

Leadership Style and Perceived Meritocracy: Work Engagement as a Mediator of Job Satisfaction

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Abstract

The management of non-organic workers requires organizations to pay attention not only to supervisory practices but also to the fairness and objectivity of employment-related decisions. This study examines the effects of leadership style and perceived meritocracy on job satisfaction, with work engagement serving as a mediating variable among non-organic workers at PT Petrokopindo Cipta Selaras. The study employed a quantitative explanatory design and analyzed data from 100 respondents using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The measurement model consisted of 16 indicators representing leadership style, perceived meritocracy, work engagement, and job satisfaction. The results show that leadership style does not significantly affect either work engagement ($\beta = -0.023$, $p = 0.891$) or job satisfaction ($\beta = 0.126$, $p = 0.303$). In contrast, perceived meritocracy has a positive and significant effect on work engagement ($\beta = 0.706$, $p < 0.001$) and job satisfaction ($\beta = 0.323$; $p = 0.032$). Work engagement also positively affects job satisfaction ($\beta = 0.439$, $p = 0.001$). The mediation analysis further indicates that work engagement does not mediate the relationship between leadership style and job satisfaction, whereas it significantly mediates the relationship between perceived meritocracy and job satisfaction ($\beta = 0.310$, $p = 0.003$). These findings highlight the importance of merit-based workforce management in strengthening work engagement and job satisfaction among non-organic workers.

Keywords: Job Satisfaction, Leadership Style, Perceived Meritocracy, Work Engagement, PLS-SEM

1. INTRODUCTION

Human resource management increasingly involves diverse employment arrangements, including permanent, contractual, outsourced, and non-permanent personnel. In this study, non-permanent personnel are classified as *Tenaga Kerja Non-Organik/TKNO*, hereafter referred to as non-organic workers. Despite differences in employment arrangements, their performance remains essential to organizational objectives, making job satisfaction and work engagement important aspects of workforce management (Ahamed et al., 2023; Bakotić & Bulog, 2021). Job satisfaction reflects employees' overall evaluation of their work experiences, encompassing compensation, organizational treatment, supervisory relationships, working conditions, and expectations (Sypniewska et al., 2023; Aydın Küçük, 2022; Yalçın & Yalçın, 2022; Mamić et al., 2024). This study focuses on PT Petrokopindo Cipta Selaras, which employs 659 non-organic workers. Internal records indicate that 37 workers resigned or experienced contract non-renewal in 2025, representing approximately 5.94% of the workforce. Although these figures do not establish the causes of workforce exits, they highlight the importance of examining organizational factors associated with employee engagement and satisfaction.

Leadership style is an important determinant of employee attitudes and experiences. Drawing on path-goal theory, this study examines directive, supportive, participative, and achievement-oriented leadership behaviors that influence employees' understanding of responsibilities, motivation, and workplace relationships (Fabac et al., 2022; Li et al., 2021; Stankevičiūtė & Savanevičienė, 2021). Previous studies have identified positive relationships between leadership and work engagement (Rahal & Farmanesh, 2022; Alamri, 2023; Li et al., 2021), although Hermanto and Srimulyani (2022) reported an insignificant direct relationship when organizational justice was considered. Leadership has also been associated with job satisfaction, suggesting that its influence may vary across organizational contexts and leadership approaches (Sudewa et al., 2022; Abolnasser et al., 2023; Aydın Küçük, 2022; Bakotić & Bulog, 2021).

Beyond leadership, perceived meritocracy reflects employees' perceptions that organizational decisions are based on performance, competence, discipline, responsibility, initiative, and contribution rather than subjective considerations ([Lee & Rhee, 2023](#); [Froese et al., 2019](#); [Aydın Küçük, 2022](#)). At PT Petrokopindo Cipta Selaras, worker evaluations incorporate work quality, productivity, discipline, punctuality, teamwork, responsibility, and initiative. Consistent and transparent merit-based decisions may strengthen employees' positive perceptions of organizational practices and job satisfaction ([Bakotić & Bulog, 2021](#); [Froese et al., 2019](#); [Yalçın & Yalçın, 2022](#)).

Work engagement, characterized by vigor, dedication, and absorption, may mediate the relationships between organizational practices and job satisfaction ([Mazzetti et al., 2023](#); [Cho et al., 2025](#)). According to the job demands-resources perspective, supportive leadership and fair organizational practices constitute job resources that encourage psychological involvement and positive work experiences ([Bakker et al., 2023](#); [Ahamed et al., 2023](#); [Deepa, 2020](#); [Rahman & Karim, 2022](#)). However, leadership primarily operates through supervisor–employee interactions, whereas perceived meritocracy reflects broader organizational decisions concerning evaluation, recognition, development, and employment continuity. These mechanisms can also be understood through social exchange theory, which emphasizes employees' responses to organizational treatment ([Froese et al., 2019](#)).

Although previous studies have examined leadership, organizational justice, work engagement, and job satisfaction, limited research has integrated leadership style and perceived meritocracy as distinct organizational factors within a single structural model, particularly among non-organic workers ([Cho et al., 2025](#); [Li et al., 2021](#); [Yalçın & Yalçın, 2022](#)). The novelty of this study lies in combining leader-centered and system-centered organizational perspectives to explain job satisfaction through work engagement as a mediating mechanism. Therefore, this study examines the direct effects of leadership style and perceived meritocracy on work engagement and job satisfaction, as well as their indirect effects on job satisfaction through work engagement among non-organic workers at PT Petrokopindo Cipta Selaras ([Sypniewska et al., 2023](#)).

2. LITERATURE REVIEW

2.1 Job Satisfaction

Job satisfaction refers to an employee's overall evaluation of their work experience, including perceptions of the work environment, organizational treatment, relationships with supervisors, expectations, and the overall quality of the job. In this study, job satisfaction is conceptualized as a global evaluation rather than satisfaction with a single employment component ([Thompson & Phua, 2012](#)). This conceptualization is relevant to non-organic workers because their overall assessment may reflect multiple organizational and psychological experiences ([Aydın Küçük, 2022](#); [Mamić et al., 2024](#); [Sypniewska et al., 2023](#); [Yalçın & Yalçın, 2022](#)). Job satisfaction has been associated with leadership, organizational justice, and work engagement. Previous studies have reported relationships between leadership and job satisfaction, while other research has linked fairness-related organizational perceptions and employee satisfaction ([Sudewa et al., 2022](#); [Abolnasser et al., 2023](#); [Bakotić & Bulog, 2021](#); [Lee & Rhee, 2023](#); [Pathardikar et al., 2023](#)). Therefore, in the present study, job satisfaction is positioned as the final endogenous outcome.

2.2 Leadership Style

Leadership style refers to the behavioral patterns through which leaders direct, support, involve, and motivate employees in pursuing organizational goals. This study uses the path-goal perspective by [House \(1971\)](#), which distinguishes directive, supportive, participative, and achievement-oriented leadership behaviors. Directive leadership clarifies tasks and expectations, supportive leadership emphasizes consideration and assistance, participative leadership involves employees in relevant decisions; and achievement-oriented leadership emphasizes challenging goals and high performance standards ([Fabac, Kokot, & Bubalo, 2022](#); [Li, Sun, Taris, Xing, & Peeters, 2021](#); [Stankevičiūtė, & Savanevičienė, 2021](#)).

The path-goal perspective explains how leadership behavior may influence employee motivation and work-related attitudes by clarifying expectations, reducing uncertainty, providing support, involving employees in appropriate decisions, and encouraging achievement ([Cristianto & Purnama, 2026](#)). Empirical evidence has reported positive relationships between leadership and work engagement, although findings vary when other organizational mechanisms are considered simultaneously ([Alamri, 2023](#); [Hermanto, & Srimulyani, 2022](#); [Rahal, & Farmanesh, 2022](#)). Leadership has also been associated with job satisfaction across different organizational settings ([Abolnasser, Abdou, Hassan, & Salem, 2023](#); [Aydin, 2022](#); [Sudewa, Landra, Sudja, & Wijana, 2022](#)).

