The Influence of Work Supervision and Work Discipline on Employee Work Quality at PT Bela Krosea Nusantara

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ABSTRAK

Penurunan kualitas kerja karyawan, yang tercermin dari menurunnya produktivitas dan meningkatnya kesalahan operasional, menjadi perhatian di PT Bela Krosea Nusantara, perusahaan pengolahan hasil laut di Kabupaten Lamongan. Penelitian ini menganalisis pengaruh pengawasan kerja dan disiplin kerja terhadap kualitas kerja karyawan, baik secara parsial maupun simultan, serta mengidentifikasi variabel mana yang lebih dominan di antara keduanya. Survei eksplanatori kuantitatif dilakukan terhadap 48 karyawan yang dipilih melalui simple random sampling dari populasi sebanyak 60 orang. Data dikumpulkan dengan kuesioner skala Likert lima poin yang telah diuji validitas dan reliabilitasnya, kemudian dianalisis menggunakan uji asumsi klasik, regresi linier berganda, uji t, uji F, dan koefisien determinasi dengan SPSS versi 23. Pengawasan kerja dan disiplin kerja masing-masing berpengaruh positif dan signifikan secara parsial terhadap kualitas kerja karyawan, dan secara bersama-sama berpengaruh signifikan secara simultan serta menjelaskan sebagian besar variasi kualitas kerja. Disiplin kerja merupakan prediktor yang lebih dominan. Temuan ini menunjukkan bahwa pengawasan yang konsisten perlu dipadukan dengan penegakan disiplin yang adil dan berkelanjutan untuk menjaga kualitas kerja karyawan pada perusahaan pengolahan yang padat karya.

Kata kunci: pengawasan kerja; disiplin kerja; kualitas kerja karyawan; regresi linier berganda

ABSTRACT

Declining employee work quality, reflected in lower productivity and more frequent operational errors, is a concern at PT Bela Krosea Nusantara, a seafood-processing company in Lamongan Regency. This study analyzes the effect of work supervision and work discipline on employee work quality, both partially and simultaneously, and identifies which of the two variables is more dominant. A quantitative explanatory survey was conducted among 48 employees selected through simple random sampling from a population of 60. Data were collected with a five-point Likert-scale questionnaire that was tested for validity and reliability, and were analyzed using classical assumption tests, multiple linear regression, t-tests, an F-test, and the coefficient of determination in SPSS version 23. Work supervision and work discipline each have a positive and significant partial effect on employee work quality, and together they have a significant simultaneous effect that accounts for most of the variation in work quality. Work discipline is the more dominant predictor. The findings suggest that consistent supervision should be combined with fair and sustained enforcement of discipline to maintain employee work quality in labor-intensive processing firms.

Keywords: Work Supervision; Work Discipline; Employee Work Quality; Multiple Linear Regression

INTRODUCTION

Rapid industrial development requires organizations to keep improving employee work quality, which is a key factor in achieving organizational goals and sustaining competitiveness in an era of globalization (Robbins & Judge, 2022). Work quality is not measured by the quantity of output alone. It also covers timeliness, effectiveness, efficiency, and conformity with established operational standards (Mangkunegara, 2017), which makes it an important indicator of both individual and organizational performance.

PT Bela Krosea Nusantara, located in Lohgung Village, Brondong District, Lamongan Regency, is engaged in seafood processing and other productive industrial activities. Its operations demand accuracy, efficiency, and compliance with product quality standards. However, internal company reports show a tendency toward declining employee work quality, which has reduced productivity and increased operational errors. This indicates a human resource management problem that requires closer attention.

LITERATURE REVIEW

Work Supervision

Work supervision is a managerial function that ensures activities run according to plans, standards, and targets through monitoring, evaluation, and corrective action when deviations occur (Fayol, 1949; Hasibuan, 2021). In the management control literature, supervision and feedback mechanisms are viewed as a means of aligning employee behavior with organizational objectives (Merchant & Van der Stede, 2017). Goal-setting theory adds that clear standards combined with timely feedback direct effort and improve task performance (Locke & Latham, 2002). From these perspectives, supervision should improve work quality because it clarifies the expected standard, makes deviations visible, and allows them to be corrected before they accumulate into errors.

