



The Effect of a Digital-Based Attendance Information System and Work Motivation on Teachers' Work Discipline

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Abstract: This study is situated within the discourse of educational management, particularly teacher work discipline in relation to the use of digital-based attendance information systems and work motivation. The research problem is grounded in the continued presence of delays in task completion, suboptimal lesson planning, delayed implementation of evaluation, and irregular teacher attendance in school activities. This study aims to analyze the effect of digital-based attendance information systems and work motivation on teacher work discipline at public senior high schools in Kulim District, Pekanbaru, both partially and simultaneously. This research employed a quantitative approach using a survey method. Data were collected through questionnaires distributed to 129 teachers and educational staff at SMAN 10 Pekanbaru and SMAN 11 Pekanbaru using a census technique. The novelty of this study lies in its integrated examination of technological and psychological factors in explaining teacher work discipline, whereas previous studies have generally discussed digital attendance systems and work motivation separately. The results show that the digital-based attendance information system has a positive and significant effect on teacher work discipline, with a regression coefficient of 0.333. Work motivation also has a positive and significant effect, with a stronger regression coefficient of 0.601. Simultaneously, both variables have a significant effect, with an Fcount value of 42.990 and a contribution of 40.6%. Academically, these findings strengthen educational management studies by showing that teacher discipline is not only shaped by technology-based monitoring, but also by motivational factors that drive professional responsibility. Therefore, the development of teacher work discipline requires an integrated management approach that combines effective digital supervision with the strengthening of work motivation.

Keyword: Digital-Based Attendance Information System, Work Motivation, Teacher Work Discipline.

Abstrak: Penelitian ini berada dalam diskursus manajemen pendidikan, khususnya mengenai disiplin kerja guru dalam kaitannya dengan penggunaan sistem informasi absensi berbasis digital dan motivasi kerja. Permasalahan penelitian dilatarbelakangi oleh masih ditemukannya keterlambatan penyelesaian tugas, kurang optimalnya perencanaan pembelajaran, keterlambatan pelaksanaan evaluasi, serta ketidakteraturan kehadiran guru dalam kegiatan sekolah. Penelitian ini bertujuan untuk menganalisis pengaruh sistem informasi absensi berbasis digital dan motivasi kerja terhadap disiplin kerja guru di SMA Negeri se-Kecamatan Kulim, Pekanbaru, baik secara parsial maupun simultan. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei. Data dikumpulkan

melalui angket yang disebarakan kepada 129 guru dan tenaga kependidikan di SMAN 10 Pekanbaru dan SMAN 11 Pekanbaru dengan menggunakan teknik sensus. Kebaruan penelitian ini terletak pada pengujian secara terpadu antara faktor teknologi dan faktor psikologis dalam menjelaskan disiplin kerja guru, sementara penelitian sebelumnya umumnya membahas sistem absensi digital dan motivasi kerja secara terpisah. Hasil penelitian menunjukkan bahwa sistem informasi absensi berbasis digital berpengaruh positif dan signifikan terhadap disiplin kerja guru dengan koefisien regresi sebesar 0,333. Motivasi kerja juga berpengaruh positif dan signifikan dengan koefisien regresi yang lebih kuat, yaitu sebesar 0,601. Secara simultan, kedua variabel berpengaruh signifikan dengan nilai Fhitung sebesar 42,990 dan kontribusi sebesar 40,6%. Secara akademik, temuan ini memperkuat kajian manajemen pendidikan dengan menunjukkan bahwa disiplin kerja guru tidak hanya dibentuk oleh pengawasan berbasis teknologi, tetapi juga oleh faktor motivasional yang mendorong tanggung jawab profesional. Oleh karena itu, pengembangan disiplin kerja guru memerlukan pendekatan manajemen yang terpadu melalui penggabungan antara pengawasan digital yang efektif dan penguatan motivasi kerja.