2.3 Perceived Meritocracy

Perceived meritocracy refers to employees' perception that organizational and employment-related decisions are based on merit, including performance, competence, discipline, responsibility, initiative, and contribution. This construct concerns employees' perceptions rather than an objective assessment of whether an organization is completely meritocratic. It emphasizes whether the criteria are transparent, consistently applied, and meaningfully connected to workforce management decisions ([Froese et al., 2019](#)).

Perceived meritocracy is related to organizational justice but represents a more specific organizational perception. Organizational justice encompasses broader evaluations of procedural, distributive, and interpersonal fairness, whereas perceived meritocracy in this study emphasizes the perceived connection between employee contribution and workforce management decisions. Social exchange theory further suggests that employees may respond more positively when they perceive that their contributions are recognized consistently through organizational decisions ([Ahamed et al., 2023](#); [Gomes & Marques, 2025](#); [Lee & Rhee, 2023](#)).

2.4 Work Engagement

Work engagement represents a positive psychological state characterized by vigor, dedication, and absorption ([Schaufeli et al., 2006](#)). Vigor reflects energy and mental resilience, dedication reflects enthusiasm and significance, and absorption reflects concentration and deep involvement in work activities. In the present study, work engagement was positioned as the mediating variable between organizational factors and job satisfaction ([Mazzetti et al., 2023](#); [Sypniewska et al., 2023](#)).

The Job Demands-Resources (JD-R) theory provides the main theoretical foundation for understanding work engagement. Job resources can stimulate motivation and support positive psychological states by helping employees deal with work demands and pursue goals ([Sari, Annisa, Supriyanto, Muwakhid, & Nugraha, 2026](#)). Leadership support, clarity of expectations, recognition, and fair organizational practices may therefore function as resources that encourage employees to invest psychological energy in their work ([Ahamed et al., 2023](#); [Bakker et al., 2023](#); [Mazzetti et al., 2023](#); [Rahman & Karim, 2022](#)).

2.5 Leadership Style and Work Engagement

Leadership style may influence work engagement because supervisors shape employees' daily work experiences. Directive leadership may provide task clarity, supportive leadership may provide interpersonal resources, participative leadership may increase involvement in decision-making, and achievement-oriented leadership may encourage challenging goals ([Jasim & Hassn, 2026](#)). From the JD-R perspective, these behaviors can operate as job resources that support motivation and engagement ([Li et al., 2021](#); [Stankevičiūtė & Savanevičienė, 2021](#)). Previous findings are not fully consistent. [Alamri \(2023\)](#), [Li et al. \(2021\)](#), and [Rahal and Farmanesh \(2022\)](#) reported positive relationships between leadership and work engagement, whereas [Hermanto and Srimulyani \(2022\)](#) found that a direct relationship between servant leadership and work engagement was not significant after organizational justice was considered. This contextual variation provides a basis for testing the relationship among non-organic workers.

H₁: Leadership style has a positive and significant effect on work engagement

2.6 Perceived Meritocracy and Work Engagement

Perceived meritocracy may influence work engagement because employees may be more willing to invest their psychological energy in their work when they believe that their contributions are recognized through credible organizational processes ([Yudiska, Rosalina, & Yanto, 2026](#)). Transparent performance criteria, consistent evaluation, and clear connections between contributions and workforce management consequences can reduce uncertainty regarding what the organization values ([Froese et al., 2019](#)). This relationship can be explained using the JD-R framework. When organizational procedures provide clarity, consistency, and recognition, they may operate as organizational resources that encourage employees' motivational investment. For nonorganic workers, perceptions of merit-based decisions may be particularly salient because employment-related decisions can influence the assignment, development, recognition, and continuity of employment ([Bakker et al., 2023](#)).

This relationship can also be interpreted through social exchange theory. When employees perceive that the organization recognizes their contribution through consistent decisions, they may perceive the employment relationship as more reciprocal. Such perceptions may encourage employees to respond with greater psychological involvement and work engagement. Research on organizational justice provides supporting evidence for the relationship between fair organizational practices and engagement ([Gomes & Marques, 2025](#); [Lee & Rhee, 2023](#); [Pathardikar et al., 2023](#)).

H₂: Perceived meritocracy has a positive and significant effect on work engagement

2.7 Leadership Style and Job Satisfaction

Leadership style may influence job satisfaction because supervisors constitute an important part of the work environment. Supportive and participative behaviors may improve interpersonal experiences, while directive and achievement-oriented behaviors may provide clarity and performance direction ([Amalia & Rayyani, 2026](#)). Previous studies have reported the relationships between leadership and job satisfaction in different organizational contexts ([Abolnasser et al., 2023](#); [Bakotić & Bulog, 2021](#); [Sudewa et al., 2022](#)). Therefore, this study examines whether leadership style provides a unique contribution to job satisfaction after perceived meritocracy and work engagement are considered simultaneously ([Bakotić & Bulog, 2021](#)).

H₃: Leadership style has a positive and significant effect on job satisfaction

2.8 Perceived Meritocracy and Job Satisfaction

Perceived meritocracy may contribute to job satisfaction because employees' overall evaluations of their jobs can be influenced by whether organizational decisions appear to recognize their contributions. When performance, competence, discipline, responsibility, initiative, and contribution are perceived to be connected to organizational decisions, employees may develop a more favorable evaluation of the employment relationship ([Lee & Rhee, 2023](#); [Mamić et al., 2024](#); [Pathardikar et al., 2023](#)). Social exchange theory also suggests that credible recognition of contributions can influence employees' evaluation of the employment relationship because consistent treatment communicates how the organization values employee contributions.

H₄: Perceived meritocracy has a positive and significant effect on job satisfaction

2.9 Work Engagement and Job Satisfaction

Work engagement is expected to contribute to job satisfaction because employees who experience vigor, dedication, and absorption may evaluate their work experience more positively. Work engagement represents an active psychological connection with work, whereas job satisfaction represents a broader evaluation of that work experience ([Mazzetti et al., 2023](#); [Sypniewska et al., 2023](#)). The relationship is particularly relevant because work engagement is positioned as a psychological mechanism connecting organizational conditions with job satisfaction ([Mazzetti et al., 2023](#); [Sypniewska et al., 2023](#)).

H_6 : Work engagement has a positive and significant effect on job satisfaction

2.10 Work Engagement as a Mediator

Work engagement may function as a psychological mechanism through which organizational conditions influence job satisfaction. The JD-R framework suggests that organizational resources can stimulate employee motivation, which may subsequently contribute to favorable employee outcomes. Thus, organizational practices may affect job satisfaction, both directly and through employees' motivational experiences ([Mazzetti et al., 2023](#); [Sypniewska et al., 2023](#)). Leadership style represents a leader-centered organizational factor, whereas perceived meritocracy represents a system-centered organizational perception of CSE. Previous evidence supports the possibility of mediation but also demonstrates contextual variations. Work engagement has been shown to mediate the relationship between participative leadership and job satisfaction ([Fatoki, 2023](#)), while the present model also considers perceived meritocracy as a distinct system-level predictor. For perceived meritocracy, the proposed mediation pathway is theoretically supported by the JD-R and social exchange perspectives. When employees perceive organizational decisions as transparent, consistent, and connected to their contributions, they may develop greater psychological investment in their work, and stronger work engagement may subsequently be associated with greater job satisfaction ([Bakker et al., 2023](#)).

