

Impact of OHS and leadership style on employee performance with job satisfaction as a mediator

JMSAB

179

M Artha Hallaludin, Suhada, Rifqi Syarif Nasrullo

Department of Management, Faculty of Economics, Universitas Nahdlatul Ulama Yogyakarta, Yogyakarta, Indonesia

Research paper
Strategic Human Resources Management

Abstract

This study examines the influence of occupational health and safety (OHS) practices and leadership behavior on workforce performance at PT IB, with job satisfaction investigated as a potential mediating factor. Using a quantitative approach, data were collected through structured questionnaires and analyzed to assess these organizational relationships. The findings reveal that OHS practices significantly enhance both employee performance and job satisfaction. At the same time, leadership behavior positively affects job satisfaction but does not directly impact performance. Contrary to expectations, job satisfaction does not mediate the relationship between OHS, leadership, and performance outcomes. These results underscore the critical role of robust OHS implementation and practical leadership approaches in fostering workforce satisfaction and productivity. These findings underscore the crucial role of robust OHS implementation and practical leadership approaches in boosting workforce satisfaction and productivity. Organizational management should therefore prioritize workplace safety and leadership development as key drivers of employee performance.

Received 8/15/2025
Revised 9/20/2025
Accepted 10/15/2025
Online 11/16/2025



Keywords:

Occupational and Health Safety, Leadership Style, Employee Performance, Job Satisfaction.

JMSAB, Vol 8, No. 2, 2025
pp. 179-192

Corresponding Author:

Suhada.

Email: suhada@unu-jogja.ac.id

eISSN 2655-237X

© The Author(s) 2025

DOI: <https://doi.org/10.36407/jmsab.v8i2.1742>



CC BY: This license allows reusers to distribute, remix, adapt, and build upon the material in any medium or format, so long as attribution is given to the creator. The license allows for commercial use.

Abstrak

Penelitian ini mengkaji pengaruh praktik kesehatan dan keselamatan kerja (K3) serta perilaku kepemimpinan terhadap kinerja tenaga kerja di PT IB, dengan kepuasan kerja diinvestigasi sebagai faktor mediasi potensial. Menggunakan pendekatan kuantitatif, data dikumpulkan melalui kuesioner terstruktur dan dianalisis untuk mengevaluasi hubungan organisasi ini. Temuan menunjukkan bahwa praktik K3 secara signifikan meningkatkan baik kinerja karyawan maupun kepuasan kerja. Pada saat yang sama, perilaku kepemimpinan secara positif mempengaruhi kepuasan kerja tetapi tidak secara langsung berdampak pada kinerja. Berlawanan dengan ekspektasi, kepuasan kerja tidak memediasi hubungan antara K3, kepemimpinan, dan hasil kinerja. Hasil ini menyoroti peran kritis implementasi K3 yang kuat dan pendekatan kepemimpinan praktis dalam meningkatkan kepuasan dan produktivitas tenaga kerja. Temuan ini menyoroti peran krusial implementasi K3 yang kuat dan pendekatan kepemimpinan praktis dalam meningkatkan kepuasan dan produktivitas tenaga kerja. Manajemen organisasi seharusnya memprioritaskan keselamatan tempat kerja dan pengembangan kepemimpinan sebagai faktor kunci dalam meningkatkan kinerja karyawan.

Kata kunci: Keselamatan dan Kesehatan Kerja, Gaya Kepemimpinan, Kinerja Karyawan, Kepuasan Kerja.

Introduction

Workplace safety remains a critical challenge across industries, particularly in high-risk sectors such as construction, where occupational hazards pose a significant threat to worker wellbeing and productivity (Marzuki et al., 2018). The persistent prevalence of workplace accidents and occupational illnesses continues to undermine operational efficiency, highlighting systemic gaps in current Occupational Health and Safety (OHS) implementations (Tafere et al., 2020). These safety concerns not only jeopardize employee welfare but also directly affect organizational performance, as workforce health is a fundamental form of human capital for production (Liu et al., 2020). The construction industry exemplifies these challenges, consistently ranking among the most hazardous work environments globally due to its elevated injury rates, which demand urgent attention from all stakeholders, employers, workers, and regulatory bodies alike (Marzuki et al., 2018).

According to OHS management theory, continuous supervision and monitoring are essential to minimize hazards and ensure employee protection (Listyandini et al., 2025). A comprehensive OHS system not only meets legal requirements but also aims to cultivate a safe, healthy, and efficient work environment (Firman, 2022). While the existing literature has emphasized the role of organizational culture in supporting OHS, few studies have examined how OHS implementation interacts with leadership style, job satisfaction, and employee performance. Data from Ikaningtyas et al. (2019) indicates that accident rates in Indonesia's industrial and construction sectors remain alarmingly high, emphasizing the need for a systematic approach to OHS practices to prevent injuries and occupational illnesses. Occupational safety theory further argues that OHS should be embedded within broader company policies to proactively mitigate workplace hazards. A well-executed OHS framework contributes not only to operational efficiency and lower accident-related costs but also to higher employee satisfaction and overall productivity (Milošević et al., 2025).

