Supervision and Fingerprint Attendance as Dominant Factors in Enhancing Work Discipline

Fymelia Nova Arifeny[1] , Sih Darmi Astuti[2]*

[1,2] Departement of Management, Faculty of Economics and Business,
University of Dian Nuswantoro , Indonesia

Email Corresppondence: astuti_sda@dsn.dinus.ac.id

Abstract : *This research analyzes the influence of supervision, compensation, and the application of fingerprint attendance on work discipline at PT. Chocomory Cokelat Persada, Semarang Regency, a part of the Cimory Group. Although previous studies have highlighted the importance of these factors, there remains a gap in understanding their complex interactions. This study aims to fill this gap by examining the simultaneous effects of supervision, compensation, and fingerprint attendance on work discipline. Utilizing a quantitative approach, in determining the sample using the purposive sampling method. Data were collected from 125 employees from production operator and warehouse operator through online google form questionnaire and analyzed using Structural Equation Modeling (SEM) with SmartPLS 4. The findings reveal that supervision significantly improves work discipline. The implementation of fingerprint attendance systems positively impacts work discipline. Conversely, compensation does not significantly effect on work discipline. These results suggest that effective supervision and advanced attendance systems are crucial for fostering a disciplined workforce, whereas compensation alone may not be as impactful. The study provides valuable insights for resource management practitioners and researchers, offering strategies to enhance work discipline and improve organizational success.*

Keywords : *supervision, fingerprint attendance, compensation, work discipline, quantitative method, smartpls 4.0.*

1. INTRODUCTION

Discipline is a trait that many people expect, and companies also want to have in every employee or their work. This is because discipline can help the company's operations run smoothly as expected. Mimortinnilawati *et al.* (2023) explained that discipline is considered a method or tool for an organization to maintain its existence, ensuring the implementation of work in accordance with a predetermined plan. Work discipline according to Milliana *et al.* (2023) is the awareness of and willingness to abide by all corporate policies as well as relevant social standards. This awareness is the mindset of a person who freely complies with the law since they are aware of their obligations. Work discipline can be evaluated by looking at how well employees follow corporate policies, how they present themselves, and how accountable they are for fixing errors.

Good work discipline will help the company achieve the best results. Employees with strong discipline will foster a more favorable work atmosphere, which will benefit all operations, according to Mendropa studies, Dwianto *et al.* (2023). Another opinion according to Prata Feres *et al.* (2024) explained that discipline refers more to the ability of

workers to organize their own working time with the aim of ensuring their survival. Therefore, every company or organization has the expectation that it's employees will comply with the rules. In a pre-interview with the HRGA staff of PT. Chocomory Cokelat Persada, Semarang Regencey, a phenomenon regarding work discipline problems faced by the company was obtained. For example, sometimes there are employees who. Still forget their entry or exit times, do not come to work without permission, forget to leave their cellphones at work during working hours, do not bring identity cards, and enter the production room not according to procedure. This makes the company must pay attention to how important employee discipline is, because the process, product quality, and work safety. To overcome this problem, companies usually provide training and coaching to undisciplined employees by making a statement or agreement.
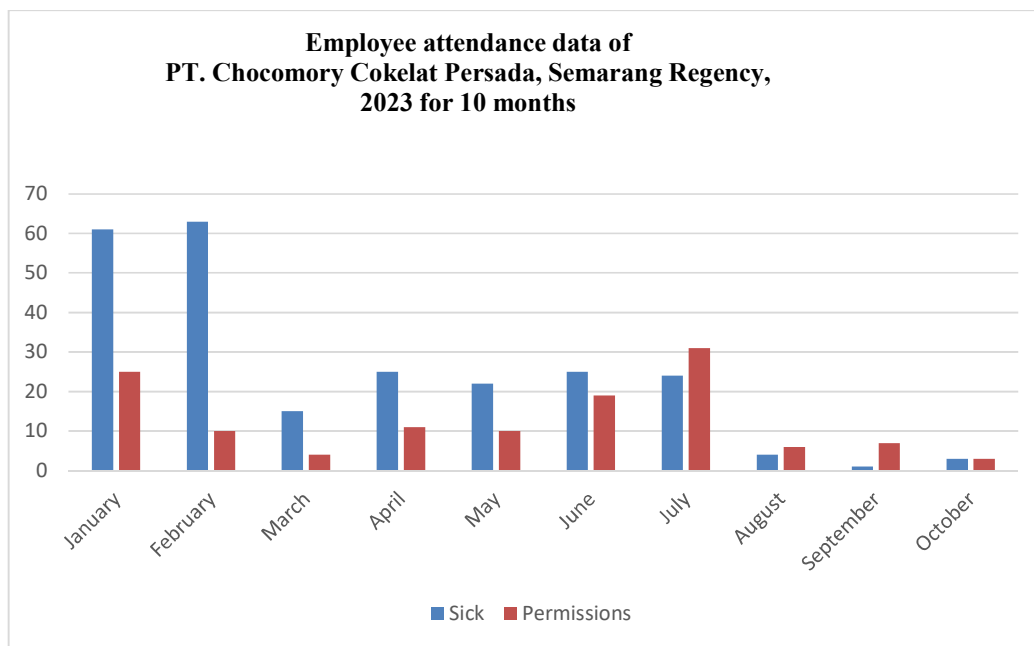