Kata kunci : Sistem Informasi Absensi Berbasis Digital, Motivasi Kerja, Disiplin Kerja Guru

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Introduction

Education plays a strategic role in developing the quality of human resources, while teachers serve as the primary actors in ensuring the quality of the teaching and learning process. (Hidayat, 2020) Professional teachers are expected not only to possess strong pedagogical competence and mastery of subject matter but also to demonstrate responsibility, exemplary conduct, ethical behavior, and consistency in carrying out their professional duties. (Mulyasa, 2021) Teacher professionalism is further reflected in the ability to conduct teaching and learning activities in an orderly, creative, and responsible manner. Within the context of educational management, teachers' work discipline constitutes a fundamental aspect, as it is closely related to punctuality, accountability, compliance with institutional regulations, and consistency in fulfilling professional responsibilities. (Hasibuan, 2012) argues that work discipline reflects an individual's compliance with organizational regulations. (Sutrisno, 2016) explains that discipline is also associated with an individual's willingness and responsibility in carrying out their duties. (Aritonang, 2015) emphasizes that good work discipline is associated with improvements in the quality of task implementation and teachers' performance.

The advancement of information technology has driven changes in school governance, including the implementation of digital-based attendance information systems. According to (Jogiyanto, 2017), is an integrated set of components used to collect, process, store, and provide information to support organizational activities. Meanwhile, (Laudon & Laudon, 2020) states that information systems also play a role in supporting organizational operations and facilitating more effective decision-making. In managing teachers' attendance, digital attendance systems, such as fingerprint, QR code, facial recognition, GPS, and RFID technologies, are considered

capable of recording attendance in real time with accuracy and transparency while reducing the risk of errors and data manipulation. According to (Widodo, 2017) The implementation of digital attendance systems can also improve the efficiency and accuracy of attendance data management compared to manual recording. In recent years, studies on digital attendance systems have indicated that attendance technology can enhance administrative effectiveness and work discipline. (Purwanti, 2023) shows that digital attendance systems have a positive effect on teachers' work discipline. (Farida & Hartono, 2016) also found that the use of fingerprint attendance systems has a significant effect on teachers' work discipline. These findings are further supported by (Hanifah et al., 2022), who demonstrated that the use of fingerprint attendance systems has a significant effect on teachers' work discipline, as well as (Maulidatul K & Antariksa, 2021), who found that the implementation of electronic attendance systems supports the improvement of teachers' work discipline. Furthermore, (Giery et al., 2025) found that employee attendance information systems can improve the effectiveness of attendance recording and support teachers' work discipline.

Nevertheless, previous studies on digital attendance systems have primarily viewed the technology as an administrative tool for recording attendance and improving data accuracy. The implementation of such technology may also not operate optimally if users lack adequate understanding and skills. (Gunawan et al., 2024) shows that training in the use of digital attendance systems is necessary to enhance users' competence while encouraging changes in teachers' disciplinary behavior. Thus, digital attendance systems do not automatically foster work discipline unless they are supported by users' readiness and individual internal factors. Technology can strengthen supervisory functions; however, it does not necessarily cultivate teachers' awareness, responsibility, and work commitment comprehensively. This limitation indicates that technology-based approaches need to be examined alongside psychological factors that promote disciplined behavior from within teachers themselves.

In addition to digital attendance systems, work motivation is also an important factor influencing teachers' work discipline. Work motivation refers to the internal and external drives that encourage individuals to perform their duties responsibly in accordance with organizational goals. Teachers with high work motivation tend to demonstrate stronger commitment to completing their responsibilities, maintaining punctual attendance, planning instruction, and conducting evaluations in an orderly manner. Previous studies have shown that intrinsic motivation, such as job satisfaction and achievement, as well as extrinsic motivation, such as rewards and incentives, are closely associated with work discipline. (Nada et al., 2022) also emphasizes that teachers' work motivation has a direct relationship with discipline in instructional activities and the completion of administrative duties.

However, studies on work motivation have generally examined it separately from digital-based monitoring systems. Consequently, the relationship between technology as an external control mechanism and work motivation as an internal driving force has not been extensively explored in an integrated manner within the context of educational management. In fact, teachers' work discipline is an

organizational behavior influenced not only by monitoring systems but also by professional awareness, achievement motivation, rewards, and support from the work environment. This conceptual gap is important to address because schools require a discipline management model that emphasizes not only administrative compliance but also the psychological and managerial dimensions of teachers.

Although digital attendance systems and work motivation enhancement programs have been implemented, preliminary observations and interviews at SMAN 11 Pekanbaru revealed a gap between school policies and teachers' work discipline practices. The identified issues included delays in completing administrative tasks, suboptimal instructional planning, delays in preparing evaluations and assessments, uneven distribution of responsibilities, and irregular attendance at school meetings. These findings indicate that the implementation of digital attendance technology alone does not fully ensure teachers' work discipline unless it is supported by work motivation and professional commitment.

