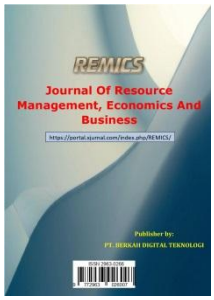

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THE IMPACT OF WORK DISCIPLINE, K3 AWARENESS, AND INCENTIVES ON EMPLOYEE PRODUCTIVITY

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Abstract

Purpose: This research aims to analyze work discipline, K3 awareness, incentives that influence employee work productivity at PT. Bhakti Sari Perkasa with Cirebon Branch. Descriptive analysis was carried out by collecting data from 78 employees through a questionnaire instrument.

Research Methodology: The research results show that work discipline does not partially affect employee work productivity. Awareness of occupational safety and health partially influences employee work productivity by 76.3%. Incentives partially influence employee work productivity by 63.3%. Work discipline, awareness of occupational safety and health, and incentives simultaneously have a significant influence on employee work productivity of 87.5%.

Results: These findings indicate the importance of maintaining work discipline, increasing K3 awareness, and providing appropriate incentives to increase employee work productivity.

Contribution: Research recommendations include increasing awareness of work discipline, strengthening occupational safety and health programs, implementing an effective incentive system, as well as further research to understand other factors that can influence employee work productivity.

Keywords: *Work discipline, awareness of occupational safety and health, incentives work productivity*

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1. INTRODUCTION

Maintaining and improving employee work productivity is a key challenge for companies in the labor supply services industry, particularly at PT. Bhakti Sari Perkasa Bersama, a company based in Cirebon. Employee productivity is vital for the efficiency and success of the company, especially in ensuring the smooth operation of labor-intensive tasks such as mining material transportation (Ahmad, 2022; Cascio & Aguinis, 2014). The productivity of employees is influenced by several factors, including work discipline, awareness of occupational safety and health (K3), and incentive systems (Griffin, 2016; Noe et al., 2017). Understanding how these

factors interact and impact productivity can provide valuable insights for better management and operational strategies (Landy & Conte, 2016).

Work discipline plays a crucial role in ensuring regular attendance and adherence to schedules, which directly affects the continuity and efficiency of operations (Cascio & Boudreau, 2015). However, at PT. Bhakti Sari Perkasa Bersama, issues such as irregular attendance and inadequate attendance reporting systems have been observed, potentially hindering overall productivity (Said et al., 2023). Therefore, understanding the impact of work discipline on productivity is essential for addressing these challenges (Griffin, 2016).

K3 awareness is another critical factor that influences productivity. Occupational safety and health programs are essential in reducing workplace accidents and health risks, which in turn affects employee absenteeism and work performance (Boudreau et al., 2015; Eyayo, 2014). A strong K3 culture can help mitigate these risks, creating a safer working environment and enhancing productivity (Said et al., 2023).

Incentives, both financial and non-financial, are commonly used to motivate employees and improve their performance. Well-structured incentive programs are designed to encourage higher levels of dedication and focus, ultimately leading to increased productivity (Griffin, 2016). However, the effectiveness of these programs at PT. Bhakti Sari Perkasa Bersama remains uncertain, as there is limited research on the correlation between incentives and employee performance within the company's operational context (Landy & Conte, 2016).

This research aims to explore the interrelationship between work discipline, K3 awareness, and incentives, and their collective influence on employee productivity at PT. Bhakti Sari Perkasa Bersama. By addressing this gap in the literature, the study will provide valuable insights into the effectiveness of these factors in improving productivity, which can be used to guide policy recommendations and inform human resource management practices (Landy & Conte, 2016; Cascio & Aguinis, 2014).

The main objective of this study is to evaluate how work discipline, K3 awareness, and incentives individually and collectively influence employee work productivity. This research is particularly relevant in the context of the labor supply services sector, where operational efficiency and employee performance are critical to the company's success and competitiveness (Landy & Conte, 2016; Griffin, 2016).

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Literature Review

Work Discipline

Work discipline refers to the degree of employee compliance with organizational rules, schedules, and behavioral standards in the workplace (Cascio & Aguinis, 2014). Discipline in an organizational context is designed to promote regularity, punctuality, and responsibility among employees (Okolie & Udom, 2019). It serves as a behavioral control mechanism that ensures employees adhere to operational procedures and performance expectations (Griffin, 2016).

