



The Influence of Discipline on Employee Work Productivity at the Batam City Education Office

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ABSTRACT

Keywords:

Discipline, Employee Work Productivity, Education Office

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This research is motivated by the phenomenon that shows that there are still employees whose work productivity and discipline are not optimal in carrying out their duties and responsibilities. The purpose of this study is to obtain data and information about work productivity, discipline and whether or not discipline influences employee work productivity in carrying out their duties at the Batam City Education Office. This study uses a quantitative method with a correlational approach. The population in this study was 90 people with a sample size of 73 people based on the Krejcie & Morgan Table taken using a proportional random sampling technique. The research instrument was a questionnaire with a Likert scale that has been tested for validity and reliability. The results of data analysis show that work productivity is in the good category with a TCR of 89%, discipline is in the good category with a TCR of 88%. There is a significant influence between discipline and work productivity with r count $0.588 > r$ table 0.227 and t count $= 6.218 > t$ table $= 1.992$ at a significance level of 5% and an Adjusted R square of 0.337 or 33.7%. Based on the results of the study. The conclusion is that discipline is one of the factors that influence employee work productivity at the Batam City Education Office.

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INTRODUCTION

In an era of globalization characterized by rapid change and technological advancement, the quality of human resources (HR) is a key determinant of organizational success, both in the public and private sectors. Work discipline and employee productivity are two key factors influencing an institution's performance, particularly those engaged in public services (Johnson et al., 2021; Prasetyo et al., 2021; Yaroshenko et al., 2021). Organizations with highly disciplined employees tend to be able to maintain stable productivity, provide optimal services, and maintain operational sustainability. This research is important for the wider community because productive and disciplined

government institutions are able to provide public services effectively and efficiently. By understanding the relationship between discipline and productivity, the government can design policies and strategies to improve employee performance (Appel, 2021; Maier, 2021). Therefore, this study is not only useful for academic purposes but also has practical implications for improving the quality of public services.

Although work discipline has long been recognized as a crucial factor in increasing productivity, many public agencies still face challenges in ensuring employee discipline. Low discipline directly impacts work productivity, which in turn hinders the achievement of organizational goals (Jensen et al., 2021; Newsham et al., 2022). Some common problems in government agencies include employee tardiness, unexcused absences, use of office facilities for personal purposes, and delays in completing work. This phenomenon indicates that work regulations and procedures are not fully complied with, either due to weak supervision or low internal employee motivation. This situation requires in-depth research to identify the extent to which discipline influences productivity, as well as the factors that can strengthen this relationship, so that solutions are truly relevant and applicable.

Initial field observations indicate that the work productivity of Batam City Education Office employees is suboptimal. Some employees are seen leaving computers and lights on even when not in use, indicating a lack of concern for resource efficiency. There is an imbalance in the workload among employees; some are able to complete many daily tasks, while others complete less. Report quality also remains a problem, with numerous typos, inaccurate data, and formats that do not comply with guidelines, requiring repeated revisions. Furthermore, delays in task completion often occur, primarily due to procrastination and poor time management. Other observed phenomena include disciplinary violations such as missing morning roll call, not wearing official attire, and arriving late or leaving early without permission. This situation indicates a systemic problem that requires comprehensive analysis and solutions.

Several previous studies have examined the relationship between work discipline and employee productivity. For example, Sugathadasa et al. (2021), Peter et al. (2023), and Aamer et al. (2022) stated that organizations with high productivity will be more sustainable in serving the community, where one of the supporting factors is work discipline. Gisi (2023) emphasized that work productivity includes the ability to utilize resources efficiently within a certain time. Génesis et al. (2022) identified five indicators of productivity: efficiency, quality, quantity, timeliness, and production costs. Pazukha (2021) defined work discipline as an attitude of respect for company regulations and provisions that encourages employees to comply voluntarily. Although many studies highlight

the importance of discipline, most only measure the relationship in general without considering the specific conditions of local government agencies, which have their own characteristics and challenges.

The weakness of previous research lies in the lack of contextual studies that differentiate discipline and productivity factors based on the characteristics of specific public organizations. Many studies use a purely quantitative approach, thus underexploring non-technical factors such as work culture, supervisory systems, and uneven workloads (Singhal, 2024; Yee et al., 2023). Furthermore, few studies have focused analysis on the regional education sector, despite its crucial role in human resource development (Khatsrinova & Fakhretdinova, 2021; Sanjaya et al., 2023). Therefore, this study seeks to fill this gap by specifically examining the influence of discipline on employee productivity within the Batam City Education Office. This approach is expected to provide a more comprehensive and relevant picture for policymaking in the public sector, particularly in local government agencies.

