

Revisiting HR Practices: Why Job Satisfaction Fails to Mediate the Effects of Training, Motivation, and Organizational Culture on Employee Performance in Conventional Banks in Batam

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ABSTRACT

The research examines the influence of training, motivation, and organizational culture on employee performance through job satisfaction among conventional bank employees in Batam. Although previous studies commonly position job satisfaction as a mediating variable between Human Resource Management (HRM) practices and employee performance, empirical findings remain inconsistent and highly dependent on organizational context. This issue is particularly relevant in the banking sector, which operates under strict regulations, standardized procedures, and high service demands. A quantitative approach is employed using data collected from 310 employees through questionnaires. The data are analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS). The findings reveal that training, motivation, and organizational culture positively and significantly affect job satisfaction. Training also has a positive and significant direct effect on employee performance. However, motivation, organizational culture, and job satisfaction do not significantly influence employee performance. Furthermore, job satisfaction is unable to mediate the relationships between training, motivation, organizational culture, and employee performance. The research novelty lies in identifying the contextual limitations of job satisfaction as a mediating variable within a highly structured banking environment. The findings extend HRM literature by demonstrating that the mediating role of job satisfaction depends on organizational context. Practically, banks are encouraged to prioritize structured and job-relevant training programs to improve employee performance directly.

Keywords: Human Resource (HR) practices, training, motivation, organizational culture, job satisfaction, employee performance

INTRODUCTION

The banking industry has undergone a significant transformation driven by digitalization, intensifying competition, and the rapid expansion of financial technology (fintech). Although macroeconomic indicators show that the banking sector, especially in Batam, continues to grow positively, this development also brings new challenges. Batam's economic growth reached 7.04% in Badan Pusat Statistik Kota Batam (2024), exceeding both provincial and national

averages, while total banking assets increased from 56.79 million in early 2022 to 72.76 million by the end of 2023 (Badan Pusat Statistik Provinsi Kep. Riau, 2025). These indicators reflect a strong and resilient industry that continues to attract investor interest and expand its operational reach.

Figure 1 presents the monthly development of banking assets in Batam during 2022–2023, categorized into government, national private, foreign, and mixed banks. Overall, the data indicate a fluctuating yet upward trend over the observed period.

Month	Government Banks 2022	Government Banks 2023	National Private Banks 2022	National Private Banks 2023	Foreign & Mixed Banks 2022	Foreign & Mixed Banks 2023	Total 2022	Total 2023
January	25,270,764	27,625,790	31,489,622	34,494,675	32,753	26,017	56,792,709	62,146,497
February	25,325,964	27,901,364	31,430,898	34,653,654	30,321	25,700	56,787,009	62,580,718
March	26,068,327	29,041,843	32,490,346	35,153,211	31,324	23,605	58,590,297	64,218,659
April	26,052,642	30,285,301	32,810,057	35,141,242	24,241	24,082	58,887,120	65,450,625
May	26,091,975	30,783,524	32,730,142	35,351,311	23,448	23,453	58,845,565	66,162,863
June	26,091,651	31,486,337	32,542,659	35,743,393	23,286	23,236	58,656,596	67,249,758
July	26,406,095	31,815,384	32,558,326	35,938,723	23,636	23,013	58,987,057	67,777,120
August	26,601,927	32,521,067	33,501,613	36,458,964	23,848	22,490	59,428,388	69,005,067
September	27,264,693	32,910,537	32,987,173	36,444,208	26,345	23,845	60,278,211	69,398,590
October	27,242,599	33,593,104	33,221,747	37,215,327	26,573	25,795	60,590,919	70,831,926
November	28,372,972	33,313,134	33,541,304	37,459,497	26,621	18,562	61,241,264	70,791,193
December	29,870,584	34,116,706	37,181,389	38,624,979	26,014	21,007	64,015,915	72,762,692

Figure 1 Total Banking Assets

Source: Badan Pusat Statistik Kota Batam (2024)

National private banks consistently account for the largest proportion of total banking assets, followed by government banks, while foreign and mixed banks contribute the smallest share. In terms of dynamics, banking assets generally increased throughout the period, with notable peaks occurring in the last quarter of 2023, particularly in November and December. This pattern reflects heightened financial activity towards the end of the year, which is likely associated with increased business transactions and cyclical economic factors. Despite several short-term fluctuations, the overall trajectory confirms sustained growth in Batam's banking sector during the 2022–2023 period.

However, favorable macroeconomic performance does not automatically translate into optimal employee conditions at the micro level (Santos, 2023). Rapid industry growth increases operational demands, accelerates digital transformation efforts, and raises customer expectations (Joel et al., 2024). In Batam, a significant portion of banking employees consists of outsourced workers, sales contract workers, and non-degree holders (senior high school/equivalent). This workforce composition often leads to high turnover and unequal access to training, ultimately complicating employee performance management (Falah et al., 2025). These pressures can intensify workloads, elevate stress levels, and create performance inconsistencies across departments (Mukherjee et al., 2024). Recent studies further report rising turnover intentions and challenges in adapting to digital systems even during periods of financial stability (Del Baldo et al., 2022; Sandhya, 2024).

Employees play a central role in ensuring the quality, stability, and competitiveness of banking operations, on par with technology, capital, and infrastructure (Siregar & Hermiati, 2023). In the banking sector, employees are directly involved in delivering financial services, maintaining customer

trust, and adapting to rapid technological changes. Therefore, the quality of human resources becomes an important factor in determining organizational effectiveness and long-term sustainability. Optimal performance is achieved when employees fully utilize their skills, knowledge, and experience to meet organizational goals efficiently and effectively (Vuong & Nguyen, 2022). Employees who perform well are more capable of handling operational demands, improving service quality, and supporting organizational competitiveness in an increasingly dynamic banking environment.

Within this context, training, motivation, and organizational culture become essential Human Resource Management (HRM) components that support employee capability and performance. Training equips employees with updated competencies and prepares them to adapt to digital processes and evolving customer requirements (Georgescu et al., 2024). Motivation influences employees' willingness to exert effort, especially in target-driven and highly regulated work environments (Putri & Astuti, 2022). Based on Herzberg's two-factor theory, job satisfaction is influenced by both motivators (achievement, recognition, and responsibility) and hygiene factors (policies, supervision, and working conditions), making it particularly relevant in high-pressure sectors such as banking (Hasan & Mishra, 2025; Lee et al., 2022).

Organizational culture shapes communication, teamwork, and behavioral norms, contributing to stability and long-term performance (Jaganjac et al., 2025). Prior studies have shown that motivation and organizational culture together explain nearly half of the variance in employee performance (Munawirsyah, 2021). Job satisfaction has also traditionally been viewed as a psychological mechanism linking HR practices to performance outcomes (Al-Sabi et al.,

2024; Wulandari & Erdiansyah, 2024).

However, recent empirical findings reveal inconsistencies. Some studies show that job satisfaction effectively mediates the influence of HR practices on performance (Stirpe et al., 2022; Volta et al., 2024), while others argue that satisfaction alone does not lead to meaningful performance improvements, especially in structured and compliance-oriented sectors such as banking (Riyanto et al., 2021). These mixed findings suggest that the mediating role of job satisfaction may be context-dependent and influenced by regulatory environments, work structures, and employee expectations.

Given Batam's distinct workforce characteristics and the sector's rapid digital evolution, two major research gaps emerge. First, an empirical gap remains, as limited studies have examined whether job satisfaction still functions as an effective mediator within conventional banks in Batam. Second, a theoretical gap arises because dominant HRM frameworks in prior studies generally suggest that job satisfaction mediates the relationship between HR practices and employee performance outcomes. In contrast, newer evidence indicates that this mechanism may weaken in rigid, target-driven, or technologically transitioning environments (Abdelhamied et al., 2023). Considering Batam's distinctive workforce composition and the sector's rapid digital transformation, the research re-examines the influence of training, motivation, and organizational culture on employee performance in conventional banks in Batam. It has a specific focus on examining the contextual conditions under which job satisfaction exhibits a limited mediating role in these relationships. By integrating macroeconomic stability, micro-level HR challenges, and empirical model testing, the researchers provide new insights into the context-dependent boundaries of satisfaction-based performance models within the banking sector.

The research focuses on employees of conventional banks in Batam, with the banking industry selected for its strong relevance to the region's economic and employment challenges. Addressing these challenges requires implementing sustainable financial strategies and developing initiatives such as training programs, motivation enhancement, and the establishment of a strong organizational culture. These efforts are expected to optimize the quality of HR and provide banks with a competitive advantage.