A disciplined workforce contributes to higher operational efficiency by reducing absenteeism, lateness, and unproductive time (Laura, 2019). Conversely, low discipline levels may lead to disruptions in workflow, reduced coordination, and lower productivity (Harun, 2022). In the human resource management (HRM) literature, discipline is linked to motivation

and organizational commitment, where fair enforcement of rules can enhance employee engagement (Covey, 2020). Prior studies, such as Jaya (2019) and Fadhilah (2019), confirm that consistent disciplinary policies positively correlate with work productivity in labor-intensive industries.

Occupational Safety and Health (K3)

Occupational safety and health (OSH or K3) is defined as an interdisciplinary approach aimed at preventing work-related injuries, illnesses, and hazards (Burke & Signal, 2010). K3 initiatives encompass policies, training, and workplace designs intended to maintain employees' physical and psychological well-being (Eyayo, 2014; Niskanen et al., 2012). According to Bamel et al. (2020), a strong safety climate significantly influences employee behavior and reduces operational risks.

Empirical studies demonstrate that employees who perceive high workplace safety exhibit greater satisfaction, motivation, and productivity (Giawa et al., 2021; Purba & Sukwika, 2021). The implementation of effective K3 systems also contributes to a positive organizational image and compliance with national labor standards (Dharmawan & Kurniawan, 2023). In the Indonesian context, the role of K3 is not merely preventive but also strategic in enhancing trust between management and workers, which ultimately supports sustainable productivity (Hermawan et al., 2023).

Incentives

Incentives are tangible or intangible rewards given to motivate employees toward achieving specific performance outcomes (Said et al., 2023). Incentive systems encompass financial (e.g., bonuses, profit-sharing) and non-financial rewards (e.g., recognition, career advancement) that enhance intrinsic and extrinsic motivation (Noe et al., 2017). Effective incentive mechanisms align individual goals with organizational objectives, fostering productivity and innovation (Ekhsan & Mariyono, 2020).

Research by Lestari et al. (2021) and Erwin & Rosnaida (2021) indicates that well-structured incentive programs significantly improve employee morale and output quality. However, improper implementation—such as inequitable or opaque reward systems—can cause dissatisfaction and counterproductive behavior. Therefore, incentive policies should consider individual performance, team contributions, and contextual fairness (Barney, 2021).

Employee Work Productivity

Employee work productivity is defined as the level of efficiency and effectiveness demonstrated by employees in performing their duties to achieve organizational goals (Landy & Conte, 2016). It represents the balance between input utilization and output performance, encompassing both quantity and quality aspects (Douglas & Borman, 2016). According to Luthans and Youssef-Morgan (2017), productivity is influenced by motivation, workplace environment, and psychological capital.

Prior research supports the premise that productivity is a multidimensional construct, affected by both organizational and individual factors (Al Qusaeri, 2023; Prayudi, 2021). High productivity is associated with structured work systems, healthy work conditions, and adequate incentives (Marginson, 2019). In labor service industries, maintaining productivity requires an

integrated management strategy that combines discipline, K3 compliance, and reward structures (Ong & Mahazan, 2020).

2.2. Hypothesis Development

The development of hypotheses in this study is grounded in behavioral and organizational theory, where human performance is affected by motivation, control systems, and environmental safety (Luthans & Youssef-Morgan, 2017). Based on the reviewed literature, the following hypotheses are proposed:

Work Discipline and Work Productivity

Discipline ensures that employees comply with schedules and organizational norms, reducing delays and inefficiencies. Studies by Cahyani and Rokhman (2022) and Harun (2022) found that employees with higher levels of discipline exhibit better punctuality and task completion rates. However, other findings, such as Fadhilah (2019), show that discipline alone may not be sufficient to enhance productivity without motivational support. Therefore, the relationship may vary based on organizational context.

H1: Work discipline has a significant positive effect on employee work productivity.

Occupational Safety and Health (K3) and Work Productivity

A strong K3 culture enhances employees' sense of security and reduces absenteeism due to illness or injury, thereby improving performance outcomes (Burke & Signal, 2010; Purba & Sukwika, 2021). According to Kutni et al. (2023), employees who feel protected at work demonstrate greater focus, efficiency, and psychological comfort, leading to higher productivity levels.

