



THE INFLUENCE OF ONLINE ATTENDANCE SYSTEM AND WORK DISCIPLINE ON THE PERFORMANCE OF EDUCATIONAL STAFF

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This research is aimed at understanding the influence of the online attendance system and work discipline on the performance of educational staff at Universitas Negeri Semarang (UNNES). This research investigates the influence of online attendance systems and work discipline on the performance of educational staff at Universitas Negeri Semarang. The sampling technique employed in this research is random sampling. There were 140 Educational Staff in UNNES taken as the samples of this research. This research features a quantitative approach where the primary data were obtained from surveys through questionnaires distributed to the respondents. The data analysis and processing utilised the regression equation in the SPSS, a statistics software. The result shows that the main factor influencing employees' work performance in UNNES is work discipline. The implementation of an online attendance system has minimum influence on employees' performance. Online attendance systems, followed by work discipline, directly had a more significant impact than merely the online attendance systems.

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INTRODUCTION

The provision of Higher Education Autonomy, which allows the upgrade of a Public Service Agency Financial Management Pattern University (PTN BLU) to become a Legal Entity State University (PTN BH), brings the logical consequence where the university has the authority to control its bylaws within each organisation. Essentially, Human Resources is a capital of an organisation. Good Management of Human Resources is critical to achieving the goal of an organisation. Employee performance assessment is a part of the management for human resources which is conducted periodically. Employee performance comprises the quality and quantity of employees' work influenced by internal and external factors. Good performance from the employees will improve the performance of the organisation. As an effort of Human Resource Management, Universitas Negeri

Semarang (UNNES), through Rector's Regulation Number 34 of 2014 regarding Attendance Discipline for UNNES Employees, regulates electronic attendance while clocking in and out of work. The online attendance system implemented in UNNES work when the employees look at the designated camera provided by UNNES for the attendance system. The electronic attendance system is aimed at easing the recording of employees' attendance which will be used as the data to calculate the payment of their remuneration. With an electronic attendance system, we could monitor employees' attendance easily. Attendance supports employees' discipline (Kamal, Winarso, & Hidayat, 2020).

One of the factors influencing employees' performance is work discipline. Work discipline is the attitude and behaviour reflecting the employees' compliance with the organisational

regulation. Discipline is crucial in achieving a particular goal. With good discipline, a goal will be achieved optimally. Employees having good discipline will work well without being supervised by their leaders. Employees' professionalism demands professionalism in executing their roles and functions as a prerequisite for achieving the organisation's goal (Ichsan 2020).

Universitas Negeri Semarang regulates the clock-in hour of 07.00 and clock-out hour at 16.00 on Monday to Thursday and 07.00 to 14.30 every Friday. UNNES also regulates lunch breaks from 12.00 to 13.00 on Monday to Thursday. Meanwhile, the lunchtime is 11.00 to 13.00 on Friday. Attendance regulation is regulated by the management of an organisation for the sake of employees' compliance (Kumayza, 2017). There are several ways to control employees' attendance. One of them is through an electronic attendance system. Aside from its user-friendly features, the system is also cheap. The attendance of the employees could be easily monitored. Any employee absent for ten consecutive days could be punished with disciplinary action in the form of unilateral honourable dismissal (Government Regulation Number 94 of 2021 regarding Civil Servant Discipline 2021).

However, based on the UNNES attendance system database, only 33% of employees are disciplined and on time following the pre-determined clock-in and working hours outlined in the Rector Regulation. Many employees need to comply with the working hour provision. There is a harmful habit from the employees who ask their workmates to clock their attendance and leave the office during working hours.

Some researchers stated that the fingerprint attendance system significantly influences employees' work discipline (Kamal, Winarso, and Hidayat, 2020); Nani & Wijaya (2020); Safudin, (2018). The findings contrast with Kusmayati, who stated that the fingerprint system only small impacts to the discipline, and the most significant factor is monitoring (Kusmayati, 2018). Prior research found that motivation and work discipline partially or completely influenced performance (Muhammad et al., 2021); (Tarigan & Priyanto, (2021). Outstanding employees who maintain discipline should be rewarded to improve their performance.