H_6 : Work engagement mediates the relationship between leadership style and job satisfaction

H_7 : Work engagement mediates the relationship between perceived meritocracy and job satisfaction

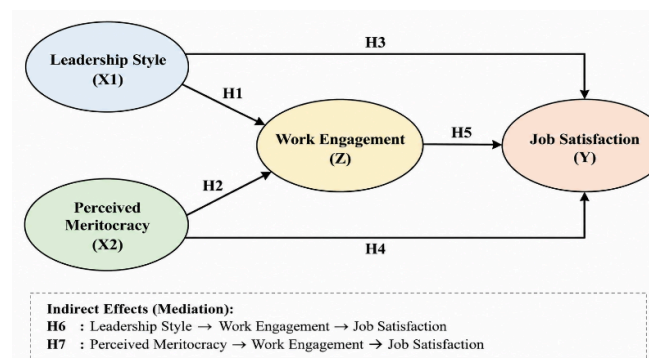


Figure 1. Research framework

Figure 1 shows the conceptual framework examining the relationships among leadership style, perceived meritocracy, work engagement, and job satisfaction. Hypotheses H_1 – H_5 assess the direct effects among these constructs, with work engagement serving as a predictor of job satisfaction. Hypotheses H_6 and H_7 examine the mediating role of work engagement in the relationships between leadership style and perceived meritocracy and job satisfaction.

3. RESEARCH METHODOLOGY

This study employed a quantitative explanatory design using a cross-sectional survey of active non-organic workers or locally *Tenaga Kerja Non-Organik/TKNO* at PT Petrokopindo Cipta Selaras in 2026. The study examined the direct effects of leadership style and perceived meritocracy on work engagement and job satisfaction, including the mediating role of work engagement. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyze relationships among latent constructs and mediation effects ([Hair, Hult, Ringle, Sarstedt, Danks, & Ray, 2022](#)). Of 659 eligible workers invited through a census approach, 100 valid questionnaires were obtained after screening for eligibility, completeness, duplication, and response quality, yielding a usable response rate of 15.2%. Sample adequacy was assessed using the inverse square root method ([Kock & Hadaya, 2018](#)), which indicated a minimum of 60 respondents to detect an anticipated path coefficient of 0.323 at 5% significance and 80% statistical power [$n = (2.486/0.323)^2 \approx 60$]. The sample also exceeded the

ten-times rule minimum of 50 observations, based on five structural paths ([Hair et al., 2022](#)), supporting its adequacy under these criteria.

Primary data were collected through a structured, self-administered questionnaire measuring four constructs using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Participation was voluntary, respondents were informed of the study's academic purpose, and personal identities were excluded from the analytical dataset. Instrument items and sources are presented in Table 1, while secondary data were obtained from company records and scientific literature. The model comprised four reflective constructs, such as leadership style (X_1), representing directive, supportive, participative, and achievement-oriented behaviors ([House, 1971](#); [Fabac, Kokot, & Bubalo, 2022](#)), perceived meritocracy (X_2), reflecting merit-based, transparent, and consistent workforce decisions ([Froese, Peltokorpi, Varma, & Hitotsuyanagi, 2019](#)), work engagement (Z), encompassing vigor, dedication, and absorption ([Schaufeli, Bakker, & Salanova, 2006](#)), and job satisfaction (Y), representing employees' overall evaluation of their work experiences ([Thompson & Phua, 2012](#)).

Table 1. Questionnaire items, instrument sources, and analytical measurement specification

Construct	Article Code	Item Content / Measurement Domain	Instrument Source (Author, Year)
Leadership Style (X_1)	GK1	Directive leadership	Path-Goal leadership style framework (House, 1971)
	GK2	Supportive leadership	Path-Goal leadership style framework (House, 1971)
	GK3	Participative leadership	Path-Goal leadership style framework (House, 1971)
	GK4	Achievement-oriented leadership	Path-Goal leadership style framework (House, 1971)
Perceived Meritocracy (X_2)	PM1	Merit-based decisions	Adapted from merit-based reward perceptions (Froese et al., 2019)
	PM2	Transparency of criteria	Adapted from merit-based reward perceptions (Froese et al., 2019)
	PM3	Consistency / impartiality	Adapted from merit-based reward perceptions (Froese et al., 2019)
	PM4	Merit-linked workforce-management consequences	Adapted from merit-based reward perceptions (Froese et al., 2019)
Work Engagement (Z)	WE1	Vigor	Adapted from the Utrecht Work Engagement Scale (Schaufeli et al., 2006)
	WE2	Dedication	Adapted from the Utrecht Work Engagement Scale (Schaufeli et al., 2006)
	WE3	Absorption	Adapted from the Utrecht Work Engagement Scale (Schaufeli et al., 2006)
Job Satisfaction (Y)	JS1	Overall job satisfaction	Adapted from the brief index of affective job satisfaction (Thompson & Phua, 2012)
	JS2	Positive evaluation of work experience	Adapted from the brief index of affective job satisfaction (Thompson & Phua, 2012)
	JS3	Fit with overall work expectations	Adapted from the brief index of affective job satisfaction (Thompson & Phua, 2012)
	JS4	Satisfaction with job choice	Adapted from the brief index of affective job satisfaction (Thompson & Phua, 2012)

Construct	Article Code	Item Content / Measurement Domain	Instrument Source (Author, Year)
Job Satisfaction (Y)	JS5	Acceptance of overall work conditions	Adapted from the brief index of affective job satisfaction (Thompson & Phua, 2012)

For the article analysis, a parsimonious measurement specification was applied while retaining the predefined conceptual coverage of each construct. One theoretically representative item was retained for each leadership style, perceived meritocracy, and work engagement dimension, whereas all five global job satisfaction items were maintained. Item retention followed the predefined dimensions of the instrument rather than ranking items by the magnitude of their PLS loadings. The retained indicators are presented sequentially as GK1-GK4, PM1-PM4, WE1-WE3, and JS1-JS5, together with their instrument sources. The final analytical model therefore consisted of 16 indicators, as summarized in Table 1.

The econometric model of the study consists of two structural equations for work engagement and job satisfaction such as Formula 1 and Formula 2:

$$WE_i = \beta_0 + \beta_1 LS_i + \beta_2 PM_i + \varepsilon_{1i} \quad (1)$$

$$JS_i = \gamma_0 + \gamma_1 LS_i + \gamma_2 PM_i + \gamma_3 WE_i + \varepsilon_{2i} \quad (2)$$

Where LS represents Leadership Style, PM represents Perceived Meritocracy, WE represents Work Engagement, and JS represents Job Satisfaction. The indirect effects were calculated as $\beta_1 \times \gamma_3$ for leadership style and $\beta_2 \times \gamma_3$ for perceived meritocracy, using the PLS algorithm and bootstrapping in SmartPLS 4. As presented in Table 1, leadership style items were based on path-goal leadership behaviors (House, 1971; Fabac et al., 2022). Perceived meritocracy items on merit-based reward perceptions by Froese et al. (2019), work engagement items on the utrecht work engagement scale by Schaufeli et al. (2006), and job satisfaction items on the five-item brief index of affective job satisfaction (Thompson & Phua, 2012). All items used a five-point Likert scale in Indonesian. The complete questionnaire is available from the corresponding author upon reasonable request.

