR) Baturaja. *Journal*
- [9] Arikunto, S. 2016. *Research Procedures A Practical Approach*. Jakarta: Rineka Cipta.
- [10] Aritonang, Kromei L, et al. 2019. The Effect of Career Development and Physical Work Environment on Employee Job Satisfaction at PT Sinar Sosro. *Journal of Management*. 5 (1): 53-60
- [11] Azharuddin, Rakka Adittyta, M. Djudi Mukzam and Yudha Prakasa. 2019. The Effect of Physical and Non-Physical Work Environment on Job Satisfaction and Its Impact on Employee Performance (Study on Employees of Pt Bali AgemSurabaya). *Journal of Business Administration (JAB)*, Vol. 72, No. 2, Faculty of Administrative Sciences, Brawijaya University Malang.
- [12] Bramamsta Rizal, Asmika metik, kadi ari. 2021. The Effect of Workload and Work Discipline on Work Productivity with Motivation as an Intervening Variable Simba: business management and accounting innovation seminar vol 3
- [13] Busro, Muhammad. 2018. *Theories of Human Resource Management*. Jakarta: Prenadameidia Group
- [14] Dadang, 2013. *E-Business & E-Commerce*, Publisher Andi, Yogyakarta
- [15] Edy Sutrisno. 2019. *Human Resource Management*. Eleventh print. Prananda Media Group, Jakarta
- [16] Elbadiansyah. 2019. *Human Resource Management*. First Printing. Malang: IRDH.
- [17] Enny, Mahmudah. 2019. *Human Resource Management*. Surabaya: UBHARA Management Press.
- [18] Firmansyah,, Mariyudi, Zulkarnaen Teuku, 2021. The Effect of Leadership Style, Occupational Health and Safety on Work Productivity with Organizational Commitment as an Intervening Variable at Baitul Qiradh Babburayan Cooperative, Central Aceh Regency. *E Biram Samtani Science Journal*, Vol. 5 no.1 july, page 1-15
- [19] Ghozali, Imam. 2016. *Application of Multivariate Analysis with IBM SPSS 23 Program (8th Edition)*. 8th print. Semarang: Diponegoro University Publishing Agency.
- [20] Hamali, Arief Yusuf. 2019. *Practical Understanding of Administration, Organization, and Management*. 1st ed. Jakarta: Prenada Media Group
- [21] Handoko. 2020. *Management*. Yogyakarta: BPFE.
- [22] Hasibuan, Malayu. 2016. *Human Resource Management*. Jakarta: Publisher Bumi Aksara.
- [23] Hermawan, A., wulandari, A., Buana, A.M., & Sanjaya, V. 2020, The influence of competence, incentives and work experience on employee performance in Lampung. *Management and organizational science studies*, 1 (1) 71-73\\
- [24] Indriantoro, Nur., and Supomo, Bambang. 2013. *Business Research Methodology for Accounting & Management*. Yogyakarta: BPFE.

- [25] Khurosani, Aan. 2018. The Effect of Physical Work Safety and Work Environment on Employee Performance (Empirical Study of Pt. Karakatau Posco Employees in Cilegon Banten). *Journal of Business Research and Management Tirtayasa (JRBMT)*, Vol.2, No.1. Master of Management Postgraduate Program, Sultan Ageng Tirtayasa University
- [26] Pamungkas D.T, Ngatno N. 2017. The Effect of Non-Physical Work Environment and Work Stress on Employee Productivity Through Work Motivation as an Intervening Variable (Case Study of the Sales Department of PT. Mitrabuana Cinta Abadi Semarang. *journal of business administration*, vol 6 No. 01
- [27] Prasetyo, widyo Deni. 2022. Job stress and work productivity the role of job satisfaction as an intervening variable at PT. sejahtera usaha bersama, *MBR (management and business review)*, 6 (1), 2022, 91-101.
- [28] Satria, Dicky. 2019 Analysis of Work Experience on Employee Work Productivity with Work Discipline as an Intervening Variable at PT. Aasuransi Jasa Indonesia. *Collection of Thesis Faculty of Social Science Iniversitas Pembangunan Panca Budi*. Vol 196No. 01
- [29] Sedarmayanti. 2017. *HR Planning and Development to Improve Competence, Performance and Productivity*. PT Refika Aditama. Bandung.
- [30] Sedarmayanti. 2018. *Human Resources and Work Productivity*. Bandung: CV.Mandar Maju