In order to maintain a focused and comprehensive discussion, this research addresses specific questions related to the performance and work discipline of educational staff at Universitas Negeri Semarang. The following key problems guide the scope of our investigation: Firstly, we examine whether the implementation of the online attendance system has an impact on the performance of educational staff. Secondly, we investigate the potential positive influence of the

online attendance system on the performance of educational staff at Universitas Negeri Semarang. Thirdly, we explore the relationship between work discipline and the performance of educational staff. Lastly, our research delves into the combined impact of the online attendance system and work discipline on the performance of educational staff at Universitas Negeri Semarang. By focusing on these specific aspects, we aim to gain valuable insights into the interplay of attendance systems, work discipline, and overall performance within the educational context.

LITERATURE REVIEW

Online Attendance System

Implementing an Online Attendance System is a form of Management Information System using computerised technology. Management Information System uses information effectively and efficiently to improve the organisation's performance (Zakiyudin, 2012). The online attendance system implemented in UNNES work when the employees look at the designated camera provided by UNNES for the attendance system. This system is implemented to ease the recording of the employees' attendance. The record calculates food allowance and remuneration paid to the employees in Universitas Negeri Semarang.

The indicators show an object or activity's characteristics, size, or characteristics. The Online Attendance system is the management information system containing the following indicators. (Sutabri 2016)

1. Hardware
2. Software
3. Database
4. Procedure
5. Personnel

Work Discipline

Work discipline is the awareness and willingness of an individual to comply with the company's regulations and the applicable social norm. This factor positively influences employees' performance in a particular institution (Hasibuan, 2009). Work discipline is directly proportional to employees' performance in a company/institution. If the employees have a good level of discipline, their performance will usually be improved. This premise aligns with Singodimedjo. He states that work discipline is the willingness and readiness of an individual to comply with and follow the applicable local regulation (Singodimedjo, 2002).

Work discipline is a form of respect and compliance with the regulated laws, whether written or verbal and the willingness to bear the consequence of the violation. Work discipline is compliance with the organisation's regulation or

order (Sinambela, 2012). The factors that influence employees' discipline, as identified by Dewi (2016), encompass various aspects within the organizational context. Firstly, the total paid compensation emerges as a significant determinant. The adequacy of compensation plays a pivotal role in shaping employee discipline, as individuals are more likely to adhere to organizational rules and regulations when they perceive fair remuneration for their contributions. Secondly, the presence of an exemplary leader within the company is crucial. Employees closely observe how leaders regulate disciplinary behavior, and a leader's positive example can foster a culture of discipline within the organization. Thirdly, the existence of leaders' monitoring in every company activity serves as a guiding force for employees, ensuring accurate and aligned work. Additionally, the provision of definite rules acts as a cornerstone for effective discipline management; clear regulations provide a framework for guiding everyone within the organization. The courage of leaders to take action in response to disciplinary violations is another vital factor. When leaders demonstrate the willingness to address violations promptly, it reinforces the importance of adhering to established norms. Lastly, attention to employees emerges as a nuanced factor. Recognizing the diverse characters of employees, leaders need to go beyond monetary benefits and provide attention and acknowledgment, understanding that challenging work and personal attention are integral aspects of fostering a disciplined and motivated workforce.

Work discipline is characterized by several key indicators, as outlined by Rivai et al. (2005). Firstly, attendance stands out as a crucial measure of employees' discipline. The level of discipline is reflected in attendance, as employees with lower levels of discipline are likely to exhibit less optimal work attendance. Secondly, compliance with work regulations is a significant indicator. Employees who have a clear understanding of organizational work regulations are more likely to adhere to them, contributing to a conducive and efficient working environment. Thirdly, adherence to work standards is a key aspect of discipline. Employees are expected to work in accordance with established standards and guidelines to prevent accidents and ensure the quality of their output. Compliance with these standards is observable in how employees execute their responsibilities for assigned tasks. Lastly, ethical conduct represents an important facet of work discipline. Engaging in unethical or inappropriate behavior towards colleagues or within the office is considered undisciplined. Therefore, ethical work practices serve as a tangible manifestation of employees' discipline, contributing to a positive and harmonious work environment.