PLS-SEM analysis was conducted using SmartPLS 4. The measurement model was evaluated through outer loadings (≥ 0.70), Cronbach's alpha and composite reliability (> 0.70), and Average Variance Extracted (AVE > 0.50). Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) (Henseler, Ringle, & Sarstedt, 2015; Hair et al., 2022). The structural model was examined using Variance Inflation Factors (VIF < 5), coefficients of determination (R^2), effect sizes (f^2), and path coefficients. Effect sizes of 0.02, 0.15, and 0.35 indicated small, medium, and large effects, respectively. Statistical significance was determined through nonparametric bootstrapping ($p < 0.05$; approximately $t > 1.96$ for two-tailed tests), while mediation was evaluated using bootstrapped specific indirect effects. Endogeneity assessment. Potential endogeneity was examined using the Gaussian copula approach (Hult, Hair, Proksch, Sarstedt, Pinkwart, & Ringle, 2018). Copula terms for leadership style and perceived meritocracy were incorporated into the relevant structural equations and evaluated through bootstrapping. Significant copula coefficients ($p < 0.05$) indicated evidence of endogeneity, whereas non-significant coefficients indicated insufficient evidence of correlation between the exogenous constructs and structural error terms (Hult et al., 2018).

4. RESULTS AND DISCUSSION

4.1 Respondent Profile and Descriptive Overview

The final analysis was based on 100 valid questionnaires completed by active non-organic workers of PT Petrokopindo Cipta Selaras, corresponding to 15.2% of the 659-person population invited to participate in the study. The respondents represented three generational groups, such as

Generation Z accounted for 45.0% of the sample, Generation Y for 43.0%, and Generation X for 12.0%. Therefore, the pooled sample contained a multigenerational workforce, although Generation X was represented by a substantially smaller subgroup. Therefore, this study interprets the structural model at the pooled-sample level and does not infer statistically verified differences between generations. Table 2 shows the demographic composition of the 100 valid respondents across the three generational groups.

Table 2. Respondent profile by generation

Generation	Frequency	Percentage (%)
Generation Z	45	45
Generation Y	43	43
Generation X	12	12
Total	100	100

Table 3. Descriptive statistics of the final indicators

Code	Construct / Domain	Mean	Std. Dev.
GK1	Leadership Style - Directive	4.200	0.829
GK2	Leadership Style - Supportive	4.240	0.818
GK3	Leadership Style - Participative	4.190	0.884
GK4	Leadership Style - Achievement-oriented	4.370	0.691
PM1	Perceived Meritocracy - Merit-based decisions	4.240	0.712
PM2	Perceived Meritocracy - Transparency	4.240	0.653
PM3	Perceived Meritocracy - Consistency / impartiality	4.160	0.788
PM4	Perceived Meritocracy - Merit-linked consequences	4.150	0.744
WE1	Work Engagement - Vigor	4.410	0.605
WE2	Work Engagement - Dedication	4.280	0.637
WE3	Work Engagement - Absorption	4.390	0.650
JS1	Job Satisfaction - Overall satisfaction	4.300	0.674
JS2	Job Satisfaction - Positive work experience	4.430	0.607
JS3	Job Satisfaction - Fit with expectations	4.200	0.667
JS4	Job Satisfaction - Satisfaction with job choice	4.380	0.616
JS5	Job Satisfaction - Acceptance of work conditions	4.430	0.555

The descriptive statistics for the 16 indicators used in the final analytical model are shown in Table 3. The mean values ranged from 4.15 to 4.43 on a five-point scale, indicating that the respondents generally provided favorable evaluations of the four constructs. However, descriptive tendencies should not be interpreted as evidence of causal relationships. Therefore, the structural conclusions are based on PLS-SEM estimates rather than mean scores alone.

4.2 Structural Equation Modeling-Partial Least Squares Scheme

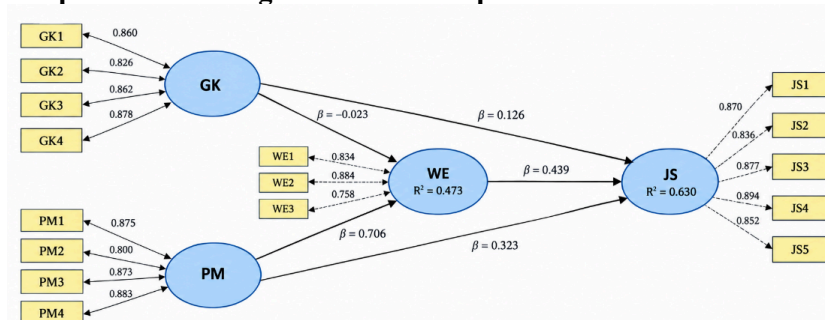


Figure 2. PLS-SEM algorithm results

The hypothesized relationships were estimated using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The final model contained Leadership Style (GK) and Perceived Meritocracy (PM) as exogenous constructs, Work Engagement (WE) as a mediator, and Job Satisfaction (JS) as the final endogenous construct. The article model used four indicators for Leadership Style (GK1-GK4), four indicators for Perceived Meritocracy (PM1-PM4), three indicators for Work Engagement (WE1-WE3), and five indicators for Job Satisfaction (JS1-JS5). Figure 2 shows the PLS algorithm results. The values attached to the indicator arrows represent outer loadings, the values on the structural paths represent standardized path coefficients, and the figures inside the endogenous constructs represent R^2 . This figure should be read together with the measurement-model and structural-model statistics reported in the subsequent tables because a visually large coefficient alone is not sufficient to determine statistical significance or measurement quality.

4.3 Outer Model Evaluation

The evaluation of the outer model was conducted before interpreting the structural paths. Because all four constructs were specified reflectively, the assessment focused on indicator reliability, convergent validity, internal consistency reliability, and discriminant validity. This sequence is important because structural conclusions should only be interpreted after the indicators demonstrate adequate measurement quality (Hair et al., 2022). Figure 3 shows the final outer model and the retained indicator loadings used in the measurement assessment.

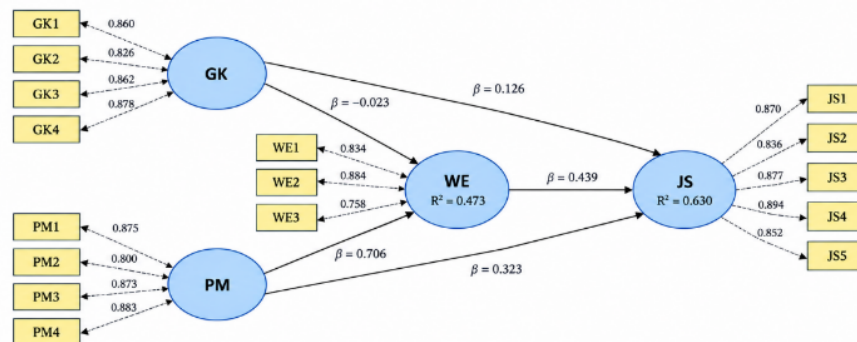


Figure 3. Outer model (measurement model)

The reporting sequence follows standard PLS-SEM evaluation logic while applying current measurement model diagnostics. Indicator loadings are used to assess convergent validity, HTMT is used as the primary discriminant validity criterion, and AVE together with reliability coefficients is reported separately so that each aspect of measurement quality can be evaluated transparently. This comprehensive assessment ensures that the measurement model demonstrates adequate reliability and validity before proceeding to the evaluation of structural relationships and hypothesis testing.

4.4 Convergent Validity

Indicator reliability was assessed using outer loadings. In the reflective measurement, an outer loading close to or above 0.70 indicates that an indicator shares a substantial proportion of variance with the construct intended to be measured. Table 4 shows that all 16 indicators exceeded 0.70, with loading values ranging from 0.758 to 0.894. All outer loadings were statistically significant ($p < 0.001$). Consequently, no indicator in the final article specification required removal based on loading magnitude or significance.