Theoretically, the research extends and refines existing HRM theories by clarifying the conditions under which job satisfaction may not function optimally as a mediating mechanism, rather than challenging its broader relevance in explaining employee behavior. In particular, the findings highlight how structural regulation, limited autonomy, and task-based job designs typical of conventional banks may constrain the strength of motivational and attitudinal mechanisms emphasized in prior research. In practice, the previous findings offer guidance to banking institutions in refining their HR strategies by identifying which HR practices directly enhance employee performance and which require structural alignment before producing measurable outcomes. Specifically, the results underscore the importance of aligning training programs with job-relevant skill needs, designing motivational systems that address both intrinsic and extrinsic dimensions, and ensuring that organizational culture is consistently translated into daily operational practices, particularly for outsourced and frontline employees.

The relationships among the research variables are further described in Figure 2. Training, motivation, and organizational culture are hypothesized to positively influence job satisfaction (H1–H3), which in turn is expected to affect employee performance (H7). In addition, training, motivation, and organizational culture

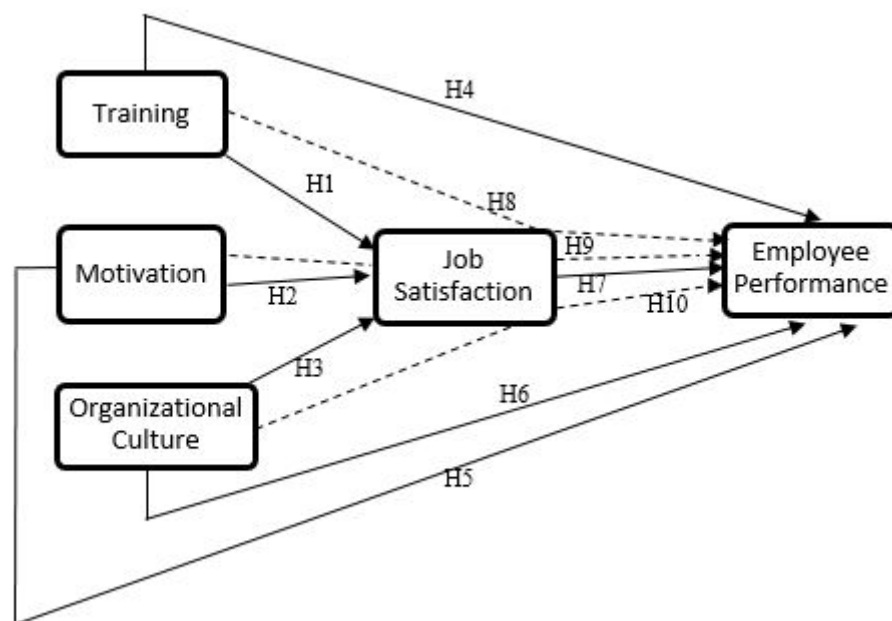


Figure 2 Research Framework

culture are also assumed to have direct effects on employee performance (H4–H6). Furthermore, job satisfaction is hypothesized to mediate the relationships between training, motivation, organizational culture, and employee performance (H8–H10). Thus, job satisfaction acts as a mediating variable, linking the independent variables (training, motivation, and organizational culture) to the dependent variable (employee performance).

METHODS

The research employs a quantitative, explanatory research methodology to examine the fundamental relationships among the tested variables (Indrayani et al., 2024). In line with Sentoso et al. (2024), quantitative research typically begins with hypothesis formulation, followed by empirical testing. Accordingly, the primary objective of the research is to address existing gaps by evaluating strategies and analyzing factors that can potentially improve employee performance.

Data collection is carried out through online questionnaires distributed via Google Forms. A purposive sampling technique is used to ensure that respondents possess relevant work experience. The target population consists of employees of conventional banks in Batam with at least one year of tenure and holding operational, administrative, or customer service positions. In calculating the representative sample size for the research, the theory by Hair et al. (2021) is adopted. The theory states that a construct item can be represented by 10 respondents. In this context, the research model encompasses 22 constructs, indicating that the minimum number of respondents to participate in the research is 220. The researchers distribute 350 questionnaires to target respondents, and 310 valid responses are accepted. It results in an 88.6% response rate, which is considered highly satisfactory for organizational surveys.

The questionnaire measures five latent constructs in the research, namely training, motivation, organizational culture, job satisfaction, and employee performance. The measurement instrument used is developed by adopting and adapting validated questionnaires from previous research, as shown in Table 1. All items are measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The constructs are operationalized as follows. Training is adapted from Dao et al. (2025), covering dimensions related to training relevance, clarity of materials, and improvement of employee skills. Then, motivation is measured using indicators adapted from Herzberg's two-factor theory and items from previous studies, such as Ibrahim et al. (2023), including intrinsic and extrinsic motivation, recognition, encouragement, and willingness to perform. Organizational culture is adapted from Georgousopoulou et al. (2025), introducing an organizational culture framework, and supported by previous empirical research (Handriyani et al., 2023), which is measured using indicators

related to shared values, norms, and workplace practices. Job satisfaction is adapted from Memon et al. (2023), including previous studies such as García-Salirrosas et al. (2023) and Wulandari and Erdiansyah (2024), capturing satisfaction with work conditions, responsibilities, and supervisor support. Employee performance is adapted from the performance dimensions developed by Saidin et al. (2024) and supported by indicators from Yimam (2022), focusing on task completion, work quality, and efficiency.

The initial questionnaire consists of six indicators for each variable. However, several items are removed during the measurement model evaluation because they do not meet the minimum outer loading threshold recommended (Zhenjing et al., 2022). Only indicators with acceptable reliability and validity are retained for further analysis.

Next, the data are analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS), which is considered appropriate for examining complex relationships among latent constructs and testing mediation effects simultaneously. SEM-PLS is also suitable for predictive research models and does not require strict assumptions of normal data distribution. The analysis is conducted in two stages, namely evaluation of the measurement model and evaluation of the structural model. The measurement model assessment includes validity and reliability testing through outer loading, Average Variance Extracted (AVE), composite reliability, Cronbach's alpha, and discriminant validity. Meanwhile, the structural model evaluation examines path coefficients, coefficient of determination (R^2), predictive relevance (Q^2), model fit (Standardized Root Mean Square Residual (SRMR)), and hypothesis significance through bootstrapping procedures to ensure robust hypothesis testing (Hair et al., 2021).

RESULTS AND DISCUSSION

The respondents' demographic characteristics can be summarized as follows. A total of 213 respondents (68.7%) are female, while the remaining 97 respondents (31.3%) are male. In terms of age, most employees are between 24 and 27 years old, accounting for 93 respondents (30.0%), followed by 88 respondents (28.4%) aged 20–23 years, and 50 respondents (14.4%) aged 28–31 years. Regarding educational level, most respondents are high school/vocational school graduates (160 respondents, or 51.6%), followed by bachelor's degree holders (130 respondents, or 41.9%).

Although more than half of the respondents are high school/vocational school graduates, this distribution is consistent with the job positions represented in the sample. As shown in the demographic data, most respondents are administrative staff (35.5%), sales employees (22.6%), customer service officers (19.7%), and tellers (14.8%). These positions are typically filled by outsourced or contract-based frontline employees. Many of them are recruited with

Table 1 Measurement Indicators

Variable	Code	Indicator
Training	TN1	Training relevance
	TN2	Clarity of training materials
	TN3	Skill improvement
	TN4	Adaptation to banking systems
	TN5	Enhancement of task efficiency
	TN6	Support for job performance
Motivation	MV1	Achievement motivation
	MV2	Recognition for performance
	MV3	Supervisor encouragement
	MV4	Extra work effort
	MV5	Work enthusiasm
	MV6	Motivation to maintain performance
Organizational Culture	OC1	Shared organizational values
	OC2	Compliance with organizational norms
	OC3	Teamwork encouragement
	OC4	Discipline and professionalism
	OC5	Supportive organizational practices
	OC6	Implementation of organizational values
Job Satisfaction	JS1	Satisfaction with working conditions
	JS2	Satisfaction with job responsibilities
	JS3	Satisfaction with supervisor support
	JS4	Comfort in the workplace
	JS5	Overall job satisfaction
	JS6	Satisfaction with organizational role
Employee Performance	EP1	Timely task completion
	EP2	Work accuracy
	EP3	Achievement of performance targets
	EP4	Work efficiency
	EP5	Quality of work outcomes
	EP6	Compliance with work procedures

high school or diploma-level qualifications. Only 1.3% of respondents hold positions that require higher academic credentials, such as credit analyst roles. Because the research specifically targets operational, administrative, and customer-facing employees, rather than managerial or officer-level staff, the educational distribution observed in the data accurately reflects the structure of the banking workforce. Therefore, the sample remains representative of the intended population, and the findings retain their generalizability within this employee category.