Performance

Performance, as discussed by Sudarmanto (2009), can be effectively categorized into two main dimensions. Firstly, performance viewed as results, as articulated by Bernardin, entails the recording of productivity, work output, or any activities within a specific timeframe. This perspective aligns with Ricard's notion, emphasizing that performance is essentially an outcome of work tied to measures of productivity and effectiveness. Secondly, performance considered as behavior, according to Campbell and Dobbins, encompasses actions and behaviors that are pertinent to the organizational objectives or the specific unit within which individuals operate. This dual categorization provides a comprehensive framework for understanding performance, incorporating both tangible outcomes and the behavioral aspects that contribute to the overall effectiveness and success of individuals within an organizational context.

Performance is related to quantity, quality, and time in executing tasks. Performance is the product of the work individuals execute (Robbins, 2005). Performance is the final product that can be observed and measured objectively and periodically (Rivai et al., 2005). The main factor which could influence individual performance is personal capability, efforts, and supports from the institution/organisation (Malthis & Jackson, 2006). Performance assessment is a way to assess the contribution of individuals to their organisation. The assessment should be organised periodically to improve employees' performance, impacting their organisational performance.

Based on the definition above, the Performance of the Educational Staff refers to the work result or achievement that could be measured objectively based on a particular period. The factors that exert influence on performance, as identified by Simanjuntak (2011), encompass various dimensions. Firstly, individual ability and skills are highlighted as critical factors contributing to effective work. Secondly, the support provided by the organization is underscored, with individual terms and conditions influenced by psychological states such as perception, behavior, and motivation. In terms of performance indicators, as outlined by Bernardin and Russell (1993), the multifaceted nature of performance is elucidated through several key criteria. These include the quantity of work, representing the workload within a predetermined period; the quality of work, reflecting the achievement of predetermined standards; job knowledge, emphasizing extensive knowledge and skills relevant to the work; creativeness, involving the generation of original and creative ideas to address challenges; cooperation, signifying a willingness to

collaborate with others within the organization; dependability, indicating readiness to be entrusted with tasks and completion reliability; initiative, demonstrating the drive to undertake new tasks and extend responsibility; and personal qualities, encompassing traits such as personality, leadership, friendliness, and personal integrity. Together, these factors and indicators provide a

comprehensive framework for understanding the multifaceted nature of performance within an organizational context. This research aims to observe the influence of the online attendance system and work discipline on the performance of education staff at Universitas Negeri Semarang. The framework of this research is as follows:

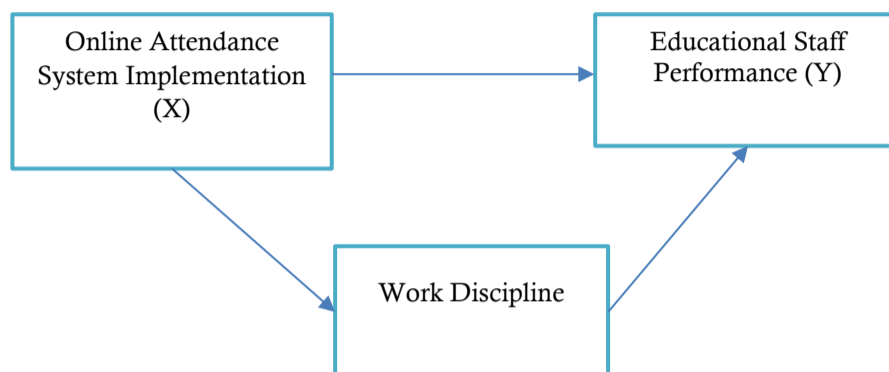


Figure 1. Research Framework

Based on the abovementioned research questions and theoretical reviews, the hypotheses of this research are as follows:

H₁: It is assumed that the online attendance system positively and significantly influences the work performance of educational staff at UNNES

H₂: It is assumed that the online attendance system positively and significantly influences the work discipline of educational staff in UNNES

H₃: It is assumed that work discipline positively and significantly influences the work performance of educational staff in UNNES

H₄: It is assumed that the online attendance system through work discipline positively and significantly influences the work performance of educational staff at UNNES

This research uses a quantitative approach, where the primary data are obtained from surveys through questionnaires distributed to the respondents. This research's data analysis and processing came from the regression equation in the SPSS, a statistics software.

