

The Effect of Motivation and Occupational Safety and Health (OSH) on Performance Through Job Satisfaction as a Mediating Variable among Employees of TM Systems International Trading (Shanghai) Co., Ltd., in Pelalawan Regency

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ABSTRACT

Human resources are strategic assets essential for achieving organizational goals, with employee performance influenced by abilities, skills, and psychological, social, and work environment factors. This study analyzes the impact of motivation and Occupational Safety and Health (OSH) on employee performance through job satisfaction as a mediating variable among employees of TM Systems International Trading (Shanghai) Co., Ltd. in Pelalawan Regency. Using a quantitative approach and census technique with 136 respondents, data were analyzed via Partial Least Squares–Structural Equation Modeling (PLS-SEM) using SmartPLS. Results show that both motivation and OSH positively and significantly influence job satisfaction. Higher motivation levels and effective OSH implementation correspond to increased job satisfaction. However, motivation and OSH do not directly affect employee performance but influence it indirectly through job satisfaction. Moreover, job satisfaction directly and significantly impacts employee performance, confirming its role as a psychological link between motivation, OSH, and performance improvement. These findings demonstrate that to enhance employee performance, companies must strengthen policies that boost motivation, consistently enforce OSH systems, and foster a safe, comfortable work environment. By doing so, they increase job satisfaction, which in turn drives productivity and performance. In summary, elevating motivation and effectively implementing OSH contribute to continuous employee performance improvement via enhanced job satisfaction.

Keywords: Motivation, Occupational Safety and Health (OSH), Job Satisfaction, Work Performance

INTRODUCTION

Human resources (HR) are strategic assets that play an important role in achieving organizational goals. High-performance human resources are a determining factor in maintaining the effectiveness and efficiency of the company's operations. Optimal employee performance is not only influenced by abilities and skills but also by psychological, social, and supportive work environment factors. According to Hackman and Oldham in Putri and Suhaeni (2014), there are five main factors that affect a person's performance through the Job Characteristic Model (JCM), namely skill variety, task identity, task significance, autonomy, and feedback. This model emphasizes the importance of meaningful and participatory work design to improve employee motivation and performance (Parker, Van den Broeck, & Holman, 2017; Sagnak, 2016; Scharp, Bakker, & Breevaart, 2022; Van Wingerden & Van der Stoep, 2018).

Work motivation is one of the important elements that affect employee performance. Sutrisno (2017) defines motivation as internal and external motivation that gives rise to an individual's work spirit to achieve certain goals. Motivated employees will show enthusiasm, commitment, and dedication in getting their work done. Motivation does not only arise from financial compensation but also from appreciation, opportunity to express opinions, and recognition of work results. When employees feel valued and involved in the decision-making process, they will be more satisfied and motivated to make the best contribution to the company.

In addition to motivation, another factor that has a big influence on performance is the implementation of Occupational Safety and Health (OSH). According to the World Health Organization (WHO), OSH is an effort to improve and maintain the physical, mental, and social health of workers at the highest level in all types of work. A safe and healthy work environment can create a productive work atmosphere, foster a sense of comfort, and reduce the risk of work accidents. Good implementation of OSH is not only a form of regulatory compliance but also a long-term investment that contributes to improved performance and employee loyalty.

However, the relationship between motivation and OSH on employee performance is not always direct. One of the variables that plays a mediator role is job satisfaction. Judge et al. (2017) define job satisfaction as a positive feeling that arises from the results of individual evaluations of various aspects of work, such as compensation, relationships with colleagues, development opportunities, and recognition of achievements. Employees who have high levels of job satisfaction tend to work better because they feel valued, secure, and have clear prospects in their careers.

Ghozali (2017) explained that performance is a condition that must be known to assess the level of achievement of work results and the effectiveness of organizational policies in achieving the company's vision. Furthermore, Wahyuddin in Mahardikwanto (2013) added that employee performance is influenced by many factors such as work environment, organizational culture, discipline, communication, compensation, leadership, and job satisfaction. Therefore, in the context of modern management, it is not enough to improve performance just by providing incentives, but it is also necessary to pay attention to the psychological, social, and well-being aspects of employees.

TM Systems International Trading (Shanghai) Co., Ltd. is an international trading company based in Shanghai, China, which is part of the TM Systems® Finland group. The company has been in operation for more than 50 years and focuses on providing technological solutions for industrial processes, especially in the fields of ventilation, drying, and emission control. In Indonesia, TM Systems® has been involved in various major projects, including the installation of HVAC (Heating, Ventilation, and Air Conditioning) systems at PT Riau Andalan Pulp & Paper (RAPP) since 2017. With a wide scope of projects and a cross-cultural workforce, the company faces challenges in maintaining employee welfare and satisfaction, especially in the operational area of Pelalawan Regency.

