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## The Effect of Digital Absence and Leadership on Employee Performance through Work Discipline at the Ministry of Religious Affairs, Pasangkayu, West Sulawesi

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### Abstract

*This study aims to analyze the effect of the digital attendance system and leadership on employee performance, with work discipline as a mediating variable at the Ministry of Religious Affairs Office in Pasangkayu Regency, West Sulawesi Province. The research is grounded in the growing need for bureaucratic reform, enhanced employee accountability, and the adoption of digital systems to improve work monitoring and efficiency within government institutions. The expansion of digital public administration highlights the importance of accurate, transparent, and tamper-resistant attendance systems that support reliable employee supervision. At the same time, leadership plays a crucial role in shaping behavioral commitment, strengthening compliance with organizational rules, and encouraging a productive and performance-oriented work environment. A quantitative research method was applied using Structural Equation Modeling–Partial Least Squares (SEM-PLS), with data collected from 142 employees through questionnaires distributed between June and July 2024. The findings reveal that both the digital attendance system and leadership exert a positive and significant influence on employee performance, both directly and indirectly through work discipline. The results further demonstrate that accurate and technology-based attendance mechanisms enhance punctuality and accountability, while effective leadership characterized by communication, role modeling, and motivation strengthens organizational engagement. This study concludes that integrating technological monitoring tools with leadership development is essential for fostering a high-performance organizational culture and advancing modernization within public sector governance. The implications suggest that policymakers should simultaneously prioritize digital infrastructure and leadership capacity-building to sustainably improve employee performance outcomes.*

**Keywords:** Digital Attendance System, Leadership, Work Discipline, Employee Performance, SEM-PLS, Public Sector Management

### Background

The Ministry of Religious Affairs is one of the government institutions responsible for managing essential fields such as education and religion, which directly affect people's lives. The Ministry of Religious Affairs in Pasangkayu, West Sulawesi Province, as part of this institution, faces significant challenges related to human resource management (HRM). One of the main issues faced is employee absenteeism and low work discipline, which can hinder the achievement of organizational goals. Employee performance, which is a key indicator of an organization's success, heavily relies on factors such as an efficient attendance system, good leadership, and strong work discipline.

In the current digital era, many organizations have begun adopting technology to improve efficiency in managing human resources, one of which is the digital attendance system. A digital attendance system enables real-time recording of employee attendance using technologies such as facial recognition, fingerprints, and mobile applications. This system offers various advantages, including higher data accuracy, reducing the possibility of fraud, and facilitating the monitoring of employee attendance (Tukiyat et al., 2024). The implementation of digital attendance systems is also expected to improve employee discipline, which ultimately impacts their performance.

Additionally, leadership within an organization plays a critical role in determining employee performance. Effective leaders are able to provide clear direction, high motivation, and create a supportive work environment.

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Research by Raharjo et al. (2023) shows that good leadership can enhance employee performance by developing a positive work culture. Transformational leadership, which focuses on empowerment and development of individuals, has been proven to increase motivation and employee productivity. In the context of the Ministry of Religious Affairs in Pasangkayu, the leadership style applied by leaders can directly impact employee discipline and performance.

Absenteeism and frequent tardiness among employees at the Pasangkayu Ministry of Religious Affairs have been serious concerns in recent years. High absenteeism and frequent tardiness directly affect individual productivity and the overall performance of the work unit. One of the main causes of this issue is the inefficient manual attendance system, which often opens opportunities for errors in recording or fraud. Previous research by Aprianti (2023) showed that the implementation of an electronic attendance system can improve employee discipline, but there are still challenges in its use, such as technical issues and infrastructure limitations.

Leadership also influences how employees perform tasks and adhere to rules. Leaders who fail to provide clear direction or support for employee development often fail to build strong work discipline. In many cases, ineffective leadership styles may cause employees to be less motivated to work well, ultimately leading to low organizational performance (Munandar et al., 2023).

Most previous studies have focused on the private sector and education, with limited research on the application of digital attendance systems in the public sector. Additionally, research related to leadership often overlooks the role of work discipline as a mediator between leadership and employee performance. Work discipline, an essential factor in ensuring that employees adhere to regulations and timelines, is often neglected in studies of leadership and performance. This study aims to fill that gap by exploring how the combination of digital attendance, effective leadership, and work discipline can interact to improve employee performance at the Ministry of Religious Affairs in Pasangkayu.

The novelty of this research lies in its approach that integrates digital technology with leadership theory in the context of work discipline to improve employee performance in a government institution. Research by Sidik (2024) mentions that the implementation of digital attendance systems can offer solutions to absenteeism and tardiness issues, which have been major barriers to improving performance. In addition, effective and transformational leadership can play an essential role in increasing employee motivation, which in turn will improve work discipline and performance.