The sampling technique used in this research is probability sampling, where each population has the same chance to be chosen as the sample (Priyono, 2016). The sample of this research was 20% of 690 employees, which is 140 people. The samples represent the educational staff in UNNES. The sampling was conducted randomly where it was randomised without considering the difference within the population (Siyoto & Sodik, 2015).

The variables of this research are displayed as follows in Table 1.

METHOD

Table 1. Research Variables

Variable	Dimension	Indicators	Scale
Online Attendance System (X) Online Attendance is a system used to record employees' presence	Hardware	a. The availability of the hardware b. The easiness of using the device	ordinal
	Software	a. The availability of the software b. The easiness of operating the system	ordinal
	Database	a. Data security b. The easiness of using the data c. Data validity	ordinal
	Procedure	a. Operate in the clock-in and clock-out hours. b. Operate based on the applicable	ordinal

Variable	Dimension	Indicators	Scale
		procedures	
	Personnel	a. The easiness of using the system for all employees	ordinal
	Attendance	a. Employees come on time b. The optimisation of working hour	ordinal
Work Discipline (Z) Work Discipline is the awareness and willingness of individuals to comply with all company regulations and applicable social norms.	Compliance with Work Regulation	a. Employees understand the applicable work regulation b. Employees work based on the applicable regulations	ordinal
	Compliance with Work Standard	a. Employees work based on the regulated work standard b. Employees are responsible for the work assigned to them	ordinal
	Ethical Work	a. Employees behave politely while working b. Employees behave well in working	ordinal
Performance (Y) Performance is the work result or achievement which could be measured objectively in a particular period	Quantity of Work	a. Completing the work on time b. Achievement of work target c. Completing the work beyond the target	ordinal
	Quality of Work	a. Processing the work based on the standard b. The work outcome fulfils the standard c. The ability to do the work	ordinal
	Job Knowledge	a. Skills b. Knowledge c. Mastery	ordinal
	Cooperative	a. The willingness to work in a team b. The willingness to help the leader c. Good rapport between employees and consumers	ordinal
	Dependability	a. The trust of the supervisor/leader b. Employees' awareness of availability c. Awareness of completing work	ordinal

The data collection was conducted through the study of literature, the questionnaires distributed to 140 employees, observation, and documentation. The observation employed in this research is participative observation, where the researchers are directly involved in the day-to-day activities done by the subjects (Sugiyono, 2017). The researchers used the validity test in SPSS to measure the validity of the questionnaires. The criteria for the validity of the questions depend on the probability (p-value) compared to the significance of 5% or 0.05. If the p-value < 0.05,

then the question/item is valid. Meanwhile, if the p-value > 0.05, the item is invalid. The instrument was going through a reliability test to know how consistent the relative calculation is of the repetitively used instrument. The questionnaire is reliable if it is answered consistently each time. The reliability test of the instrument in this research was conducted using Cronbach's Alpha Coefficient in SPSS. The instrument of variable is deemed reliable for the research if its Cronbach Alpha coefficient is higher than (>) 0.70 (Ghozali, 2016).

The analysis of this research follows a quantitative descriptive method to explain the variables in detail. The data were obtained by linking relevant theories to research questions, followed by a conclusion. To convert the data of the questionnaire as quantitative data, the researcher scored it with ordinal and Likert scale as follows:

- a. Very disagree : score 1
- b. Disagree : score 2
- c. Somewhat agree : score 3
- d. Agree : score 4
- e. Very agree : score 5

The path analysis technique is used if the researchers face problems related to cause and effect. The path analysis is the extension of multiple linear regression. The path analysis uses regression analysis to estimate the causality between variables (causal model) previously set based on the theory (Ghozali, 2016).

Direct influence testing is aimed at testing the hypothesis on the influence of X (Online Attendance System) to Y (Performance) mediated by Z (Work Discipline). The use of influence testing is aimed at understanding the hypothesis indirectly affecting the variable with other variables. The indirect influence of X to Y is smaller than that of X to Y. Hence, Z becomes the mediator of X's influence on Y. At this moment, Z becomes the intervening variable.