Figure 1. Employee Attendance Data

(Source: PT. Chocomory Cokelat Persada Semarang Regency)

The employee attendance data from 2023 and the initial months of 2024 provides insight into these issues. In 2023, the company had 176 employees. Over the ten months of data provided, the company recorded 243 sick days and 126 permissions, totaling 369 absences. Sick days constituted 65.85% of the total absences, while permissions accounted for 34.15%. The high number of sick days suggests potential health issues among employees or possible misuse of sick leave policies. The significant number of permissions indicates that

a considerable portion of employees needed to take time off for various reasons, which could also be linked to issues of planning and time management.
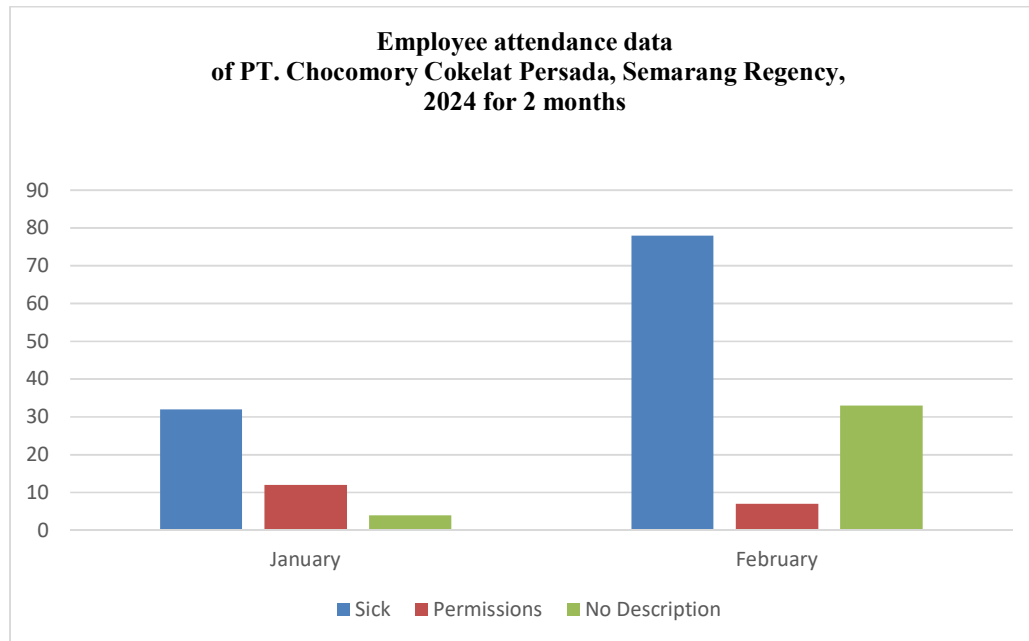

Figure 2. Employee Attendance Data

(Source: PT. Chocomory Cokelat Persada Semarang Regency)

The data for 2024 further highlights these disciplinary challenges. With 125 employees in the first two months of the year, there were 110 sick days, 19 permissions, and 37 absences labeled as "No Description," totaling 166 absences. Sick days made up 66.27% of the total absences, permissions accounted for 11.45%, and "No Description" absences constituted 22.29%. The high number of sick days, particularly in February, and the significant number of "No Description" absences suggest emerging issues that need immediate attention.

Discipline, in this context, relates to employees adhering to company policies and maintaining regular attendance. The substantial number of sick days may indicate either genuine health concerns or a misuse of sick leave, pointing to a potential lack of discipline in following health-related policies. The permissions data suggests that employees might not be managing their time effectively or are not fully committed to their work schedules. The "No Description" absences are particularly alarming, as they reflect a lack of accountability and possible reporting issues, further underscoring the need for improved disciplinary measures.

Enhancing employee knowledge and accountability for their job requires strategic actions, such as enforcing stricter attendance policies, laying out explicit consequences, and fostering greater communication and understanding of the value of discipline in accomplishing organizational objectives. Dwianto *et al.* (2023) stated that, there are 5 indicators of work discipline, attendance, compliance with work rules, compliance with work standards, high level of alertness, and work ethically.