The implementation of Occupational Health and Safety (OHS) and effective leadership style are vital for cultivating a safety-oriented workplace culture and enhancing employee wellbeing and performance. Transformational leadership, as described by Bass & Avolio (1994), goes beyond guiding employees toward goals; it also inspires them to uphold safety standards. Proactive leadership promotes workplace discipline and a culture of risk prevention (Suryawan et al., 2021). Empowering leadership styles positively correlate with employee adherence to

safety protocols and overall job satisfaction (Siswanto et al., 2020). According to Herzberg's two-factor theory (1959), as discussed by Gilbert et al. (2022), job satisfaction encompasses intrinsic motivators and hygiene factors, including safety standards. In construction, job satisfaction is influenced by a safe work environment and effective leadership, not just financial compensation (Mezentseva et al., 2023). Employees who perceive their environment as safe and supportive show higher organizational commitment and productivity (Ramadani et al., 2024). Therefore, integrating OHS policies with strong leadership and employee satisfaction is essential for enhancing performance and maintaining a competitive edge in the construction industry.

This study examines the influence of OHS implementation and leadership style on employee performance, with job satisfaction as a mediating variable. More specifically, it aims to assess the extent to which OHS practices and leadership effectiveness impact performance outcomes via employee satisfaction. Practically, the study is intended to provide PT. IB with insights into the key factors that drive employee productivity and wellbeing, offering a strategic foundation for developing policies that support workforce efficiency. Additionally, given the limited academic exploration of OHS practices in Indonesia, this research addresses a relevant gap in the literature. It contributes empirical findings that inform both scholarly understanding and practical applications in enhancing workplace safety management.

Theoretical framework and hypotheses

Implementation of OHS on employee performance

The implementation of Occupational Health and Safety (OHS) is crucial for maintaining a work environment that ensures employee safety and enhances operational productivity. Research by Alfonso (2021) and Pratikto & Ferijani (2024) indicates that OHS has a significant, positive influence on employee performance. When OHS is effectively implemented, employees experience greater safety and comfort, which can improve their productivity. A robust workplace safety system minimizes the risk of accidents, enabling employees to work optimally without concern for workplace hazards. It is the responsibility of companies to maintain safe working conditions and promote the well-being of their employees, as emphasized by Chandra & Anwar (2023). This responsibility includes identifying potential risks, implementing mitigation strategies, and providing education and training related to occupational safety.

Effective OHS implementation not only affects individual performance but also fosters a strong safety culture within the organization. However, research findings on the impact of OHS are inconsistent. For instance, Rantung et al. (2021) found that occupational safety does not significantly affect employee performance. This view is also supported by Rusmiati & Harjadi (2021), Liu et al. (2020), and Chandra & Anwar (2023), who argue that OHS does not constantly directly improve employee performance. The discrepancies in research results may be influenced by various factors, including compliance with OHS regulations, workplace safety culture, and employees' perceptions of the safety policies in place. Based on the findings from previous studies, the hypothesis is:

H1: The implementation of OHS has a strong and meaningful impact on enhancing employee performance.

Implementation of OHS on job satisfaction

When Occupational Health and Safety (OHS) is effectively implemented within a company, it significantly enhances employee job satisfaction. Research conducted by Arifiyanto and Rahayu (2024) indicates that OHS has a substantial impact on job satisfaction. Fostering job satisfaction begins with routine inspections of work equipment and the provision of appropriate personal protective equipment, both of which play a crucial role in improving employees' experiences while performing their daily tasks. On the other hand, insufficient work equipment and the use

of uncomfortable personal protective gear can hinder employee performance and lead to fatigue, negatively affecting their perception of safety and overall job satisfaction (Milošević et al., 2025).

Moreover, unaddressed workplace safety risks not only diminish worker satisfaction but also have the potential to disrupt production systems and create operational instability within the company (Gul & Ak, 2018; Guo & Yang, 2023; Salami et al., 2023). It is worth noting that a study by Chandra and Anwar (2023) found that OHS does not affect job satisfaction among employees at PT Hutama Karya Infrastruktur in Padang Pariaman. The differing findings may be attributed to cultural factors related to OHS. Consequently, the hypothesis generated from the previous study can be summarized as follows:

H2: There is a positive and significant influence between the implementation of OHS and job satisfaction.

OHS implementation on employee performance mediated by job satisfaction

Occupational Health and Safety (OHS) plays a crucial role in enhancing job satisfaction and supporting optimal employee performance. A study by Ramadhani et al. (2024) indicates a positive and significant relationship between OHS implementation and employee performance, with job satisfaction as a mediating variable. However, another study by Marzuki et al. (2018) presents new findings suggesting that job satisfaction does not mediate the relationship between OHS and employee performance. A safe work environment, coupled with high employee well-being, positively impacts overall performance (Ramadhani et al., 2024). Conversely, when workers experience poor well-being, they not only express dissatisfaction with their company but also exhibit a decline in performance.

Consequently, implementing OHS programs across every organization is essential to establishing a comprehensive OHS management system that encompasses elements such as management, workforce, working conditions, and an integrated work environment. This approach is designed to minimize the risk of workplace accidents and occupational diseases, ultimately fostering a safe, productive, and conducive work environment (Firman, 2022). Effective implementation of OHS not only directly improves employee performance but also enhances job satisfaction, making employees feel safer and more protected, which, in turn, boosts overall company performance. Therefore, the proposed hypothesis is:

H3: There is a positive and significant influence of OHS implementation on employee performance, mediated by job satisfaction.