The initial questionnaire contains six indicators for each construct. However, several items are removed during the SEM-PLS measurement model evaluation because they do not meet the minimum outer loading threshold (Hair et al., 2021). The reduction in items is influenced by several factors, including differences in interpretation and response-pattern tendencies. Although the questionnaire is carefully adapted,

certain items may have been interpreted inconsistently by respondents, reducing clarity and lowering their loading values. Additionally, some indicators exhibited limited response variation (e.g., overly similar or neutral responses), a pattern commonly observed in structured service environments, resulting in low loadings.

Loading factors are coefficients from the original sample estimates that indicate the values used in convergent validity analysis (Hair et al., 2021). Table 2 presents the final retained indicators for each construct. After the evaluation, the remaining items are as follows: organizational culture (OC4, OC5, OC6), job satisfaction (JS4, JS5, JS6), employee performance (EP5, EP6), motivation (MV4, MV5, MV6), and training (TN4, TN5, TN6). Compared to the original 6 indicators for each construct, the removed items are 16 (organizational culture with 3 items, job satisfaction with 3 items, employee performance with

4 items, motivation with 3 items, and training with 3 items). Therefore, the final indicators still provide an adequate and reliable representation of each construct within the context of conventional banks in Batam.

Despite meeting the required statistical validity and reliability criteria, the substantial reduction in indicators, particularly in employee performance, which ultimately retains only two items, represents a methodological limitation. It should be explicitly acknowledged and warrants careful consideration. The retained indicators primarily capture task-oriented and efficiency-based performance outcomes closely associated with training effectiveness and routine task execution in conventional banking operations. Consequently, other important dimensions of employee performance that are more strongly influenced by motivational factors, organizational culture, and attitudinal states such as job satisfaction, including contextual performance, proactive behavior, adaptability, creativity, and extra-role contributions, may not be fully represented in the measurement model. This limitation is closely linked to the highly standardized and procedurally regulated nature of frontline banking work in Batam. In this context,

employee performance is predominantly assessed based on target achievement, operational accuracy, and compliance with standard operating procedures. As a result, the measurement of employee performance in the research should be interpreted within the scope of the retained indicators, reflecting core task performance aligned with formal HR practices. At the same time, broader behavioral dimensions associated with motivation, organizational culture, and job satisfaction remain less observable.

Table 3 presents AVE values for organizational culture, job satisfaction, employee performance, motivation, and training. The AVE values, which range from 0.679 to 0.837, all exceed the recommended threshold of 0.50 (Ghozali, 2021). This result confirms that each construct demonstrates adequate convergent validity, meaning the indicators effectively capture the variance of the respective latent variables. Employee performance records the highest AVE value (0.837), indicating strong convergent validity. Meanwhile, training shows the lowest (0.679) but remains within the acceptable range. These results reinforce the reliability and validity of the measurement model and provide a solid basis for conducting subsequent SEM.

Table 2 Outer Loadings Test Results

Indicator	Loading Factor	Description
OC4	0.816	Eligible
OC5	0.906	Eligible
OC6	0.894	Eligible
JS4	0.863	Eligible
JS5	0.875	Eligible
JS6	0.842	Eligible
EP5	0.924	Eligible
EP6	0.906	Eligible
MV4	0.814	Eligible
MV5	0.885	Eligible
MV6	0.891	Eligible
TN4	0.930	Eligible
TN5	0.571	Eligible
TN6	0.921	Eligible

Note: Training (TN), Motivation (MV), Employee Performance (EP), Job Satisfaction (JS), and Organizational Culture (OC).

Table 3 Average Variance Extracted (AVE) Test Results

Variable	AVE	Description
OC	0.762	Eligible
JS	0.740	Eligible
EP	0.837	Eligible
MV	0.747	Eligible
TN	0.679	Eligible

Note: Training (TN), Motivation (MV), Employee Performance (EP), Job Satisfaction (JS), and Organizational Culture (OC).

Table 4 presents the results of the Heterotrait-Monotrait Ratio (HTMT) test for discriminant validity. According to Cheung et al. (2024), an HTMT value below 0.90 indicates that discriminant validity is achieved and is acceptable. The results show that all correlation values among the constructs are below the 0.90 threshold, ranging from 0.405 to 0.888. This finding confirms that each construct is empirically distinct from the others. There is no issue of multicollinearity among the variables. Therefore, the discriminant validity of the measurement model is well established, providing further support for the robustness of the research framework and enabling the continuation of hypothesis testing with confidence.

To confirm that the instrument reliably and accurately captures the intended constructs, the validity evaluation examines the measurement model to assess each construct's validity and reliability. According to Cheung et al. (2024), Cronbach's alpha and composite reliability values above 0.70 indicate acceptable reliability. As presented in Table 5, all constructs demonstrate Cronbach's alpha values ranging from 0.744 to 0.843 and composite reliability values ranging from 0.859 to 0.911. These results indicate satisfactory internal consistency and confirm that all constructs are reliable for further analysis. Employee performance shows the highest composite reliability value (0.911), indicating strong consistency among its indicators. Training records the lowest reliability values but remains within the acceptable threshold. Therefore, the measurement instrument is considered reliable and suitable for evaluating the structural model.

Despite these reductions, all remaining constructs fulfill the required validity and reliability criteria (composite reliability > 0.70, Cronbach's alpha > 0.70, and AVE > 0.50). All retained indicators meet the convergent validity criteria with loading values above 0.50. Indicators falling below the threshold are removed from the model. According to Cheung et al. (2024), outer loadings between 0.50 and 0.60 may still be considered acceptable in the early stages of scale development, provided that AVE and composite reliability remain adequate.

The direct effects (path coefficients) provide insights into the direct relationships between latent variables. As shown in Table 6, organizational culture has a positive and significant effect on job satisfaction with a coefficient of 0.393, supported by a t-statistic value of 4.243 and a p-value of 0.000. Motivation (t-statistic = 4.737; p-value = 0.000) and training (t-statistic = 2.697; p-value = 0.007) also show significant positive effects on job satisfaction. Training further demonstrates a strong, significant direct effect on employee performance, with a coefficient of 0.689, a t-statistic of 16.974, and a p-value of 0.000, making it the strongest predictor in the model. Meanwhile, three relationships show no significant influence: organizational culture on performance (t-statistic = 0.459; p-value = 0.646), job satisfaction on performance (t-statistic = 1.346; p-value = 0.178), and motivation on performance (t-statistic = 1.533; p-value = 0.126). Although job satisfaction exhibits a negative coefficient (-0.102), the relationship is statistically insignificant. Therefore, the negative direction should be interpreted cautiously. Overall,

Table 4 Heterotrait-Monotrait Ratio (HTMT Ratio) Test Results

Variable	OC	JS	EP	MV	TN
OC					
JS	0.840				
EP	0.435	0.405			
MV	0.886	0.839	0.501		
TN	0.602	0.635	0.888	0.659	

Note: Training (TN), Motivation (MV), Employee Performance (EP), Job Satisfaction (JS), and Organizational Culture (OC).

Table 5 Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability	Description
OC	0.843	0.906	Eligible
JS	0.824	0.895	Eligible
EP	0.806	0.911	Eligible
MV	0.831	0.898	Eligible
TN	0.744	0.859	Eligible

Note: Training (TN), Motivation (MV), Employee Performance (EP), Job Satisfaction (JS), and Organizational Culture (OC).

the results indicate that only training has a meaningful direct effect on employee performance. In contrast, motivation, organizational culture, and job satisfaction do not significantly influence performance outcomes in conventional banks in Batam.