In a previous study conducted by Sari & Dewi (2020) the results showed that the implementation of integrated internal supervision is a key factor in improving work discipline. These findings provide a strong foundation for work discipline improvement strategies at PT. Chocomory Cokelat Persada, Semarang Regency. By understanding the latest trends and practice in human resource management, companies can optimize work discipline. Hakim & Afriany (2023), stated that good supervision can build a positive relationship between employees and the company, creating a productive and result-oriented work environment. Establishing an equitable and clear remuneration scheme may serve as a motivator for staff members to consistently maintain high attendance rates. According to Hajiali *et al.* (2022), the better the compensation provided, the higher the employee discipline. In addition, good compensation can also help companies in retaining qualified employees. Compensation is very important in helping to advance employee discipline, employees must carry out job descriptions and responsibilities according to their work and experience. The use of fingerprint technology as an attendance tool can also be an effective solution to ensure accurate employee attendance and reduce the potential for human error. An efficient way to keep an eye on staff members is through fingerprint-based attendance (Dwianto *et al.*, 2023).

This research will analyze the influence of supervision, compensation, and the application of fingerprints as attendance on employee discipline at PT. Chocomory Cokelat Persada, Semarang Regency, which is part of the Cimory Group. Although previous research has identified the importance of effective supervision, compensation, and the use of fingerprint technology in improving work discipline, there is still a gap in the understanding of the complex interactions between these three factors.

By examining the simultaneous effects of supervision, compensation, and the use of fingerprint technology on work discipline at PT. Chocomory Cokelat Persada, Semarang Regency, this study seeks to close this knowledge gap and could offer new perspectives for resource management practitioners and researchers. The study's findings will give businesses valuable information about how to best support work discipline, which will enhance business success. This research will also assist companies in developing effective strategies

to control employee discipline, so as to build good relationships between employees and companies, and gain a good reputation in the chocolate industry market. Thus, this research is expected to provide great benefits for PT. Chocomory Cokelat Persada, Semarang Regency.

2. LITERATURE REVIEW

To establish a strong foundation for this study, the existing literature is reviewed to identify key theories and findings that inform the research direction. This comprehensive review helps pinpoint gaps and build on previous insights, leading to the crucial step of hypothesis development, where statements on research problems are formulated based on previous studies. Based on these references, the authors propose the following hypothesis:
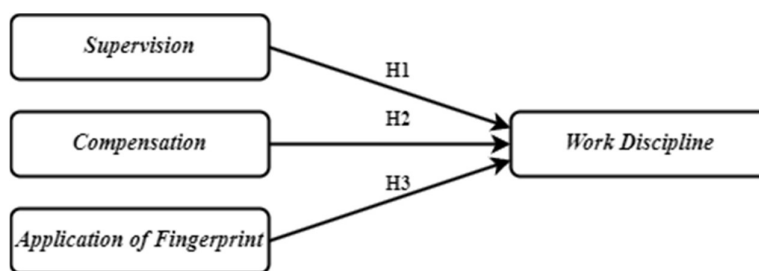

Figure 3. Research Model

Relationship between Supervision on Work Discipline

Rahmad *et al.* (2021) stated supervision is a systematic and continuous effort to encourage and direct teachers' personal growth to develop more effectively. It is an interactive process between the supervisor and the supervised, and the effectiveness of supervision depends largely on the quality of the relationship between the supervisor and the supervised (Guin, 2019). Supervision has an important role in ensuring employee discipline and strengthening the relationship between leadership and employee discipline. Supervision helps ensure that performance standards are met and provides constructive feedback to improve work effectiveness. According to research conducted by (Hajiali *et al.*, 2022), (Sari & Dewi, 2020), and (Meidijati, 2020) prove that supervision has a positive effect on work discipline. Based on the explanation above, the hypothesis formulation can be proposed in this study is:

H₁ : Supervision has a positive effect on Work Discipline.

Relationship between Compensation on Work Discipline

Rovi Romadhon *et al*. (2022) said Compensation is a reward given to employees, both financial and non-financial in nature. Compensation has an important role in ensuring employee discipline and strengthening the relationship between leadership and employee discipline. Compensation helps ensure that performance standards are met and provides constructive feedback to improve work effectiveness. Sutanto *et al*. (2023), stated that compensation has the potential to improve work discipline, employee performance, motivation, loyalty, and satisfaction. Offering competitive salary will make workers feel that the company values them, which will encourage them to stay with the company (Komang *et al.,* 2021). According to research conducted by (Khairuman *et al*. 2022), (Meldiana *et al*. 2021), and (Zhenyu Cui & John Zysman, 2021) prove that compensation has a positive effect on work discipline.