H2: Occupational safety and health (K3) awareness has a significant positive effect on employee work productivity.

Incentives and Work Productivity

Incentive systems motivate employees to increase effort and maintain consistent performance (Said et al., 2023). Empirical findings by Lestari et al. (2021) and Erwin and Rosnaida (2021) demonstrate that both financial and non-financial rewards significantly influence employee productivity. Incentives that are transparent and aligned with individual contributions foster satisfaction and retention (Dharmawan & Kurniawan, 2023).

H3: Incentives have a significant positive effect on employee work productivity.

Work Discipline, K3, and Incentives on Work Productivity

While each variable influences productivity independently, their combined effect may create a synergistic impact. Consistent discipline ensures operational regularity, K3 ensures safety and stability, and incentives maintain motivation. This integrated framework aligns with the contingency theory in HRM, emphasizing contextual alignment among human, technical, and motivational factors (Pang et al., 2020).

H4: Work discipline, occupational safety and health (K3), and incentives simultaneously have a significant positive effect on employee work productivity.

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Conceptual Framework

Based on the reviewed literature, the conceptual model of this research can be visualized as follows:

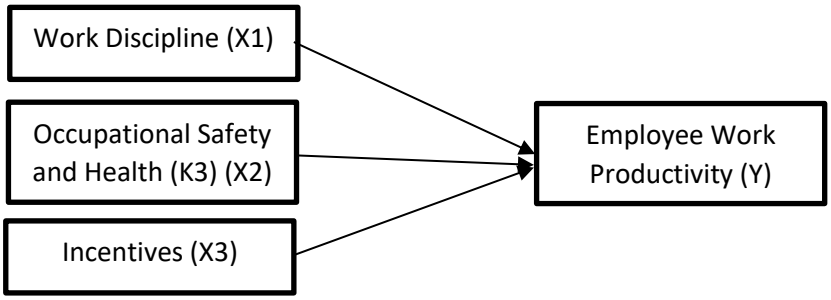

Figure 1. Reseach Framework

3. RESEARCH METHODOLOGY

3.1. Research Design

This study adopts a quantitative survey-based approach with a descriptive and associative design. The purpose of this research is to examine the effect of work discipline, occupational safety and health (K3) awareness, and incentives on employee work productivity at PT. Bhakti Sari Perkasa Bersama, Cirebon Branch. The study employs a non-experimental design, as the variables are not manipulated but observed as they naturally occur within the organizational context (Neuman, 2014). The associative design aims to identify both the partial and simultaneous relationships among the independent and dependent variables.

The theoretical foundation of this research is based on behavioral control theory, motivation theory, and occupational safety models, emphasizing that employee productivity results from the interaction between discipline enforcement, environmental safety, and motivational reinforcement (Luthans & Youssef-Morgan, 2017; Pang et al., 2020).

3.2. Population and Sampling Technique

The population of this study comprises all employees of PT. Bhakti Sari Perkasa Bersama, Cirebon Branch, totaling 356 employees across administrative, operational, and logistics divisions. Considering the relatively moderate population size, the sample was determined using the Slovin formula with a margin of error of 10%, resulting in 78 respondents.

A simple random sampling technique was used to ensure equal opportunity for all employees to participate in the survey, thereby minimizing selection bias (Sugiyono, 2015). This approach is appropriate because the employees share similar job characteristics, ensuring data homogeneity across respondents.

3.3. Data Collection Method

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Primary data were collected using a structured questionnaire survey distributed physically and electronically via Google Forms. Secondary data were obtained from the company's HR records, attendance logs, and productivity reports to ensure cross-validation of responses.

The questionnaire was designed using a five-point Likert scale ranging from "Strongly Disagree (1)" to "Strongly Agree (5)" to measure each construct quantitatively. Prior to distribution, a pilot test involving 10 respondents was conducted to ensure instrument clarity and internal consistency. Adjustments were made based on pilot feedback.