The application of technology in attendance management and HRM in government sectors, particularly at the Ministry of Religious Affairs in Pasangkayu, is still very limited. However, by using an effective digital attendance system, organizations can monitor employee attendance more accurately and in real-time, reducing the potential for fraud and improving discipline. Therefore, this research is expected to provide deeper insights into how digital attendance influences employee performance through work discipline and effective leadership.

The digital transformation in the public sector, particularly in digital attendance systems, presents significant opportunities to improve the quality of human resource management. As technology becomes more widespread, leadership that can integrate technology with sound managerial strategies will have a significant impact on fostering a strong work discipline culture. This research contributes importantly to understanding how technology and leadership can work together to enhance employee performance, particularly in the context of government institutions in regions with unique challenges in adopting technology.

Therefore, the objective of this study is to analyze the impact of digital attendance and leadership on employee performance through work discipline at the Ministry of Religious Affairs in Pasangkayu, West Sulawesi Province. This study is expected to provide useful recommendations for policymakers in government institutions to optimize the use of technology in attendance systems, as well as enhance leadership capacity to drive better employee discipline and performance.

### **Research Method**

This research uses a quantitative approach, specifically a causal associative design, to analyze the effect of digital absenteeism and leadership on employee performance through work discipline at the Ministry of Religious Affairs in Pasangkayu, West Sulawesi Province. The study aims to investigate how digital attendance systems and leadership influence employee performance through work discipline as a mediating variable.

### Research Design

The research design is explanatory, which aims to explain the relationship between the variables under study. This design is appropriate for testing hypotheses related to the influence of digital absenteeism and leadership on employee performance, considering work discipline as a mediating variable. The study uses Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) technique to analyze the data. This approach is chosen because it allows for complex modeling of relationships between variables, providing a robust statistical framework for understanding the effects of digital attendance and leadership on employee performance.

### Population and Sample

The population in this study consists of all employees at the Ministry of Religious Affairs in Pasangkayu, West Sulawesi, totaling 149 employees. Since the population is relatively small, a saturated sampling technique is used, where all members of the population are selected as respondents. This approach is often referred to as a census. The total sample for the study is 142 employees who actively participated in the study.

### Data Collection Methods

Data for this study is collected through primary and secondary sources:

**Primary Data:** Primary data is obtained through a structured questionnaire, which is distributed directly to the respondents. The questionnaire is designed to gather information about digital absenteeism, leadership, work discipline, and employee performance. The questions are closed-ended, and respondents are asked to choose their responses based on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

**Secondary Data:** Secondary data is collected from official reports, previous studies, and documentation available at the Ministry of Religious Affairs. These data sources provide additional context and support for the findings from the primary data.

### Variable Definition and Measurement

The study includes four main variables: digital absenteeism, leadership, work discipline, and employee performance. Each variable is measured using established indicators:

**Digital Absenteeism:** Measured by accuracy of attendance data, ease of use of the digital system, data transparency, employee acceptance, and the frequency of tardiness and absenteeism recorded by the system (Rahayu et al., 2022).

**Leadership:** Measured by leadership style (transformational, transactional, situational), communication effectiveness, motivation, support and development, and decision-making involvement (Fazira, 2019).

**Work Discipline:** Measured by adherence to work hours, compliance with organizational rules, punctuality, work productivity, and responses to disciplinary actions (Apriyansyah et al., 2023).

**Employee Performance:** Measured by the quantity and quality of tasks completed, work efficiency, innovation, creativity, and the employee's commitment to the organization (Nasution, 2018).

### Data Analysis Techniques

Data analysis is conducted using the Structural Equation Modeling (SEM) method with the Partial Least Squares (PLS) technique. This technique is chosen because it can handle complex models with multiple variables and relationships. The analysis will focus on:

**Descriptive Analysis:** To provide an overview of the characteristics of the respondents and the distribution of each variable.

**Measurement Model Evaluation:** To assess the validity and reliability of the measurement model, including outer loading, composite reliability, and average variance extracted (AVE).

**Structural Model Evaluation:** To evaluate the structural model, test hypotheses, and determine the relationships between the variables. This includes testing the goodness-of-fit, R-squared, and predictive validity using PLS-SEM.

The statistical tools and software used for data processing include SmartPLS, which is widely used for SEM-PLS analysis. This tool allows for an efficient evaluation of the path model and hypothesis testing.

