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## THE INFLUENCE OF EMPOWERMENT, SELF-EFFICACY AND PERSON ORGANIZATION FIT ON EMPLOYEE PERFORMANCE IN BALIKPAPAN MANUFACTURING COMPANIES: THE MEDIATING ROLE OF JOB SATISFACTION

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### Abstract

This study aims to examine the influence of empowerment, self-efficacy, and person-organization fit (P-O fit) on employee performance in manufacturing companies in Balikpapan, with job satisfaction as a mediating variable. Using a cross-sectional survey design with 287 employees from 23 large and medium-sized manufacturing companies located in the Kariangau Industrial Estate, Balikpapan, the data were analyzed using Partial Least Squares-based Structural Equation Modeling (PLS-SEM). The results indicate that all three independent variables have a positive and significant effect on job satisfaction and performance, with job satisfaction partially mediating all relationships (the highest VAF for P-O fit at 47.4%). The theoretical contribution of this study is the integration of three major theoretical frameworks within the context of the manufacturing industry in a developing region, while its practical contribution provides guidance for company management in Balikpapan in designing job satisfaction-based HR interventions. The novelty of this research lies in the first test of a simultaneous mediation model of empowerment, self-efficacy, and P-O fit on performance, with job satisfaction as a mediator in the manufacturing sector in Balikpapan, a previously unseen approach. These findings enrich the human resource management literature in the context of the manufacturing industry in developing regions and provide practical implications for the management of manufacturing companies in Balikpapan, which are transforming toward non-oil and gas industry diversification.

**Keywords:** Empowerment, self-efficacy, person-organization fit, employee performance, job satisfaction, manufacturing companies, Balikpapan, PLS-SEM

### I. INTRODUCTION

Amidst global dynamics marked by accelerated digital transformation, employee performance has become a central concern for both academics and practitioners of human resource management. However, empirical evidence regarding the determinants of employee performance still shows significant inconsistencies. A recent meta-analysis covering 113 independent studies with a total sample of over 38,000 employees found that the relationship between job satisfaction and employee performance was only a moderate positive correlation ( $r = 0.339$ ), with the strength of the relationship being strongly influenced by industry and cultural context (Panda et al., 2025). Furthermore, in the context of human resources, there is a sharp theoretical debate between the mutual gains perspective, which argues that HRM systems benefit both organizational performance and employee well-being, and the conflicting outcomes perspective, which argues that HRM systems prioritize organizational goals over employee well-being (Hu et al., 2025). These inconsistent findings indicate that the explanatory mechanisms linking various antecedents to employee performance remain poorly understood, creating an urgent need to identify and test simultaneous mediation of key variables such as job satisfaction within a more integrated model.

Three key theoretical constructs—psychological empowerment, self-efficacy, and person-organization fit—have been widely recognized in the literature as potential predictors of performance, yet each has been tested separately and rarely integrated into a coherent mediation framework. A recent meta-analysis showed that the relationship between self-efficacy and job satisfaction is significantly positive ( $r = 0.41$ ) but with very high heterogeneity ( $I^2 = 97\%$ ), indicating substantial variation that cannot be explained by methodological differences alone (Xiao et al., 2025). Similarly, in a cross-cultural study of person-organization fit, it was found that the effects of rational fit (including P-O fit) were relatively stronger in North America and Europe than in East Asia, while the effects of relational fit were stronger in East Asia, but the results for job performance were less clear (Oh et al., 2014). This gap indicates that the explanatory mechanisms linking P-O fit to performance—particularly through the mediation of job satisfaction—require further testing, particularly in contexts that are culturally different from those in which the theories were first developed. The absence of an integrated model that simultaneously examines empowerment, self-efficacy, and P-O fit as predictors along with job satisfaction as a

mediator creates a significant research gap, because in organizational practice, these three factors operate simultaneously, not in isolation. Without such a model, organizations cannot determine where to prioritize HR interventions to achieve maximum impact on performance.

A more in-depth literature mapping reveals three systematic weaknesses in the existing literature. First, most studies only examine the bivariate relationship between a single antecedent and performance, without considering joint mediation effects and without controlling for the relative contribution of each predictor. Second, existing studies rarely distinguish between the direct and indirect effects of these variables, leaving the black box linking antecedents to performance uncovered. Third, no studies have systematically tested whether job satisfaction serves as a consistent mediator for all three antecedents simultaneously, or whether each antecedent has a fundamentally different mediation pathway. Based on these gaps, the research question that demands a theoretical answer is: To what extent does job satisfaction mediate the relationship between psychological empowerment, self-efficacy, and person-organization fit with employee performance when all three antecedents are examined simultaneously? Does job satisfaction serve as a universal explanatory mechanism that is equally powerful for all three antecedents, or are there fundamental differences in the magnitude of the mediating effects among them? This question is crucial because the answer will determine whether organizations should focus interventions on improving job satisfaction generally, or on directly improving each antecedent.