Based on the explanation above, the hypothesis formulation can be proposed in this study is:

H_2 : Compensation has a positive effect on Work Discipline.

Relationship between Application of The Fingerprint Attendance on Work Discipline

Hardaningtyas & Holifah (2023) fingerprint attendance or automatic Finger Print Identification System (AFIS) is a tool that assists staff in recording attendance. This tool allows

automatic recording of attendance by scanning fingerprints that have been registered on the attendance machine. The implementation of fingerprint attendance has significantly changed employee discipline, by reducing cases of absenteeism and tardiness. Lie et al. (2021) explained that fingerprint is one of the biometrics that is relatively easy to reach and easy to analyze because it never changes with the age of a person. Realizing this fact, the use of fingerprint attendance according to Sofyan Laksamana Haidar et al. (2022) with fingerprints, the phrase "have someone else mark attendance" is eliminated, making it a better manner to offer solutions to staff members. Electronically recorded attendance can be recorded precisely and unalterably, supporting improved work discipline. Study by (Rochendi, 2022), (Dwianto *et al*., 2023), and (Putri *et al*., 2024) prove that the use of fingerprint-based attendance has a positive effect on work discipline.

Based on the explanation above, the hypothesis formulation can be proposed in this study is:

H3 : Application of Fingerprint Attendance has a positive effect on Work Discipline.

3. RESEARCH METHOD

In this study there are 3 independent variables including supervision, compensation, and application of fingerprint attendance models. And there's one dependent variable, namely work discipline. This research is quantitative research and the data contained in it is primary data obtained from the dissemination of questionnaires through online google forms. Primary data, or information gathered straight from the source (respondents), directly observed, and documented, is used in this study, Pane & Astuti (2009). According to Sugiyono, in quantitative research, population is defined as a generalization area consisting of objects/subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions (Eka Putra, 2021). The population in this study are 176 employess of PT. Chocomory Cokelat Persada Semarang Regency. Sampling of respondents was carried out using the purposive sampling method. Therefore, the sample in this study were all employees who worked at PT. Chocomory Cokelat Persada, Semarang Regency, from the production operator division and warehouse operator division, totaling 125 employees.

The measurement of supervision variable uses instrument by Hajiali *et al*, (2022) with 7 items, legislative phase, administration stage, support phase, policies implemented, support financing budget, staff deployment and work procedures, stability of coordination within the organization; compensation variable uses research from Hajiali *et al.* (2022) 3 items, base salary, performance-based pay, indirect wages; application of fingerprint uses research from Dwianto *et al*. (2023) against 3 indicators, with 10 items: convenience (3 items), safety (4 items), time effectiveness (3 items); and work discipline uses research from Dwianto *et al*. (2023) against 5 indicators, with 11 items: attendance (3 items), compliance with work rules (2 items), compliance with work standards (2 items), high level of alertness (2 items), work ethically (2 items).

In the analysis of research data using SEM (Structural Equation Modeling) with the help of software SmartPLS version 4. SEM is used because the data studied is primary data. Furthermore, SEM has the advantage of being able to produce more robust, descriptive, and dependeable research results in describing interactions, errors, measurement error, non-linearity, as well as correlations between latent variables measured by several indicators, when compared with regression methods. This study uses a likert scale measurement from 1 to 7 where each point has its own statement. Test measurement models are validity tests with outer loading and AVE (Average Variance Extracted) as well as significant tests with T-

Statistic and Composite Reliability measurements.

4. RESULTS AND DISCUSSION

Characteristics of Respondentss

This sections describe information obtained from respondents that contains descriptive data to describe their situation or condition. The demographic characteristics of the respondents provide valuable insights into the composition of the sample. Especially, the majority of respondents are male, accounting for 52.8% of the total, while females make up 47.2%. In terms of age, the largest proportion falls within the 23-27 years bracket, comprising 54.4% of the respondents. This suggests that the sample is predominantly composed of young adults. Furthermore, indicating a level of education, all respondents have completed high school. The work period distribution reveals that the majority of respondents are relatively new to their jobs, with 40% having worked for less than a year and 68% having worked for 1-2 years and have the status of non-permanent employees. The work division is dominated by Productions Operators, who make up 88% of the sample, while Warehouse Operators account for the remaining 12%.