Table 4. Outer loadings and indicator significance

Indicator	Construct	Loading	<i>t</i> -statistic	<i>p</i> -value
GK1	Leadership Style	0.860	17.213	<0.001
GK2	Leadership Style	0.826	14.383	<0.001
GK3	Leadership Style	0.862	22.499	<0.001
GK4	Leadership Style	0.878	30.761	<0.001

Indicator	Construct	Loading	t-statistic	p-value
PM1	Perceived Meritocracy	0.875	23.823	<0.001
PM2	Perceived Meritocracy	0.800	15.091	<0.001
PM3	Perceived Meritocracy	0.873	25.062	<0.001
PM4	Perceived Meritocracy	0.883	24.190	<0.001
WE1	Work Engagement	0.834	22.239	<0.001
WE2	Work Engagement	0.884	30.583	<0.001
WE3	Work Engagement	0.758	10.045	<0.001
JS1	Job Satisfaction	0.870	27.796	<0.001
JS2	Job Satisfaction	0.836	25.436	<0.001
JS3	Job Satisfaction	0.877	40.922	<0.001
JS4	Job Satisfaction	0.894	27.889	<0.001
JS5	Job Satisfaction	0.852	20.139	<0.001

At the construct level, the loading pattern was also balanced. leadership style loadings ranged from 0.826 to 0.878 and perceived meritocracy from 0.800 to 0.883, suggesting that the four selected domains of each construct were represented relatively consistently. Work engagement had the widest loading range, WE3 (absorption) was the lowest at 0.758, but it remained above the recommended threshold and was statistically significant. Job satisfaction showed consistently high loadings between 0.836 and 0.894, supporting the use of the five global satisfaction indicators in the final model.

4.5 Average Variance Extracted (AVE)

Convergent validity at the construct level was assessed using Average Variance Extracted (AVE). An AVE above 0.50 indicates that, on average, the construct explains more than half of the variance in its indicators. As shown in Table 5, the AVE values ranged from 0.684 to 0.750. Therefore, all constructs met the convergent-validity requirement.

Table 5. Average Variance Extracted (AVE)

Construct	AVE	Assessment
Leadership Style (GK)	0.734	Adequate
Perceived Meritocracy (PM)	0.736	Adequate
Work Engagement (WE)	0.684	Adequate
Job Satisfaction (JS)	0.750	Adequate

The AVE pattern also indicates that the simplification of the final analytical measurement specification did not undermine construct convergence. Even work engagement, which is represented by only three dimensions in the article model, retained an AVE of 0.684. Thus, the three indicators collectively capture a sufficiently large proportion of common variance in the Work Engagement construct.

4.6 Composite Reliability and Cronbach's Alpha

Internal consistency was examined using Cronbach's alpha, rho_A, and composite reliability (rho_c). Reliability values above 0.70 are generally regarded as adequate for established constructs. Table 6 shows that Cronbach's alpha ranged from 0.767 to 0.917 and composite reliability ranged from 0.866 to 0.937. All four constructs demonstrated satisfactory internal consistency.

Table 6. Construct reliability

Construct	Cronbach alpha	rho_A	Composite reliability (rho_c)
Leadership Style (GK)	0.880	0.903	0.917
Perceived Meritocracy (PM)	0.880	0.880	0.918
Work Engagement (WE)	0.767	0.772	0.866

Construct	Cronbach alpha	rho_A	Composite reliability (rho_c)
Job Satisfaction (JS)	0.917	0.918	0.937

Job satisfaction produced the highest reliability values, whereas work engagement produced the lowest. Nevertheless, the work engagement values remained above the accepted threshold, indicating that the three retained dimensions provide adequate consistency without requiring additional item deletion. Taken together with the AVE results, the measurement model demonstrates acceptable reliability and convergent validity.

4.7 Discriminant Validity

Discriminant validity was evaluated using the Heterotrait-Monotrait Ratio (HTMT), which assesses whether the latent constructs are empirically distinguishable. This study applied an HTMT threshold of 0.90. Table 7 shows that all pairwise HTMT values were below this criterion, ranging from 0.615 to 0.878. Thus, the four constructs satisfied the discriminant validity criterion adopted in this study.

Table 7. Heterotrait-Monotrait Ratio (HTMT)

Construct	GK	JS	PM	WE
GK	-			
JS	0.661	-		
PM	0.878	0.801	-	
WE	0.615	0.871	0.828	-

Two relationships deserve attention because they are relatively close to the 0.90 criterion, leadership style-perceived meritocracy (0.878), and job satisfaction-work engagement (0.871). Their proximity is conceptually understandable because supervisors can influence perceptions of organizational treatment, whereas engagement and satisfaction are both positive work attitudes. Nevertheless, both values remained below the selected threshold. Therefore, the results support construct distinctiveness, while the relatively high values should be acknowledged when interpreting the overlap among conceptually adjacent employee perceptions.

Overall, the measurement model evidence is internally consistent, every retained indicator loads above 0.70, all AVE values exceed 0.50, all reliability coefficients exceed 0.70, and all HTMT values remain below 0.90. Therefore, the sixteen-indicator specification provides sufficient measurement quality for evaluating the structural relationships. This conclusion concerns the adequacy of the final analytical specification and does not imply that the constructs are conceptually unrelated; rather, it indicates that they remain empirically distinguishable within the present sample.

4.8 Evaluation of the Inner Model

After the measurement model met the required criteria, the inner model was evaluated to determine whether the predictor constructs exhibited problematic collinearity, how much variance was explained in work engagement and job satisfaction, the incremental contribution of each predictor, and whether the hypothesized direct and indirect effects were statistically significant. This evaluation provides insights into the explanatory power and predictive relationships among the constructs. The results also serve as the basis for assessing the proposed hypotheses and mediation effects.

4.9 Collinearity Statistics (Inner VIF)

Inner Variance Inflation Factors (VIF) were examined before interpreting the path coefficients. Values below 5 indicate the absence of severe multicollinearity. As shown in Table 8, all inner VIF values were between 1.897 and 3.458. Accordingly, there is no indication of severe collinearity that would invalidate the interpretation of the structural paths.

Table 8. Inner model collinearity statistics

Structural path	VIF	Assessment
GK → JS	2.515	Acceptable
GK → WE	2.513	Acceptable
PM → JS	3.458	Acceptable
PM → WE	2.513	Acceptable
WE → JS	1.897	Acceptable

The largest VIF was found for perceived meritocracy in the job satisfaction equation (3.458). This value is still below the study criterion of 5, although it is slightly above the more conservative benchmark of approximately 3.3, sometimes used as an early-warning value. Therefore, the result does not indicate severe multicollinearity, but it reinforces the need to interpret the effects of perceived meritocracy, leadership style, and work engagement as simultaneous contributions within a model of related workplace perceptions rather than as completely independent phenomena.

4.10 Coefficient of Determination (R^2)

Table 9. Coefficients of determination

Endogenous construct	R^2	Adjusted R^2
Work Engagement (WE)	0.473	0.462
Job Satisfaction (JS)	0.630	0.618

Table 9 shows the coefficient of determination (R^2) assesses the in-sample explanatory power of the model for endogenous constructs. Leadership style and perceived meritocracy jointly explained 47.3% of the variance in work engagement ($R^2 = 0.473$, adjusted $R^2 = 0.462$). Leadership style, perceived meritocracy, and work engagement jointly explained 63.0% of the variance in job satisfaction ($R^2 = 0.630$, adjusted $R^2 = 0.618$). These findings indicate that the structural model demonstrates substantial explanatory power in accounting for variations in both endogenous constructs.

These results indicate meaningful explanatory power. Nearly half of the observed variance in work engagement is associated with the two organizational antecedents included in the model, while almost two-thirds of the variance in job satisfaction is explained by leadership style, perceived meritocracy, and work engagement. The remaining variance reflects factors outside the present model and should not be interpreted as model error alone, job satisfaction and engagement are multidetermined employee attitudes that may also depend on compensation, job design, career expectations, work-life conditions, and individual differences.