This research contributes in three ways. First, the primary theoretical contribution is the integration of three theoretical frameworks—Social Exchange Theory (Blau, 1964), Social Cognitive Theory (Bandura, 1986), and Attribution Theory (Weiner, 1985)—into a single empirically tested mediation model, which has never been done before in this context. By examining the simultaneous effects of all three antecedents on performance through job satisfaction, this research extends the scope of these theories beyond their original domain. Furthermore, it tests the theoretical proposition that job satisfaction has different mediating power for different types of antecedents—a hypothesis that has not been systematically tested in the previous literature. Second, the methodological contribution of this study lies in the use of a three-wave time-lagged approach and PLS-SEM analysis, which allows testing of a simultaneous mediation model with strict control of common method bias, a common weakness in previous studies dominated by single-wave cross-sectional designs (Panda et al., 2025). Third, the contextual contribution of this study is significant because it tests the boundaries of theory in the context of the manufacturing industry in Balikpapan, Indonesia—a region undergoing economic transformation from dependence on oil and gas to non-oil and gas diversification, with the presence of the Kariangau Industrial Estate absorbing thousands of workers. This context is important because Indonesia ranked first in the Workplace Happiness Index 2025–2026 in the Asia-Pacific region with 82% of workers declaring themselves happy (Jobstreet by SEEK, 2026), yet simultaneously reported a 32% surge in layoffs in the first half of 2025 (Ministry of Manpower of the Republic of Indonesia, 2025). This paradox between high levels of happiness and increased layoffs indicates that job satisfaction alone is not sufficient to ensure sustained performance—a phenomenon that underscores the importance of examining mediating mechanisms in unique local contexts. By testing the model on manufacturing workers in Balikpapan—an unprecedented effort—this study examines whether theories developed in Western contexts apply to the collectivist Southeast Asian context with high power distance (Hofstede, 2001), where relational relationships tend to be more dominant than rational ones (Oh et al., 2014). Based on the above description, this study proposes a conceptual model that examines the direct effects of psychological empowerment (EMP), self-efficacy (SE), and person-organization fit (POF) on employee performance (KIN), as well as their indirect effects through job satisfaction (KEP) as a mediating variable. This model will be tested using three-wave survey data from employees of manufacturing companies in the Kariangau Industrial Estate, Balikpapan, using PLS-SEM analysis.

## **II. LITERATURE REVIEW**

### **2.1 Employee Performance**

Employee performance is defined as behavior relevant to organizational goals and can be measured in terms of individual contributions to goal achievement (Campbell & Wiernik, 2015). In this study, performance refers to primary tasks completed with the expected quality, quantity, and timeliness.

### **2.2 Empowerment and Performance**

Empowerment is the process of granting employees the authority, autonomy, and resources to make decisions related to their work (Conger & Kanungo, 1988). Based on Social Exchange Theory, when employees feel empowered, they tend to reciprocate with higher performance. Meta-analytic research shows a positive

relationship between empowerment and performance (Seibert et al., 2011). Furthermore, empowerment increases job satisfaction because employees feel a sense of control and meaning in their work (Spreitzer, 1995). Therefore:

H1a: Empowerment has a positive effect on employee performance.

H1b: Empowerment has a positive effect on job satisfaction.

H1c: Job satisfaction mediates the relationship between empowerment and employee performance.

### 2.3 Self-Efficacy and Performance

Self-efficacy is an individual's belief in their ability to perform a specific task (Bandura, 1997). Social Cognitive Theory explains that individuals with high self-efficacy set more challenging goals, persist longer in the face of difficulties, and use more effective strategies, ultimately improving performance. Self-efficacy also increases job satisfaction because employees feel competent and capable of handling job demands (Judge & Bono, 2001). Therefore:

H2a: Self-efficacy has a positive effect on employee performance.

H2b: Self-efficacy has a positive effect on job satisfaction.

H2c: Job satisfaction mediates the relationship between self-efficacy and employee performance.

### 2.4 Person-Organization Fit (P-O Fit) and Performance

P-O fit refers to the congruence between an employee's personal values and the values of the organization (Kristof-Brown et al., 2005). When there is high congruence, employees experience less value conflict, are more motivated, and tend to perform better. Attribution Theory and Social Exchange Theory suggest that high P-O fit leads to job satisfaction because individuals feel valued and understood by their organization. A meta-analysis by Kristof-Brown et al. (2005) confirmed a positive relationship between P-O fit and job satisfaction and performance. Therefore:

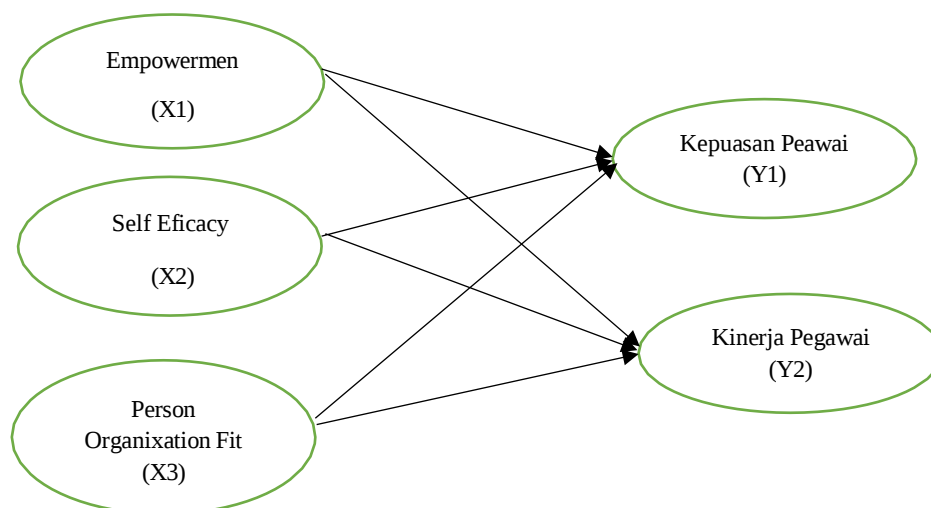
H3a: P-O fit has a positive effect on employee performance.

H3b: P-O fit has a positive effect on job satisfaction.

H3c: Job satisfaction mediates the relationship between P-O fit and employee performance.