Convergent Testing

Convergent testing involves two important components to keep in mind. External load values are one of those factors. The external load value indicates the extent to which each indicator or statement used in the measuring instrument can measure the variable of the construction being tested. The external loading results of this study are shown here.
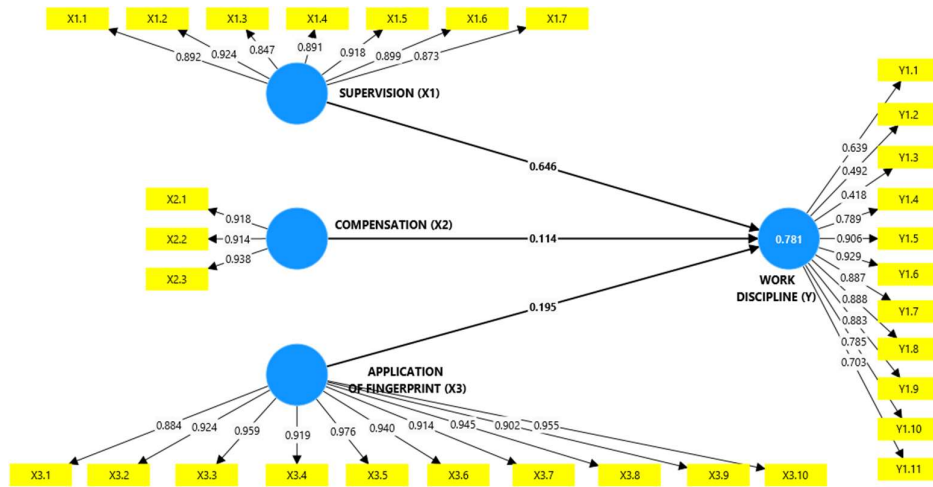
Figure 4. Loading Factor Outer Model

Figure 4. presents the initial outer loading values for the indicators associated with their respective constructs. After a through analysis, it is apparent that the outer loading values of attendance indicators Y1.1, Y1.2, and Y1.3 are below the permitted level of 0.7. This finding indicates that these indicators are not valid measures of their respective constructs. Specifically, the low loading values suggest are intended to measure. The presence of these invalid indicators weakens the overall validity of the measurement model, necessitating their removal or revision to improve the model's accuracy and reliability.

In response to the identified issues in Figure 4, Figure 5 presents a refined outer loading model. In this model, the invalid indicators have been deleted. The outer loading values for all remaining indicators in figure 5 exceed the threshold of 0.7, indicating that they are valid measures of their respective constructs. This adjustment has significantly improved the model's overall validity, as all remaining indicators now sufficiently measure their constructs, enhancing the reliability and accuracy of the measurement model.
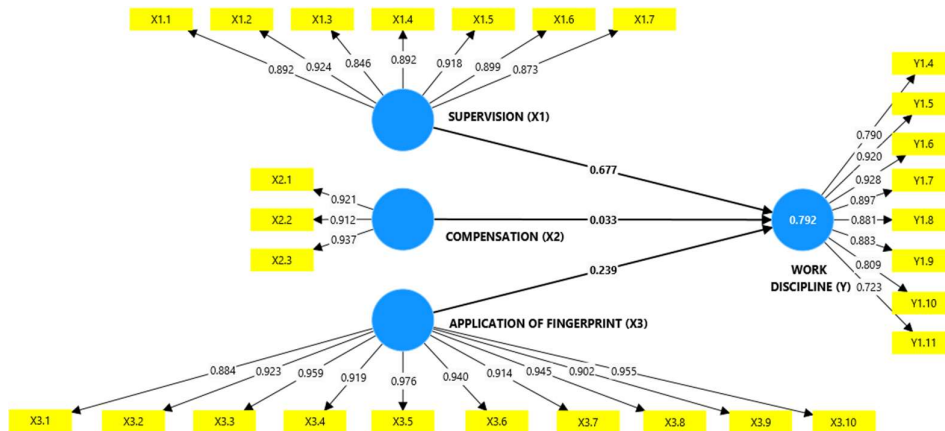

Figure 5. Final Loading Factor Outer Model

From the figure above, the loading factor data can be organized into a table as shown below:

Table 1. Convergent Validity Loading Factor

	SUPERVISION (X1)	COMPENSATION (X2)	APPLICATION OF FINGERPRINT (X3)	WORK DISCIPLINE (Y)
X1.1	0.892			
X1.2	0.924			
X1.3	0.846			
X1.4	0.892			
X1.5	0.918			
X1.6	0.899			
X1.7	0.873			
X2.1		0.921		
X2.2		0.912		
X2.3		0.937		
X3.1			0.884	
X3.2			0.923	
X3.3			0.959	
X3.4			0.919	
X3.5			0.976	
X3.6			0.940	
X3.7			0.914	
X3.8			0.945	
X3.9			0.902	
X3.10			0.955	
Y1.4				0.790
Y1.5				0.920
Y1.6				0.928
Y1.7				0.897
Y1.8				0.881
Y1.9				0.883
Y1.10				0.809
Y1.11				0.723

Source: Processed data

The outer loading results of the above data show that the entire variable in this study can be said to be valid. This is due to the value of the loading factor greater than 0.7, but some theories state that the load factor greater than 0.6 can also be said to be reasonable or good. The avarage variance extracted (AVE) is then tested to further strengthen the convergent validity result with the criterion that the AVE value is > 0.5.