Regression testing is conducted after the data fulfils the assumption on the criteria of the classic assumption test. The test aims to know the existence of violation to the classical assumption in the regression model to get the Best Linear Unbiased Estimator or BLUE. In this research, we did 3 (three) classical assumption tests: the normality test, heteroskedasticity test, and multicollinearity test.

A normality test was conducted to test whether the independent and dependent variables in the regression model have a normal distribution (Ghozali, 2016). Several methods in the Normality Tests are P-Plot graphical analysis and One Sample Kolmogorov-Smirnov. The normality test in this research came from One Sample Kolmogorov-Smirnov. In the One-Sample Kolmogorov-Smirnov, the data can be deemed generally distributed if the Asymp. Sig. (2-tailed) is more significant than α (5%).

The following classical assumption test is the heteroskedasticity test which is conducted to test whether there is a different residual variety between one observation to the others in the regression model of research. If there is a similarity of the residual between one observation and the others, then it is called homoskedasticity.

Meanwhile, a different conclusion is called heteroskedasticity (Ghozali, 2016). A regression model will be deemed suitable if it is homoskedasticity, not heteroskedasticity (Wahyudin, 2015). The researcher uses the Glejser test in testing the heteroskedasticity by seeing the absolute residual score as the dependent variable with α significance of 5%.

The decision-making criteria are as follows:

1. If the independent variable is statistically significant, heteroskedasticity is possible.
2. There is no heteroskedasticity
3. if the significant probability is above 5% of the trust.

The multicollinearity test tests the correlation between independent variables in the regression equation model. A good regression model has an independent variable which does not have a high level of correlation or does not have multicollinearity (Ghozali, 2016). The high level of correlation between the independent variable makes the statistical value in the t-test smaller and the independent variable insignificant in influencing the dependent variable. However, the determinant coefficient (R square) is high, so the estimation must be more accurate. The multicollinearity test is conducted by analysing each independent variable's tolerance and VIF (Variance Inflation Factors).

Criteria of multicollinearity test:

1. If tolerance ≤ 0.1 and VIF ≥ 10 , there is a multicollinearity in the regression model of the research.
2. If tolerance > 0.1 and VIF < 10 , there is not any multicollinearity in the regression model of the research.

The determinant coefficient test is used to see the capability of the independent variable to explain the dependent variable (Ghozali, 2016). In this research, the test is used to measure the proportion or percentage of the independent variable, which is work discipline (X1), to the fluctuation of the dependent variable, which is educational staff performance (Y). In other words, we could see how the independent variable could influence or explain the dependent variable.

The F statistical test is used to test whether the independent variable (X) is simultaneously correlated with the dependent variable (Y) (Sugiyono, 2017). The decision-making criteria of the F-count value and significance are as follows:

- 1) The H_0 is rejected if the F-count $>$ F table or Sig. $<$ 0.05. Hence, there is a significant influence between all independent and dependent variables.

- 2) The H_0 is accepted if the $F\text{-count} > F\text{ tabel}$ or $\text{Sig.} > 0.05$. Hence, there is a significant influence between all independent and dependent variables.

The t-statistical test aims to understand how influential the independent variable is to the dependent variable and to analyse which independent variable influences the dependent variable. If the significance $\alpha < 0.05$, we can conclude that the independent variable partially influences the dependent variable. If the significance $\alpha > 0.05$, the independent variable does not have a significant partial influence on the dependent variable (Ghozali, 2016).

The hypothesis test in the t-statistical test in this research is explained as follows:

1. Null hypothesis (H_0): There is not any influence between work discipline (X1) and the fluctuation of the dependent variable, educational staff performance (Y).
2. Alternative hypothesis (H_1): There is an influence between work discipline (X1) and the fluctuation of the dependent variable, educational staff performance (Y)

The criteria of decision-making in the t-statistical test are as follows:

1. Alternative hypothesis (H_1) is rejected if $t_{\text{count}} < t_{\text{table}}$ in $\alpha = 0.05$ and the significance > 0.05 .
2. Alternative hypothesis (H_1) is accepted if $t_{\text{count}} > t_{\text{table}}$ in $\alpha = 0.05$ and the significance < 0.05 .