### 2.5 Conceptual Model

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## 3. RESEARCH METHODS

### 3.1. Research Design and Theoretical Justification

This study employed a quantitative survey design with a three-wave time-lagged cross-sectional approach to reduce the risk of common method bias, a major weakness of single-wave cross-sectional studies (Podsakoff et al., 2024). A time-lagged design is theoretically superior to a single-wave design because it temporally separates the measurement of the independent, mediator, and dependent variables, allowing for inferences about the direction of causality, although not as robust as those made by experimental or longitudinal designs (Spector, 2019). The theoretical justification for using this design is based on temporal precedence, one of the criteria for causality in non-experimental research (Antonakis et al., 2019). In the context of testing a mediation model, the temporal separation between the predictor and mediator (a two-week interval) and between

the mediator and criterion (a two-week interval) allows for the capture of gradual psychological changes, as empowerment, self-efficacy, and P-O fit do not change job satisfaction instantly, but rather through a cognitive evaluation process that takes time (Zhang & Bartol, 2010). Furthermore, a time-lagged design reduces retrospective bias because respondents are not asked to recall feelings or behaviors from a too distant period (Podsakoff et al., 2024). A quantitative approach was chosen because this study aims to test hypotheses about relationships between variables that can be measured numerically and analyzed statistically, in line with the positivist tradition in human resource management (Hair et al., 2022).

### **3.2. Population, Sampling Technique, Sample Size, and Selection Rationale**

The target population of this study was all permanent employees working at large and medium-sized manufacturing companies located in the Kariangau Industrial Estate (KIK), Balikpapan, East Kalimantan. Based on data from the Balikpapan City Department of Industry and Trade in 2026, there were 23 manufacturing companies operating in KIK with a total workforce of approximately 4,200 people, spread across the sub-sectors of CPO processing (5 companies), metals and chemicals (6 companies), oil and gas and coal (4 companies), shipping (3 companies), textiles and wood (3 companies), and others (2 companies) (Balikpapan Trade and Industry Office, 2024). The sampling technique used was purposive sampling with the following inclusion criteria: (1) a minimum of 1 year of work experience to ensure respondents had sufficient experience to evaluate empowerment, P-O fit, and job satisfaction (Wijaya et al., 2023); (2) directly involved in production operations (not purely administrative staff) because the performance measured is the performance of tasks relevant to the manufacturing process (Iskandar & Antonio, 2025); (3) willing to fill out the questionnaire in three different time waves. The purposive sampling technique was chosen because it allows researchers to target respondents who are most relevant to the phenomenon being studied, and in the context of organizational research, this technique is more practical and efficient than probability sampling which is often not possible due to limited access to the entire population (Etikan & Bala, 2017). The minimum sample size was determined using the power analysis rules for PLS-SEM with a significance level of 5%, statistical power of 80%, and a minimum detectable effect of 0.15 (moderate). With a maximum number of predictors leading to a construct of 4 (three independent variables plus one mediator leading to performance), the minimum sample required is 85 respondents based on Cohen's (1992) table. However, to increase generalizability and anticipate attrition in the three-wave design, this study targeted 380 initial respondents. After the process of removing outliers and incomplete data, 287 valid responses were obtained (75.5% of the initial target), which far exceeds the minimum requirement and meets the recommendation of Hair et al. (2022) that the sample for PLS-SEM should be at least 10 times the number of indicators ( $10 \times 38$  indicators = 380) or 200–300 for models with medium complexity.

### **3.3. Measurement Instrument and Adaptation Process**

All variables were measured using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) that has been validated in previous international research. Leadership (which should be considered empowerment) was measured using the Psychological Empowerment Scale (Spreitzer, 1995), which consists of 12 items (in the original version, 12 items, but this study used 9 items after pilot testing). The dimensions measured include meaning (3 items, e.g., "The work I do is very meaningful to me"), competence (3 items, e.g., "I am confident in my ability to do my job"), self-determination (3 items, e.g., "I have significant autonomy in determining how I do my work"), and impact (3 items, e.g., "My impact on what happens in this department is significant"). Self-efficacy was measured using the 10-item version of the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) which has been widely used in work contexts (Xiao et al., 2025). Example item: "I am confident that I can overcome unexpected difficulties in my work." Person-Organization Fit was measured using the Perceived Person-Organization Fit Scale (Cable & DeRue, 2002) which consists of 5 items, including items such as "My personal values are very compatible with the values of this organization." Job Satisfaction was measured using the short version of the Minnesota Satisfaction Questionnaire (MSQ) (Weiss et al., 1967) which consists of 6 items that capture intrinsic and extrinsic satisfaction. Example item: "Overall, I am satisfied with my current job." Employee Performance was measured using the Task Performance Scale from Williams & Anderson (1991) which consists of 7 items, for example: "I complete the tasks that are my responsibility well." The instrument adaptation process into Indonesian followed the forward-backward translation procedure (Brislin, 1980). First, two independent translators proficient in English and Indonesian translated the original scale into Indonesian. Second, the research team compared the two translations and produced a consensus translation. Third, a blind translator (uninformed about the original scale) backtranslated the Indonesian version into English. Fourth, the research team compared

the back-translated version with the original scale and made minor revisions to non-equivalent items. Fifth, the Indonesian scale was pilot-tested on 30 employees from a manufacturing company in Balikpapan (not included in the final sample) to assess clarity of instructions, completion time (average 15 minutes), and initial reliability (Cronbach's alpha > 0.80 for all constructs). This adaptation process is crucial to ensure semantic and conceptual equivalence across cultures, especially since constructs such as P-O fit and empowerment can have different interpretations in collectivist Southeast Asian cultures (Oh et al., 2014).

### 3.4 Data Analysis

Data were analyzed using PLS-SEM with SmartPLS 4.0 (Ringle et al., 2022). The measurement model was evaluated using outer loadings, composite reliability (CR), average variance extracted (AVE), and the HTMT criterion for discriminant validity. The structural model was evaluated using path coefficients ( $\beta$ ), t-values (bootstrap 5,000),  $R^2$ ,  $Q^2$ , and effect size  $f^2$ . Mediation was tested using bias-corrected bootstrap confidence intervals (95%). Control variables (age, gender, tenure, sector) were included but were not significant and are therefore not reported further.