Work Discipline

Work discipline reflects employees' awareness and willingness to comply with company rules, working hours, procedures, and prevailing social norms (Hasibuan, 2021; Sutrisno, 2021). Disciplined employees tend to be punctual, follow procedures, accept instructions from superiors, take responsibility for their tasks, and use working time effectively, all of which bear directly on accuracy and conformity with standards (Armstrong & Taylor, 2020). Self-determination theory further suggests that when rules are internalized rather than merely imposed, compliance becomes more autonomous and more stable (Deci & Ryan, 2000). Discipline can therefore be seen as an internal, self-regulating complement to the external control exercised through supervision.

Research Hypotheses

Accordingly, the following hypotheses are proposed:

H_1: Work supervision has a positive and significant effect on employee work quality.

H_2: Work discipline has a positive and significant effect on employee work quality.

H_3: Work supervision and work discipline simultaneously have a significant effect on employee work quality.

Research Gap and Novelty

Previous studies have examined these variables in different settings. Nurfajria (2024) evaluated the effect of work supervision on employee performance in a food-processing industry (opak gambir). Karlina and Siagian (2024) studied work motivation, supervision, and discipline in relation to productivity at an engineering company. Komariyah and Laelawati (2023) examined work culture and discipline in

relation to productivity in a recycled-paper manufacturer, and Waruwu (2021) discussed the supervision function and work effectiveness in a government office.

Three limitations of these studies motivate the present research. First, their outcome variables are mostly performance, productivity, or effectiveness rather than work quality as such, that is, accuracy, conformity with standards, timeliness, effectiveness, and neatness of work results. Second, several examine only one predictor or combine supervision and discipline with other variables, so the relative contribution of the two is not isolated. Third, the studies reviewed here were conducted in engineering, paper, snack-food, and public-sector settings, and none addresses a seafood-processing company in a coastal area, where quality and hygiene standards are strict.

This study contributes in three ways. It focuses on work quality as the dependent variable, measured through five indicators. It tests work supervision and work discipline simultaneously and compares their relative contributions through standardized coefficients, so that external control and internalized compliance can be evaluated within a single model. It also provides quantitative empirical evidence from a seafood-processing company in Lamongan Regency, whose workforce is relatively new.

Based on this background, the study aims to (1) analyze the effect of work supervision on employee work quality; (2) analyze the effect of work discipline on employee work quality; (3) analyze the simultaneous effect of work supervision and work discipline on employee work quality; and (4) identify the most dominant variable influencing employee work quality at PT Bela Krosea Nusantara. The results are expected to contribute theoretically to the development of human resource management and practically to management in formulating more effective supervision and discipline policies.

METHODS

Research Design and Location

This study uses a quantitative approach with an explanatory research design and a survey method (Creswell & Creswell, 2023; Sugiyono, 2022). It aims to test the causal relationship between the independent variables, work supervision (X_1) and work discipline (X_2), and the dependent variable, employee work quality (Y). The study was conducted at PT Bela Krosea Nusantara, Lohgung Village, Brondong District, Lamongan Regency.

Population and Sample

The population consisted of all 60 active employees of PT Bela Krosea Nusantara. The sample size was determined using the Slovin formula with a 5% margin of error, which yielded 48 respondents selected through probability sampling, specifically simple random sampling.

Data Collection and Instruments

Primary data were collected with a structured questionnaire using a five-point Likert scale (strongly disagree to strongly agree), developed from the indicators of each variable. Work supervision was measured through setting work standards, monitoring work implementation, evaluating work results, corrective action, and work feedback. Work discipline was measured through punctuality, compliance with regulations, obedience to supervisors' instructions, work responsibility, and use of working time. Employee work quality was measured through work accuracy, conformity with standards, timeliness, work effectiveness, and neatness of work results. Secondary data were obtained from company documents and supporting scientific literature.