Leadership style on employee performance

Leadership style plays a crucial role in shaping employee performance, alongside factors such as workload and stress levels (Ginting et al., 2024). A leader's strategic role involves directing, guiding, and motivating subordinates to achieve company goals effectively (Noratta et al., 2022). Previous research (Pratikto & Ferijani, 2024; Baig et al., 2021; Ginting et al., 2024; Irwan et al., 2020) indicates that leadership style can significantly affect employee performance, with both positive and negative effects.

Jiang et al. (2024) categorize leadership into two main types: transformational and dysfunctional. Transformational leadership, which emphasizes interpersonal relationships, fosters a conducive work environment, improves adherence to procedures, and reduces the incidence of work accidents and risky behavior (Clarke, 2013; Mullen & Kelloway, 2009). Conversely, dysfunctional leadership, such as destructive and passive styles, can diminish work motivation, heighten stress, and stifle innovation and productivity (Mullen et al., 2011). Over time, ineffective leadership styles can impede the achievement of company goals and diminish employee effectiveness. Therefore, selecting and implementing the appropriate leadership style is essential for enhancing employee performance and achieving sustainable company goals.

H4: There is a positive and significant relationship between leadership styles and employee performance, which depends on the effectiveness of the leadership applied within the company.

Leadership style and job satisfaction

Leadership plays a crucial role in enhancing company performance. It is a fundamental aspect of organizational dynamics, particularly in influencing employee job satisfaction (Musinguzi et al., 2018). Leaders who create a safe work environment and support employee well-being significantly contribute to higher job satisfaction (Boamah et al., 2018). Various studies confirm that leadership style positively impacts job satisfaction. For instance, research by Irwan et al. (2020) indicates that leadership style has a positive and significant effect on employee job satisfaction. This finding aligns with studies by Soetirto et al. (2023) and Oyewobi (2024), which suggest that leadership style can enhance job satisfaction.

In small and medium-sized enterprises, employees tend to show greater commitment when led by supervisors who adopt a task-oriented leadership style (Huynh & Hua, 2020). Conversely, a study by Alamir et al. (2019) reveals that employees' affective and normative commitment is more closely associated with transformational leadership, which focuses on motivation, inspiration, and individual development within the organization. Furthermore, Wu et al. (2023) confirm that transformational leadership has a substantial impact on job satisfaction. Empirical studies show that leadership style significantly influences employee job satisfaction, both directly and indirectly through factors such as loyalty and commitment.

H5: There is a positive and significant influence of leadership style on job satisfaction.

Leadership style and employee performance mediated by job satisfaction

Leadership is central to determining a company's effectiveness, particularly in influencing employee performance. Effective leaders not only guide employees but also enhance motivation and job satisfaction, which ultimately boosts productivity (Jani & Suryadinata, 2023). A leader's influence is vital in encouraging improved employee performance, resulting in higher work standards that meet company expectations. According to Path-Goal Theory, leadership effectiveness lies in its ability to motivate subordinates, improve performance, and strengthen job satisfaction (Irwan et al., 2020). Research by Oyewobi (2024) highlights a strong relationship between leadership style, job satisfaction, and employee performance. Previous studies, including those by Dhir et al. (2020) and Abdul Halim et al. (2021), support these findings, indicating a linear relationship among leadership style, employee job satisfaction, and employee performance. Additionally, studies by Irwan et al. (2020) and Soetirto et al. (2023) demonstrate that job satisfaction serves as a mediating variable linking leadership style and employee performance.

Thus, effective leadership fosters a supportive work atmosphere and enhances employee engagement in achieving organizational goals. In conclusion, leadership style influences employee performance not only directly but also indirectly through job satisfaction. High job satisfaction strengthens employee motivation, loyalty, and commitment to the organization, ultimately contributing to improved overall company performance.

H6: There is a positive and significant influence of leadership style on employee performance, mediated by job satisfaction.

Job satisfaction and employee performance

Job satisfaction plays a crucial role in enhancing employee performance and achieving company goals. According to Oyewobi (2024), employee retention and psychological attachment to the company are significant challenges in today's competitive business environment. Research indicates a positive correlation between job satisfaction and employee performance (Egemen, 2024; Ramadani et al., 2024). Employees who are satisfied with their jobs tend to be more productive, loyal, and engaged with their organization (Ngo et al., 2009). To maximize

productivity, companies must understand and improve their employees' job satisfaction (Vansteenkiste et al., 2007).

In industries characterized by high complexity, such as construction, the success of a project is closely linked to employee job satisfaction (Dodanwala et al., 2021). Factors such as a positive work environment, performance-based rewards, and adequate professional support are essential for increasing job satisfaction, which, in turn, boosts productivity and enhances employee performance. On the other hand, low job satisfaction can result in decreased performance, minimal engagement, and higher employee turnover. Therefore, companies should develop strategies to improve employee well-being and foster a more productive, sustainable work environment.

H7: Job satisfaction has a positive and significant effect on enhancing employee performance.