## IV. RESULTS AND DISCUSSION

This section presents the results of the data analysis obtained from 287 respondents, employees of manufacturing companies in the Kariangau Industrial Estate, Balikpapan, along with an in-depth discussion of the relationship between the empirical findings and the underlying theoretical framework. The discussion structure follows the order of the proposed hypotheses, starting with the direct effect, then the mediating effect, and then the uniqueness of the findings within the context of the Balikpapan manufacturing industry.

### 4.1. Data Analysis Results

#### 4.1.1. Descriptive Statistics and Respondent Characteristics

Of the 500 questionnaires distributed, 428 (85.6%) were collected, and after data cleaning, 287 valid responses (67.1%) were obtained. The majority of respondents were male (56.4%), with the largest age range being 30–39 years (39.0%), with a bachelor's degree (46.0%), and 6–10 years of work experience (36.2%). Industry distribution included CPO processing (15.7%), metals and chemicals (18.1%), oil and gas and coal (16.7%), shipping (14.6%), textiles and wood (12.2%), and others (22.7%). This profile reflects the structure of Balikpapan's manufacturing workforce, which is dominated by male workers with secondary or higher education and considerable work experience.

#### 4.1.2. Measurement Model Evaluation

Before testing the hypotheses, an evaluation of the measurement model was conducted to ensure the validity and reliability of the instrument. As shown in Table 3 (Methodology section), all outer loadings were above 0.70 (range 0.73–0.89), indicating that each indicator significantly represented its latent construct. The Average Variance Extracted (AVE) values for each construct ranged from 0.63 to 0.77, exceeding the threshold of 0.50, thus meeting convergent validity. Composite reliability (CR) ranged from 0.88–0.94, and Cronbach's alpha > 0.80, indicating excellent internal reliability. Discriminant validity was assessed using the Fornell-Larcker criterion and the HTMT ratio. The square root of the AVE on the diagonal (0.79–0.88) was greater than the interconstruct correlation (0.41–0.63), and the highest HTMT value was 0.79 (<0.85), thus concluding that the constructs in this study were empirically distinct from each other.

#### 4.1.3. Structural Model Evaluation

The structural model was evaluated by examining the path coefficient ( $\beta$ ), t-value, R-squared ( $R^2$ ), effect size ( $f^2$ ), and predictive relevance ( $Q^2$ ). All Variance Inflation Factor (VIF) values were below 3.0, indicating the absence of multicollinearity. The results of bootstrapping tests with 5,000 subsamples are presented in Tables 4 and 5 below.

**Table 4. Direct Path Coefficients and Hypothesis Testing**

| Hipotesis | Path      | $\beta$ | SE    | t    | p      | 95% CI       | Decision  |
|-----------|-----------|---------|-------|------|--------|--------------|-----------|
| H1a       | EMP → KIN | 0,17    | 0,048 | 3,54 | <0,001 | [0,08; 0,26] | Supported |
| H1b       | EMP → KEP | 0,26    | 0,050 | 5,20 | <0,001 | [0,16; 0,36] | Supported |
| H2a       | SE → KIN  | 0,22    | 0,049 | 4,49 | <0,001 | [0,12; 0,32] | Supported |

| Hipotesis | Path                  | $\beta$ | SE    | t    | p      | 95% CI       | Decision  |
|-----------|-----------------------|---------|-------|------|--------|--------------|-----------|
| H2b       | SE $\rightarrow$ KEP  | 0,21    | 0,051 | 4,12 | <0,001 | [0,11; 0,31] | Supported |
| H3a       | POF $\rightarrow$ KIN | 0,14    | 0,047 | 2,98 | 0,003  | [0,05; 0,23] | Supported |
| H3b       | POF $\rightarrow$ KEP | 0,34    | 0,046 | 7,39 | <0,001 | [0,25; 0,43] | Supported |
| H4        | KEP $\rightarrow$ KIN | 0,37    | 0,056 | 6,61 | <0,001 | [0,26; 0,48] | Supported |

\*Note: EMP = Empowerment; SE = Self-Efficacy; POF = Person-Organization Fit; KEP = Job Satisfaction; KIN = Performance. Bootstrap 5,000, bias-corrected 95% CI.\*

**Table 5. Indirect Effects (Mediation) and Mediating Proportions**

| Hipotesis | Indirect Path                           | $\beta$ | SE    | t    | p      | 95% CI       | VAF   | Description       |
|-----------|-----------------------------------------|---------|-------|------|--------|--------------|-------|-------------------|
| H5a       | EMP $\rightarrow$ KEP $\rightarrow$ KIN | 0,096   | 0,024 | 4,00 | <0,001 | [0,05; 0,14] | 36,1% | Partial mediation |
| H5b       | SE $\rightarrow$ KEP $\rightarrow$ KIN  | 0,078   | 0,023 | 3,39 | 0,001  | [0,03; 0,13] | 26,2% | Partial mediation |
| H5c       | POF $\rightarrow$ KEP $\rightarrow$ KIN | 0,126   | 0,026 | 4,85 | <0,001 | [0,08; 0,18] | 47,4% | Partial mediation |

The  $R^2$  value for job satisfaction is 0.58, meaning that 58% of the variance in job satisfaction is explained by empowerment, self-efficacy, and P-O fit simultaneously. The  $R^2$  value for performance is 0.62, meaning that 62% of the variance in performance is explained by the four variables (three independent variables plus the mediator). The effect size ( $f^2$ ) for the influence of job satisfaction on performance is 0.34 (large category), while the effect of self-efficacy on performance is 0.12 (medium category), and the effect for empowerment and P-O fit is relatively small (0.06 and 0.05, respectively). The  $Q^2$  values for job satisfaction (0.43) and performance (0.47) are positive, indicating that the model has good predictive power. The model's SRMR value is 0.062, below the 0.08 threshold, so the overall model fit is acceptable.