3.4. Research Instrument and Variables

The research instrument was developed based on validated constructs from prior studies:

Table 1. Research Instrument

Variable	Indicator	Source
Work Discipline (X1)	Attendance, compliance with rules, punctuality, and responsibility	(Cascio & Aguinis, 2014; Laura, 2019)
Occupational Safety and Health (K3) (X2)	Safety training, use of protective equipment, risk awareness, management supervision	(Burke & Signal, 2010; Purba & Sukwika, 2021)
Incentives (X3)	Financial bonuses, recognition, promotion, non-financial motivation	(Said et al., 2023; Lestari et al., 2021)
Employee Work Productivity (Y)	Work efficiency, task completion, quality of output, achievement of targets	(Landy & Conte, 2016; Barney, 2021)

Each variable was operationalized into multiple questionnaire items following a Likert-scale format to enable parametric analysis using regression techniques.

All statistical analyses were conducted using IBM SPSS Statistics version 26 (2021). This software was chosen for its reliability in handling regression, correlation, and classical assumption tests. Data cleaning, coding, and transformation were performed using Microsoft Excel 2021.

3.5. Data Analysis Technique

The data analysis process followed a multi-stage statistical procedure, comprising:

1. ***Validity and Reliability Testing***
    - *Validity:* Using Pearson Product-Moment Correlation to test the item-total correlation. Items with (r_{count} > r_{table} (0.2242) were considered valid.
    - *Reliability:* Using Cronbach's Alpha, with acceptable reliability if (alpha > 0.60) (Ghozali, 2015).
2. ***Classical Assumption Tests***

- *Normality Test:* Kolmogorov–Smirnov test to ensure residuals follow normal distribution.
- *Multicollinearity Test:* Based on Variance Inflation Factor (VIF < 10) and Tolerance (> 0.10).
- *Heteroscedasticity Test:* Conducted using the Glejser method to verify homoscedasticity.

3. ***Multiple Linear Regression Analysis***

   The regression model used is:

   $Y=\beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\varepsilon$

   where:
   Y = Employee work productivity,
   X_1 = Work discipline,
   X_2 = Occupational safety and health (K3),
   X_3 = Incentives.

4. ***Hypothesis Testing***

   - *t-test (Partial Test):* To evaluate the individual influence of each independent variable.
   - *F-test (Simultaneous Test):* To test whether all independent variables jointly affect the dependent variable.
   - *Coefficient of Determination (Adjusted R^2):* To assess the explanatory power of the model.

All tests were conducted at a 95% confidence level ($\alpha = 0.05$).

3.6. Research Assumptions and Limitations

This study assumes that:

1. Respondents provided honest and accurate responses to the questionnaire items.
2. The organizational policies and incentive structures during the survey period remained constant.
3. All variables were measured independently without mutual interference.

Limitations include the cross-sectional design, which restricts causal inference, and the focus on one company, which may limit generalizability. Future research could extend this model using structural equation modeling (SEM-PLS) to validate latent constructs more comprehensively.

3.7. Ethical Considerations

Prior to data collection, informed consent was obtained from all participants. Respondents were assured of anonymity and confidentiality, in accordance with ethical research standards (American Psychological Association, 2020). The study posed no physical or psychological risk to participants.

4. RESULTS AND DISCUSSIONS

4.1. Results

4.1.1. Validity and Reliability Test

To ensure the research instrument's precision, validity and reliability tests were conducted. Validity was assessed using the Pearson Product Moment, while reliability was measured using Cronbach's Alpha (α).

Table 2. Validity and Reliability Test Results

Variable	Number of Items	Validity (r-count > 0.2242)	Cronbach's Alpha (α)	Interpretation
Work Discipline	8	All items valid	0.884	Reliable
K3 Awareness	8	All items valid	0.863	Reliable
Incentives	8	All items valid	0.890	Reliable
Work Productivity	8	All items valid	0.875	Reliable

Source: Primary Data Processed, 2025

All constructs show α > 0.60, indicating the questionnaire is statistically reliable (Ghozali, 2015). Thus, the measurement instruments are both valid and consistent for further analysis.

4.1.2. Classical Assumption Test

The classical assumption tests—normality, multicollinearity, and heteroscedasticity—were performed to ensure that regression analysis meets the BLUE (Best Linear Unbiased Estimator) criteria.

Table 2. Summary of Classical Assumption Test Results

Test Type	Indicator	Result	Criteria	Conclusion
Normality	Kolmogorov-Smirnov Sig. = 0.000	p < 0.05	Normally distributed residuals	Normal
Multicollinearity	VIF (X1=4.63; X2=1.88; X3=4.74)	VIF < 10	No multicollinearity	Passed
Heteroscedasticity	Sig. (X1=0.312; X2=0.260; X3=0.557)	p > 0.05	Homoscedastic	Passed

Source: Primary Data Processed, 2025

The data meet all classical assumption requirements, validating the use of multiple linear regression.