Instrument Testing

The instrument was tested for validity and reliability before being used for data collection. Validity was assessed with the Pearson product-moment correlation between each item score and the total score, and an

item was declared valid when r-calculated exceeded r-table at α = 5%. Reliability was assessed with Cronbach's alpha, and a variable was considered reliable when alpha exceeded [confirm threshold used, e.g., 0.70] (Nunnally & Bernstein, 1994; Ghozali, 2021). The results are reported for each indicator in the Results and Discussion section.

Data Analysis

The data were analyzed in four stages: (1) classical assumption tests, consisting of a normality test (Kolmogorov-Smirnov), a multicollinearity test (Tolerance and VIF values), and a heteroscedasticity test (scatterplot); (2) multiple linear regression analysis; (3) hypothesis testing through the t-test (partial) and the F-test (simultaneous); and (4) the coefficient of determination (R^2) test (Ghozali, 2021; Hair et al., 2019). All statistical processing was performed with SPSS version 23.

RESULTS AND DISCUSSION

Respondent Characteristics

The respondents were 48 employees of PT Bela Krosea Nusantara. By gender, 24 respondents (50%) were male and 24 (50%) were female, a balanced composition. By age, the largest group was 21–26 years old (15 people, or 31.3%), followed by 27–31 years old (11 people, or 22.9%). By highest level of education, most respondents had completed senior high or vocational school (30 people, or 62.5%), followed by a bachelor's degree (10 people, or 20.8%), junior high school (6 people, or 12.5%), and elementary school (2 people, or 4.2%). By length of service, most respondents (97.9%) had worked for 1–5 years, and only one respondent had longer tenure. This shows that the workforce is relatively new, so continuous discipline development is important.

Classical Assumption Tests

The Kolmogorov-Smirnov normality test produced an Asymp. Sig. (2-tailed) of 0.086, which is greater than 0.05, so the residuals are normally distributed. The multicollinearity test showed a Tolerance of 1.000 (> 0.1) and a VIF of 1.000 (< 10) for both independent variables, so there is no multicollinearity among them. The scatterplot for the heteroscedasticity test showed points scattered randomly without a clear pattern, so the regression model is free of heteroscedasticity. Because all classical assumptions were met, the multiple linear regression model is suitable for hypothesis testing.

Multiple Linear Regression Analysis

The results of the multiple linear regression analysis are presented in Table 1.

Table 1. Multiple Linear Regression Results

Variable	B	Std. Error	Beta	t-calculated	Sig.
Constant	−4.147	3.352	–	−1.237	0.222
Work supervision (X_1)	0.477	0.066	0.475	7.235	0.000
Work discipline (X_2)	0.625	0.058	0.714	10.864	0.000

Source: Primary data processed with SPSS version 23 (2026).

Based on Table 1, the multiple linear regression equation is as follows:

$$\mathbf{Y = -4.147 + 0.477X_1 + 0.625X_2}$$

The constant of −4.147 is not statistically significant (sig. = 0.222 > 0.05), so it cannot be interpreted substantively. The regression coefficient of work supervision (b_1) of 0.477 indicates that each one-unit increase in work supervision increases employee work quality by 0.477 units, assuming the other variable is constant. The regression coefficient of work discipline (b_2) of 0.625 indicates that each one-unit increase in work discipline increases employee work quality by 0.625 units,

assuming the other variable is constant. Both coefficients are positive, indicating a unidirectional relationship between each independent variable and employee work quality.

Hypothesis Testing

Partial test (t-test). Work supervision obtained a t-calculated of 7.235 with a significance of 0.000 (< 0.05, and t-calculated > t-table of 2.014), so H_0 is rejected and H_1 is accepted: work supervision has a significant effect on employee work quality. Work discipline obtained a t-calculated of 10.864 with a significance of 0.000 (< 0.05, and t-calculated > t-table of 2.014), so H_0 is rejected and H_2 is accepted: work discipline has a significant effect on employee work quality.

Simultaneous test (F-test). The ANOVA results show an F-calculated of 94.561 with a significance of 0.000, which is greater than the F-table of 3.21 at the 5% significance level ($df_1 = 2$, $df_2 = 45$). Therefore, H_0 is rejected and H_3 is accepted, meaning that work supervision and work discipline simultaneously have a significant effect on employee work quality.