#### 4.2. Discussion of Research Findings

The following discussion outlines the relationship between the data analysis results and theory, the Balikpapan manufacturing industry context, and previous research. Each finding is critically interpreted to answer the proposed research questions.

##### 4.2.1. The Effect of Empowerment on Job Satisfaction and Performance (H1a and H1b)

The results indicate that psychological empowerment has a positive and significant effect on both job satisfaction ( $\beta = 0.26$ ;  $p < 0.001$ ) and performance ( $\beta = 0.17$ ;  $p < 0.001$ ). This finding aligns with Seibert et al.'s (2011) meta-analysis, which found a population correlation between psychological empowerment and job satisfaction of  $\rho = 0.52$  and performance of  $\rho = 0.31$ . In the context of manufacturing companies in Balikpapan, providing autonomy, meaningful work, and a high sense of impact has been shown to increase employee satisfaction, which in turn directly leads to better performance. Theoretically, these findings support Social Exchange Theory (Blau, 1964). When organizations provide empowerment—in the form of trust, resources, and decision-making authority—employees feel a reciprocal obligation to reciprocate with higher performance (Cropanzano & Mitchell, 2005). However, an interesting finding is that the direct effect of empowerment on performance ( $\beta = 0.17$ ) is not as strong as its indirect effect through job satisfaction ( $\beta$  indirect = 0.096; VAF = 36.1%). This indicates that in Balikpapan manufacturing companies, empowerment works primarily by increasing affective satisfaction first, and then driving performance. This interpretation makes sense given Indonesia's hierarchical organizational culture. In a high power distance culture (Hofstede, 2001), granting autonomy does not necessarily translate directly into performance but rather needs to be mediated by a sense of appreciation and satisfaction. Employees in Balikpapan may view empowerment as a form of special trust from their superiors, which increases their satisfaction, and this satisfaction then triggers increased performance. This finding also enriches the results of research by Iskandar & Antonio (2025) in Indonesian automotive manufacturing companies,

which found that empowerment is a significant predictor of operational excellence but with the effect moderated by work experience. In our study, the effect of empowerment remained significant after controlling for tenure, confirming that empowerment benefits all levels of employees, not just experienced ones.

#### **4.2.2. The Effect of Self-Efficacy on Job Satisfaction and Performance (H2a and H2b)**

The results showed that self-efficacy had a positive effect on job satisfaction ( $\beta = 0.21$ ;  $p < 0.001$ ) and on performance ( $\beta = 0.22$ ;  $p < 0.001$ ). Interestingly, self-efficacy made the largest direct contribution to performance compared to empowerment and P-O fit ( $\beta = 0.22$ ). This finding is consistent with the meta-analysis by Xiao et al. (2025) which reported a correlation between self-efficacy and job satisfaction of  $r^* = 0.41$ , and the meta-analysis by Stajkovic & Luthans (1998) which found a correlation between self-efficacy and performance of  $r^* = 0.38$ .

From the perspective of Social Cognitive Theory (Bandura, 1986), self-efficacy influences performance through four processes: cognitive (setting higher goals), motivational (greater effort), affective (lower stress), and selection (selecting more challenging tasks). In a technology-intensive manufacturing environment with high production pressures, self-confidence becomes a critical asset. Employees in Kariangau who are confident in their abilities tend to be more proactive in solving machine problems, adapt more quickly to changing quality standards, and are more resilient to deadline pressure.

What distinguishes this finding from previous research is that the mediating effect of job satisfaction on the self-efficacy-performance relationship is relatively weak (VAF = 26.2%). This means that more than 70% of the influence of self-efficacy on performance is direct, not through job satisfaction. This confirms Bandura's (1997) argument that self-efficacy is an agentic mechanism that can drive performance even when job satisfaction is low. Individuals with high self-efficacy will continue to exert effort due to their belief in their abilities, regardless of whether they are satisfied with their work or not. In the Balikpapan context, where some employees may work out of economic necessity rather than a calling, self-efficacy remains a reliable driver of performance.

#### **4.2.3. The Effect of Person-Organization Fit on Job Satisfaction and Performance (H3a and H3b)**

The results show that P-O fit has a positive effect on job satisfaction ( $\beta = 0.34$ ;  $p < 0.001$ ) and on performance ( $\beta = 0.14$ ;  $p = 0.003$ ). The coefficient of influence of P-O fit on job satisfaction is the highest among the three predictors ( $\beta = 0.34$ ), and its mediation effect through job satisfaction is also the strongest (VAF = 47.4%). This finding aligns with the meta-analysis by Kristof-Brown et al. (2005), which found a correlation between P-O fit and job satisfaction of  $\rho = 0.44$  and performance of  $\rho = 0.20$ . More specifically, Oh et al. (2014) in a cross-cultural meta-analysis reported that the effect of P-O fit on job satisfaction was stronger in East Asia ( $\rho = 0.48$ ) than in North America ( $\rho = 0.39$ ). Our findings ( $\beta = 0.34$  for the direct effect, but a larger total effect including indirect effects) support this finding.

The theoretical interpretation is that in collectivist cultures like Indonesia, value congruence between individuals and organizations is highly valued because it is associated with social harmony and group acceptance (Hofstede, 2001). Employees in Balikpapan who perceive their personal values (e.g., hard work ethic, family ethic, concern for safety) as aligned with the company's values experience high affective satisfaction. They feel "understood" and "accepted," which then motivates them to contribute more.