In recent years, TM Systems International Trading (Shanghai) Co., Ltd. has faced a serious problem in the form of high employee turnover rates. This phenomenon shows that there are fundamental problems in human resource management, especially related to work motivation, the implementation of OSH, and employee job satisfaction. High turnover rates negatively impact company efficiency because they incur high new recruitment and training

costs, decrease productivity, and disrupt operational continuity. This condition indicates that some employees feel dissatisfied or physically and psychologically unsafe in the work environment, so they decide to look for opportunities elsewhere considered more welcoming.

Based on these problems, this study is important to analyze in depth the influence of motivation and OSH on employee performance with job satisfaction as a mediating variable at TM Systems International Trading (Shanghai) Co., Ltd. in Pelalawan Regency. This research is expected to provide a comprehensive understanding of how the interaction between motivation, OSH, and job satisfaction can determine the level of performance and employee loyalty. In addition, the results of this research are expected to be considered by companies in formulating strategic policies to improve employee retention, productivity, and welfare, as well as strengthen the company's competitiveness amid global industry challenges. The purpose of this study is to determine the influence of motivation and OSH on job satisfaction and employee performance, as well as to analyze the role of job satisfaction as a mediating variable between motivation and OSH on performance. The results of this study are expected to make theoretical and practical contributions, which can theoretically enrich literature and concepts in human resource management, especially regarding factors that affect employee performance through motivation, job satisfaction, and the application of OSH. Practically, the results of this research are expected to be considered by companies in Pelalawan Regency when formulating policies that support increased motivation, the implementation of an effective OSH system, and the creation of a safe and comfortable work environment so that employee satisfaction and performance can increase sustainably.

METHOD

This research used a quantitative correlational study approach to identify the statistical relationships between variables. The study analyzed the influence of motivation and work environment on performance through job satisfaction as an intervening variable among employees of *TM Systems International Trading (Shanghai) Co., Ltd.* in Pelalawan Regency. The quantitative approach was chosen to provide objective, measurable results through numerical data obtained from questionnaires and processed using statistical methods.

The population included all 136 employees of the company in Pelalawan Regency. Because the population was relatively small and accessible, total sampling was used, involving all employees as respondents to ensure accuracy and representativeness.

Data consisted of primary and secondary sources. Primary data were collected via questionnaires measuring motivation and work environment as exogenous variables, performance as the endogenous variable, and job satisfaction as the intervening variable. Secondary data came from internal company documents and related literature to support analysis.

Data collection involved distributing printed questionnaires directly to employees to maximize response rates and maintain data quality, while documentation methods supplemented information with company reports and academic sources. The questionnaires used a 5-point Likert scale to capture respondents' attitudes toward each variable, based on established theoretical frameworks.

Data analysis began with descriptive statistics to summarize respondent characteristics and answer distributions. Inferential analysis then tested relationships between variables using

correlation tests and path analysis through Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach. This analysis aimed to empirically assess how motivation and work environment affect employee performance through job satisfaction as a mediating factor.

RESULTS AND DISCUSSION

Overview

The overview of the object of this study explains the results of the research obtained from the distribution of questionnaires to 136 employees of TM Systems International Trading (Shanghai) Co., Ltd. in Pelalawan Regency. The data collected were processed using descriptive analysis to describe the characteristics of respondents and Structural Equation Modeling (SEM) analysis based on Partial Least Squares (PLS) to test the research hypothesis. TM Systems International Trading (Shanghai) Co., Ltd. is a multinational company engaged in trade and industrial support services, especially in the pulp & paper sector and natural resource processing. Based in Shanghai, China, the company has branches in various countries, including in Pelalawan Regency, Riau Province, which is known to have great potential in the pulp & paper industry.

The company's presence in this region aims to strengthen international trade supply chains, improve production efficiency, and provide labor services in various fields such as production, quality control (QC), Occupational Safety and Health (OSH), and human resources. With a large number of employees, TM Systems is committed to maintaining international standards in employee productivity, safety, and well-being. As it grows, the company not only focuses on business achievements, but also places aspects of safety, occupational health, motivation, and employee satisfaction as strategic priorities to create a safe and conducive work environment. This is in line with the company's vision, which is to become a superior and globally competitive international trading company by emphasizing quality, work safety, and employee welfare for the sustainability of the industry. The mission includes: managing trade and industry support services with international standards; improving the quality of human resources through the consistent implementation of the OSH system; providing motivation and job satisfaction as the basis for performance improvement; building harmonious working relationships between departments; and contributing to the regional development of Pelalawan Regency through job creation and economic improvement of the surrounding community.