In addition to examining path coefficients and significance levels, the researchers also conduct a predictive relevance test using the Stone–Geisser Q^2 value. A Q^2 value greater than 0 indicates that the model has predictive relevance, while values less than or equal to 0 suggest a lack of predictive capability. Values of 0.02, 0.15, and 0.35 generally indicate small, medium, and large predictive relevance, respectively (Hair et al., 2021). As shown in Table 7, job satisfaction obtains a Q^2 value of 0.187, and employee performance has a Q^2 value of 0.214. Since both values exceed 0.15, the structural model demonstrates medium predictive relevance for these constructs. This finding indicates that the model provides meaningful predictive accuracy in estimating job satisfaction and employee performance.

The mediating variables of the research model are highlighted through the indirect effects. Table 8 shows that the indirect effects between variables have p-values greater than 0.05 and t-statistic values less

than 1.96. These results suggest that, in the context of employee training, motivation, and organizational culture, job satisfaction does not function as a significant mediating variable.

According to Hair et al. (2021), a result greater than 0.50 is considered strong. A result between 0.25 and 0.50 is considered moderate, and a result below 0.25 can be categorized as weak. As shown in Table 9, the R^2 value for job satisfaction is 0.585. Then, the R^2 value for employee performance is 0.532. These R^2 values indicate moderate predictive performance.

Table 10 presents the results of the SRMR test, which is an indicator used to assess the goodness of fit in SEM. According to Sinniah et al. (2022), an SRMR value below 0.10 indicates an acceptable fit between the model and the observed data. The results show that both the saturated and estimated models yield an SRMR of 0.049, well below the recommended threshold. These findings confirm that the proposed model adequately fits the data, indicating that the discrepancy between observed and predicted correlations is minimal. Therefore, the SRMR test provides strong evidence that the structural model used in the research is reliable and valid for further interpretation.

Table 6 Hypothesis Test Results

Hypothesis	Sample Mean (M)	T-Statistics (O/STDEV)	P-Values
OC → JS	0.393	4.243	0.000
OC → EP	0.028	0.459	0.646
JS → EP	-0.102	1.346	0.178
MV → JS	0.346	4.737	0.000
MV → EP	0.133	1.533	0.126
TN → JS	0.126	2.697	0.007
TN → EP	0.689	16.974	0.000

Note: Training (TN), Motivation (MV), Employee Performance (EP), Job Satisfaction (JS), and Organizational Culture (OC).

Table 7 Predictive Relevance Results

Variable	Q^2	Interpretation
Job Satisfaction	0.187	Medium predictive relevance
Employee Performance	0.214	Medium predictive relevance

Table 8 Indirect Effect Test Results

Hypothesis	Sample Mean (M)	T Statistics (O/STDEV)	P-Values
OC → JS → EP	-0.040	1.202	0.230
MV → JS → EP	-0.036	1.265	0.206
TN → JS → EP	-0.013	1.122	0.262

Note: Training (TN), Motivation (MV), Employee Performance (EP), Job Satisfaction (JS), and Organizational Culture (OC).

The test result for H1 shows a p-value of 0.007, indicating that training has a positive and significant influence on the job satisfaction of conventional bank employees in Batam. Therefore, H1 is accepted. This finding suggests that well-designed and relevant training programs enhance employees' job satisfaction, while poorly aligned training may reduce satisfaction with work roles. This result is consistent with Dami et al. (2022), finding that higher levels of training and education are associated with greater employee job satisfaction. Similar evidence is also reported by Usman et al. (2023) and Rožman et al. (2023), emphasizing the important role of training in shaping positive employee attitudes. However, some studies conducted in organizational contexts characterized by higher autonomy and flexibility report weaker or non-significant effects of training on job satisfaction, as employees place greater emphasis on intrinsic motivation and discretionary job design (García-Salirrosas et al., 2023). In contrast, the research findings highlight the contextual importance of training within Batam's conventional banking sector. In a highly regulated, target-driven, and system-oriented work environment, training serves not only as a means of skill development but also as a mechanism to reduce role ambiguity and support compliance with standardized procedures. Under such conditions, employees rely heavily on structured and job-relevant training to adapt to operational demands and digital systems. This contextual characteristic helps to explain why the effect of training on job satisfaction appears particularly strong in Batam's banking sector compared to organizational settings characterized by greater autonomy and flexibility.

The H2 test, with a p-value of 0.000, indicates that motivation has a positive and significant effect on the job satisfaction of conventional bank employees in Batam. Therefore, H2 is accepted. According to Basalamah and As'ad (2021) and Wolor et al. (2023), if employees feel satisfied with their work, they tend to be more motivated to excel. Previous research by Sypniewska et al. (2023) has stated that when employees' needs are met in the work environment, they will feel satisfied with their work. Recognition and

appreciation for contributions are important factors that enhance satisfaction. Awards acknowledge employees' efforts and achievements, promotions provide career advancement opportunities, and recognition validates the value of their work. Theoretically, high motivation positively impacts job satisfaction. It encourages individuals to improve their efforts, achieve more optimal results, and remain actively engaged in their work (Aljumah, 2023).

The H3 test result, with a p-value of 0.000, demonstrates that organizational culture has a positive and significant impact on job satisfaction. Therefore, H3 is accepted. It suggests that the better the organizational culture established within a company is, the greater the satisfaction and comfort are experienced by employees. The compatibility between employees' values and habits can contribute to higher job satisfaction (Georgousopoulou et al., 2025; Wulandari & Erdiansyah, 2024). These results are consistent with the findings of Handriyani et al. (2023) that organizational culture significantly affects job satisfaction. This relationship can also be explained by the specific context of conventional banking institutions in Batam, where standardized procedures and strict regulatory controls dominate daily operations. In such environments, a strong and consistent organizational culture provides clarity, stability, and a sense of belonging, thereby enhancing employees' job satisfaction (Georgescu et al., 2024; Giday & Perumal, 2023). Consequently, organizational culture functions as a supportive mechanism that compensates for the limited flexibility inherent in banking work settings.

The test result for H4 indicates a p-value of 0.000, confirming that training has a significant and positive effect on the performance of employees at conventional banks in Batam. Therefore, H4 is accepted. The training programs implemented are effective in improving the quality of employees' work outcomes. Training is essential for enhancing performance across divisions and roles, as it equips employees with the necessary skills and knowledge to excel (Muzam, 2023; Yimam, 2022). This research also corroborates the findings of Giday and

Table 9 R-Square Test Results

Variable	R-Square	Adjusted R-Square
Job Satisfaction	0.585	0.581
Employee Performance	0.532	0.526

Table 10 Standardized Root Mean Square Residual (SRMR) Test Results

	Original Sample (O)	Samples Mean (M)
Saturated Model	0.101	0.049
Estimated Model	0.101	0.049

Perumal (2023) that training significantly influences employee performance. The strong effect of training on employee performance is particularly relevant in Batam's banking sector, characterized by frequent system updates, high accuracy requirements, and strict compliance standards. In this environment, training not only enhances technical competencies but also ensures that employees can meet operational targets and perform their duties in accordance with established procedures. Therefore, training emerges as a key strategic mechanism that directly supports employee performance and organizational effectiveness in conventional banking institutions.

The test result for H5 shows a p-value of 0.126, indicating that motivation has a positive but insignificant influence on employee performance in conventional bank employees in Batam. Therefore, H5 is rejected. Although motivation is generally expected to enhance performance, motivation does not always translate into measurable performance improvements. The result aligns with José et al. (2025). This pattern becomes clearer when considering the characteristics of frontline and outsourced employees in conventional banks in Batam. Many of these employees work under strict operational guidelines, tightly defined daily targets, and standardized procedures that leave little room for personal discretion. As a result, performance outcomes tend to be shaped more by compliance and routine task execution than by internal motivational states. Possible explanations include the limited recognition, support, and appreciation that employees receive from superiors, as well as rigid regulations that require productivity to be maintained regardless of motivational levels (Imran et al., 2025). Herzberg's two-factor theory provides further insight into this condition. Most motivational initiatives offered by the banks, such as verbal encouragement, target briefings, or general performance reminders, function primarily as hygiene factors rather than true motivators. Hygiene factors, including supervision quality, policies, and working conditions, prevent dissatisfaction but do not inherently increase performance. In many Indonesian banks, especially among outsourced staff, employees seldom receive motivator-based incentives, such as recognition awards, career development opportunities, or greater job autonomy. Consequently, even when employees report feeling motivated, their performance may not increase because the essential drivers of meaningful satisfaction and enhanced performance are not fully present (Layek & Koodamara, 2024; Liaquat et al., 2024). In the context of conventional banks, where work is highly procedural and regulated, performance may depend more on structural hygiene factors than on intrinsic motivators (Hasan & Mishra, 2025; Jung & Moon, 2024; Ybañez, 2024).