Table 2. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)
Supervision	0,796
Compensation	0,852
Application of Fingerprint	0,869
Work Discipline	0,734

Source: Processed data

Based on the average variance extracted (AVE) test, all variables are declared valid because they have values greater than 0.5. High AVE values can increase the strength of the research model, as it indicates that the variables used have a strong contribution in describing the measured construction.

Reliability Test

The reliability test in this study is using composite reliability. Composite reliability is used to measure the impediment of an indicator. Through these values, we can measure the actual reliability of a construction being developed. The expected standard for the composite reliability value is at least 0.7 according to the guidelines given.

Table 3. Composite Reliability

Variabel	Composite Reliability
Supervision	0,959
Compensation	0,936
Application of Fingerprint	0,985
Work Discipline	0,952

Source: Processed data

It can be seen that the entire variable/latent construction has a composite reliability value of more than 0.7. It is identifiable that all the variables in this study have good reliability. So these variables effectively reflect the concepts or theories underlying the construction.

R-Square Analysis of Variance

This test is to find out how much influence independent variables have on dependent variables.

Table 4. R-Square and R-Square Adjusted

	R-Square	R-Square Adjusted
Work Discipline	0,792	0,787

Source: Processed data

On the data above, it is explained that all exogenous constructions (X1, X2, X3) simultaneously affect independent variables (Y) of 0.792 or 79.2%. For R-Square Adjusted value of 0.787 or 78.7% where the both position is above 0.75%, then it can be inferred for model value that is strong.

Hypothesis Testing

This test uses a bootsrapping method with a decision to accept or reject a hypothesis based on a P-Value and T-Statistics.

Table 5. Significant T-Statistic and P-Value Test

Influence	Original Sample	T-Statistic	P-Value	Conclusion
Supervision (X1) →Work Discipline (Y)	0,677	6,460	0,000	Accepted
Compensation (X2) → Work Discipline (Y)	0,033	0,365	0,358	Rejected
Application of Fingerprint (X3) → Work Discipline (Y)	0,239	2,406	0,008	Accepted

Source: Processed data

1. **The Effect of Supervision on Work Discipline**

With a T-statistic of 6.460, the relationship between supervision and work discipline is shown to be strong and positive, as this value is considerably higher than the typical threshold for significance. The P-value of 0.000 indicates an almost negligible probability that this result is due to chance, affirming that effective supervision is a crucial determinant of work discipline. This underscores the importance of managerial oversight and guidance in maintaining and enhancing discipline among employees. The T-statistic of 6.460 and P-value of 0.000 strongly support the acceptance of this hypothesis. Thus, effective supervision significantly influences work discipline. The results of this study show significant influences that are relevant to the findings in previous studies, as discussed by (Hajiali *et al*., 2022), (Sari & Dewi, 2020), and (Meidijati, 2020). So the researcher conclude that (H_1) is accepted.

2. **The Effect of Compensation on Work Discipline**

The T-statistic of 0.365 indicates a weak relationship between compensation and work discipline, as it is close to zero. The high P-value of 0.358 implies that there is a 35.8% probability

that the observed relationship could be due to random variation, far exceeding the 5% threshold for statistical significance. Consequently, compensation does not has positive effect on work discipline within the context of this study, suggesting that other factors might be more critical in shaping work discipline. The T-statistic of 0.365 and P-value of 0.358 suggest that the hypothesis is rejected. This means there is no significant relationship between compensation and work discipline in this study. The results of this study show insignificant influences relevant to the findings in previous studies, (Milliana *et al*., 2023). So the

researcher conclude that (H_2) is rejected.

3.   The Effect of Application of Fingerprint on Work Discipline

A T-statistic value of 2.406 means that the relationship between fingerprint attendance and work discipline is 2.406 standard deviations away from zero, suggesting a statistically positive effect. The P-value of 0.008, which is below the conventional threshold of 0.05, further supports this finding, indicating that there is less than a 1% probability that this result is due to random chance. Therefore, implementing fingerprint attendance systems can be seen as a practical measure to enhance work discipline. The T-statistic of 2.406 and P-value of 0.008 indicate that the hypothesis is accepted. This implies a significant positive relationship between the use of fingerprint attendance systems and work discipline. The results of this study show significant influences that are relevant to the findings in previous studies, as discussed by (Dwianto *et al*., 2023), (Rochendi, 2022), and (Putri *et al*., 2024). So the researcher conclude that (H_3) is accepted.