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4.1.3. Multiple Linear Regression Analysis

The relationship between independent variables (Work Discipline, K3 Awareness, Incentives) and the dependent variable (Work Productivity) was analyzed using multiple regression.

Table 4. Coefficients of Multiple Linear Regression

Variable	Unstandardized Coefficient (B)	Std. Error	t-value	Sig.	Interpretation
Constant	5.179	3.405	1.521	0.133	—
Work Discipline (X1)	-0.505	0.118	-4.287	0.000	Significant (negative)
K3 Awareness (X2)	0.840	0.071	11.823	0.000	Significant (positive)
Incentives (X3)	0.780	0.102	7.645	0.000	Significant (positive)

Source: SPSS Output, 2025

Regression Model:

$$Y = 5.179 - 0.505X_1 + 0.840X_2 + 0.780X_3$$

Interpretation:

- Work Discipline (X1) shows a negative but significant effect on productivity, implying that excessive rule enforcement may reduce motivation.
- K3 Awareness (X2) and Incentives (X3) have strong positive effects, reinforcing that safety assurance and reward mechanisms are key productivity drivers.

4.1.4. Determination Coefficient (R^2)

Table 4. Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of Estimate
1	0.935	0.875	0.870	2.613

Source: SPSS Output, 2025

The Adjusted R^2 value of 0.870 indicates that 87% of the variation in employee work productivity is explained by Work Discipline, K3 Awareness, and Incentives, while the remaining 13% is influenced by other unobserved factors.

4.1.5. Simultaneous F-Test

Table 5. ANOVA (F-Test)

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	3539.664	3	1179.888	172.836	0.000
Residual	505.169	74	6.827	—	—

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Source	Sum of Squares	df	Mean Square	F	Sig.
Total	4044.833	77	—	—	—

Source: SPSS Output, 2025

Since Sig. = 0.000 < 0.05 and F = 172.836 > 3.96, all independent variables collectively have a significant influence on employee productivity.

4.2 Discussions

The findings provide strong empirical evidence that employee productivity in PT. Bhakti Sari Perkasa Bersama is largely driven by behavioral, safety, and motivational factors. The discussions below link these findings to existing theoretical and empirical frameworks.

4.2.1. Effect of Work Discipline on Employee Productivity

The negative but significant relationship between work discipline and productivity suggests that rigid or punitive disciplinary systems may reduce intrinsic motivation. This aligns with Covey (2020) and Griffin (2016), who emphasize that discipline must be balanced with autonomy and trust to sustain performance. However, this result diverges from Jaya (2019) and Cahyani & Rokhman (2022), who found a positive link, indicating that contextual differences—such as company culture and employee demographics—play a critical role.

4.2.2. Effect of Occupational Safety and Health (K3) Awareness on Employee Productivity

The positive and significant influence of K3 awareness (β = 0.840, p < 0.001) confirms that employees perform better when they feel physically and psychologically safe. This supports the Safety Climate Model (Burke & Signal, 2010) and Maslow's Hierarchy of Needs, where safety forms a fundamental motivational driver.

Similar findings were reported by Purba & Sukwika (2021) and Dharmawan & Kurniawan (2023), who observed that effective safety management enhances concentration, reduces absenteeism, and improves output quality. In the industrial context of PT. Bhakti Sari Perkasa Bersama, regular K3 training, availability of PPE (personal protective equipment), and supervisory support contribute to increased morale and work commitment.

4.2.3. Effect of Incentives on Employee Productivity

The incentive variable (β = 0.780, p < 0.001) positively affects productivity, reinforcing Vroom's Expectancy Theory, which posits that employees exert more effort when rewards are perceived as desirable.

This finding corroborates prior works by Lestari et al. (2021) and Erwin & Rosnaida (2021), where financial and non-financial incentives enhanced job performance. In PT. Bhakti Sari Perkasa Bersama, transparent and equitable incentive systems—such as bonuses and recognition programs—strengthen employees' sense of fairness and loyalty, which ultimately boosts organizational performance.