RESULTS

The instrumental test shows that the instrument is valid and reliable. Hence the

instrument could be used in studying the influence of online attendance systems and work discipline on the performance of educational staff in UNNES. There are 27 items of questions in the questionnaires of this research. They were used to measure the variable of educational staff performance, 15 questions were used to measure the work discipline, and 11 items were focused on calculating the variable of work discipline. The validity test of the instrument was conducted using a probability test compared with the significance. The validity test showed a significance of $0.00 < 0.05$ for all question items, which means all items were valid or the variables of this research passed the validity test—the reliability test for the instrument used by observing Cronbach's alpha coefficient in SPSS. The instrument of the variable is deemed reliable if Cronbach's alpha coefficient is more significant than 0.70. The result of the reliability test for the instrument of the data is displayed as follows (Table 2):

Table 2. Reliability statistics analysis result of the instrument

Cronbach's Alpha	N of Items
0.753	54

The Cronbach Alpha scored $0.753 > 0.70$ based on the reliability test. The result shows that all questions of this research are reliable and that the instrument could be used in this research.

The data was then tested for classical assumption test to know whether the regression model shows the level of significance and representativeness. In this research, we conducted three tests on that matter: the normality test, heteroskedasticity test, and multicollinearity test. The normality test in this research came from One Sample Kolmogorov-Smirnov. The result of the One-Sample Kolmogorov-Smirnov is displayed in Table 3 as follows:

Table 3. Normality Test Results of the One-Sample Kolmogorov-Smirnov Test

		Unstandardised Residual
N		140
Normal Parameters ^b	Mean	0E-7
	Std. Deviation	6.12326679
	Absolute	0.091
Most Extreme Differences	Positive	0.091
	Negative	-0.069
Kolmogorov-Smirnov Z		1.076
Asymp. Sig. (2-tailed)		0.198
a. Test distribution is Normal.		
b. Calculated from data.		

The result of the normality test in SPSS shows the Asymp. Sig. (2-tailed) of 0.198, which is higher than the α (0.05). The result shows that the data have a normal distribution that fulfils the requirement to conduct normality tests for the regression analysis for statistical tests.

This research employs the Glejser test with the residual absolute score as the dependent variable with the α significance of 5% in the heteroskedasticity test. The criteria for decision-making in the Glejser test is if the significance is above the trust score of 5%, where there is no heteroskedasticity. Table 4 displays the result of the heteroskedasticity from the Glejser test.

Table 4. Heteroscedasticity analysis results using the Glejser test

Type	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.748	4.579		-0.382	0.703
1 Online Attendance System	0.022	0.084	0.029	0.262	0.793
1 Work Discipline	0.096	0.099	0.108	0.968	0.335

a. Dependent Variable: abs_res

The result of the heteroskedasticity in Table 4 provides information that the score of the significance of the online attendance system is 0.793, and work discipline is 0.335. The significance of the independent variables to the absolute residual of the performance is above the trust, where the significance is above 5% (0.05). Therefore, there is no problem with heteroskedasticity in the regression model.

This research conducted the multicollinearity test by analysing the tolerance and VIF (Variance Inflation Factors) on each independent variable. If tolerance > 0.1 and VIF < 10, there is not any multicollinearity of the regression model of the research.

Table 5. Multicollinearity test results

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	22.212	6.971		3.186	0.002		
1 Online Attendance System	0.264	0.128	0.137	2.058	0.042	0.575	1.738
1 Work Discipline	1.606	0.151	0.709	10.632	0.000	0.575	1.738

Table 5 presents the result of the multicollinearity test in SPSS. The online attendance system and work discipline tolerance have the same score of 0.575.

The independent variables' tolerance is higher than (>) 0.1, which means there is no multicollinearity. In addition, the VIF of the independent variable is also 1.738, which is lesser

than (<) 10 (ten), which means there is no multicollinearity. From the data, the tolerance and VIF prove no multicollinearity on the regression model. After fulfilling the classical assumption test, we did the path analysis to test the intervening variables using SPSS. The output of the SPSS using the regression 1 equation model is as follows.