Based on these gaps, this study aims to analyze the effects of a digital-based attendance information system and work motivation on teachers' work discipline in public senior high schools across Kulim District, Pekanbaru, both partially and simultaneously. The novelty of this study lies in the integrated examination of two factors—digital attendance technology and work motivation—in explaining teachers' work discipline within the context of public senior high schools. This study is expected to contribute to the advancement of educational management, particularly in strengthening discipline management through the integration of technology and human resource management. The hypotheses of this study are as follows: (1) the digital-based attendance information system has a significant effect on teachers' work discipline; (2) work motivation has a significant effect on teachers' work discipline; and (3) the digital-based attendance information system and work motivation simultaneously have a significant effect on teachers' work discipline.

Conceptually, this study is expected to strengthen the field of educational management by demonstrating that teachers' work discipline should be understood as the result of the interaction between technology-based managerial systems and teachers' motivational factors. Therefore, the contribution of this article extends beyond examining the relationships among variables to proposing a broader perspective that improving teachers' work discipline requires an integrated management approach through the strengthening of digital monitoring systems alongside the enhancement of work motivation. The hypotheses of this study are as follows: (1) the digital-based attendance information system has a significant effect on teachers' work discipline; (2) work motivation has a significant effect on teachers' work discipline; and (3) the digital-based attendance information system and work motivation simultaneously have a significant effect on teachers' work discipline.

Method

This study employed a quantitative approach using a survey method. The research was conducted at SMAN 10 Pekanbaru and SMAN 11 Pekanbaru from December 2025 to January 2026. The study involved two independent variables, namely the digital-based attendance information system (X_1) and work motivation (X_2), and one dependent variable, namely teachers' work discipline (Y). The study

aimed to examine the effects of each independent variable on teachers' work discipline, both partially and simultaneously.

The research participants consisted of teachers and educational staff at SMAN 10 Pekanbaru and SMAN 11 Pekanbaru who were involved in the use of the digital-based attendance information system. The study population comprised 129 participants, including 59 from SMAN 10 Pekanbaru and 70 from SMAN 11 Pekanbaru. A total sampling technique was employed, whereby all members of the population were included as the research sample. This sampling technique was selected to ensure that the data comprehensively represented the work discipline of teachers and educational staff in both schools.

Data were collected through questionnaires, observations, and documentation. The questionnaire served as the primary research instrument and employed a five-point Likert scale to measure respondents' perceptions of the digital-based attendance information system, work motivation, and teachers' work discipline. The response categories ranged from strongly disagree to strongly agree, with scores ranging from 1 to 5. Higher scores indicated more positive perceptions of the measured variables.

The research instrument was developed through several stages. First, the operational definition of each variable was established based on the research objectives. Second, an instrument blueprint was developed according to the indicators of each variable. Third, the indicators were translated into questionnaire items. Finally, the validity and reliability of the instrument were tested before the main analysis. This procedure was undertaken to ensure that the instrument was aligned with the research objectives and capable of measuring the variables consistently.

The indicators of the digital-based attendance information system included system usability, attendance recording speed, attendance data accuracy, transparency of attendance reports, and the system's ability to support disciplinary monitoring. The indicators of work motivation included responsibility at work, achievement motivation, enthusiasm for carrying out duties, recognition of performance, and support from the work environment. Meanwhile, the indicators of teachers' work discipline included punctuality, compliance with school regulations, regular attendance at school activities, responsibility for completing assigned tasks, and consistency in preparing lesson plans and conducting assessments.

Each variable was measured using 20 questionnaire items. The validity test indicated that 19 items for each variable were valid, while one item was found to be invalid and was excluded from further analysis. Reliability was assessed using Cronbach's Alpha. The reliability coefficients were 0.842 for the digital-based attendance information system, 0.792 for work motivation, and 0.810 for teachers' work discipline. Therefore, all research instruments were considered reliable, as each Cronbach's Alpha coefficient exceeded the acceptable threshold of 0.70.