5.DISCUSSION

This study highlights the importance of supervision and the implementation of fingerprint attendance systems in improving work discipline at PT. Chocomory Cokelat Persada, Semarang Regency. Effective supervision is proven to be a crucial factor in determining work discipline, aligning with previous research that found a positive impact of supervision on employee discipline. Effective supervision ensures that employees adhere to performance standards and receive constructive feedback, fostering a positive work environment that encourages compliance with rules. In contrast, the hypothesis that compensation has not positive effects work discipline is not supported by the study's findings. Factors such as intrinsic motivators, organizational culture, and the perception of compensation as an entitlement can explain why compensation does not significantly impact work discipline. The company may choose to provide incentives in other forms, such as training, career development, or additional facilities, rather than giving cash bonuses, and it may have a different compensation structure based on job levels or grades, where production and warehouse operators may be at a level that does not include regular bonus recipients. Work discipline is often more related to personal satisfaction, a sense of responsibility, and professional pride than to extrinsic rewards. The implementation of fingerprint attendance shows a significant positive relationship with work discipline, as this system ensures accurate and tamper-proof recording of attendance, reducing absenteeism and tardiness, and reinforcing the importance of punctuality and regular attendance. While compensation is

important for overall employee satisfaction and retention, its impact on work discipline appears to be limited, indicating that intrinsic motivation, direct supervision, and systematic attendance monitoring are more effective in influencing work discipline.

6. CONCLUSION

This study found that fingerprint system is the strongest factor influencing work discipline. This system enhances security, ease of use, and time efficiency, necessitating widespread implementation and clear, understandable procedures. From this study indicate that, supervision also influences on work discipline. Strict and regular supervision by management is crucial for maintaining work discipline, requiring supervisors to set clear targets, conduct daily monitoring, and provide constructive guidance. Although overall compensation has not been shown positively affect work discipline, the findings suggest that pay raise policies that respond to current economic conditions provide positive outcomes. While not directly affecting work discipline, these policies can increase employee motivation and satisfaction, which can contribute to a positive working atmosphere and higher productivity. Therefore, maintaining a pay raise policy that is sensitive to today's economic conditions can be an appropriate step in supporting employee well-being and engagement in the company.

7. SUGGESTION

Based on the analysis suggestions for the use of fingerprint attendance, it is necessary to socialize the importance of attendance discipline as well as ensure the convenience and good functioning of the attendance machine. For improving work discipline in the company include improving work assessment standards with revi

ews and training for leaders, and improving communication and coordination between teams with the use of technology. On the compensation aspect, regular internal surveys and open dialogue with employees are recommended to gain insights into compensation perceptions and work discipline, aiding management in designing effective policies while maintaining harmonious employment relationships. The implementation of these solutions will improve work discipline in the company.

8. ACKNOWLEDGMENT

respondents who shared valuable insights. We also thank the supporting institutions for their invaluable moral and material contributions. Our heartfelt gratitude extends to our families, especially our parents, and friends for their unwavering support. Lastly, we acknowledge ourselves for the perseverance and hard work throughout this process. We hope these findings will enhance work discipline in various organizations and inspire future research. Thank you for being part of this significant step.

9. BLIBIOGRAPHY

Darmadi, Hamid. (2013). *Metode Penelitian Pendidikan Dan Sosial*. Bandung: Alfabeta.

Dermawan, Putra Arif. (2017). Studi Evaluasi Perencanaan Instalasi Penerangan Hotel Neo By Aston Pontianak. *Jurnal Teknik Elektro Universitas Tanjungpura, 2*(1). https://jurnal.untan.ac.id/index.php/jteuntan/article/view/21514

Dwianto, A. S., Wicaksana, I., & Dewi, B. A. (2023). The Impact of Leadership and Application of Fingerprint Attendance Model on Work Discipline of Employees at PT Autoplastic Indonesia. *International Journal of Economics, Management, Business and Social Science (IJEMBIS), 3*(1), 77–91.