Methods

To obtain precise, real, observable, measurable, and statistically analyzable data, this research adopted a quantitative approach. The data collected consisted of primary data gathered through questionnaires, which formed a crucial part of the data collection process. This research tool employed a four-level Likert scale. Data analysis was performed using Partial Least Squares (PLS) within the framework of Structural Equation Modeling (SEM) with SmartPLS 4 software (Tyas, 2021).

Participants and procedure

The study was conducted at PT IB, located in Sleman Regency, Yogyakarta. The total employee population was 41 individuals. Due to the limited number of participants (fewer than 100), a saturated sampling technique was used, in which the entire population served as the research sample. Data were collected by distributing structured questionnaires that employed a four-point Likert scale, with all participants completing the survey after providing informed consent.

Measures

This study focused on four primary constructs: Occupational Health and Safety (OHS), leadership style, job satisfaction, and employee performance. The measurement instruments were adapted from previously validated research. OHS indicators were based on Wantouw et al. (2018), leadership style on Saputro (2020), and job satisfaction and employee performance on Prasetyo & Marlina (2019). Each construct was assessed using five indicators that reflected key theoretical dimensions relevant to the study's objectives. The indicators used in this study are presented in Table 1, Measurement of Construct.

Data analysis procedures

The data were analyzed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach in SmartPLS 4.0. The analysis included tests of validity and reliability, including outer loading, Average Variance Extracted (AVE), composite reliability, and Cronbach's alpha. R-squared values were calculated to assess the models' explanatory power, and path coefficient analysis was conducted to evaluate the significance of the hypotheses. T-statistics greater than 1.96 and p-values less than 0.05 were considered statistically significant for hypothesis acceptance.

Table 1.

Measurement of construct

No	Construct	Indicators
1	Occupational Health and Safety (Wantouw et al., 2018)	<ol style="list-style-type: none"> 1. Establish OHS standards in accordance with the SOP. 2. Establish rules that must be obeyed. 3. Establish OHS regulations. 4. Socialize these OHS rules and regulations to the entire workforce. 5. Monitor the implementation of OHS regulations.
2	Lydership Style (Saputro, 2020)	<ol style="list-style-type: none"> 1. Decision-making ability 2. Motivating ability 3. Communication skills 4. Ability to control subordinates 5. Responsibility 6. Ability to control emotional
3	Employee Performance (Prasetyo & Marlina, 2019)	<ol style="list-style-type: none"> 1. Effectiveness 2. Efficiency 3. Standard of Excellence 4. Punctuality 5. Output Performance
4	Job Satisfaction (Prasetyo & Marlina, 2019)	<ol style="list-style-type: none"> 1. Tasks that stimulate cognitive abilities. 2. A work environment that fosters support and comfort. 3. Appropriate salary or wages, more, and improved Societal Position. 4. Alignment between personal traits and occupational roles. 5. For the majority of workers, having friendly colleagues is essential, as the workplace also serves as a space for social engagement.

Source: previous research (Wantouw et al., 2018; Saputro, 2020; Prasetyo & Marlina, 2019).

Results and discussion

Outer model evaluation

Before presenting the results in Table 2, the outer model evaluation was conducted to assess the measurement model's reliability and validity. This evaluation ensures that each construct in the study meets the required criteria for indicator reliability, internal consistency, convergent validity, and discriminant validity. Reliability is measured through Cronbach's Alpha (CA) and Composite Reliability (CR), both of which should exceed the threshold value of 0.70, indicating acceptable internal consistency. Convergent validity is evaluated using Outer Loadings and Average Variance Extracted (AVE), where outer loadings should be greater than 0.50 and AVE should be above 0.50, signifying that the indicators adequately represent the latent construct. Meanwhile, discriminant validity is examined using the Heterotrait–Monotrait Ratio (HTMT), with values below 0.90 indicating distinctiveness among the constructs. The following table presents the detailed results of reliability and validity testing for all variables in this study.

Table 2.
Reliability and validity of the measures

No	Variable	Outer loadings	CA	CR	AVE	Heterotrait-monotrait ratio (HTMT) ^a			
						1	2	3	4
1	OHS	0.781-0.787	0.807	0.805	0.569	0.754			
2	LS	0.763-0.767	0.810	0.809	0.568	0.782	0.754		
3	EP	0.803-0.851	0.824	0.823	0.591	0.792	0.834	0.769	
4	JS	0.675-0.798	0.819	0.820	0.584	0.853	0.782	0.762	0.764

Source: Processed by the author (2025)

According to Table 2, all constructs examined in this study meet established reliability and validity standards. The outer loading values for the indicators range from 0.675 to 0.851, exceeding the minimum criterion of 0.50, indicating that each indicator adequately represents its corresponding construct. The Cronbach's Alpha (CA) values range from 0.807 to 0.824, while the Composite Reliability (CR) values range from 0.805 to 0.823; both exceed the recommended threshold of 0.70, indicating high internal consistency. The Average Variance Extracted (AVE) values, spanning from 0.568 to 0.591, are above the 0.50 benchmark, thereby satisfying the requirement for convergent validity. Additionally, the Heterotrait-Monotrait Ratio (HTMT) values, ranging from 0.754 to 0.853, remain below the critical limit of 0.90, confirming that the constructs meet the criteria for discriminant validity. Accordingly, the measurement model can be deemed both valid and reliable, and thus appropriate for subsequent structural model evaluation.