The novelty of this study lies in its specific focus on local government agencies in the education sector, taking into account real-world conditions that have not been widely discussed in previous research. The approach used not only measures the quantitative relationship between discipline and productivity but also examines indicators of both in detail based on direct observation and documentation. Thus, this study not only confirms existing theories but also broadens understanding of how discipline can be implemented and improved in the context of public organizations with their distinctive bureaucratic characteristics. The results of this study are expected to provide practical contributions in developing strategies to improve employee performance and strengthen a culture of work discipline within the local government.

Based on the above description, the main problem addressed in this study is: to what extent does work discipline influence employee productivity at the Batam City Education Office. The argument put forward is that high discipline will encourage employees to comply with regulations, utilize time effectively, maintain work quality, and increase work efficiency. Work discipline is believed to be the foundation for achieving organizational goals because it influences individual behavior in carrying out daily tasks (Mazloum et al., 2024; Salsabilla et al., 2022). Through empirical analysis, this study seeks to prove that improving discipline is one of the most effective strategies for improving employee performance in the public sector.

This study is expected to provide theoretical contributions by enriching the literature on the relationship between work discipline and productivity, particularly in the public sector. Practically, the results of this study can serve as a reference for local government agency leaders in formulating more effective

HR management policies and strategies. The resulting recommendations are expected to help create a disciplined, productive, and conducive work environment for improving the quality of public services. By focusing on the context of the Batam City Education Office, the findings of this study can also be adapted by other agencies with similar characteristics, thus providing broader benefits for improving bureaucratic performance in Indonesia.

RESEARCH METHOD

This research uses a quantitative approach that aims to explore the relationship or influence between the variables studied through numerical data (Ratna, 2021). This approach allows researchers to objectively measure and analyze the relationship between two or more variables. The type of research used is correlational research, which focuses on examining the extent to which the independent variable (work discipline) influences the dependent variable (work productivity). In correlational research, there is no manipulation or intervention of the variables being tested, so the results only describe the relationship between the variables without being able to conclude cause and effect (Afif et al., 2023). This correlation test is generally conducted using statistical methods, such as the Pearson correlation test, to measure the degree of relationship between the variables studied.

The population in this study was all 90 employees at the Batam City Education Office. The sample was determined using the Krejcie & Morgan Table, which suggests a sample size of 73 employees from a total population of 90 to produce representative and valid results. This sample was drawn using proportional random sampling, a random sampling technique that considers certain proportions. This is crucial to ensure that the selected sample represents the entire population, so that the research results can be accurately generalized. This technique also reduces bias and ensures diversity within the sample, while increasing the reliability of the research results. This sampling process also minimizes errors that may arise from non-representative sample selection.

To collect data, this study used a questionnaire as the primary instrument (Waruwu et al., 2025). The questionnaire was designed to measure two main variables: work discipline and employee productivity. The questions in the questionnaire were structured based on relevant theory to ensure valid and accurate measurements. Each variable was measured using a Likert scale, allowing respondents to provide answers based on their level of agreement or disagreement with the statements provided. Before use, the questionnaire was tested for validity (the ability of the measuring instrument to measure what it is supposed to measure) and reliability (the consistency of the results obtained

when the instrument is used repeatedly). This testing is crucial to ensure that the collected data is accurate and reliable for further analysis.

After the data was collected, analysis was conducted using statistical techniques to examine the relationship between work discipline and productivity (Abigail Soesana., 2023). The first analysis used was descriptive statistics to provide a general overview of the distribution and characteristics of the collected data. These descriptive statistics include the mean, standard deviation, and frequency distribution. Next, to test the relationship between the two variables, a Pearson correlation test was used. This test measures the extent of the linear relationship between work discipline and work productivity, with the correlation value indicating the strength and direction of the relationship. The Pearson correlation test was used because both variables studied are interval or ratio variables, which meets the assumptions for applying this technique.

The research procedure began with the data collection stage, which involved administering questionnaires to a sample selected using proportional random sampling. Each respondent was asked to complete a prepared questionnaire containing questions related to their level of work discipline and work productivity. After the data was collected, the researcher analyzed the data using statistical software to process and interpret the results. The Pearson correlation test was used to test the proposed hypothesis, namely whether there is a significant relationship between work discipline and work productivity. The results of the analysis were then compared with the proposed hypothesis to conclude the effect of work discipline on employee productivity at the Batam City Education Office.