Table 6. Regression 1 Equation Model

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B		Std. Error	Beta	
1	(Constant)	11.659	3.801		3.067	0.003
	Online Attendance System	0.553	0.055	0.652	10.093	0.000

a. Dependent Variable: Work Discipline,

The output of the SPSS gave a beta standardised variable of the online attendance system on the regression 1 equation model score of 0.652 and significance of 0.000. This means that the online attendance system influences Work Discipline.

The second regression model on the SPSS output gave the beta standardised score for the Online Attendance System of 0.137 and a significance of 0.000. For the work discipline, the score is 0.137, with a significance of 0.42. The details can be seen in the following table.

Table 7. Regression 2 Equation Model

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B		Std. Error	Beta	
1	(Constant)	22.212	6.971		3.186	0.002
	Online Attendance System	0.264	0.128	0.137	2.058	0.042
	Work Discipline	1.606	0.151	0.709	10.632	0.000

a. Dependent Variable: Performance

Based on the analysis, online attendance and work discipline significantly influence employee performance. The direct influence of the attendance system on the performance scores is 0.137; meanwhile, the indirect influence could be counted by redirecting the indirect coefficient,

which is $(0.652) \times (0.709) = 0.462$. Since the indirect coefficient is more significant than the direct coefficient, we could conclude that the correlation between coefficients is indirect through the work discipline.

Table 8. Table R Square of Regression 1 Equation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.652 ^a	0.425	0.421	3.47569

a. Predictors: (Constant), Online Attendance System

The Summary Model found the influence of the online attendance system to work has a score of 0.425, which means that online attendance could influence the performance in 42.5%, and the rest (58.5%) are other factors not studied in this research. The online attendance system does not explain the total variance for the work discipline, where the formula of $e^1 = \sqrt{1 - 0.425} = 0.758$ could count as e^1 . Meanwhile, the second regression equation model

can be seen in the Model Summary table below. The data show the influence of the online attendance system and work discipline is 0.649. We could infer that the online attendance system influences the performance of 64.9%, and the remaining 35.1% are other factors not studied in this research. The e^2 The total variance for the work discipline is not explained by the online attendance system, where e^2 could be counted by $e^2 = \sqrt{1 - 0.649} = 0.592$.

Table 9. Table R Square Regression 2 Equation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.806 ^a	0.649	0.644	6.16780

a. Predictors: (Constant), Work Discipline, Online Attendance System

b. Dependent Variable: Performance

Based on the regressions 1 and 2 analysis, the path analysis of the relation between online attendance, work discipline, and performance can be seen in the flowchart below.

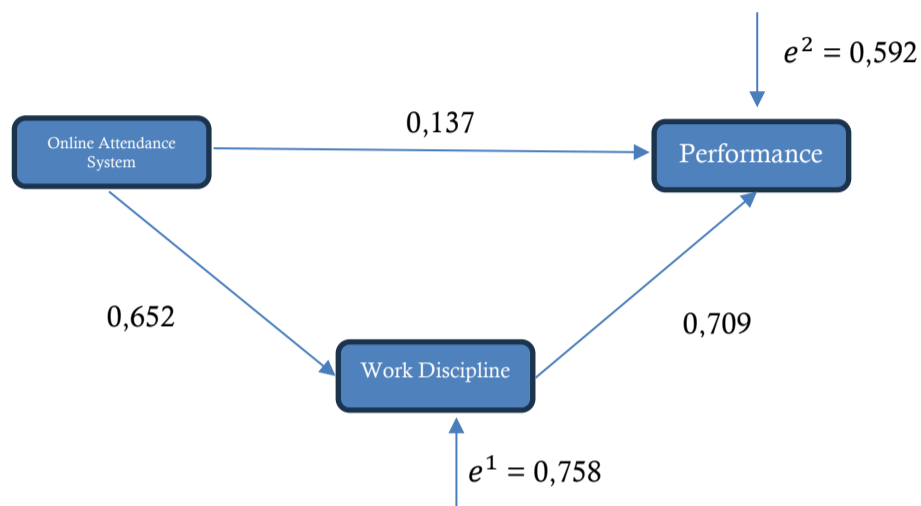


Figure 2. Flowchart of the Relation between Online Attendance System, Work Discipline, and Performance