4.2.4. Joint Influence of Work Discipline, K3, and Incentives

The F-test results confirm that these three factors collectively contribute significantly to productivity (R^2 = 0.875). This supports the Contingency Theory of Organizational Performance (Pang et al., 2020), which emphasizes that human, structural, and motivational factors interact

dynamically to determine efficiency outcomes. Moreover, this synergistic relationship implies that discipline without motivation is ineffective, and safety without incentives lacks sustainability. The study thus reinforces the importance of integrated HRM systems that align control mechanisms (discipline), protection systems (K3), and motivational levers (incentives).

4.2.5. Theoretical and Practical Implications

Theoretically, this study enriches the HRM and organizational behavior literature by validating that productivity is a multidimensional construct influenced by psychological safety, behavioral regulation, and motivational reinforcement. Practically, it offers guidance for management to:

1. Implement participative discipline policies rather than rigid enforcement.
2. Enhance safety culture programs emphasizing employee involvement.
3. Design transparent incentive systems based on measurable performance metrics.

These combined approaches contribute not only to productivity but also to employee well-being and organizational sustainability.

5. CONCLUSION

Work discipline has a negative but significant effect on employee productivity. Excessive or punitive disciplinary enforcement may reduce intrinsic motivation, suggesting that discipline must be applied with fairness and participatory engagement.

Occupational safety and health (K3) awareness has a positive and significant effect on productivity. Employees who perceive a safe working environment exhibit higher concentration, lower absenteeism, and greater job satisfaction.

Incentives have a positive and significant influence on productivity. Both financial and non-financial rewards effectively enhance employee motivation, commitment, and performance outcomes.

Collectively, work discipline, K3 awareness, and incentives explain 87% (Adjusted R^2 = 0.870) of the variation in employee productivity, indicating a strong integrated relationship between behavioral control, safety culture, and motivational systems.

These results fulfill the research objectives by empirically validating that employee productivity is not solely determined by compliance but by the synergistic interaction of discipline, safety, and motivation. Hence, the study reinforces the theoretical foundation of behavioral control theory, safety climate theory, and expectancy theory of motivation as effective frameworks for explaining productivity dynamics in labor-intensive organizations.

LIMITATION AND STUDY FORWARD

Despite its empirical robustness, this study has several limitations that must be acknowledged:

1. The research was conducted exclusively at PT. *Bhakti Sari Perkasa Bersama*, which may limit the generalizability of findings to other industrial sectors or geographic regions.
2. Data were collected at one point in time, restricting the ability to infer causality or track changes in productivity over time.

3. The use of questionnaire-based responses may introduce response bias, as employees could overstate or understate their perceptions due to social desirability factors.
4. Only three independent variables (discipline, K3, incentives) were analyzed, while other potential determinants—such as leadership style, organizational culture, and psychological capital—were not included.
5. The absence of qualitative exploration (e.g., interviews or focus groups) limits the depth of understanding regarding employee perceptions and contextual nuances.

These limitations indicate the need for a more diverse methodological and contextual approach in future investigations.

Study Forward

Building on the limitations above, several research directions are recommended to strengthen future studies:

1. Expanding Research Contexts: Future research should include multiple organizations across various sectors (manufacturing, logistics, and services) to enhance external validity and generalizability.
2. Longitudinal Approach: Implementing a longitudinal design would allow researchers to observe changes in employee productivity over time, especially before and after HR interventions or policy shifts.
3. Inclusion of Mediating or Moderating Variables: Future models could incorporate variables such as job satisfaction, organizational commitment, or psychological capital as mediators or moderators to better understand causal mechanisms.
4. Integration of Qualitative Methods: Combining survey data with interviews, focus group discussions (FGD), or ethnographic observation could yield richer insights into employee experiences and behavioral drivers.
5. Technology and Digital Safety: With the rise of Industry 4.0, subsequent studies should explore how digital work monitoring, e-safety systems, and AI-based performance analytics influence work discipline and productivity.
6. Comparative Cross-Cultural Studies: Investigating similar variables across different regions or countries could uncover cultural variations in how discipline, safety, and incentives interact to affect productivity.

By addressing these directions, future research can contribute to a more holistic and dynamic understanding of human resource management in the context of occupational safety, behavioral control, and motivational systems.

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