### Hypothesis Testing

The hypotheses in this study are tested based on the relationships between digital absenteeism, leadership, work discipline, and employee performance. The following hypotheses are proposed:

H1: Digital absenteeism positively and significantly affects work discipline at the Ministry of Religious Affairs in Pasangkayu.  
H2: Leadership positively and significantly affects work discipline at the Ministry of Religious Affairs in Pasangkayu.  
H3: Digital absenteeism positively and significantly affects employee performance at the Ministry of Religious Affairs in Pasangkayu.  
H4: Leadership positively and significantly affects employee performance at the Ministry of Religious Affairs in Pasangkayu.  
H5: Work discipline positively and significantly affects employee performance at the Ministry of Religious Affairs in Pasangkayu.  
H6: Digital absenteeism positively and significantly affects employee performance through work discipline.  
H7: Leadership positively and significantly affects employee performance through work discipline.  
The results of the analysis will either support or reject these hypotheses based on statistical significance and path coefficients.

#### Ethical Considerations

The research follows ethical guidelines for conducting studies involving human participants. Respondents are informed about the purpose of the study, and their participation is voluntary. Confidentiality and anonymity are maintained throughout the research process.

### Result and Discussion

The research aimed to examine the effects of digital absenteeism and leadership on employee performance, with work discipline acting as a mediating variable, at the Ministry of Religious Affairs in Pasangkayu, West Sulawesi Province. This section discusses the results of the analysis and the implications for understanding the role of digital absenteeism, leadership, and work discipline in improving employee performance.

#### Descriptive Statistics of Respondents

A total of 142 employees from the Ministry of Religious Affairs in Pasangkayu participated in the study. The respondents were diverse in terms of gender, age, and job positions, providing a broad representation of the workforce. Table 1 provides a summary of the demographic characteristics of the respondents.

**Table 1: Respondent Demographic Characteristics**

Demographic Variable	Frequency	Percentage (%)
<b>Gender</b>		
Male	80	56.34
Female	62	43.66
<b>Age Group</b>		
20-30 years	35	24.65
31-40 years	50	35.21
41-50 years	42	29.58
51+ years	15	10.56
<b>Job Position</b>		
Structural	5	3.52

<b>Functional</b>	60	42.25
<b>Teaching Staff</b>	35	24.65
<b>Other</b>	42	29.58

Source: Primary Data Processed, 2025

This table shows that the majority of respondents were male (56.34%) and between the ages of 31-40 years (35.21%). The functional staff category was the largest group (42.25%), highlighting the range of positions involved in the study.

### Analysis of Variables

The SEM-PLS model was used to test the hypotheses. The results from the data analysis provide insights into the relationships between the variables: digital absenteeism, leadership, work discipline, and employee performance.

### Digital Absenteeism and Work Discipline

The first hypothesis tested whether digital absenteeism affects work discipline. The analysis showed that digital absenteeism has a positive and significant effect on work discipline ( $\beta = 0.45$ ,  $p < 0.01$ ). This result supports the findings of previous studies, such as those by Aprianti (2023) and Susilo & Abdurrahman (2023), which indicated that digital attendance systems improve the accuracy and transparency of attendance data, thus fostering greater discipline among employees. Digital systems provide real-time data, reducing errors and opportunities for absenteeism, and encouraging employees to adhere more strictly to work hours.

**Table 2: Path Coefficients for Digital Absenteeism on Work Discipline**

Variable	$\beta$ Value	t-Statistic	p-Value
Digital Absenteeism → Work Discipline	0.45	5.22	< 0.01

Source: Primary Data Processed, 2025

The positive impact of digital absenteeism on work discipline aligns with prior research, indicating that when attendance is tracked digitally, employees are more accountable for their presence and punctuality.

### Leadership and Work Discipline

The second hypothesis examined the relationship between leadership and work discipline. The results show that leadership has a positive and significant effect on work discipline ( $\beta = 0.39$ ,  $p < 0.05$ ). This finding is consistent with the research of Munandar et al. (2023), which suggested that leadership styles, particularly transformational leadership, can effectively foster a culture of discipline within an organization.

**Table 3: Path Coefficients for Leadership on Work Discipline**

Variable	$\beta$ Value	t-Statistic	p-Value
Leadership → Work Discipline	0.39	4.85	< 0.05

Source: Primary Data Processed, 2025

Effective leadership motivates employees by providing clear directions, setting expectations, and offering support for personal development. Leaders who encourage transparency and maintain consistent communication are more likely to create an environment where employees adhere to the organization's rules and regulations.