Eka Putra, A. S. (2021). The influence of competence and integrity on the performance of village apparatus. *JESS (Journal of Education on Social Science), 5*(1), 24. https://doi.org/10.24036/jess.v5i1.314

Guin, S. (2019). Field work supervision through open and distance learning: An Indian perspective. *Asian Association of Open Universities Journal, 14*(2), 107–121. https://doi.org/10.1108/AAOUJ-08-2019-0031

Hajiali, I., Fara Kessi, A. M., Budiandriani, B., Prihatin, E., & Sufri, M. (2022). The Effect of Supervision, Compensation, Character on Work Discipline. *Golden Ratio of Human Resource Management, 2*(2), 70–85. https://doi.org/10.52970/grhrm.v2i2.85

Hakim, A., & Afriany, J. (2023). The Effect of Leadership Style and Supervision on Employee Performance. *Economics Journal, 12*(01). http://ejournal.seaninstitute.or.id/index.php/Ekonomi

Hardaningtyas, D., & Holifah, N. (2023). Analysis of Finger Print Usage at Wachid Hasyim Foundation I to Improve Employee Work Discipline. *4*(2), 301–316.

Khairuman, Octarinie, N., & Fane, S. M. (2022). Analysis of the Use of Fingerprint Attendance and the Effect of Compensation on the Discipline of Employees of the Prabumulih City Regional People's Representative Council Secretariat. *Journal of Applied Economics, Management and Business, 2*(1), 11–19. https://jurnal.polsri.ac.id/index.php/jtiemb/article/view/4690

Lie, Christian, E. M., & Wijaya, L. S. (2021). Analysis of Human Resources Communication Strategy on the Implementation of Fingerprint Presence. *Precious: Public Relations Journal, 1*(2), 158–176. https://ejournal.uksw.edu/precious/article/view/4752

Meidijati. (2020). A new decade for social changes. *Technium Social Sciences Journal, 6*(December), 101–105.

Meldiana, M., Fajrillah, F., & Ginting, R. S. (2021). The Influence of Organizational Culture, Compensation and Motivation on Employee Work Discipline at PT Inti Palm Sumatra. *Journal of Business and Economics Research (JBE), 2*(1), 20–25. https://ejurnal.seminar-id.com/index.php/jbe/article/view/703/462

Milliana, Andry Stepahnie Titing, & Hendrik, H. (2023). The Influence of Work Discipline and Compensation on Employee Performance. *Multifinance, 1*(2), 81–94. https://doi.org/10.61397/mfc.v1i2.48

Mimortinnilawati, T., Susanto, Y., & Rimbano, D. (2023). The Correlation between Discipline, Motivation and Compensation on the Performance of the Land Office of Musi Rawas District. *Proceedings International Conference on Business, Economics & Management, 1*, 881–899. https://doi.org/10.47747/icbem.v1i1.1306

Pane, J., & Astuti, S. D. (2009). The Influence of Organizational Culture, Leadership, Transformational, and Compensation on Employee Performance (Case Study at Telkom Divre IV Office in Semarang). *THEME: Management Review, 6*(1), 67–85.

Prata Feres, L., Wilhans Antonio Palludeto, A., & Oliveira Rodrigues Dias, H. M. (2024). Financialization and labor discipline in contemporary capitalism. *EconomiA*. https://doi.org/10.1108/econ-11-2023-0194

Putri, P., Suardi, A., & Basir, A. (2024). The Influence of Organizational Behavior and Finger Print Technology on Employee Work Discipline at The Palopo City Land Office. *2*(1), 37–46.

Rochendi, T. (2022). The Role of Fingerprint System on Work Discipline at CV Bangun Jaya. *Interdisciplinary Social Studies, 1*(5), 603–609. https://doi.org/10.55324/iss.v1i5.127

Rovi Romadhon, E., Didik Subiyanto, & Ignatius Soni Kurniawan. (2022). An empirical study of the influence of compensation, leadership and commitment on work discipline (Case study on BMT Sejahtera Trucuk). *MANDAR: Management Development and Applied Research Journal, 4*(2), 71–86. https://doi.org/10.31605/mandar.v4i2.1692

Sari, I. H., & Dewi, R. (2020). The Influence of Supervision and Workload of Southern Oku. *Journal of Economics, 13*(2), 53–69.

Sofyan Laksamana Haidar, L. R. H., Ihsanil Huda, H., & Sudirman, B. (2022). Analysis Security of Absence Information System with Finger Print using Minutiae Method on STEKOM. *Scientific Journal of Information Systems, 1*(1), 86–94. https://doi.org/10.51903/juisi.v1i1.319

Zhenyu Cui, & John Zysman. (2021). The Effect of Compensation on Medical Doctor and Nurse With Work Discipline As an Intervening Variable (Case Study of Medical Doctor and Nurse in United States Public Health Service). *MEDALION JOURNAL: Medical Research, Nursing, Health and Midwife Participation, 2*(4), 162–168. https://doi.org/10.59733/medalion.v2i4.42