4.11 Effect Size (f^2)

R^2 describes the explanatory power of the model as a whole, whereas f^2 evaluates the incremental contribution of each predictor by comparing the explained variance with and without the predictor. Using the conventional reference points of approximately 0.02, 0.15, and 0.35 for small, medium, and large effects, respectively, the largest incremental contribution occurred on the perceived meritocracy → work engagement path. The effect sizes (f^2) of the structural relationships are presented in Table 10.

Table 10. Effect sizes

Structural path	f^2	Interpretation
GK → JS	0.017	Negligible
GK → WE	0.000	None / negligible
PM → JS	0.081	Small
PM → WE	0.376	Large
WE → JS	0.274	Medium

Perceived meritocracy had a large incremental effect on work engagement ($f^2 = 0.376$), showing that the merit-related system perception contributes substantially to explaining variation in engagement beyond leadership style. Work engagement had a medium effect on job satisfaction ($f^2 = 0.274$), while perceived meritocracy had a small direct effect on job satisfaction ($f^2 = 0.081$). Leadership style showed negligible incremental effects on both endogenous constructs. The effect-size pattern is therefore consistent with the hypothesis tests and helps distinguish statistical significance from practical contribution. Taken together, the VIF, R^2 , and f^2 statistics indicate that the structural model can be interpreted without evidence of severe collinearity, and that the main explanatory contribution is concentrated in the perceived meritocracy $\rightarrow$ work engagement and work engagement $\rightarrow$ job satisfaction paths. The next stage therefore evaluates whether these and the remaining hypothesized paths are statistically supported through bootstrapping.

4.12 Direct Effect

The structural hypotheses were tested using nonparametric bootstrapping in SmartPLS 4. A two-tailed significance level of 5% was used, corresponding to $p < 0.05$ and approximately $t > 1.96$. Figure 4 presents the bootstrapped structural model, while Table 11 reports the original sample coefficient (β), bootstrap sample mean, standard deviation, t-statistic, p-value, and decision for H_1 - H_5 . These results provide the statistical basis for evaluating the significance and direction of the hypothesized relationships.

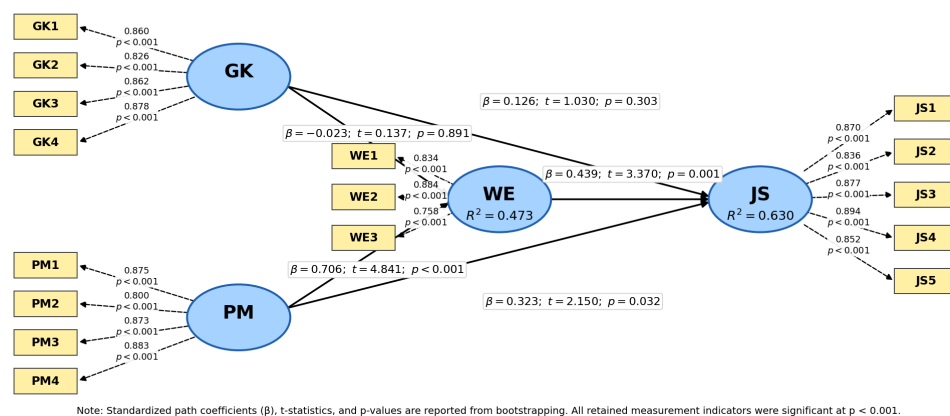


Figure 4. Bootstrapping results of the structural model

Table 11. Direct effects and hypothesis testing

Hypothesis / Path	Original sample (β)	Sample mean	SD	t-statistic	p-value	Decision
H_1 : GK $\rightarrow$ WE	-0.023	-0.015	0.171	0.137	0.891	Not supported
H_2 : PM $\rightarrow$ WE	0.706	0.709	0.146	4.841	<0.001	Supported
H_3 : GK $\rightarrow$ JS	0.126	0.119	0.123	1.030	0.303	Not supported
H_4 : PM $\rightarrow$ JS	0.323	0.308	0.150	2.150	0.032	Supported
H_5 : WE $\rightarrow$ JS	0.439	0.460	0.130	3.370	0.001	Supported

4.13 Discussion

4.13.1 The Effect of Leadership Style on Work Engagement

The path from leadership style to work engagement was not statistically significant ($\beta = -0.023$, $t = 0.137$, $p = 0.891$), with a near-zero coefficient and effect size ($f^2 = 0.000$). Thus, H_1 was not supported. The negative coefficient should not be interpreted as evidence that better leadership reduces engagement. Rather, the findings indicate no significant unique direct effect of leadership style on work engagement after accounting for perceived meritocracy. This finding is noteworthy because leadership is commonly regarded as an important job resource. Path-goal theory suggests that directive, supportive, participative, and achievement-oriented leadership facilitates goal clarification, support, participation, and performance. However, these behaviors did not explain additional variance in engagement within the TKNO sample. One possible explanation is that non-organic workers

distinguish daily supervisory practices from broader employment systems governing performance evaluation and rewards.

Empirically, this finding aligns with [Hermanto and Srimulyani \(2022\)](#), who found that servant leadership did not significantly affect work engagement directly when organizational justice was considered as an intervening mechanism. However, it contrasts with studies reporting positive leadership–engagement relationships ([Alamri, 2023](#); [Rahal & Farmanesh, 2022](#); [Abolnasser et al., 2023](#)). These differences suggest that leadership effects may depend on employment arrangements, leadership dimensions, and the presence of organizational resources. Theoretically, path-goal theory explains how leadership facilitates desired work outcomes but does not imply uniform effects across employment contexts. The near-zero coefficient suggests that leadership provides limited additional motivational influence after perceived meritocracy is considered, without contradicting the theory itself. Practically, these findings do not diminish the importance of leadership in coordination, safety, communication, and daily operations. Instead, they suggest that improving supervisory practices alone may be insufficient to enhance work engagement without transparent, consistent, and merit-based workforce management systems.

4.13.2 The Effect of Perceived Meritocracy on Work Engagement

Perceived meritocracy had a positive and statistically significant effect on work engagement ($\beta = 0.706$, $t = 4.841$, $p < 0.001$), supporting H_2 . This relationship represented the strongest direct effect in the structural model, with a large effect size ($f^2 = 0.376$). The findings indicate a strong association between merit-based workforce management and employees' vigor, dedication, and absorption at work. Within the Job Demands–Resources (JD-R) framework, transparent performance criteria, consistent decision-making, and clear links between employee contributions and organizational outcomes function as job resources that reduce uncertainty. For TKNO, these resources are particularly relevant because employment assignments, development opportunities, recognition, and contract continuation may depend on performance evaluations. When employees perceive these decisions as merit-based, they may become more motivated to invest effort and psychological energy in their work.

This finding aligns with organizational justice literature, which associates fair procedures and treatment with higher employee engagement. [Saks \(2006\)](#) identified fairness as an important antecedent of engagement, while subsequent research has reinforced this relationship. Although perceived meritocracy differs conceptually from organizational justice, it specifically reflects whether competence, discipline, responsibility, initiative, and contributions are recognized in workforce decisions. The result also supports the interpretation offered by social exchange theory, suggesting that employees who perceive consistent recognition of their contributions may respond with greater psychological investment. However, this study examined the direct relationship between perceived meritocracy and work engagement without independently measuring perceived reciprocity. Practically, organizations should strengthen merit-based management through transparent performance criteria, documented evaluations, consistent implementation, constructive feedback, and credible links between performance and employment opportunities. The large effect size ($f^2 = 0.376$) highlights the importance of perceived meritocracy as a key organizational resource for enhancing engagement among non-organic workers ([Saks, 2006](#); [Froese et al., 2019](#)).