Similarly, the Self-Determination Theory (SDT) argues that motivation enhances performance when employees experience competence, autonomy, and relatedness (Olafsen et al., 2025; Rahi et al., 2023). In such banking environments with a lack of autonomy and highly controlled tasks, motivation, especially

regarding extrinsic motivation, tends to increase compliance, but not performance quality (Ng et al., 2024; Msuya & Kumar, 2022; St-Onge & Legault, 2022). As a consequence, even when employees feel motivated, their ability to express this motivation through higher performance is constrained by the nature of their work (Inan et al., 2023). In contrast, a previous study conducted in different organizational contexts has reported a significant positive effect of motivation on employee performance (Shahzad et al., 2023). It is mostly conducted in environments that offer greater autonomy, recognition, and performance-based rewards. The divergence of findings suggests that the highly regulated, target-oriented, and compliance-driven nature of conventional banking operations in Batam limits employees' ability to translate motivation into higher performance outcomes.

The test result for H6 reveals a p-value of 0.646. Organizational culture does not significantly impact employee performance in conventional banks in Batam. Therefore, H6 is rejected. This finding suggests that the existing organizational culture does not strongly influence how employees perform their tasks. The lack of a significant effect may stem from factors such as weak integration of cultural values into daily operations or inconsistent practices across the organization. If employees are not engaged with or committed to the culture, the influence of organizational culture on performance is reduced. This finding aligns with Widarko and Anwarodin (2022) and Abane et al. (2022) that organizational culture does not substantially affect employee performance. This result highlights the need for companies to actively and consistently implement their cultural values to improve their potential impact on performance. In contrast, several prior studies have reported a significant positive effect of organizational culture on employee performance, particularly in organizations where cultural values are strongly internalized and embedded into daily work practices (Jiatong et al., 2022; Kim & Jung, 2022; Zulkifli et al., 2023). In such environments, shared values actively guide employee behavior and decision-making. The insignificant result in the context of conventional banks in Batam indicates that organizational culture tends to operate more as a formal guideline than a performance-driving mechanism within highly regulated, standardized work systems.

The H7 test, with a p-value of 0.178, indicates a negative, statistically insignificant relationship between job satisfaction and employee performance among conventional bank employees in Batam. Therefore, H7 is rejected. This finding implies that variations in job satisfaction do not have a meaningful effect on employees' performance levels within these banks. Several factors may contribute to this lack of significance. For example, other elements influencing employee performance that are not examined in the research, such as the work environment, salary, or management practices, may overshadow the effect of job satisfaction, rendering its impact negligible. This

finding is consistent with the study by Goetz and Wald (2022) that job satisfaction does not have a significant impact on employee performance. Meanwhile, the findings contrast with research implemented by Memon et al. (2023) and Chi et al. (2023) regarding the strong relationship of job satisfaction with employee performance. The results suggest that a broader investigation into additional factors beyond job satisfaction may be necessary to understand what drives employee performance fully. It may include exploring workplace dynamics or external influences that can play a more pivotal role in shaping performance outcomes.

The test results for H8 show a p-value of 0.262 (> 0.050). Job satisfaction does not mediate the relationship between training and employee performance among conventional bank employees in Batam. Therefore, H8 is rejected. This finding can be understood within the context of Batam's conventional banking sector, where highly structured procedures, frequent system updates, and strict operational targets make training a direct driver of performance rather than an indirect one through job satisfaction. In such environments, training primarily enhances employees' competence and ability to meet procedural standards, which may overshadow its potential effect on satisfaction. While previous studies by Sagheem et al. (2024) and Volta et al. (2024) have found that training improves performance via job satisfaction. The contextual characteristics of Batam's banks, such as standardized roles and limited autonomy, may explain the difference.

The test result for H9 has a p-value of 0.206. Job satisfaction does not effectively mediate the relationship between motivation and employee performance. Therefore, H9 is rejected. This result implies that, even when motivation exists, its influence on performance via job satisfaction is limited in the studied context. The findings may be influenced by contextual factors that are not directly examined in the research. For instance, previous research by Abikova (2025) and Winkelhaus et al. (2022) has argued that a negative or unsupportive work environment can constrain job satisfaction, even when motivation levels are high. In Batam's conventional banks, frontline employees and outsourced staff often operate under tight operational guidelines and limited autonomy, which restricts the translation of motivational states into enhanced performance outcomes. These results differ from previous findings by Nusraningrum et al. (2024) and Memon et al. (2023), which have found that job satisfaction mediates the link between motivation and employee performance. This discrepancy underscores the importance of contextual factors, such as procedural control, supervisory support, and the extent of employee discretion in shaping the mediation effect of job satisfaction.

The H10 test results show a p-value of 0.230, indicating that job satisfaction does not mediate the relationship between organizational culture and employee performance. Therefore, H10 is rejected.

From a theoretical perspective, prior studies have suggested that the mediating role of job satisfaction depends on the extent to which employees internalize organizational values. When personal values are misaligned with formal cultural expectations, organizational culture may have limited influence on job satisfaction and, consequently, on performance (Hngoi et al., 2023; Kosec et al., 2022; Mutonyi et al., 2022). In addition, the literature on bureaucratic and control-oriented organizations argues that employee performance in highly regulated environments is primarily driven by external mechanisms, such as target enforcement, regulatory compliance, and system-based monitoring, rather than affective states such as job satisfaction (Amin, 2022; Na-Nan et al., 2021). Within this theoretical framework, job satisfaction is less likely to function as an effective mediating mechanism. These findings contrast with Abawa and Obse (2024) that organizational culture significantly affects both job satisfaction and performance. The differences highlight the importance of considering additional variables that may shape the mediating role of job satisfaction, including the alignment between employees' values and organizational expectations, degree of autonomy, job contract type, and other contextual factors within the banking environment.

From a contextual perspective, several local conditions further shape employee dynamics in Batam and help to explain the limited mediating role of job satisfaction. Many frontline banking employees come from high school and vocational school backgrounds, which often place them in procedural, task-focused roles with limited autonomy for discretionary performance improvements. It aligns with the highly standardized workflows in Batam's banking sector, where strict compliance and risk-control requirements leave little opportunity for job satisfaction to translate into enhanced performance (Bagherifam et al., 2025). Additionally, the sector relies heavily on outsourced or contract-based employees, particularly in teller, customer service, and sales positions, who often exhibit lower organizational attachment and weaker internalization of cultural values, thereby reducing both the direct and indirect impact of culture on performance (Ababneh, 2021). Furthermore, growing competitive pressure from fintech services and digital banking platforms intensifies performance demands in conventional banks in Batam, compelling employees to prioritize aggressive sales targets and regulatory requirements (Muhammad & Nugraheni, 2022). Under such conditions, employee performance tends to be shaped more by external demands, including target enforcement and system-based monitoring, than by internal psychological states such as satisfaction (Mukherjee et al., 2024).

CONCLUSION

The research contributes to the theoretical understanding of how training, motivation, and organizational culture influence employee

performance through job satisfaction in conventional banks in Batam. The findings show that although training, motivation, and organizational culture have a significant positive effect on job satisfaction, these improvements do not consistently translate into higher employee performance. It indicates the presence of a contextual disconnect between satisfaction and performance in highly regulated and target-driven banking environments. The results extend existing HRM theories by demonstrating that in sectors characterized by strict procedural control, limited autonomy, and a high reliance on outsourced labor, structural and regulatory factors may override the behavioral mechanisms traditionally explained through motivation and satisfaction models.

From a practical perspective, organizations should refine their HR strategies to align with the operational realities of the banking sector in Batam. First, training programs should be preceded by a comprehensive training needs analysis and tailored to the evolving demands of frontline banking roles, which are increasingly shaped by digitalization and competition from fintech services. Second, motivational strategies should focus on consistent recognition, transparent career pathways, and performance-based incentives that address the needs of both permanent and outsourced employees. Third, strengthening organizational culture requires embedding cultural values into daily operational routines through clear communication, leadership example, and consistent implementation across branches, an approach especially important in work environments characterized by high turnover and contract-based employment.