Data analysis was performed using SPSS version 25.0. The analytical procedures included validity testing, reliability testing, normality testing, linearity testing, multicollinearity testing, heteroscedasticity testing, simple linear regression analysis, multiple linear regression analysis, the *t*-test, the *F*-test, and the coefficient

of determination. The normality test was conducted to determine whether the data for each variable were normally distributed, while the linearity test was used to verify the existence of a linear relationship between the independent and dependent variables.

Multicollinearity testing was conducted to determine whether excessive correlations existed among the independent variables in the multiple regression model. The criteria applied were a tolerance value greater than 0.10 and a variance inflation factor (VIF) value below 10. If both criteria were satisfied, the regression model was considered free from multicollinearity. Subsequently, heteroscedasticity was examined using the Glejser test by evaluating the significance values. A significance value greater than 0.05 indicated that the regression model did not exhibit heteroscedasticity.

Simple linear regression analysis was employed to examine the partial effect of the digital-based attendance information system on teachers' work discipline and the partial effect of work motivation on teachers' work discipline. Multiple linear regression analysis was used to examine the simultaneous effects of the digital-based attendance information system and work motivation on teachers' work discipline. The *t*-test was conducted to determine the significance of the partial effect of each independent variable, whereas the *F*-test was used to assess the significance of their simultaneous effects. Finally, the coefficient of determination was calculated to determine the extent to which the digital-based attendance information system and work motivation explained the variance in teachers' work discipline.

Results and Discussion

Results

Descriptive Statistics of the Research Variables

This study involved 129 respondents consisting of teachers and educational staff from SMAN 10 Pekanbaru and SMAN 11 Pekanbaru. The descriptive statistical analysis indicated that all three research variables exhibited relatively favorable score distributions. The digital-based attendance information system variable had a mean score of 76.186 with a standard deviation of 5.185. The work motivation variable had a mean score of 76.690 with a standard deviation of 5.392. Meanwhile, the teachers' work discipline variable had a mean score of 76.853 with a standard deviation of 5.128. The relatively similar mean scores across the three variables indicate that respondents' perceptions of the digital-based attendance information system, work motivation, and teachers' work discipline were at relatively comparable levels.

Table 1. Descriptive Statistics

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Digital-Based Attendance Information System	129	76.186	5.185	59	90
Work Motivation	129	76.690	5.392	58	90

Teachers' Work Discipline	129	76.853	5.128	58	90
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The categorization results indicate that the majority of respondents were classified in the moderate category. The digital-based attendance information system variable was categorized as moderate for 75.97% of respondents, work motivation for 78.30%, and teachers' work discipline for 78.29%. These findings indicate that the implementation of digital attendance systems, work motivation, and teachers' work discipline has been relatively well established but has not yet reached an optimal level. A proportion of respondents remained in the low category, accounting for 15.50% for the digital-based attendance information system, 12.40% for work motivation, and 10.85% for teachers' work discipline. These results suggest that further improvements are still needed, particularly in enhancing system effectiveness, strengthening work motivation, and improving the consistency of teachers' work discipline.

Table 2. Categories of the Research Variables

Variable	Low	Moderate	High
Digital-Based Attendance Information System	15.50%	75.97%	8.53%
Work Motivation	12.40%	78.30%	9.30%
Teachers' Work Discipline	10.85%	78.29%	10.85%

Assumption Test Results

The normality test was conducted using the Kolmogorov-Smirnov test. The results indicated significance values of 0.087 for the digital-based attendance information system, 0.102 for work motivation, and 0.100 for teachers' work discipline. Since all significance values were greater than 0.05, the data for all three variables were considered to be normally distributed. Furthermore, the linearity test showed that the relationship between teachers' work discipline and the digital-based attendance information system had a deviation from linearity value of 0.103, while the relationship between teachers' work discipline and work motivation had a deviation from linearity value of 0.515. Because both values exceeded 0.05, the relationships among the variables were considered linear and therefore met the assumptions required for regression analysis.