Inner model evaluation

In the inner model evaluation, the structural relationships among variables were tested to assess the significance and strength of the hypothesized paths. This stage aims to determine whether the proposed hypotheses are supported by the data, using statistical indicators such as path coefficients (β), standard deviations, t-values, and p-values. Additionally, effect size (f^2), coefficient of determination (R^2), and predictive relevance (Q^2) are examined to evaluate the model's explanatory power and predictive capability. Table 3 presents the results of the structural model analysis, detailing the direct and indirect effects between Occupational Health and Safety (OHS), Leadership Style (LS), Job Satisfaction (JS), and Employee Performance (EP).

Table 3.
Structural model results

	β	STDEV	T Value	P Value	f-square	R-square	Q^2
OHS → EP	0.548	0.112	4.912	0.000	0.021	0.781	0.937
OHS → JS	0.349	0.133	2.627	0.009	0.085	0.748	0.945
LS → EP	0.262	0.169	1.550	0.121	0.478		
LS → JS	0.568	0.131	4.349	0.000	0.537		
JS → EP	0.135	0.185	0.729	0.466	0.203		
OHS → JS → EP	0.047	0.064	0.732	0.464			
LS → JS → EP	0.077	0.120	0.637	0.524			

Source: Processed by the author (2025)

Referring to the findings presented in Table 3, the path coefficient analysis indicates that OHS exerts a statistically significant, positive influence on both EP ($\beta = 0.548$, $p = 0.000$) and JS ($\beta = 0.349$, $p = 0.009$). Similarly, LS exhibits a significant positive relationship with JS ($\beta = 0.568$, $p =$

0.000), although its direct effect on EP is not statistically significant ($\beta = 0.262$, $p = 0.121$). Furthermore, the results reveal that JS does not significantly impact EP directly ($\beta = 0.135$, $p = 0.466$). The mediation analysis indicates that JS does not considerably mediate the relationship between OHS and EP ($\beta = 0.047$, $p = 0.464$), nor between LS and EP ($\beta = 0.077$, $p = 0.524$).

The model's explanatory power, as reflected in the R^2 values, shows that OHS and LS account for 78.1% of the variance in EP and 74.8% in JS. Moreover, the Q^2 values of 0.937 and 0.945 suggest strong predictive relevance for both endogenous variables. An effect size (f^2) analysis further reveals that LS has a substantial influence on JS ($f^2 = 0.537$). In contrast, OHS exerts negligible effects on both EP (0.021) and JS (0.085), and JS has a negligible impact on EP (0.203). These results underscore the critical role of OHS and LS in enhancing JS, with OHS also contributing directly to EP. However, JS does not act as a significant mediating variable in these relationships.

Discussion

The outcomes of this study offer significant contributions to the literature in human resource management, particularly regarding the effects of Occupational Health and Safety (OHS) implementation and leadership style on employee performance and job satisfaction. For researchers in this field, the results both confirm and expand upon prior studies (Alfonso, 2021; Pratikto & Ferijani, 2024; Arifiyanto & Rahayu, 2024), which emphasize the critical role of effective OHS implementation in enhancing employee performance and satisfaction. A well-established OHS policy not only creates a safe and healthy work environment but also fosters greater employee security and engagement (Mei et al., 2020). Furthermore, strategically implementing OHS can reduce operational costs associated with workplace accidents, increase labor productivity, and support long-term business sustainability (Sharma & Mishra, 2021). These findings underscore the necessity for continuous improvement and optimization of OHS systems as a fundamental element of corporate strategy.

For researchers in adjacent fields such as organizational psychology, occupational health, and industrial engineering, this study has relevant implications. It highlights how the physical and psychosocial aspects of the workplace intersect, influencing both employee satisfaction and long-term organizational outcomes. For policymakers and practitioners in the industrial sector, the findings provide empirical support for adopting a holistic and integrated approach to managing workforce well-being. They suggest that, beyond merely meeting regulatory compliance, companies should actively promote supportive leadership and reward systems to strengthen employees' emotional connection with their work environment. This aligns with the view that employee performance is affected not only by external safety conditions but also by internal organizational culture, leadership behaviour, and the value employees perceive within the system (Milošević et al., 2025; Ramadani et al., 2024).

Although job satisfaction increased with improvements in OHS quality and leadership style, this did not consistently translate into higher employee performance, suggesting a more complex interaction among the influencing variables. This finding contrasts with previous research (Soetirto et al., 2023; Irwan et al., 2020), which often reports a significant mediating role of job satisfaction. While employees may feel content and secure in their work environment, these feelings do not necessarily translate into higher performance levels. Contextual factors such as the rigid application of Standard Operating Procedures (SOPs), limited motivational incentives, and hierarchical organizational structures may constrain individual initiative and creativity (Siswanto et al., 2020). The study supports Marzuki et al. (2018), who argue that other psychological and structural variables—such as effective communication, leadership engagement, and individual motivation—may play more significant roles in determining performance outcomes.

The lack of a significant relationship between job satisfaction and employee performance suggests that satisfaction alone cannot be relied upon as a dependable measure of productivity. While it may enhance morale and workplace harmony, performance is influenced by more complex factors, including task efficiency, individual competencies, goal clarity, and performance-based feedback. Therefore, companies should adopt a multi-dimensional approach to performance management, rather than relying solely on general satisfaction metrics to evaluate employee effectiveness.