The research also has several limitations that should be acknowledged. The geographic focus on conventional banks in Batam and the predominance of frontline employees, many of whom are high school graduates or outsourced workers, limit the generalizability of the findings. Additionally, the use of self-reported questionnaires may introduce perceptual bias, as respondents may overstate satisfaction or motivation. The cross-sectional research design further restricts the ability to draw causal inferences. Furthermore, the research employed a relatively limited number of measurement indicators, particularly for employee performance. Although the retained indicators capture essential aspects of performance, they may not fully reflect their multidimensional nature in the conventional banking context. Therefore, this measurement constraint should be considered a methodological limitation when interpreting the findings.

Future studies should expand the empirical scope to include multiple regions and diverse organizational types, such as state-owned banks, fintech firms, or digital banking units, to examine whether the satisfaction-performance disconnect persists across different institutional contexts. Including additional mediating variables, such as employee engagement, psychological empowerment, and organizational

commitment, as well as moderating variables such as autonomy, workload, and contract type, may offer deeper insights into the mechanisms linking HRM practices to performance. Longitudinal or mixed-method approaches will also be valuable for capturing dynamic changes over time and providing richer contextual explanations.

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AUTHOR CONTRIBUTIONS

Contributed to the development of the research framework and analytical design, Y. G. P.; Contributed to manuscript development and substantive revisions, Y. G. P.; Collected primary data from employees of conventional banks in Batam through questionnaire distribution, S. S.; Prepared and organized the dataset and assisted in setting up the SEM-PLS analysis, S. S.; Conducted data analysis using SEM-PLS and interpreted the statistical results, S. S.; Drafted the manuscript and contributed to content revision and refinement, S. S.; Conceived and designed the research framework and supported the development of data analysis tools, M. D. M.; and Contributed to data and analytical tools to support the research, M. D. M.

DATA AVAILABILITY

The data that support the findings of the research are available from the corresponding author, Yuddy Giovana Priscilla, upon reasonable request. The data are generated from a primary survey involving employees of conventional banks in Batam. Due to ethical considerations, respondents' confidentiality, and institutional sensitivity within the banking sector, the data cannot be made publicly available. Access to the data may be granted for academic purposes under appropriate confidentiality safeguards.

REFERENCES

- Ababneh, O. M. A. (2021). The impact of organizational culture archetypes on quality performance and total quality management: The role of employee engagement and individual values. *International Journal of Quality & Reliability Management*, 38(6), 1387–1408. <https://doi.org/10.1108/IJQRM-05-2020-0178>
- Abane, J. A., Adamtey, R., & Ayim, V. O. (2022). Does organizational culture influence employee productivity at the local level? A test of Denison's culture model in Ghana's local government sector. *Future Business Journal*, 8, 1–13. <https://doi.org/10.1186/s43093-022-00145-5>

- Abawa, A., & Obse, H. (2024). Organizational culture and organizational performance: Does job satisfaction mediate the relationship? *Cogent Business & Management*, 11(1), 1–15. <https://doi.org/10.1080/23311975.2024.2324127>
- Abdelhamied, H. H., Elbaz, A. M., Al-Romeedy, B. S., & Amer, T. M. (2023). Linking green human resource practices and sustainable performance: The mediating role of job satisfaction and green motivation. *Sustainability*, 15(6), 1–18. <https://doi.org/10.3390/su15064835>
- Abikova, J. (2025). Management matters: What do we need to know about the motivation and job satisfaction of humanitarian logisticians? *Journal of Humanitarian Logistics and Supply Chain Management*, 15(3), 238–255. <https://doi.org/10.1108/JHLSCM-01-2024-0012>
- Aljumah, A. (2023). The impact of extrinsic and intrinsic motivation on job satisfaction: The mediating role of transactional leadership. *Cogent Business & Management*, 10(3), 1–23. <https://doi.org/10.1080/23311975.2023.2270813>
- Al-Sabi, S. M., Al-Ababneh, M. M., Al Qsssem, A. H., Afaneh, J. A. A., & Elshaer, I. A. (2024). Green human resource management practices and environmental performance: The mediating role of job satisfaction and pro-environmental behavior. *Cogent Business & Management*, 11(1), 1–23. <https://doi.org/10.1080/23311975.2024.2328316>
- Amin, M. S. (2022). Organizational commitment, competence on job satisfaction and lecturer performance: Social learning theory approach. *Golden Ratio of Human Resource Management*, 2(1), 40–56. <https://doi.org/10.52970/grhrm.v2i1.156>
- Badan Pusat Statistik Kota Batam. (2024, May 16). *Jumlah aktiva bank menurut akhir periode dan kelompok bank (Rp juta), 2023*. <https://batamkota.bps.go.id/id/statistics-table/2/MjU2IzI=/jumlah-aktiva-bank-menurut-akhir-periode-dan-kelompok-bank.html>
- Badan Pusat Statistik Provinsi Kep. Riau. (2025, February 5). *Pertumbuhan ekonomi Kepulauan Riau triwulan IV-2024*. <https://kepri.bps.go.id/id/pressrelease/2025/02/05/1576/pertumbuhan-ekonomi-provinsi-kepulauan-riau-triwulan-iv-2024.html>
- Bagherifam, N., Naghdi, S., Ahmadian, V., Fazlzadeh, A., & Shishehgharkhaneh, M. B. (2025). Digital regulatory governance: The role of RegTech and SupTech in transforming financial oversight and administrative capacity. *International Journal of Financial Studies*, 13(4), 1–59. <https://doi.org/10.3390/ijfs13040217>
- Basalamah, M. S. A., & As'ad, A. (2021). The role of work motivation and work environment in improving job satisfaction. *Golden Ratio of Human Resource Management*, 1(2), 94–103. <https://doi.org/10.52970/grhrm.v1i2.54>
- Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 41, 745–783. <https://doi.org/10.1007/s10490-023-09871-y>
- Chi, H., Vu, T., Nguyen, H. V., & Truong, T. H. (2023). How financial and non-financial rewards moderate the relationships between transformational leadership, job satisfaction, and job performance. *Cogent Business & Management*, 10, 1–18. <https://doi.org/10.1080/23311975.2023.2173850>
- Dami, Z. A., Wiyono, B., Imron, A., Burhanuddin, Supriyanto, A., & Daliman, M. (2022). Principal self-efficacy for instructional leadership in the perspective of principal strengthening training: Work engagement, job satisfaction and motivation to leave. *Cogent Education*, 9(1), 1–18. <https://doi.org/10.1080/2331186X.2022.2064407>
- Dao, T. H. A., Sisavath, C., Bui, H. T. T., Bui, T. Q., & Le, T. H. (2025). Digital workforce training, employee motivation, job satisfaction, digital behavior as determinants of employee performance: Empirical research from Vietnam. *Sage Open*, 15(4), 1–20. <https://doi.org/10.1177/21582440251395698>
- Del Baldo, M., Sitnikov, C., Vasilescu, L., Mandache, L., Ogarcă, R., Băndoi, A., & Ganea, E. (2022). Funding, turnover, sustainability and digital technologies: A multicriteria research model for SMEs facing a challenging context. *Sustainability*, 14(7), 1–33. <https://doi.org/10.3390/su14073953>
- Falah, F., Ma'arif, S., & Ekananta, A. (2025). Outsourcing business development strategy (PT XYZ case study). *Indonesian Journal of Multidisciplinary Science*, 4(8), 492–505. <https://doi.org/10.55324/ijoms.v4i8.1127>
- García-Salirrosas, E. E., Rondon-Eusebio, R. F., Geraldo-Campos, L. A., & Acevedo-Duque, Á. (2023). Job satisfaction in remote work: The role of positive spillover from work to family and work-life balance. *Behavioral Sciences*, 13(11), 1–22. <https://doi.org/10.3390/bs13110916>
- Georgescu, I., Bocean, C. G., Vărzaru, A. A., Rotea, C. C., Mangra, M. G., & Mangra, G. I. (2024). Enhancing organizational resilience: The transformative influence of strategic human resource management practices and organizational culture. *Sustainability*, 16(10), 1–21. <https://doi.org/10.3390/su16104315>
- Georgousopoulou, V., Amanatidou, M., Vlotinou, P., Lahana, E., Tsiakiri, A., Koutelekos, I., Koutra, E., & Manomenidis, G. (2025). The role of organizational culture and emotional intelligence: Enhancing healthcare professionals' job satisfaction. *Social Sciences*, 14(5), 1–11. <https://doi.org/10.3390/socsci14050286>
- Ghozali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26* (10th ed.). Badan Penerbit Universitas Diponegoro.
- Giday, D. G., & Perumal, E. (2023). A study on the effect