### Work Discipline and Employee Performance

The next hypothesis tested whether work discipline influences employee performance. The analysis revealed that work discipline has a significant positive impact on employee performance ( $\beta = 0.51$ ,  $p < 0.01$ ). This result confirms previous findings, such as those by Nasution (2018), who noted that disciplined employees are more efficient and productive, contributing directly to better performance outcomes.

**Table 4: Path Coefficients for Work Discipline on Employee Performance**

Variable	$\beta$ Value	t-Statistic	p-Value
<b>Work Discipline → Employee Performance</b>	0.51	6.22	< 0.01

Discipline plays a crucial role in enhancing employee performance, as it ensures that employees meet deadlines, maintain high standards, and exhibit consistent productivity.

#### Digital Absenteeism and Employee Performance

The study also tested whether digital absenteeism directly impacts employee performance. The results indicate a positive but indirect effect through work discipline ( $\beta = 0.34$ ,  $p < 0.05$ ). This supports the idea that digital absenteeism improves work discipline, which then leads to better performance, rather than directly influencing performance on its own.

**Table 5: Path Coefficients for Digital Absenteeism on Employee Performance**

Variable	$\beta$ Value	t-Statistic	p-Value
<b>Digital Absenteeism → Employee Performance</b>	0.34	3.98	< 0.05

Source: Primary Data Processed, 2025

The findings highlight the importance of digital absenteeism systems in ensuring discipline, which in turn enhances the overall performance of employees, in line with previous studies (Elisnawati et al., 2023).

#### Leadership and Employee Performance

Leadership was found to positively influence employee performance both directly ( $\beta = 0.43$ ,  $p < 0.01$ ) and indirectly through work discipline ( $\beta = 0.32$ ,  $p < 0.05$ ). This supports research by Pratiwi et al. (2023), who emphasized that leadership not only motivates employees but also creates an environment where they are disciplined and perform optimally.

**Table 6: Path Coefficients for Leadership on Employee Performance**

Variable	$\beta$ Value	t-Statistic	p-Value
<b>Leadership → Employee Performance</b>	0.43	5.10	< 0.01
<b>Leadership → Work Discipline → Employee Performance</b>	0.32	4.25	< 0.05

Source: Primary Data Processed, 2025

This result suggests that leadership influences employee performance by fostering a disciplined work environment, thereby improving overall organizational outcomes.

#### Discussion

The results of this study emphasize the crucial role of digital absenteeism and leadership in enhancing employee performance through improved work discipline. The findings are consistent with the literature, which highlights that digital attendance systems improve accuracy, reduce absenteeism, and encourage timely attendance (Tukiyat et al., 2024). Moreover, leadership's influence on work discipline supports the argument that effective leadership can shape employee behaviors, encourage discipline, and ultimately enhance performance (Raharjo et al., 2023).

Digital absenteeism is a key factor in building a disciplined workforce, as it provides reliable data for monitoring employee attendance and performance. Furthermore, strong leadership plays a pivotal role in ensuring that employees remain motivated, disciplined, and aligned with the organizational goals, thereby improving performance.

The study also confirms that work discipline mediates the relationship between both digital absenteeism and leadership on employee performance. This finding highlights that while digital absenteeism and leadership have direct effects on employee performance, their impact is amplified when employees are disciplined and adhere to organizational rules and expectations.

## Conclusion

This study aimed to examine the impact of digital absenteeism and leadership on employee performance, with work discipline as a mediating variable, at the Ministry of Religious Affairs in Pasangkayu, West Sulawesi Province. The findings reveal several important conclusions about the interplay of these variables in improving employee performance.

First, digital absenteeism has a significant positive effect on work discipline. The implementation of digital attendance systems increases the accuracy and transparency of attendance data, reducing absenteeism and improving punctuality among employees. This result confirms the findings of previous studies, indicating that technology-driven attendance systems are an effective tool in promoting discipline in the workplace.

Second, leadership plays a crucial role in fostering work discipline. Effective leadership, particularly transformational leadership, motivates employees and sets clear expectations, creating an environment where employees are more likely to adhere to organizational rules and regulations. The positive impact of leadership on work discipline reinforces the notion that leadership style directly influences the work behavior of employees.

Third, work discipline was found to have a significant positive impact on employee performance. Disciplined employees are more productive, meet deadlines, and perform at higher standards, contributing directly to the overall performance of the organization. This aligns with previous research showing that work discipline is a critical factor in enhancing employee efficiency and output.

Finally, both digital absenteeism and leadership indirectly influence employee performance through work discipline. The study highlights the importance of integrating technology in attendance systems and fostering effective leadership to create a disciplined workforce, ultimately leading to better employee performance.

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