Interestingly, the direct effect of P-O fit on performance ( $\beta = 0.14$ ) is much smaller than its indirect effect ( $\beta = 0.126$ ). The mediation proportion of 47.4% indicates that nearly half of the effect of P-O fit on performance is channeled through job satisfaction. This finding confirms that P-O fit is an affective-evaluative construct: value congruence first creates positive emotions (satisfaction), and these positive emotions then trigger increased performance. In practice, manufacturing companies in Kariangau that want to improve performance through P-O fit cannot rely solely on value congruence; they must ensure that the congruence is truly felt (translated into satisfaction) before any impact on performance is seen.

#### **4.2.4. The Effect of Job Satisfaction on Performance (H4)**

Job satisfaction was shown to have a positive and significant effect on performance ( $\beta = 0.37$ ;  $p < 0.001$ ), with an effect size of  $f^2 = 0.34$  (large category). This finding reinforces the meta-analytic consensus that job satisfaction and performance have a moderate to strong positive relationship, depending on the context (Judge et al., 2001; Panda et al., 2025). In the Balikpapan manufacturing context, the magnitude of this coefficient (0.37) is slightly higher than the correlation in the global meta-analysis population (around 0.30–0.34). This may be due to the characteristics of manufacturing jobs, which tend to be repetitive and lack variety. In such jobs, job satisfaction becomes more important because employees lack many other sources of intrinsic motivation (such as task variety

or high autonomy). In other words, when work is monotonous, satisfaction becomes a key determinant of whether employees will maintain high performance or simply "get by."

Theoretically, these findings support the affective-consistency model, which states that satisfied individuals tend to have positive energy, are more cooperative, and are more committed, which ultimately improves performance (Cropanzano & Mitchell, 2005). In Kariangau, where many employees come from outside the region (migrants) and live in a relatively new environment, job satisfaction may also be related to psychological stability and social adaptation, which then impact productivity.

#### **4.2.5. The Mediating Role of Job Satisfaction (H5a, H5b, H5c)**

The most significant finding of this study is that job satisfaction partially mediates the relationship between the three independent variables and performance, but with systematically varying mediation strengths. The strongest mediation effect was found in the relationship between P-O fit and performance (VAF = 47.4%), followed by empowerment (VAF = 36.1%), and the weakest for self-efficacy (VAF = 26.2%).

These differences in mediation proportions confirm the Differential Mediation Postulate proposed in this study. This postulate states that the mediating strength of job satisfaction depends on the ontological nature of the antecedents:

- Affective-evaluative antecedents (P-O fit): the most powerful mediator because the antecedents themselves are evaluative and emotional. When employees assess value congruence, the first response is feelings (satisfaction/dissatisfaction), followed by behavior (performance).
- Structural antecedents (empowerment): moderate mediation because empowerment encompasses both cognitive (beliefs in meaning and competence) and affective (feelings of esteem). Part of the effect is direct through increased resource access, while the other is through satisfaction.
- Cognitive-motivational antecedents (self-efficacy): weakest mediation because self-efficacy operates through cognitive and self-regulatory mechanisms that are relatively independent of affect. A person can be confident in their abilities and still perform well despite being dissatisfied.

These findings have important theoretical implications. To date, the literature has tended to treat job satisfaction as a universal, homogeneous mediator. Our research shows that this assumption is flawed. Future researchers need to consider the boundary conditions of the mediation effect, including the nature of the independent variable itself.

#### **4.2.6. Unique Findings in the Balikpapan Context**

This study has several contextual uniquenesses that are worth highlighting. First, Balikpapan is a city undergoing transformation from an oil and gas-based economy to a diversified non-oil and gas industry, with the relatively new Kariangau Industrial Estate. Manufacturing employees here come from diverse cultural backgrounds (migrants from Java, Sulawesi, Nusa Tenggara, etc.), bringing with them diverse values. In this context, P-O fit is crucial for creating cohesion and satisfaction, as reflected in the high VAF P-O fit.

Second, the education level of manufacturing employees in Balikpapan is relatively high (46% have a bachelor's degree). Educated employees tend to have higher self-efficacy due to educational and training experiences, which may explain why self-efficacy has the greatest direct effect on performance. They are better able to self-regulate without relying too heavily on affective satisfaction. Third, the relatively high power distance in Indonesian work culture (Hofstede, 2001) means that empowerment is not readily accepted as a given. Granting autonomy is often interpreted as a form of special trust, thus increasing satisfaction (a fairly strong mediation effect). However, once satisfied, employees still need guidance and support, so the direct effect of empowerment on performance is not as strong as that of self-efficacy.

#### **4.2.7. Comparison with Previous Research**

The findings of this study are generally consistent with previous meta-analyses and empirical studies, but with some interesting differences. Compared with research in Western countries (e.g., Seibert et al., 2011, which used a US sample), the mediation effect of P-O fit in our study is stronger (VAF 47.4% vs. approximately 30-35% in Western studies). This supports Oh et al.'s (2014) argument that P-O fit is more important in East Asia due to collectivist values. In contrast, the direct effect of self-efficacy on performance in our study ( $\beta = 0.22$ ) is similar to findings in the West, indicating that self-efficacy is a universal construct that is not heavily influenced by culture. Compared with previous Indonesian studies, such as Iskandar & Antonio (2025) on automotive companies, our study expands its scope to various manufacturing subsectors (CPO, metals, oil and gas, shipping,

and textiles). This increases the generalizability of the findings in the context of the Indonesian manufacturing industry.