Table 10. The Summary of Hypothetical Test

Hypothesis	Statement	Result
H1	The online attendance system positively and significantly influences the work performance of the educational staff at UNNES.	Accepted
H2	The online attendance system positively and significantly influences the work discipline of the educational staff at UNNES.	Accepted
H3	Work discipline positively and significantly influences the work performance of the educational staff at UNNES.	Accepted
H4	Online attendance system through work discipline positively and significantly influences the work performance of educational staff at UNNES.	Accepted

DISCUSSION

The first hypothesis assumes that the online attendance system positively and significantly influences the work performance of the educational staff at Universitas Negeri Semarang. The result shows that the implementation of the system had a direct influence of 0.137, which gave a small contribution to the performance. Implementing the electronic system only becomes a factor which could improve performance. According to S. P.

Robbins (2005), two factors can influence employees' performance; capability and motivation. Diamantidis, A. D., and Chatzoglou, P support the idea.

They found that adaptability and intrinsic motivation had the most substantial influence on performance. The other factors, work environment and managerial support, had the most substantial direct and indirect influence (Diamantidis & Chatzoglou 2019). The second hypothesis is that the online attendance system

significantly influences work discipline improvement, evident from the 0.602 contribution score. The online attendance system uses facial recognition and a particular network to support the disciplinary regulation at Universitas Negeri Semarang. The system has a strong influence on work discipline (Kamal et al., 2020)

The third hypothesis shows that work discipline positively and significantly influences the work performance of educational staff in UNNES. The analysis shows that the hypothesis is accepted with a coefficient score of 1.606 and a significance of 0.000. The contribution of the work discipline is 0.709. The result finds that the dominant factor which improves work performance is discipline. Discipline has a significant influence on performance (Kumayza, 2017). Work discipline has a dominant influence on the performance of employees in PT. PLN (Persero) Area / State Electricity Company in Makassar (Agussalim and Mappamtopo 2019). Prayogi, Lesmana and Siregar found that work discipline contributed more than communication to the performance of officers from PDAM / Regional Waterworks (Prayogi & Lesmana, 2019).

Implementing an online attendance system indirectly contributes to work discipline in 0.462. Implementing a computerised system and network and facial recognition improves employees' discipline, which could eventually improve their performance. This research shows that the system directly has a negligible impact on performance. However, the system is a factor that improves discipline, which could also improve employees' performance. The online attendance system could improve civil servants' discipline, affecting their performance (Mawarni & Mukhrijal, 2023).

In this research, work discipline is the main factor in employees' performance at Universitas Negeri Semarang. Implementing an online attendance system has a minor influence on employee performance. The optimisation of working hours, the understanding of regulations and SOP, and the responsibility to complete their work are the indicator which could improve their performance. The online attendance system influences the employees at Universitas Negeri Semarang. The online attendance system and work discipline can significantly impact performance more than merely the online attendance system. Work discipline can mediate the influence of online attendance systems on performance. Work discipline is the most substantial variable influencing employees' performance, and there should be a specific concern about it (Pawirosumarto, Suharno and Sarjana 2017). A higher level of discipline can show a better level of performance of the educational staff (Ferdinandus, 2020).

CONCLUSION AND RECOMMENDATION

According to the research findings, the online attendance system exhibits a relatively small influence on performance, with a coefficient of 0.137. Conversely, the implementation of the online attendance system significantly contributes to work discipline, as indicated by a substantial coefficient of 0.602. Work discipline, in turn, demonstrates a notable impact on performance, registering a coefficient of 0.709. The combined effect of implementing the online attendance system and fostering work discipline indirectly influences performance at a rate of 0.462. This suggests that the performance of educational staff is more significantly influenced when the online attendance system is coupled with work discipline, surpassing the impact of the online attendance system alone.

Based on the discussion and summary, the researchers propose the following suggestions. Firstly, the leadership should enhance employees' discipline by providing motivation and fostering a better work environment to improve overall performance. Secondly, considering the focus of this research on online attendance systems, employee work discipline, and performance, future researchers are encouraged to explore additional variables that could potentially affect employees' performance, thereby expanding the scope and depth of understanding in this domain

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