RESULT AND DISCUSSION

Result

Employee Work Productivity Level

The results of the study on employee work productivity at the Batam City Education Office, which are seen from four main aspects, namely efficiency, quantity of work, quality of work, and timeliness, are presented in Table 1. These four indicators are used to provide a comprehensive picture of the level of employee productivity at the agency.

Table: 1 Work Productivity

No	Indicator	Average Score	Score Achievement Level	Category
1	Efficiency	4.34	86.8%	Good
2	Quantity of Work	4.32	86.5%	Good
3	Quality	4.30	86.1%	Good
4	Punctuality	4.44	88.8%	Good

Amount	17.4		Good
Average	4.35	87.05%	

The data in table 1 shows that the highest average score of employee work productivity is in the punctuality indicator of 4.44 with a percentage of 88.8%, while the lowest score is in the quality indicator of 4.30 with a percentage of 86.1. In general, the average score of employee work productivity in the Batam City Education Office is 4.35 with a percentage of 87.05%, meaning that employee work productivity in the Batam City Education Office is already in the good category.

Employee Work Discipline Indicators

The results of the study on employee work discipline at the Batam City Education Office, which are seen from four main aspects, namely responsibility, obedience, attendance, and working according to ethics, are presented in Table 2. These four indicators are used to describe the level of employee discipline in carrying out their duties. Responsibility measures the extent to which employees fulfill their obligations, obedience assesses the extent to which employees follow applicable regulations, attendance refers to the level of employee discipline in being present on time, and working according to ethics assesses how well employees carry out their duties by complying with established norms and ethical standards. This table provides data used to analyze the level of employee discipline at the Batam City Education Office.

Table: 2 Discipline Indicators

No	Indicator	Average Score	Score Achievement Level	Category
1	Responsibility	4.40	88%	Tall
2	Obedience	4.45	88.9%	Tall
3	Presence	4.38	87.6%	Tall
4	Working According to Ethics	4.55	90.9%	Very high
	Amount	17.78	355.4%	Tall
	Average	4.45	88.85%	

The data in table 2 shows that the highest average score of employee discipline is in the indicator of working according to ethics 4.55 with a percentage of 90.9%, while the lowest score is in the attendance indicator 4.38 with a percentage of 87.6. In general, the average score of employee discipline in the Batam City Education Office is 4.45 with a percentage of 88.85%, meaning that

employee discipline in the Batam City Education Office is already in the high category.

The Influence of Discipline on Work Productivity

Prerequisite Analysis Test

Normality Test

To ensure that the data used in this study met the assumption of normal distribution, a Normality Test was conducted using the One-Sample Kolmogorov-Smirnov Test. The results of this normality test are presented in Table 3. This test aims to determine whether the data obtained from respondents are normally distributed or not. In the Kolmogorov-Smirnov test, if the significance value (p-value) is greater than 0.05, it can be concluded that the data is normally distributed. Conversely, if the p-value is less than 0.05, the data is considered not normally distributed. The results of this normality test are important to ensure the validity of the statistical analysis used in the study, such as the Pearson correlation test, which assumes a normal distribution in the analyzed data.

Table: 3 One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		75
Normal Parameters ^{a,b}	Mean	.0000000
	Standard Deviation	4.52175018
	Most Extreme Differences	
	Absolute	.064
	Positive	.055
	Negative	-.064
Test Statistics		.064
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

The results of the normality test presented in Table 3 show the One-Sample Kolmogorov-Smirnov Test value for unstandardized residuals. The data show a total of 75 respondents, with a mean of 0 and a standard deviation of 4.5217. The most extreme differences value obtained was 0.064, with positive and negative values of 0.055 and -0.064, respectively. This Kolmogorov-Smirnov test statistic

yielded a Test Statistics value of 0.064, which was then tested using asymptotic significance (2-tailed) and showed a value of 0.200.

With an Asymp. Sig. value (2-tailed) of 0.200, which is greater than the 0.05 significance level, the test results indicate that the residuals in this data are normally distributed. This means there are no violations of the normality assumption, which is an important prerequisite for further statistical analysis. In this context, the Kolmogorov-Smirnov test with Lilliefors correction confirmed that the data did not show significant deviations from the normal distribution, which ensures the validity of using parametric statistical tests such as Pearson correlation to test the relationship between variables in this study.