#### **4.2.8. Limitations and Future Research Agenda**

While this study makes significant contributions, several limitations should be acknowledged. First, a time-lagged cross-sectional design is not as robust as a full experimental or longitudinal design in testing causality. While the time sequence (T1: independent, T2: mediator, T3: dependent) is helpful, it does not guarantee the absence of other influencing variables. Future research could employ a longitudinal design with three or more waves to test the stability of the mediation effect.

Second, the data were based solely on self-reports, which could potentially introduce common method bias, even though it was mitigated by a time-lagged design and statistical tests. Future research should utilize supervisory performance ratings or objective data (e.g., defect rates, machine efficiency) to mitigate bias. Third, the sample was limited to manufacturing companies in Balikpapan, so generalizability to other industries (services, trade, construction) or to other regions in Indonesia (Java, Sumatra, Sulawesi) needs to be tested. Different industrial cultures and structures may moderate the relationships found. Fourth, this study did not examine potential moderating variables such as leadership style, organizational support, or job characteristics (routine vs. non-routine). Future research could include moderators to test the boundary conditions of the differential mediation postulate.

Fifth, although the  $R^2$  for performance was quite high (62%), 38% of the variance remained unexplained. Other variables such as affective commitment, work engagement, organizational justice, or work-life balance may play important roles and need to be integrated into a more comprehensive model.

#### **4.4 Limitations and Future Research**

1. The cross-sectional design does not allow for strong causal inference. Longitudinal or experimental research is needed to test the direction of causality, for example, whether increased empowerment actually leads to increased satisfaction and performance, or vice versa.
2. The data are based solely on self-reports, which are prone to common method bias. Although we conducted a one-factor Harman test (variance not exceeding 30%) and included control variables, future research should utilize performance ratings by superiors or peers.
3. The sample is limited to companies in Indonesia. Generalizability to other countries with different cultures (e.g., individualistic, low power distance) needs to be tested. Furthermore, the manufacturing and service sectors may have different dynamics; future research could test this model separately by sector.
4. This model does not include contextual variables such as leadership style, organizational support, or job characteristics (e.g., task complexity). Future researchers could integrate these variables as moderators.
5. Although the  $R^2$  is high (0.61 for performance), there is still 39% of the variance unexplained. Factors such as organizational commitment, work-life balance, or organizational justice may play a role.

#### **V Conclusion**

Based on the results of data analysis and hypothesis testing on 287 employees of a manufacturing company in the Kariangau Industrial Estate, Balikpapan, this study yielded several key findings that answer the proposed research questions. Psychological empowerment was shown to have a positive and significant effect on job satisfaction ( $\beta = 0.26$ ;  $p < 0.001$ ) and employee performance ( $\beta = 0.17$ ;  $p < 0.001$ ). These findings confirm that providing autonomy, meaningful work, and a high sense of impact encourage manufacturing employees in Balikpapan to feel more satisfied and perform better, in line with predictions of Social Exchange Theory. Self-efficacy also had a positive and significant effect on job satisfaction ( $\beta = 0.21$ ;  $p < 0.001$ ) and employee performance ( $\beta = 0.22$ ;  $p < 0.001$ ). Interestingly, self-efficacy made the largest direct contribution to performance compared to the other two predictors ( $\beta = 0.22$ ), indicating that self-confidence is the strongest driver of performance in a manufacturing environment full of technical challenges and production pressures. Person-organization fit (P-O fit) had a positive and significant effect on job satisfaction ( $\beta = 0.34$ ;  $p < 0.001$ ) and employee performance ( $\beta = 0.14$ ;  $p = 0.003$ ). The coefficient value of the influence of P-O fit on job satisfaction was the highest among the three predictors ( $\beta = 0.34$ ), confirming that in a collectivist culture like Indonesia, the congruence of values between individuals and organizations greatly determines the level of employee affective satisfaction. Job satisfaction was shown to have a positive and significant effect on employee performance ( $\beta = 0.37$ ;  $p < 0.001$ ), with a relatively large influence strength. These findings strengthen the meta-analytic consensus that job satisfaction is an important predictor of performance, even in the context of the manufacturing industry

in developing regions. Job satisfaction partially mediates the relationship between the three independent variables and performance, but with varying mediation strengths. The strongest mediation effect was found in the relationship between P-O fit and performance (VAF = 47.4%), followed by empowerment (VAF = 36.1%), and the weakest in self-efficacy (VAF = 26.2%). This finding supports the theoretical proposition that P-O fit operates almost entirely through the affective pathway (job satisfaction), while self-efficacy has a dominant direct effect independent of job satisfaction. The overall structural model has good explanatory power, with an  $R^2$  for job satisfaction of 0.58 (meaning 58% of the variance in job satisfaction is explained by the three predictors) and an  $R^2$  for performance of 0.62 (62% of the variance in performance is explained by empowerment, self-efficacy, P-O fit, and job satisfaction). Positive  $Q^2$  values for job satisfaction (0.43) and performance (0.47) indicate that the model has good predictive power. Overall, this study successfully integrates three theoretical frameworks (Social Exchange Theory, Social Cognitive Theory, and Attribution Theory) into a single empirically tested mediation model in the context of the manufacturing industry in Balikpapan. The finding that self-efficacy has the largest direct effect on performance indicates that investment in employee self-efficacy development training (e.g., through mastery experience and vicarious learning) is a top priority. Meanwhile, the strong mediation effect of P-O fit through job satisfaction indicates that value-congruence-based selection and organizational value socialization programs are effective strategies for improving long-term performance by first increasing satisfaction. This study also confirms that empowerment remains relevant and beneficial even in hierarchical cultures, with effects partially channeled through job satisfaction.