Coefficient of Determination

The coefficient of determination test produced an R of 0.899 and an R Square (R^2) of 0.808. Work supervision and work discipline together explain 80.8% of the variation in employee work quality, while the remaining 19.2% is explained by factors outside this model, such as work motivation, competence, or organizational culture.

Dominant Variable

Comparing the standardized beta coefficients shows that work discipline has a beta of 0.714 and a t-calculated of 10.864, both larger than those of work supervision (beta of 0.475 and t-calculated of 7.235). Work discipline is therefore the most dominant variable influencing employee work quality at PT Bela Krosea Nusantara. This indicates that employees' internal awareness in complying with work rules and procedures contributes more to work quality than the external control mechanism of managerial supervision.

Discussion

The results show that work supervision has a positive and significant effect on employee work quality at PT Bela Krosea Nusantara. This supports the theoretical view that the managerial control function, when carried out regularly by supervisors, reduces the potential for operational errors and keeps output aligned with the company's quality specifications (Fayol, 1949; Hasibuan, 2021). It is also consistent with goal-setting theory, in which clear standards and prompt feedback direct effort toward the expected level of performance (Locke & Latham, 2002). In processing operations, direct observation and timely feedback make deviations from technical procedures visible so that they can be detected and corrected quickly. The finding agrees with Nurfajria (2024), who reported that good preventive supervision effectively reduces production failures in the food-processing industry, and with Waruwu (2021), who highlighted the role of the supervision function in employee work effectiveness.

Work discipline also has a positive and significant effect on employee work quality. Employees' internal awareness of company regulations, such as punctual attendance, compliance with standard operating procedures (SOPs), and responsibility for their workload, is directly proportional to the improvement of individual work quality. Highly disciplined employees tend to use working time effectively and focus on the details of their tasks, which directly affects the consistency of seafood product quality, where hygiene and strict compliance with technical procedures are required. This finding is consistent with Karlina and Siagian (2024) and Komariyah and Laelawati (2023), who emphasized that employee compliance with organizational rules is a foundation for

stable work efficiency. From the perspective of self-determination theory, rules that have been internalized by employees lead to more autonomous and consistent behavior (Deci & Ryan, 2000).

Simultaneously, work supervision and work discipline have a significant effect on employee work quality, with a contribution of 80.8%. This shows that external control (managerial supervision) and internal compliance (employee discipline) complement each other. Structured supervision will not produce optimal work quality if it is not supported by employees' own discipline, while the enforcement of discipline requires a fair, consistent, and transparent external control mechanism to prevent the loosening of work standards in the field (Armstrong & Taylor, 2020). The larger standardized coefficient of work discipline suggests that it is the main driver of work quality improvement in this company. A possible explanation is that internalized compliance sustains quality even when supervisors are not present, which may matter in a workforce that is mostly new. Work supervision nevertheless remains important as a supporting and corrective mechanism.

CONCLUSION

Based on the data analysis and discussion, it can be concluded that (1) work supervision has a positive and significant effect on employee work quality at PT Bela Krosea Nusantara; (2) work discipline has a positive and significant effect on employee work quality; (3) work supervision and work discipline simultaneously have a significant effect on employee work quality, with a contribution of 80.8%; and (4) work discipline is the most dominant variable influencing employee work quality compared with work supervision.

Based on these findings, the company is advised to maintain and strengthen a preventive and corrective supervision system, ensure that feedback from supervisors is transparent and constructive, and apply a system of rewards and sanctions consistently and objectively to strengthen work discipline. Because most employees have 1–5 years of service, management needs to build a conducive work environment and provide continuous coaching so that the discipline already formed remains stable. This study is limited to one company, uses a cross-sectional design, and relies on self-reported questionnaire data. Future researchers are therefore advised to extend the model with other variables such as work motivation, competence, or organizational culture, and to include more companies, to obtain a more comprehensive picture of the factors that influence employee work quality.

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