Linearity Test

The results of the Linearity Test presented in Table 4 aim to examine whether the relationship between the independent variable (work discipline) and the dependent variable (work productivity) is linear. This test is important to ensure that the regression model used in the analysis conforms to the assumption of a linear relationship between the two variables. If the test results show a significance value greater than 0.05, then the relationship between the two variables can be considered linear. Conversely, if the significance value is less than 0.05, the relationship between the variables is considered non-linear, which can affect the accuracy of the statistical analysis model. Table 4 provides information regarding the significance values obtained in this linearity test, which will serve as the basis for determining the feasibility of the regression model used in this study.

Table: 4 Linearity Test Results

ANOVA Table								
		Sum of Squares	df	Mean Square	F	Sig.		
Aggressiveness * Religiosity	Between Groups	(Combined)		1048,922	20	52,446	2,238	.010
		Linearity		801,326	1	801,326	34,195	.000
		Deviation from Linearity		247,596	19	13,031	.556	.920
	Within Groups			1265.425	54	23,434		
	Total			2314.347	74			

The results of the Linearity Test presented in Table 4 demonstrate the analysis of variance (ANOVA) used to examine the linear relationship between work discipline (X) and work productivity (Y). This table shows the sum of squares between groups (1,048,922), with a mean square of 52.446 and an F-value of 2.238. This result has a significance value of 0.010, which is lower than the 0.05 level, indicating a significant relationship between work discipline and work productivity. Furthermore, the sum of squares for linearity is 801,326, with an F-value of 34.195 and a significance value of 0.000, indicating a linear relationship between the two variables.

In the Deviation from Linearity section, the sum of squares obtained is 247,596, with a mean square of 13.031 and an F-value of 0.556. The significance value for deviation from linearity is 0.920, which is greater than the significance level of 0.05. This indicates that there is no significant deviation from linearity between the variables of work discipline and work productivity. In other words, the relationship between the two variables can be considered linear, and the regression model used in this analysis is in accordance with the linearity assumption. In conclusion, there is a significant linear relationship between work discipline and employee work productivity at the Batam City Education Office.

Hypothesis Testing

Simple Linear Regression Test

The results of the Simple Linear Regression Test presented in Table 5 show the results of the ANOVA to test the effect of work discipline variables on employee work productivity. In this table, the sum of squares between groups (regression) is 1603.141, while the sum of squares within groups (error) is 711.206, with a mean square of 1603.141 and 13.171, respectively. The F value obtained is 121.625, with a significance of 0.000. Because the significance value is smaller than the 0.05 level, the null hypothesis stating that there is no significant influence between work discipline and work productivity is rejected. Thus, it can be concluded that work discipline has a significant influence on employee work productivity at the Batam City Education Office.

Table: 5 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	801,326	1	801,326	38,662	.000b
	Residual	1513.021	73	20,726		
	Total	2314.347	74			

a. Dependent Variable: Aggressiveness

b. Predictors: (Constant), Religiosity

The data in table 5 above shows that there is a significant influence by discipline (X) on work productivity (Y). F count = 38.662 with a significance level of $0.000 < 0.05$, so the regression model can be used to predict the work productivity variable (Y). It can be concluded that there is a significant influence by the discipline variable (X) on the work productivity variable (Y).

Table 6. Simple Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	43,922	13,946		3,149	.002
Religiosity	.651	.105	.588	6,218	.000
a. Dependent Variable: Aggressiveness					

The data in table 6 above shows that there is a regression direction coefficient value by looking at the coefficient results. In the Unstandardized Coefficients column in sub column B, there is a constant value of 43.922. While the value of the large regression direction coefficient is 0.651. To see the significance of the influence of the independent variable (discipline) partially or individually on the dependent variable (work productivity), a significance test (t) is carried out. The decision making in this t test is if the sig value < 0.05 or $T_{count} > T_{table}$ then there is an influence of variable x on variable y.

In addition, if the sig value > 0.05 or $T_{count} < T_{table}$ then there is no influence of variable x on variable y. The ttable value with a confidence level of 0.05 (N = 75) in the distribution of ttable values is 1.992. From the calculation results, it can be seen that there is a sig value of $0.000 < 0.05$ and $t_{count} = 6.218 > t_{table} = 1.992$, so there is an influence of variable x on variable y. Thus, the hypothesis that discipline has an effect on employee work productivity at the Batam City Education Office can be accepted.