Based on these findings, future research should explore alternative mediating variables, such as intrinsic motivation, employee engagement, organizational support, and communication climate. Moderating factors such as organizational culture, leadership experience, and industry type should also be examined to determine when OHS and leadership are most effective. Longitudinal studies and mixed-methods approaches are recommended to gain deeper insights into how safety, satisfaction, and leadership influence employee behavior over time. Overall, this study reinforces the value of OHS and leadership while highlighting the need for a broader, more adaptive perspective across both academic inquiry and organizational practice.

Limitations

This study has several limitations. First, it was conducted within a single company, which restricts the generalizability of the findings to other industries or organizational contexts. Second, while a quantitative approach can effectively identify statistical relationships, it may not fully capture employees' subjective experiences and perceptions. As a result, workplace behavior may be underrepresented. Future research is encouraged to incorporate mixed-methods approaches to address these limitations.

Conclusion

This study concludes that effective Occupational Health and Safety (OHS) implementation positively impacts employee performance and job satisfaction. A well-managed OHS system enhances workplace safety and employee engagement, underscoring its strategic importance. However, job satisfaction does not mediate the relationship between OHS and performance, suggesting that safe, satisfied employees do not automatically perform better. Furthermore, leadership style significantly affects job satisfaction but not performance, suggesting that factors like motivation, competencies, and rewards are more critical for driving performance. Organizations should adopt a holistic approach that integrates leadership development and performance-based incentives along with effective HR practices. In practice, organizations are encouraged to embed OHS into their culture and promote supportive leadership styles that emphasize communication and empowerment. Multi-faceted performance management strategies that include tangible rewards and professional growth opportunities are also advised. Future research should explore additional mediators, such as work motivation, and include diverse industries to gain broader insights.

References

- Abdul Halim, N., Hassan, A., Basri, R., Yusof, A., & Ahrari, S. (2021). Job Satisfaction as a Mediator between Leadership Styles and Organisational Commitment of Teachers in Malaysia. *Asian Journal of University Education*, 17(2), 61. <https://doi.org/10.24191/ajue.v17i2.13398>
- Alamir, I., Ayoubi, R. M., Massoud, H., & Hallak, L. A. (2019). Transformational leadership, organizational justice and organizational outcomes: A study from the higher education

- sector in Syria. *Leadership & Organization Development Journal*, 40(7), 749–763. <https://doi.org/10.1108/LODJ-01-2019-0033>
- Alfonso, P. V. (2021). PENGARUH KESEHATAN DAN KESELAMATAN KERJA TERHADAP KINERJA KARYAWAN (Studi Pada UD. Aira Fiberglass Maluku Tengah). 10(2).
- Arifiyanto, N. D., & Rahayu, S. (2024). THE INFLUENCE OF K3, WORKLOAD AND WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE THROUGH JOB SATISFACTION. *International Journal*, 8(2).
- Baig, S. A., Iqbal, S., Abrar, M., Baig, I. A., Amjad, F., Zia-ur-Rehman, M., & Awan, M. U. (2021). Impact of leadership styles on employees' performance with moderating role of positive psychological capital. *Total Quality Management & Business Excellence*, 32(9–10), 1085–1105. <https://doi.org/10.1080/14783363.2019.1665011>
- Boamah, S. A., Spence Laschinger, H. K., Wong, C., & Clarke, S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing Outlook*, 66(2), 180–189. <https://doi.org/10.1016/j.outlook.2017.10.004>
- Chandra, R. A., & Anwar, Y. (2023). Pengaruh Keselamatan Kesehatan Kerja an Lingkungan Kerja terhadap Kinerja Karyawan dengan Kepuasan Kerja sebagai Variabel Intervening pada PT Hutama Karya Infrastruktur di Padang Pariaman. *Reslaj: Religion Education Social Laa Roiba Journal*, 5(6), 3739–3749. <https://doi.org/10.47467/reslaj.v5i6.4525>
- Clarke, S. (2013). Safety leadership: A meta-analytic review of transformational and transactional leadership styles as antecedents of safety behaviours. *Journal of Occupational and Organizational Psychology*, 86(1), 22–49. <https://doi.org/10.1111/j.2044-8325.2012.02064.x>
- Dhir, S., Dutta, T., & Ghosh, P. (2020). Linking employee loyalty with job satisfaction using PLS–SEM modelling. *Personnel Review*, 49(8), 1695–1711. <https://doi.org/10.1108/PR-03-2019-0107>
- Dodanwala, T., Shrestha, P., & Santoso, D. S. (2021). Role Conflict Related Job Stress among Construction Project Professionals: The Moderating Role of Age and Organization Tenure. *Construction Economics and Building*, 21(4). <https://doi.org/10.5130/AJCEB.v21i4.7609>
- Eduzor, N. C. (2024). Leadership Styles and Organizational Performance: Examining the Impact of Transformational Leadership on Employee Engagement and Business Success. <https://doi.org/10.5281/ZENODO.10500674>
- Egemen, M. (2024). Assessing the individual effects of different job satisfaction facets on the job performance of qualified employees in the unique conditions of the construction industry. *Ain Shams Engineering Journal*, 15(7), 102789. <https://doi.org/10.1016/j.asej.2024.102789>
- Firman, A. (2022). Implementation of Occupational Safety and Health (K3) for Increasing Employee Productivity.
- Saputro (2020). Analisis Gaya Kepemimpinan dalam Meningkatkan Efektivitas Kinerja Karyawan di Doremi Home Music Course Ponorogo
- Gilbert, J., Eka, A., & Limanto, S. (2022). Factors Affecting Worker Motivation in Construction Service Businesses Based on Herzberg's Theory.
- Ginting, E., Nurhayati, P., & Sukmawati, A. (2024). The role of leadership style and organizational culture in enhancing employee performance. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 10(3), 1037. <https://doi.org/10.29210/020244614>
- Gul, M., & Ak, M. F. (2018). A comparative outline for quantifying risk ratings in occupational health and safety risk assessment. *Journal of Cleaner Production*, 196, 653–664. <https://doi.org/10.1016/j.jclepro.2018.06.106>
- Guo, Y., & Yang, F. (2023). Mining safety research in China: Understanding safety research trends