4.13.3 The Effect of Leadership Style on Job Satisfaction

Leadership style had a positive but statistically non-significant effect on job satisfaction ($\beta = 0.126$, $t = 1.030$, $p = 0.303$), indicating that H_3 was not supported. The effect size ($f^2 = 0.017$) was below the conventional threshold for a small effect, suggesting that leadership style contributed limited additional explanatory power after accounting for perceived meritocracy and work engagement. This finding should be considered in relation to the measurement of job satisfaction as an overall evaluation of work experiences rather than satisfaction with supervisors alone. Employees may value supportive and participative leadership while assessing their jobs based on broader factors, including employment security, workload, career development, recognition, fairness, and work engagement. Consequently, leadership

may remain operationally important despite its non-significant direct effect on overall satisfaction.

The result contrasts with [Sudewa et al. \(2022\)](#), who identified a positive relationship between leadership and job satisfaction among contract workers, and [Abolnasser et al. \(2023\)](#), who reported positive leadership-related outcomes in the hospitality sector. These differences may reflect variations in leadership constructs, employment contexts, industries, and model specifications. In the present study, the inclusion of perceived meritocracy and work engagement may have reduced leadership style's unique explanatory contribution. Theoretically, the non-significant coefficient does not imply that leadership is irrelevant. Rather, it suggests that its direct influence on job satisfaction may overlap with broader organizational resources and employees' psychological engagement. Therefore, findings from different organizational settings should be interpreted within their respective structural models. Practically, organizations should integrate leadership development with transparent and merit-based HR practices. Strengthening supervisors' communication, support, participation, and motivational capabilities remains valuable, particularly when reinforced by consistent performance evaluation and workforce management systems that recognize employee contributions ([Bakotić & Bulog, 2021](#)).

4.13.4 The Effect of Perceived Meritocracy on Job Satisfaction

Perceived meritocracy had a positive and significant effect on job satisfaction ($\beta = 0.323$, $t = 2.150$, $p = 0.032$), supporting H_4 . The small effect size ($f^2 = 0.081$) indicates a meaningful but modest contribution after accounting for leadership style and work engagement. This finding suggests that employees' satisfaction is partly shaped by their perceptions of whether organizational decisions regarding assessment, development, assignments, recognition, and employment continuity consistently reflect performance, competence, discipline, responsibility, initiative, and contribution ([Lee & Rhee, 2023](#); [Pathardikar et al., 2023](#)). Consistent with previous research on organizational justice and employee satisfaction ([Lee & Rhee, 2023](#); [Pathardikar et al., 2023](#); [Mamić et al., 2024](#)), this study specifically highlights perceived meritocracy, distinguishing general procedural fairness from employees' perceptions that merit genuinely influences workforce decisions. From a social exchange perspective, consistent merit-based decisions signal organizational recognition of employee contributions, potentially strengthening job satisfaction, although reciprocity and exchange quality were not directly measured. Practically, organizations should ensure that performance evaluations are transparently and consistently linked to recognition, development opportunities, and workforce decisions. When employee contributions are visibly reflected in organizational decisions, the credibility of merit-based practices and positive job evaluations may improve.

4.13.5 The Effect of Work Engagement on Job Satisfaction

Work engagement had a positive and statistically significant effect on job satisfaction ($\beta = 0.439$, $t = 3.370$, $p = 0.001$), supporting H_5 . The f^2 value of 0.274 indicates a medium incremental effect. Thus, employees who report greater vigor, dedication, and absorption also tend to evaluate their overall work experience more positively. This finding is theoretically consistent with the idea that engagement represents an active, positive psychological state rather than a passive attitude. Engaged employees invest energy in work, experience a stronger sense of involvement, and are more psychologically connected to task accomplishment. These experiences can contribute to a more favorable overall evaluation of the job, which is reflected in job satisfaction.

The results are consistent with those of [Sypniewska et al. \(2023\)](#), who emphasized work engagement as an important mechanism in employee satisfaction, and with the broader evidence summarized by [Mazzetti et al. \(2023\)](#). It also supports the decision to position work engagement as a mediator rather than merely as another outcome variable. In the present model, engagement is associated not only with satisfaction but also transmits part of the effect of perceived meritocracy.

Because the study is cross-sectional, the coefficient should be interpreted as a structural association consistent with the proposed theory rather than as definitive temporal proof that engagement precedes satisfaction in every case. The hypothesized direction is theoretically grounded, but longitudinal or experimental designs would be needed to establish temporal ordering more strongly. Practically, the finding means that organizations should not treat job satisfaction only as a

matter of benefits or comfort. Conditions that help workers experience energy, meaningful involvement, and concentration in their tasks may also support satisfaction. For operational workers, this may involve role clarity, realistic work demands, recognition of contribution, development opportunities, and a credible connection between effort and organizational decisions.

4.14 Indirect Effect

The mediation hypotheses were evaluated using bootstrapped specific indirect effects. This approach tests the indirect pathway directly, rather than inferring mediation only from the significance of individual component paths. The results are presented in Table 12.

Table 12. Specific indirect effects and mediation testing

Hypothesis / Path	Original sample (β)	Sample mean	SD	<i>t</i> -statistic	<i>p</i> -value	Decision
H_6 : GK $\rightarrow$ WE $\rightarrow$ JS	-0.010	0.000	0.079	0.130	0.897	Not supported
H_7 : PM $\rightarrow$ WE $\rightarrow$ JS	0.310	0.322	0.104	2.983	0.003	Supported

The mediation analysis indicates that Work Engagement does not significantly mediate the relationship between leadership style and job satisfaction ($\beta = -0.010$, $t = 0.130$, $p = 0.897$), indicating that H_6 is not supported. Conversely, work engagement significantly mediates the relationship between perceived meritocracy and job satisfaction ($\beta = 0.310$, $t = 2.983$, $p = 0.003$), supporting H_7 . These findings suggest that perceived meritocracy contributes indirectly to job satisfaction through work engagement, whereas leadership style does not demonstrate a significant indirect effect.

4.15 The Mediating Role of Work Engagement in the Leadership Style-Job Satisfaction Relationship

The indirect effect of leadership style on job satisfaction through work engagement was not statistically significant ($\beta = -0.010$, $t = 0.130$, $p = 0.897$), indicating that H_6 was not supported. This finding aligns with the insignificant leadership style $\rightarrow$ work engagement relationship, suggesting that work engagement does not mediate the relationship between leadership style and job satisfaction among TKNO workers. Although leadership and engagement are theoretically related, mediation requires a statistically significant indirect effect. Other mechanisms, such as perceived supervisor support, trust in leadership (Rahal & Farmanesh, 2022), psychological empowerment (Fatoki, 2023), communication quality, and role clarity, may explain this relationship but require further investigation.

This result contrasts with Fatoki (2023), who identified a significant mediating role of work engagement between participative leadership and job satisfaction among small-business employees. The difference may reflect variations in leadership conceptualization, organizational context, and the inclusion of perceived meritocracy as an additional predictor. While leadership development remains important, the findings do not support work engagement as the mechanism linking leadership style to job satisfaction in this sample. Therefore, engagement initiatives should consider organizational resources alongside supervisory practices.

4.16 The Mediating Role of Work Engagement in the Perceived Meritocracy-Job Satisfaction Relationship

The indirect effect of perceived meritocracy on job satisfaction through work engagement was positive and significant ($\beta = 0.310$, $t = 2.983$, $p = 0.003$), supporting H_7 . Since the direct effect remained positive and significant ($\beta = 0.323$, $p = 0.032$), work engagement demonstrated complementary partial mediation. This indicates that perceived meritocracy is associated with job satisfaction through two pathways, directly through employees' favorable evaluations of merit-based decisions and indirectly through increased work engagement.