Table 3. Assumption Test Results

Assumption Test	Variable	Significance Value	Interpretation
Normality	Digital-Based Attendance Information System	0.087	Normal
Normality	Work Motivation	0.102	Normal
Normality	Teachers' Work Discipline	0.100	Normal
Linearity	Teachers' Work Discipline × Digital-Based Attendance Information System	0.103	Linear

Linearity	Teachers' Work Discipline × Work Motivation	0.515	Linear
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Hypothesis Testing Results

The simple linear regression analysis showed that the digital-based attendance information system had a positive and significant effect on teachers' work discipline. The regression coefficient of 0.333 with a significance value of 0.000 indicates that better implementation of the digital attendance system is associated with higher levels of teachers' work discipline. The resulting regression equation was $Y = 51.516 + 0.333X$. Therefore, the first hypothesis was accepted. These findings suggest that the digital attendance system can serve as an effective monitoring tool to assist schools in improving teachers' punctuality and attendance consistency.

The simple linear regression analysis also revealed that work motivation had a positive and significant effect on teachers' work discipline. The regression coefficient of 0.601 with a significance value of 0.000 indicates that work motivation has a stronger partial effect than the digital-based attendance information system. The resulting regression equation was $Y = 30.774 + 0.601X$. Therefore, the second hypothesis was accepted. This finding implies that higher levels of teachers' work motivation are associated with higher levels of work discipline, as reflected in task performance, punctuality, and compliance with school regulations.

The multiple linear regression analysis demonstrated that the digital-based attendance information system and work motivation jointly had a significant effect on teachers' work discipline. The *F*-test yielded an *F* value of 42.990 with a significance value of 0.000. The coefficient of determination (R^2) was 0.406, indicating that the two independent variables jointly explained 40.6% of the variance in teachers' work discipline, while the remaining 59.4% was attributable to factors beyond the scope of this study. The resulting multiple regression equation was $Y = 33.815 + 0.103X_1 + 0.663X_2$.

The magnitude of the simultaneous effect was also evaluated using the effect size (f^2), calculated as $f^2 = R^2 / (1 - R^2)$. Based on an R^2 value of 0.406, the calculated f^2 was 0.683. This value indicates that the combined effect of the digital-based attendance information system and work motivation on teachers' work discipline falls within the strong effect category. Thus, both variables demonstrated substantial explanatory power regarding variations in teachers' work discipline.

Based on the regression coefficients, work motivation emerged as the more dominant predictor of teachers' work discipline compared with the digital-based attendance information system.

Table 4. Hypothesis Testing Results

Hypothesis	Relationship	Coefficient	Sig.	Interpretation
H1	Digital-based attendance information system → Teachers' work discipline	0.333	0.000	Significant
H2	Work motivation → Teachers' work discipline	0.601	0.000	Significant
H3	Digital-based attendance information system and work	$R^2 = 0.406$	0.000	Significant

	motivation → Teachers' work discipline			
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Discussion

The findings of this study indicate that the digital-based attendance information system has a positive and significant effect on teachers' work discipline. These findings suggest that the better the implementation of the digital attendance system, the higher the level of teachers' work discipline. Conceptually, the digital attendance system functions as a technology-based management tool that enables schools to record attendance more accurately, transparently, and systematically. The digitalization of attendance provides schools with more objective attendance records, thereby allowing teacher discipline to be monitored in a more systematic manner. These findings are consistent with the principles of management information systems, which view technology as a means of enhancing organizational efficiency, accuracy, transparency, and accountability. Within the school context, the digital attendance system serves not only as an attendance recording tool but also as an administrative control mechanism that encourages teachers to comply with attendance regulations (Apriyanto et al., 2025; Handayani et al., 2025). This finding is also consistent with previous studies demonstrating that electronic attendance systems improve work discipline through more accurate attendance records and more structured monitoring.

Nevertheless, the influence of the digital-based attendance information system should not be regarded as the sole determinant of teachers' work discipline. Digital systems primarily function as external control mechanisms by recording attendance, lateness, and regularity of attendance. Although technology can monitor behavior, it cannot always directly foster professional awareness (Ghimire & Rana, 2023; Syahidi et al., 2025). Therefore, while digital attendance systems are effective in strengthening administrative compliance, their influence remains limited unless accompanied by teachers' internal motivation to perform their professional responsibilities responsibly.