- of training on employee performance in the case of Mekelle City, Tigray, Ethiopia. *Social Sciences & Humanities Open*, 8(1), 1–11. <https://doi.org/10.1016/j.ssaho.2023.100567>
- Goetz, N., & Wald, A. (2022). Similar but different? The influence of job satisfaction, organizational commitment and person-job fit on individual performance in the continuum between permanent and temporary organizations. *International Journal of Project Management*, 40(3), 251–261. <https://doi.org/10.1016/j.ijproman.2022.03.001>
- Hair, J. F., Astrachan, C. B., Moisesescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. *Journal of Family Business Strategy*, 12(3). <https://doi.org/10.1016/j.jfbs.2020.100392>
- Handriyani, R., Ganarsih, R. L., & Maulida, Y. (2023). Pengaruh motivasi dan budaya organisasi terhadap kinerja karyawan PT. Bank Rakyat Indonesia (Persero), Tbk cabang Pekanbaru Sudirman dengan kepuasan kerja sebagai variabel intervening. *Jurnal Manajemen Dayasaing*, 25(2), 118–129. <https://doi.org/10.23917/dayasaing.v25i2.21780>
- Hasan, M. M., & Mishra, V. (2025). Impact of Herzberg's two-factor theory and its influence on employee retention: A sectoral comparative study in Bangladesh. *Kelaniya Journal of Human Resource Management*, 20(1), 40–72. <https://doi.org/10.4038/kjhrm.v20i1.152>
- Hngoi, C. L., Abdullah, N. A., Wan Sulaiman, W. S., & Zaiedy Nor, N. I. (2023). Relationship between job involvement, perceived organizational support, and organizational commitment with job insecurity: A systematic literature review. *Frontiers in Psychology*, 13, 1–18. <https://doi.org/10.3389/fpsyg.2022.1066734>
- Ibrahim, I. W., Ghazali, I. M., Abdullah, S. A. S., Rahmat, N. H., Hamid, M. H. A., & Azhari, S. H. A. (2023). Exploring motivation for learning using Hertzberg's two factor theory. *International Journal of Academic Research in Business and Social Sciences*, 13(3), 1007–1024. <https://doi.org/10.6007/IJARBS/v13-i3/16480>
- Imran, U. D., Ghazwan, M. F., & Firmansyah. (2025). The effect of recognition and appreciation on employee motivation and performance. *Economics and Digital Business Review*, 6(1), 1–18. <https://doi.org/10.37531/ecotal.v6i1.1890>
- Inan, D. I., Hidayanto, A. N., Juita, R., Soemawilaga, F. F., Melinda, F., Puspaciantya, & Amalia, Y. (2023). Service quality and self-determination theory towards continuance usage intention of mobile banking. *Journal of Science and Technology Policy Management*, 14(2), 303–328. <https://doi.org/10.1108/JSTPM-01-2021-0005>
- Indrayani, Nurhatisyah, Damsar, & Wibisono, C. (2024). How does millennial employee job satisfaction affect performance? *Higher Education, Skills and Work-Based Learning*, 14(1), 22–40. <https://doi.org/10.1108/HESWBL-01-2023-0004>
- Jaganjac, B., Hansen, K. W., Lunde, H., & Hunnes, J. A. (2025). The role of organizational culture and structure in implementing sustainability initiatives. *Business Ethics, the Environment & Responsibility*, 34(4), 1239–1254. <https://doi.org/10.1111/beer.12710>
- Jiatong, W., Wang, Z., Alam, M., Murad, M., Gul, F., & Gill, S. A. (2022). The impact of transformational leadership on affective organizational commitment and job performance: The mediating role of employee engagement. *Frontiers in Psychology*, 13, 1–12. <https://doi.org/10.3389/fpsyg.2022.831060>
- Joel, O. S., Oyewole, A. T., Odunaiya, O. G., & Soyombo, O. T. (2024). The impact of digital transformation on business development strategies: Trends, challenges, and opportunities analyzed. *World Journal of Advanced Research and Reviews*, 21(3), 617–624. <https://doi.org/10.30574/wjarr.2024.21.3.0706>
- José, D., Palma-Moreira, A., & Au-Yong-Oliveira, M. (2025). Organizational culture and perceived performance: mediation of perceived organizational support and moderation of motivation. *Administrative Sciences*, 15(8), 1–35. <https://doi.org/10.3390/admsci15080307>
- Jung, G., & Moon, K. K. (2024). Examining public service motivation's impact on organizational commitment: Focusing on moderating roles of hygiene and motivation factors. *Behavioral Sciences*, 14(6), 1–18. <https://doi.org/10.3390/bs14060476>
- Kim, J., & Jung, H. S. (2022). The effect of employee competency and organizational culture on employees' perceived stress for better workplace. *International Journal of Environmental Research and Public Health*, 19(8), 1–22. <https://doi.org/10.3390/ijerph19084428>
- Kosec, Z., Sekulic, S., Wilson-Gahan, S., Rostohar, K., Tusak, M., & Bon, M. (2022). Correlation between employee performance, well-being, job satisfaction, and life satisfaction in sedentary jobs in Slovenian enterprises. *International Journal of Environmental Research and Public Health*, 19(16), 1–14. <https://doi.org/10.3390/ijerph191610427>
- Layek, D., & Koodamara, N. K. (2024). Motivation, work experience, and teacher performance: A comparative study. *Acta Psychologica*, 245, 1–13. <https://doi.org/10.1016/j.actpsy.2024.104217>
- Lee, B., Lee, C., Choi, I., & Kim, J. (2022). Analyzing determinants of job satisfaction based on two-factor theory. *Sustainability*, 14(19), 1–19. <https://doi.org/10.3390/su141912557>
- Liaquat, M., Ahmed, G., Ismail, H., Ain, Q. U., Irshad, S., Izhar, S. S., & Mughal, M. T. (2024). Impact of motivational factors and green behaviors on employee environmental performance. *Research in Globalization*, 8, 1–12. <https://doi.org/10.1016/j.resglo.2023.100180>
- Memon, A. H., Khahro, S. H., Memon, N. A., Memon, Z.