From the job demands-resources perspective, transparent and consistent merit-based practices function as organizational resources that clarify expectations, reinforce recognition, and encourage vigor, dedication, and absorption. This mechanism is particularly relevant to non-organic workers, whose assignments, development opportunities, recognition, and employment continuity may depend on organizational decisions. The findings contrast with Gomes and Marques (2025), who reported no significant mediating effect of work engagement between organizational justice and job satisfaction,

suggesting that mediation may vary according to fairness conceptualization and employment context. However, the results are consistent with [Sypniewska et al. \(2023\)](#), who emphasized work engagement as a mechanism connecting favorable HR conditions with employee satisfaction. The present study extends this perspective by demonstrating the mediating role of engagement in the relationship between merit-based workforce perceptions and job satisfaction among TKNO workers. Practically, organizations should strengthen transparent performance assessments and consistently connect employee contributions with feedback, recognition, development opportunities, and workforce decisions to support both engagement and satisfaction ([Sypniewska et al., 2023](#)).

4.17 Synthesis of Results and Discussion

Taken together, the results reveal a clear contrast between leader-centered and system-centered resources in the pooled TKNO model. Leadership style does not show a significant direct effect on either work engagement or job satisfaction and does not produce a significant indirect effect through work engagement. Perceived meritocracy, in contrast, significantly predicts both work engagement and job satisfaction and also produces a significant indirect effect through work engagement. Work engagement itself contributes significantly to job satisfaction.

This pattern addresses the study's central research gap by showing that leader- and system-centered resources do not necessarily operate through identical pathways. In the final model, perceived meritocracy was associated with both the motivational state of engagement and the evaluative outcome of satisfaction, whereas leadership style did not show comparable unique effects. Therefore, the empirical contribution lies in identifying distinct pathway structures rather than merely confirming that all positive HR practices are beneficial.

The combination of path coefficients and f^2 values is especially informative. Perceived meritocracy $\rightarrow$ work engagement is not only statistically significant but also has a large effect size, whereas leadership style $\rightarrow$ work engagement has essentially no incremental effect. Similarly, work engagement makes a medium contribution to job satisfaction, whereas the direct contribution of perceived meritocracy to job satisfaction is smaller but still significant. These results indicate that the central mechanism in the final model is the perceived meritocracy $\rightarrow$ work engagement $\rightarrow$ job satisfaction chain, accompanied by a remaining direct perceived meritocracy $\rightarrow$ job satisfaction path.

These findings should not be interpreted as proving that formal systems are universally more important than leaders. The evidence is specific to the model, sample, measurement design, and organizational context examined in this study. A more appropriate interpretation is that once leadership style and perceived meritocracy are considered simultaneously, merit-related system perceptions provide a stronger unique explanatory signal for engagement and satisfaction among the sampled non-organic workers. This distinction is important because it avoids converting context-specific statistical patterns into overly broad managerial claims.

For PT Petrokopindo Cipta Selaras, the practical priority suggested by the model is to strengthen the credibility of merit-based workforce management systems. This includes clear standards, consistent evaluation, transparent communication of criteria, feedback that explains performance results, and visible alignment between contributions and subsequent workforce decisions. Leadership development should continue but operate in conjunction with these system-level practices so that supervisors and formal HR processes communicate a consistent message about performance, contribution, and recognition ([Froese et al., 2019](#)).

4.18 Summary of Hypothesis Decisions

Table 13. Summary of hypothesis decisions

Hypothesis	Relationship	β	t	p	Decision
H_1	GK $\rightarrow$ WE	-0.023	0.137	0.891	Not supported
H_2	PM $\rightarrow$ WE	0.706	4.841	<0.001	Supported
H_3	GK $\rightarrow$ JS	0.126	1.030	0.303	Not supported
H_4	PM $\rightarrow$ JS	0.323	2.150	0.032	Supported

Hypothesis	Relationship	β	t	p	Decision
H_5	WE $\rightarrow$ JS	0.439	3.370	0.001	Supported
H_6	GK $\rightarrow$ WE $\rightarrow$ JS	-0.010	0.130	0.897	Not supported
H_7	PM $\rightarrow$ WE $\rightarrow$ JS	0.310	2.983	0.003	Supported

Table 13 consolidates the decisions from the direct- and indirect-effect tests. Three direct hypotheses (H_2 , H_4 , and H_5) and one mediation hypothesis (H_7) were supported, whereas H_1 , H_3 , and H_6 were not supported. The summary table does not replace the path-specific discussion above, it provides a concise overview of the empirical model.

The hypothesis testing results indicate that four hypotheses (H_2 , H_4 , H_5 , and H_7) were supported, while three (H_1 , H_3 , and H_6) were not supported. Perceived Meritocracy significantly influenced Work Engagement ($\beta = 0.706$, $p < 0.001$) and job satisfaction ($\beta = 0.323$, $p = 0.032$), while work engagement significantly affected job satisfaction ($\beta = 0.439$, $p = 0.001$) and mediated the relationship between perceived meritocracy and job satisfaction ($\beta = 0.310$, $p = 0.003$). Conversely, leadership style showed no significant direct or indirect effects, highlighting the stronger role of perceived meritocracy in explaining work engagement and job satisfaction among non-organic workers.

5. CONCLUSIONS

5.1 Conclusion

Based on the empirical findings, this study concludes that leadership style has no statistically significant direct effect on work engagement or job satisfaction, nor a significant indirect effect through work engagement. Conversely, perceived meritocracy positively and significantly influences both work engagement and job satisfaction, while work engagement also significantly improves job satisfaction and serves as a complementary partial mediator of the relationship between perceived meritocracy and job satisfaction. The model explains 47.3% of the variance in work engagement and 63.0% in job satisfaction, demonstrating meaningful explanatory power. The study contributes to understanding the distinct roles of leadership- and merit-related perceptions, indicating that perceived meritocracy provides a stronger explanatory contribution than leadership style within the examined organizational context, without implying that leadership is unimportant. These findings highlight the importance of transparent, consistent, and merit-based workforce management at PT Petrokopindo Cipta Selaras, particularly in linking employee performance, competence, discipline, responsibility, and contributions to recognition, development opportunities, and organizational decisions. Accordingly, leadership development should be aligned with formal human resource practices to strengthen fairness, employee engagement, and job satisfaction among non-organic workers.

5.2 Research Limitations

This study has several limitations. First, its cross-sectional, self-reported design within a single organization limits causal interpretation and may introduce common-method variance. Second, only 100 valid responses were obtained from 659 invited non-organic workers (15.2%), raising potential non-response bias. The uneven generational distribution (45 Generation Z, 43 Generation Y, and 12 Generation X respondents) also prevented reliable intergenerational comparisons, limiting the analysis to the pooled structural model. Third, the theory-driven reduction to 16 indicators, despite demonstrating acceptable reliability and validity, requires independent validation. Finally, the single-organizational context limits the generalizability of the findings across different employment arrangements, organizational characteristics, and workforce management practices.

5.3 Suggestions and Directions for Future Research

Future research should involve larger, more representative, and generationally balanced samples across multiple organizations to improve generalizability and examine variations in employment arrangements. Longitudinal designs and objective human resource indicators, including performance evaluations, contract renewals, absenteeism, turnover, and training participation, are recommended to strengthen causal interpretation and complement self-reported data. Further studies should independently validate the reduced 16-indicator measurement model and employ measurement-invariance testing and multi-group analysis to assess differences across generations and employment

categories. Additionally, future research should investigate alternative mediating mechanisms, including supervisor support, leadership trust, psychological empowerment, role clarity, communication quality, and organizational commitment, to clarify the insignificant leadership effects and advance understanding of how leadership and merit-based workforce management influence work engagement and job satisfaction among non-organic workers.

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AUTHOR CONTRIBUTIONS

APP contributed to conceptualization, research design, data collection, formal analysis, and original draft preparation. MR contributed to methodology, supervision, validation, and manuscript review and editing. RAS contributed to theoretical framework development, methodological supervision, interpretation of findings, and manuscript review and editing. All authors reviewed and approved the final version of the manuscript.

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