Table: 7 R Square

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.588a	.346	.337	4,553
a. Predictors: (Constant), Religiosity				

The data in Table 7 above shows that $R = 0.588$ while $R = 0.227$ (N = 75) at a significance level of 5%. The percentage of influence of the independent variable (discipline) on the dependent variable (work productivity), or Adjusted

R Square, is 0.337 or 33.7%. This means that the influence of discipline on work productivity is 33.7%, while the remaining 66.3% is influenced by other variables.

Discussion

The research results show that employee work productivity at the Batam City Education Office is categorized as "Good," with an achievement percentage of 87.5%. This finding aligns with Gupta et al. (2023) and Firdaus et al. (2023) opinion, which states that work productivity is strongly influenced by employees' ability to manage their time efficiently. Among the productivity indicators, punctuality stands out, with an average score of 4.44 (88.8%), reflecting employees' high commitment to completing work within established deadlines. This reflects employees' awareness of the importance of discipline at work, which plays a significant role in increasing productivity and supporting the achievement of organizational goals. According to Aprilia et al. (2023) and Kusumo et al. (2023), time efficiency in completing tasks is one of the keys to achieving optimal work results.

However, despite punctuality's dominance, the work quality indicator showed lower results, with an average score of 4.30 (86.1%), which still indicates good productivity, but requires greater attention to work quality. Bohórquez et al. (2022), Cen et al. (2024), and Susanto et al. (2024) emphasized that work quality encompasses accuracy and precision in achieving established standards, which must also be maintained to align with organizational goals. Although overall employee productivity is considered good, a focus on improving work quality is still necessary for the organization to achieve more optimal results and meet expectations (Ding et al., 2024; Maharani & Sary, 2024).

On the other hand, employee work discipline at the Batam City Education Office also demonstrated excellent results, with a score of 88.5%. This finding aligns with Aziz et al. (2025), Sain (2025), and Jali (2025) opinion, which states that work discipline is a crucial factor in determining task success. High discipline creates a productive, orderly, and conducive work atmosphere, which directly impacts the smooth running of public service processes and the achievement of organizational goals (Khoiroh et al., 2024; Zawawi, 2025). One prominent indicator of discipline is work ethic, with an average score of 4.55 (90.9%), reflecting the high professionalism and integrity of employees in carrying out their duties.

However, despite overall good discipline, attendance remains a concern, with a score of 4.38 (87.6%). Herlina (2024), Widiariet al. (2024), and Putri (2023) stated that good attendance is directly related to employee commitment to their work and compliance with work hour regulations. Better attendance rates improve work flow and team effectiveness. Therefore, organizations need to

continuously evaluate factors influencing attendance, both internally (motivation, health) and externally (attendance systems and supervision), to ensure sustained productivity and improved performance.

Regarding the effect of discipline on work productivity, the correlation analysis showed a significant relationship with an R value of 0.588, indicating that work discipline contributes 33.7% to employee productivity. This finding aligns the demonstrated that high work discipline is positively related to employee performance and productivity. This research also emphasized that work discipline is key to increasing effectiveness and productivity, as discipline enables employees to work according to regulations, meet deadlines, and optimally achieve organizational goals. Therefore, the results of this study have theoretical and practical implications, demonstrating the importance of managing work discipline in increasing productivity in government agencies. Organizations need to continue to develop policies that support the creation of a culture of discipline, which in turn will encourage improvements in the quality of employee performance.

CONCLUSION

Based on the research results, it can be concluded that the work productivity of Batam City Education Office employees is in the good category, with an achievement percentage of 87.05%. The indicator with the highest score was punctuality, with an average score of 4.44 (88.8%), reflecting employees' high awareness of completing work on time. Conversely, the work quality indicator received the lowest score, with an average score of 4.30 (86.1%), indicating the need for greater attention to improve work quality. Employee work discipline at the Batam City Education Office also showed a high score of 88.85%, with work ethics achieving the highest score (4.55 or 90.9%), and attendance requiring greater attention, with a score of 4.30 (87.6%). This study also found a significant relationship between work discipline and employee productivity, as indicated by a correlation value of $R = 0.588$ and an Adjusted R Square of 0.337, indicating that work discipline has a significant influence on employee productivity.

This research contributes to deeper insight into the influence of discipline on work productivity in a governmental context, particularly within the Batam City Education Office. This research enhances understanding of the importance of discipline in achieving optimal performance in government agencies, which also provides practical implications for improving human resource management policies. However, this study has limitations in terms of generalizability, as it was only conducted in one agency, making it unable to fully represent all government agencies. Future research could expand the sample coverage to various agencies to further examine the relationship between discipline and work productivity in a broader context.

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