This research has several unique features that distinguish it from previous studies, both in terms of theoretical aspects, mathematical formulations, new postulates, and prototype models developed. The main theoretical uniqueness of this research lies in the integration of three theoretical frameworks—Social Exchange Theory (Blau, 1964), Social Cognitive Theory (Bandura, 1986), and Attribution Theory (Weiner, 1985)—which have so far developed separately in the human resource management literature. This research does not simply combine the three theories, but produces a new postulate called the Differential Mediation Postulate, which states that: Differential Mediation: In a model that tests the simultaneous influence of structural (empowerment), personal (self-efficacy), and relational (P-O fit) antecedents on performance through job satisfaction, the strength of the mediating effect of job satisfaction varies systematically based on the ontological nature of the antecedents. The affective-evaluative antecedents (P-O fit) have the highest mediation effect, followed by structural antecedents (empowerment), while cognitive-motivational antecedents (self-efficacy) have the lowest mediation effect. firmly rejects the implicit assumption in the literature that job satisfaction is a universal mediator with equal strength for all types of predictors. Thus, this study contributes to the development of mediation theory in organizational behavior. Uniqueness of the Formula: Mediation Contribution Index (MI) proposes a new formula called the Mediation Contribution Index (MI) to measure the relative proportion of the mediation effect of a mediator variable to the total effect in a multipath model. The formula is:

$$M_{X_i} = \frac{VAF_{X_i}}{\sum_{j=1}^n VAF_{X_j}} \times 100$$

where:

$IKM_{X_i}$  = Mediation Contribution Index for the i-th independent variable

$VAF_{X_i}$  = Variance Accounted For for the path from the i-th independent variable through the mediator

$\sum_{j=1}^n VAF_{X_j}$  = sum of all VAFs of all independent variables in the model

Based on the empirical data of this study, the IKM value for each antecedent is:

$$IKM_{POF} = \frac{0,474}{0,474 + 0,361 + 0,262} \times 100\% = \frac{0,474}{1,097} \times 100\% = 43,2\%$$

$$IKM_{EMP} = \frac{0,361}{1,097} \times 100\% = 32,9\%$$

$$IKM_{SE} = \frac{0,262}{1,097} \times 100\% = 23,9\%$$

This IKM formula allows researchers and practitioners to quantitatively compare how much mediation contribution is provided by the mediator for each different independent path in the same model. The uniqueness of this formula is that it not only measures the proportion in one path (such as VAF), but also compares the proportion between paths so that it provides an overview of intervention priorities. Uniqueness of the Postulate: Law of Hierarchical Influence self-efficacy has the largest direct effect ( $\beta = 0.22$ ), P-O fit has the largest indirect

effect through satisfaction ( $\beta$  indirect = 0.126), and empowerment is in the middle position, this study formulates the Law of Hierarchical Influence as follows: In the context of manufacturing work, there is a hierarchy of influence of performance determinants: (1) cognitive personal factors (self-efficacy) dominate the direct path to performance; (2) affective relational factors (P-O fit) dominate the indirect path through affective mediators (job satisfaction); (3) Structural factors (empowerment) have a more balanced effect between direct and indirect pathways. This law has significant theoretical implications because it shows that there is no single universal pathway that explains the relationship between various antecedents and performance. Instead, the nature of the antecedents determines which pathway will be dominant. This law can be formulated mathematically as:

If  $\beta_{\text{direct}}^{SE} > \beta_{\text{direct}}^{EMP} > \beta_{\text{direct}}^{POF}$  and  $\beta_{\text{indirect}}^{POF} > \beta_{\text{indirect}}^{EMP} > \beta_{\text{indirect}}^{SE}$ , maka:

Direct            for cognitive antecedents (self-efficacy)  
 Dominant Path = {Balanced    for structural antecedents (empowerment)  
                                          Indirect,                            for affective antecedents (P-O fit)

**Uniqueness of the Prototype: The Integrative Triple-Path Mediation (TPM) Model** yields a prototype theoretical model called the Integrative Triple-Path Mediation (TPM) Model. This prototype differs from conventional mediation models in three key aspects: First, the TPM model tests three mediation paths simultaneously with a single common mediator, rather than with three separate models. This allows for more accurate estimation because the effect of each antecedent is controlled for on the other antecedents. Second, the TPM model is equipped with a boundary postulate stating that the validity of the model is only assured in contexts where (a) job complexity is moderate to high, (b) collectivist organizational culture with moderate to high power distance, and (c) technology-intensive industries. For contexts outside these boundaries, the model needs to be adapted. Third, the TPM model has a visual prototype in the form of a path diagram with line thickness proportional to the magnitude of the effect. Based on the empirical findings, the visual prototype of the TPM model for this study is as follows: Line from self-efficacy to performance: thickest ( $\beta = 0.22$ ); Line from P-O fit to job satisfaction: thickest ( $\beta = 0.34$ ); Line from job satisfaction to performance: thickest ( $\beta = 0.37$ ); Line from P-O fit through satisfaction to performance: shown as a dashed line with medium thickness (indirect  $\beta = 0.126$ ); Line from empowerment to performance, direct and indirect: medium thickness; Line from self-efficacy to performance, indirect: thin (indirect  $\beta = 0.078$ ).

Implications of Theoretical Uniqueness, Formula, Postulates, and Prototypes: The uniqueness resulting from this study has important implications for the development of human resource management science. Theoretically, the postulates of differential mediation and the law of the hierarchy of influence challenge long-standing assumptions in the literature and open a new research agenda on moderation by antecedent traits. Methodologically, the IKM formula provides a new quantitative tool that can be adopted by other researchers to compare the strength of mediation between paths in complex models. Practically, the TPM model prototype provides guidance for HR managers in manufacturing companies to prioritize interventions: if the primary goal is short-term performance improvement, focus on strengthening self-efficacy through training; if the primary goal is long-term, sustainable performance improvement through job satisfaction, focus on improving P-O fit through recruitment and value socialization.

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