- and future demands for sustainable mining industry. *Resources Policy*, 83, 103632. <https://doi.org/10.1016/j.resourpol.2023.103632>
- Ikaningtyas, M., Al Musadieg, M., & Prasetya, A. (2019). The Effect of Occupational Safety and Health (OSH) on Motivation and Employee Performance (A Study on Employees of PT. YTL – Paiton, East Java). *profit*, 13(01), 63–69. <https://doi.org/10.21776/ub.profit.2019.013.01.7>
- Irwan, A., Mahfudnurnajamuddin, M., Nujum, S., & Mangkona, S. (2020). The Effect of Leadership Style, Work Motivation and Organizational Culture on Employee Performance Mediated by Job Satisfaction. *International Journal of Multicultural and Multireligious Understanding*, 7(8), 642. <https://doi.org/10.18415/ijmmu.v7i8.2007>
- Jani, J., & Suryadinata, S. (2023). The Influence of Leadership Style on Employee Performance. *Jurnal Ilmiah Manajemen Kesatuan*, 11(3), 1519–1528. <https://doi.org/10.37641/jimkes.v11i3.2233>
- Jiang, Z., Zhao, X., Wang, Z., & Herbert, K. (2024). Safety leadership: A bibliometric literature review and future research directions. *Journal of Business Research*, 172, 114437. <https://doi.org/10.1016/j.jbusres.2023.114437>
- Listyandini, R., Fatimah, R., Anggraini, S., Faradhilah, A., & Isnaeni, P. N. R. (2025). Kajian Penerapan Sistem Manajemen Keselamatan dan Kesehatan Kerja di Puskesmas: Studi Kasus di Kabupaten Bogor. *Jurnal Penelitian Inovatif*, 5(1), 117–124. <https://doi.org/10.54082/jupin.1014>
- Liu, S., Nkrumah, E. N. K., Akoto, L. S., Gyabeng, E., & Nkrumah, E. (2020). The State of Occupational Health and Safety Management Frameworks (OHSMF) and Occupational Injuries and Accidents in the Ghanaian Oil and Gas Industry: Assessing the Mediating Role of Safety Knowledge. *BioMed Research International*, 2020(1), 6354895. <https://doi.org/10.1155/2020/6354895>
- Marzuki, H., Sularso, R. A., & Purbangkoro, M. (2018). The Effect of Safety Culture, Leadership, and Motivation on Job Satisfaction and Employee Performance at Oil and Gas Company "X" in East Kalimantan Province. *BISMA*, 12(1), 51. <https://doi.org/10.19184/bisma.v12i1.7601>
- Mei, Q., Wang, Q., Liu, S., Zhou, Q., & Zhang, J. (2020). Effects of organizational safety on employees' proactivity safety behaviors and occupational health and safety management systems in Chinese high-risk small-scale enterprises. *International Journal of Occupational Safety and Ergonomics*, 26(1), 101–111. <https://doi.org/10.1080/10803548.2018.1470287>
- Mezentseva, A., Gracia, F. J., Silla, I., & Martínez-Córcoles, M. (2023). The role of empowering leadership, safety culture and safety climate in the prediction of mindful organizing in an air traffic management company. *Safety Science*, 168, 106321. <https://doi.org/10.1016/j.ssci.2023.106321>
- Milošević, I., Stojanović, A., Nikolić, Đ., Mihajlović, I., Brkić, A., Perišić, M., & Spasojević-Brkić, V. (2025). Occupational health and safety performance in a changing mining environment: Identification of critical factors. *Safety Science*, 184, 106745. <https://doi.org/10.1016/j.ssci.2024.106745>
- Mullen, J. E., & Kelloway, E. K. (2009). Safety leadership: A longitudinal study of the effects of transformational leadership on safety outcomes. *Journal of Occupational and Organizational Psychology*, 82(2), 253–272. <https://doi.org/10.1348/096317908X325313>
- Mullen, J., Kelloway, E. K., & Teed, M. (2011). Inconsistent style of leadership as a predictor of safety behaviour. *Work & Stress*, 25(1), 41–54.