- A., & Mustafa, A. (2023). Relationship between job satisfaction and employee performance in the construction industry of Pakistan. *Sustainability*, 15(11), 1–21. <https://doi.org/10.3390/su15118699>
- Msuya, M. S., & Kumar, A. B. (2022). The role of supervisor work-life support on the correlation between work autonomy, workload and performance: Perspective from Tanzania banking employees. *Future Business Journal*, 8, 1–16. <https://doi.org/10.1186/s43093-022-00139-3>
- Muhammad, R., & Nugraheni, P. (2022). Sustainability of Islamic banking human resources through the formulation of an Islamic accounting curriculum for higher education: Indonesian perspective. *Sage Open*, 12(1), 1–13. <https://doi.org/10.1177/21582440221079838>
- Mukherjee, N., Haider, S. A., & Choudhury, S. (2024). A systematic literature review on the impact of job stress on employee performance with special reference to the banking sector. *Dynamic Relationships Management Journal*, 13(2), 37–54. <https://doi.org/10.17708/DRMJ.2024.v13n02a03>
- Munawirsyah, I. (2021). Pengaruh motivasi kerja dan budaya organisasi terhadap kinerja karyawan pada PT. Perkebunan Nusantara III Medan. *Jurnal Bisnis Administrasi (BIS-A)*, 10(01), 15–23.
- Mutonyi, B. R., Slåtten, T., Lien, G., & González-Piñero, M. (2022). The impact of organizational culture and leadership climate on organizational attractiveness and innovative behavior: A study of Norwegian hospital employees. *BMC Health Services Research*, 22, 1–19. <https://doi.org/10.1186/s12913-022-08042-x>
- Muzam, J. (2023). The challenges of modern economy on the competencies of knowledge workers. *Journal of the Knowledge Economy*, 14, 1635–1671. <https://doi.org/10.1007/s13132-022-00979-y>
- Na-Nan, K., Kanthong, S., & Joungtrakul, J. (2021). An empirical study on the model of self-efficacy and organizational citizenship behavior transmitted through employee engagement, organizational commitment and job satisfaction in the Thai automobile parts manufacturing industry. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 1–19. <https://doi.org/10.3390/joitmc7030170>
- Ng, C., Wider, W., Yang, C., Jiang, L., Vasudevan, A., Bhandari, P., & Lee, H. P. T. (2024). Keys factor affecting employee performance in the banking sector: A Delphi study. *Cogent Business & Management*, 11(1), 1–17. <https://doi.org/10.1080/23311975.2024.2409942>
- Nusraningrum, D., Rahmawati, A., Wider, W., Jiang, L., & Udang, L. N. (2024). Enhancing employee performance through motivation: The mediating roles of green work environments and engagement in Jakarta's logistics sector. *Frontiers in Sociology*, 9, 1–8. <https://doi.org/10.3389/fsoc.2024.1392229>
- Olafsen, A. H., Marescaux, B. P. C., & Kujanpää, M. (2025). Crafting for autonomy, competence, and relatedness: A self-determination theory model of need crafting at work. *Applied Psychology*, 74(1), 1–26. <https://doi.org/10.1111/apps.12570>
- Putri, R. W., & Astuti, P. (2022). Pengaruh pelatihan dan motivasi kerja terhadap kinerja karyawan. *Jurnal Fokus Manajemen Bisnis*, 12(1), 1–15. <https://doi.org/10.12928/fokus.v12i1.5713>
- Rahi, S., Alghizzawi, M., & Ngah, A. H. (2023). Factors influence user's intention to continue use of e-banking during COVID-19 pandemic: The nexus between self-determination and expectation confirmation model. *EuroMed Journal of Business*, 18(3), 380–396. <https://doi.org/10.1108/EMJB-12-2021-0194>
- Riyanto, S., Endri, & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162–174. [https://doi.org/10.21511/ppm.19\(3\).2021.14](https://doi.org/10.21511/ppm.19(3).2021.14)
- Rožman, M., Tominc, P., & Milfelner, B. (2023). Maximizing employee engagement through artificial intelligent organizational culture in the context of leadership and training of employees: Testing linear and non-linear relationships. *Cogent Business & Management*, 10(2), 1–30. <https://doi.org/10.1080/23311975.2023.2248732>
- Sagheem, M., Jan, N. U., & Arafat, Y. (2024). Factors affecting job satisfaction with moderating role of organizational training. *International Journal of Advanced Engineering, Management and Science*, 10(5), 071–087. <https://doi.org/10.22161/ijaems.105.3>
- Saidin, K., Wan, P., & Halim, W. F. S. W. A. (2024). A synthesis towards the construct of job performance: Dimensions and theoretical approaches. *Pakistan Journal of Life and Social Sciences*, 22(2), 300–312. <https://doi.org/10.57239/PJLSS-2024-22.2.0022>
- Sandhya, K. S. (2024). Examining factors affecting employee turnover intention in small and mid-sized information technology organisations. *Ushus Journal of Business Management*, 23(1), 1–14. <https://doi.org/10.12725/ujbm.66.1>
- Santos, E. (2023). FDI and firm productivity: A comprehensive review of macroeconomic and microeconomic models. *Economies*, 11(6), 1–15. <https://doi.org/10.3390/economies11060164>
- Sentoso, A., Junestin, & Nelson, A. (2024). The role of labour productivity in the influence of E-HRM on sustainability performance with organizational agility as a moderating variable in MSMEs. *Almana : Jurnal Manajemen dan Bisnis*, 8(2), 318–332. <https://doi.org/10.36555/almana.v8i2.2583>
- Shahzad, K., Khan, S. A., Iqbal, A., & Shabbir, O. (2023). Effects of motivational and behavioral factors on job productivity: An empirical investigation from academic librarians in Pakistan. *Behavioral Sciences*,

- 13(1), 1–16. <https://doi.org/10.3390/bs13010041>
- Sinniah, S., Al Mamun, A., Md Salleh, M. F., Makhbul, Z. K. M., & Hayat, N. (2022). Modeling the significance of motivation on job satisfaction and performance among the academicians: The use of hybrid structural equation modeling-artificial neural network analysis. *Frontiers in Psychology*, 13, 1–14. <https://doi.org/10.3389/fpsyg.2022.935822>
- Siregar, P. B., & Hermiati, N. F. (2023). Pengaruh self efficacy dan beban kerja terhadap kinerja pegawai melalui kepuasan kerja sebagai variable intervening pada Puskesmas Mekarmuti Cikarang Utara. *JEMSI (Jurnal Ekonomi, Manajemen dan Akuntansi)*, 9(3), 727–735. <https://doi.org/10.35870/jemsi.v9i3.1127>
- Stirpe, L., Profili, S., & Sammarra, A. (2022). Satisfaction with HR practices and employee performance: A moderated mediation model of engagement and health. *European Management Journal*, 40(2), 295–305. <https://doi.org/10.1016/j.emj.2021.06.003>
- St-Onge, S., & Legault, M. È. B. (2022). What can motivate me to keep working? Analysis of older finance professionals' discourse using self-determination theory. *Sustainability*, 14(1), 1–16. <https://doi.org/10.3390/su14010484>
- Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management – based on the study of Polish employees. *International Entrepreneurship and Management Journal*, 19, 1069–1100. <https://doi.org/10.1007/s11365-023-00834-9>
- Usman, M., Rofcanin, Y., Ali, M., Ogbonnaya, C., & Babalola, M. T. (2023). Toward a more sustainable environment: Understanding why and when green training promotes employees' eco-friendly behaviors outside of work. *Human Resource Management*, 62(3), 355–371. <https://doi.org/10.1002/hrm.22148>
- Volta, A. S., Oemar, F., & Nurfaisal. (2024). Pengaruh pelatihan, kepemimpinan, dan kesejahteraan melalui kepuasan kerja terhadap kinerja karyawan di PT. Gerbang Sawit Indah Rokan Hulu – Riau. *South East Asian Management Concern*, 1(2), 41–50. <https://doi.org/10.61761/seamac.1.2.41-50>
- Vuong, T. D. N., & Nguyen, L. T. (2022). The key strategies for measuring employee performance in companies: A systematic review. *Sustainability*, 14(21), 1–21. <https://doi.org/10.3390/su142114017>
- Widarko, A., & Anwarodin, M. K. (2022). Work motivation and organizational culture on work performance: Organizational Citizenship Behavior (OCB) as mediating variable. *Golden Ratio of Human Resource Management*, 2(2), 123–138. <https://doi.org/10.52970/grhrm.v2i2.207>
- Winkelhaus, S., Grosse, E. H., & Glock, C. H. (2022). Job satisfaction: An explorative study on work characteristics changes of employees in Intralogistics 4.0. *Journal of Business Logistics*, 43(3), 343–367. <https://doi.org/10.1111/jbl.12296>
- Wolor, C. W., Wibawa, E. A., Eranza, D. R. D., Nurkhin, A., & Rababah, M. A. (2023). Impact of bullying on work motivation and job satisfaction. *Health Psychology Report*, 12(3), 238–246. <https://doi.org/10.5114/hpr/166427>
- Wulandari, D. R., & Erdiansyah, R. (2024). Pengaruh pelatihan dan budaya organisasi terhadap kepuasan kerja dengan mediasi pengembangan karir pada Direktorat Jenderal Kekayaan Intelektual. *Jurnal Manajemen Bisnis dan Kewirausahaan*, 8(1), 202–212. <https://doi.org/10.24912/jmbk.v8i1.28416>
- Ybañez, R. P. (2024). Application of Herzberg's two-factor theory: Motivational factors and hygiene factors in the financial industry. *Journal of Interdisciplinary Perspectives*, 2(4), 92–101. <https://doi.org/10.69569/jip.2024.0055>
- Yimam, M. H. (2022). Impact of training on employees performance: A case study of Bahir Dar University, Ethiopia. *Cogent Education*, 9(1), 1–18. <https://doi.org/10.1080/2331186X.2022.2107301>
- Zhenjing, G., Chupradit, S., Ku, K. Y., Nassani, A. A., & Haffar, M. (2022). Impact of employees' workplace environment on employees' performance: A multi-mediation model. *Frontiers in Public Health*, 10, 1–13. <https://doi.org/10.3389/fpubh.2022.890400>
- Zulkifli, Purwati, A. A., Renaldo, N., Hamzah, Z., & Hamzah, M. L. (2023). Employee performance of Sharia Bank in Indonesia: The mediation of organizational innovation and knowledge sharing. *Cogent Business & Management*, 10(3), 1–25. <https://doi.org/10.1080/23311975.2023.2273609>