The findings also demonstrate that work motivation has a positive and significant effect on teachers' work discipline. The regression coefficient for work motivation is greater than that of the digital-based attendance information system, indicating that work motivation is the more dominant factor in explaining teachers' work discipline (Darojah et al., 2025; Rokhmawati et al., 2025). This finding can be understood because teachers' discipline extends beyond physical attendance at school and encompasses responsibilities such as preparing instructional plans, conducting assessments, completing administrative duties, participating in school activities, and maintaining consistency in fulfilling professional responsibilities. From a critical perspective, work motivation exerts a stronger influence because it is closely associated with the internal dimension of teachers' behavior. Teachers with high levels of work motivation are more likely to demonstrate discipline not merely because they are monitored but because they possess professional awareness, responsibility, commitment, and a strong desire to perform their duties effectively. Consequently, work motivation encourages teachers to perceive discipline as an

integral component of their professional responsibilities rather than merely as a response to external monitoring. Accordingly, work motivation influences broader aspects of discipline than digital attendance systems, including diligence, compliance with assigned responsibilities, work initiative, and consistency in fulfilling academic obligations.

These findings indicate that technology and motivation exert different types of influence. The digital-based attendance information system functions as an external control mechanism that strengthens administrative order, whereas work motivation serves as an internal driving force that fosters teachers' awareness and responsibility. This distinction explains why work motivation exerts a more dominant influence than the digital-based attendance information system. In other words, technology can assist schools in monitoring discipline, whereas work motivation determines the extent to which teachers internalize discipline as an essential component of professional behavior.

Simultaneously, the digital-based attendance information system and work motivation have a significant effect on teachers' work discipline. The coefficient of determination (R^2) of 40.6% indicates that these two variables explain a substantial proportion of the variation in teachers' work discipline. Moreover, the effect size (f^2) of 0.683 indicates that the proposed research model has a strong explanatory effect. These findings confirm that teachers' work discipline is influenced not only by technology-based monitoring systems but also by motivational factors inherent within teachers themselves.

The theoretical implication of this study is that educational management should conceptualize teachers' work discipline as the outcome of the interaction between technology-based managerial systems and the psychological characteristics of human resources. Teachers' work discipline cannot be adequately explained solely through an administrative control perspective but should also be understood through a motivational perspective that emphasizes professional awareness, commitment, recognition, responsibility, and support from the work environment (Azizah et al., 2024). Accordingly, this study broadens the perspective of educational management by demonstrating that technology-based monitoring and work motivation are not independent factors but complementary components in shaping teachers' disciplinary behavior.

The conceptual contribution of this study lies in strengthening a teacher discipline management model that integrates technological and psychological dimensions. Unlike previous studies that have focused exclusively on either the effectiveness of digital attendance systems or work motivation, this study demonstrates that improving teachers' work discipline requires an integrated approach. Digital attendance systems provide an objective foundation for monitoring, whereas work motivation facilitates the internalization of discipline in the performance of professional responsibilities. Therefore, within educational management theory, teachers' work discipline can be understood as the product of school governance that integrates technological control, managerial leadership, and the enhancement of human resource motivation.

From a practical perspective, these findings suggest that schools should not rely solely on digital attendance systems to improve teachers' work discipline. Such

systems should be complemented by strategies to strengthen work motivation, including recognition and reward programs, leadership support, professional development opportunities, healthy organizational communication, and a supportive work environment. The integration of technology-based attendance management with initiatives to enhance work motivation represents an important strategy for establishing a sustainable culture of discipline within schools.

Conclusion

This study demonstrates that the digital-based attendance information system has a positive and significant effect on teachers' work discipline, indicating that better implementation is associated with higher levels of teachers' work discipline. Work motivation also has a significant effect, with a greater contribution than the digital-based attendance information system, making it the dominant factor influencing teachers' work discipline. Collectively, these two variables explain 40.6% of the variation in teachers' work discipline, while the remaining 59.4% is attributable to other factors beyond the scope of this study.

Based on these findings, optimizing the implementation of digital attendance systems and strengthening teachers' work motivation constitute important strategies for improving work discipline. Enhancing the stability and usability of digital attendance systems, together with developing motivational programs that emphasize recognition, appreciation, and teacher empowerment, can promote greater punctuality, responsibility, and consistency in carrying out professional duties.

Furthermore, this study recommends that school policies integrate technology-based management and motivational strategies simultaneously to achieve optimal outcomes. Future research should also consider additional factors, such as leadership, teacher interactions, and psychosocial aspects, and should employ longitudinal designs to examine the long-term effects of digital attendance systems and work motivation on teachers' work discipline.

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