<https://doi.org/10.1080/02678373.2011.569200>

- Musinguzi, C., Namale, L., Rutebemberwa, E., Dahal, A., Nahirya-Ntege, P., & Kekitiinwa, A. (2018). The relationship between leadership style and health worker motivation, job satisfaction and teamwork in Uganda. *Journal of Healthcare Leadership*, Volume 10, 21–32. <https://doi.org/10.2147/JHL.S147885>
- Ngo, H., Foley, S., & Loi, R. (2009). Family friendly work practices, organizational climate, and firm performance: A study of multinational corporations in Hong Kong. *Journal of Organizational Behavior*, 30(5), 665–680. <https://doi.org/10.1002/job.606>
- Noratta, S., Masriah, I., & Prabowo, B. (2022). Pengaruh Gaya Kepemimpinan Otoriter Dan Kompensasi Terhadap Stres Kerja Serta Dampaknya Terhadap Kinerja Karyawan. *inovator*, 11(1), 341–350. <https://doi.org/10.32832/inovator.v11i2.7190>
- Oyewobi, L. O. (2024). Leadership styles and Employees commitment: The mediating role of job satisfaction. *Journal of Facilities Management*, 22(5), 737–757. <https://doi.org/10.1108/JFM-06-2022-0069>
- Prasetyo, E. T., & Marlina, P. (2019). Pengaruh Disiplin Kerja dan Kepuasan Kerja Terhadap Kinerja Karyawan. 3.
- Pratikto, Y., & Ferijani, A. (2024). The Effect of Leadership Style, Work Motivation, and Occupational Safety and Health (OSH) on Employee Performance at PT. Sucofindo Semarang Branch (3).
- Ramadani, T. F., Marcellah, A., & Muktamar, A. (2024). Eksplorasi Konsep dan Model Kepemimpinan dalam Manajemen Strategik. 2.
- Ramadhani, N. N., Syaifuddin, D. T., Maharani, S. W., & Putera, A. (2024). Mediation Analysis of Job Satisfaction on the Effect of Occupational Health, Safety, and Work Environment on Employee Performance.
- Rantung, P. A., Dotulong, L. O. H., & Lumintang, G. G. (2021). Analysis of the Effect of Occupational Safety and Health and Job Involvement on Employee Performance at PT Indofood CBP Sukses Makmur Tbk Noodle Division Manado.
- Rusmiati, E., & Harjadi, D. (2021). Analysis of the Impact of Risk and Workload on Motivation and Their Effect on Employee Performance. *International Journal*, 5 (2).
- Salami, O. B., Xu, G., Kumar, A. R., & Pushparaj, R. I. (2023). Underground mining fire hazards and the optimization of emergency evacuation strategies (EES): The issues, existing methodology and limitations, and way forward. *Process Safety and Environmental Protection*, 177, 617–634. <https://doi.org/10.1016/j.psep.2023.07.012>
- Sandhåland, H., Olteidal, H. A., Hystad, S. W., & Eid, J. (2017). Effects of leadership style and psychological job demands on situation awareness and the willingness to take a risk: A survey of selected offshore vessels. *Safety Science*, 93, 178–186. <https://doi.org/10.1016/j.ssci.2016.12.004>
- Sharma, R., & Mishra, D. K. (2021). An analysis of thematic structure of research trends in occupational health and safety concerning safety culture and environmental management. *Journal of Cleaner Production*, 281, 125346. <https://doi.org/10.1016/j.jclepro.2020.125346>
- Siswanto, S., Masyhuri, M., Maksun, I., & Murdiansyah, I. (2020). The role of job satisfaction as a mediating variable on leadership styles to employee performance. *Jurnal Ekonomi Modernisasi*, 16(1), 54–65. <https://doi.org/10.21067/jem.v16i1.4796>
- Soetirto, M. M., Muldjono, P., & Hidayatulloh, F. S. (2023). The Influence of Leadership Style on Employee Performance Mediated by Job Satisfaction and Moderated by Work Motivation. *International Journal of Social Service and Research*, 3(6), 1517–1527. <https://doi.org/10.46799/ijssr.v3i6.393>

- Suryawan, I. G. R., Ardana, I. K., & Suwandana, I. G. M. (2021). Transformational leadership, work stress and turnover intention: The mediating role of job satisfaction.
- Tafere, G. A., Beyera, G. K., & Wami, S. D. (2020). The effect of organizational and individual factors on health and safety practices: Results from a cross-sectional study among manufacturing industrial workers. *Journal of Public Health*, 28(2), 173–179. <https://doi.org/10.1007/s10389-019-01050-y>
- Tyas, P. A. (2021). Mathematics Study Program, Faculty of Science and Technology.
- Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van Den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of Occupational and Organizational Psychology*, 80(2), 251–277. <https://doi.org/10.1348/096317906X111024>
- Wantouw, F., Tumewu, T. W., & Rachmadi, R. A. (2018). Implementation of Occupational Safety and Health (OSH) in the Construction Project of the Canteen Building at De La Salle Catholic University Manado. *Jurnal Ilmiah Realtech*, 14(2), 149–156. <https://doi.org/10.52159/realtech.v14i2.47>

Declarations

Funding.

The authors received no financial support for the research and publication of this article

Availability of data and materials

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Competing interests

No potential competing interest was reported by the authors.