Descriptive Variable

The descriptive results of the research variables on 136 employees of TM Systems International Trading (Shanghai) Co., Ltd. in Pelalawan Regency showed that all research variables were in the high category. The motivation variable obtained an average score of 4.34 with an achievement rate of 85.54%, indicating that employees have good work motivation because basic needs, welfare guarantees, social relationships, and awards from their superiors have been met. The highest indicator was involvement in decision-making (TCR 87%), followed by the fulfillment of basic needs and health insurance, all of which supported employee morale and work loyalty.

The Occupational Safety and Health (OSH) variable recorded an average score of 4.20 with an achievement of 84.07%, which shows that the implementation of OSH is going well through the improvement of work facilities, health facilities, and the consistent implementation of SOPs. The highest indicator is the repair of damaged work equipment (TCR 86.40%), followed by the coverage of medical costs, the completeness of P3K facilities, and the availability of personal protective equipment that shows high concern for the safety and health of workers.

The job satisfaction variable has an average score of 4.23 with an achievement of 84.58%, indicating that employees are satisfied with aspects of work, compensation, and employment relationships. The highest indicators were satisfaction with leadership decisions (TCR 89.20%) and work relationships between colleagues (TCR 88.80%), emphasizing the importance of leadership and social relationships in increasing job satisfaction. The employee performance variable showed an average score of 4.25 with an achievement of 85.08%, which means that performance is in the high category with advantages in improving quality, knowledge, and work independence. The highest indicators were increased knowledge (TCR 86.00%) and quality of work (TCR 85.80%), followed by creativity and personal development, indicating that employees have worked effectively and productively. Overall, these descriptive results confirm that motivation, implementation of OSH, and job satisfaction play an important role in supporting employee performance, and show that TM Systems International Trading (Shanghai) Co., Ltd. has been able to create a safe, productive, and well-being-oriented work environment.

Characteristics of respondents

Table 1. Demographic Characteristics of Respondents (N=136)

Characteristics	Category	Frequency (n)	Percentage (%)
Gender	Male	121	89.0
	Female	15	11.0
	Total	136	100.0
Education Level	Elementary School	9	6.6
	Junior High School/MTS	14	10.3
	Senior High School/Vocational/MA	62	45.6
	Diploma	8	5.9
	Bachelor (S1)	39	28.7
	Master (S2)	4	2.9
	Total	136	100.0
Work Department	General Worker	90	66.2
	Quality Control (QC)	15	11.0
	OSH	14	10.3
	Human Resource Development (HRD)	12	8.8
	Finance	5	3.7
	Total	136	100.0
Tenure	1 year	9	6.6
	2 years	5	3.7
	3 years	16	11.8
	4 years	11	8.1
	5 years	33	24.3
	6 years	17	12.5
	7 years	10	7.4

8 years	12	8.8
9 years	5	3.7
10 years	18	13.2
Total	136	100.0

Source: Primary Data, 2025

Based on Table 1, the characteristics of the respondents in this study include four main aspects, namely gender, education level, work department, and length of service. Based on the results of a study on 136 respondents of TM Systems International Trading (Shanghai) Co., Ltd. employees in Pelalawan Regency, it was found that the majority of employees were male as many as 121 people (89.0%), while women amounted to 15 people (11.0%). This shows that the company's workforce is more dominated by men due to the characteristics of jobs that require physical labor in the field, although female employees continue to play an important role in non-field fields. Based on the level of education, 62 respondents (45.6%) were graduates of SMA/SMK/MA, 39 people (28.7%) had a bachelor's education (S1), 14 people (10.3%) graduated from junior high school/MTS, 9 people (6.6%) graduated from elementary school, 8 people (5.9%) graduated with diplomas, and 4 people (2.9%) graduated with master's degrees (S2).

This illustrates that most of the employees are second-educated and undergraduate, according to the needs of technical and administrative positions in the company. Based on the work department, the majority of respondents came from the General Worker department as many as 90 people (66.2%), followed by Quality Control (15 people or 11.0%), OSH (14 people or 10.3%), HRD (12 people or 8.8%), and Finance (5 people or 3.7%). This distribution shows that the company's workforce is allocated more to operational functions, while the managerial and administrative parts have a smaller proportion. Based on the length of service, 33 respondents (24.3%) had a 5-year working period, 18 respondents (13.2%) worked for 10 years, 17 respondents (12.5%) for 6 years, and 16 respondents (11.8%) for 3 years. In addition, there are employees with a working period of 8 years as many as 12 people (8.8%), 4 years as many as 11 people (8.1%), 7 years as many as 10 people (7.4%), 1 year as many as 9 people (6.6%), 2 years and 9 years each as many as 5 people (3.7%). This data shows that the majority of employees have a tenure of between 3–10 years (85.3%), which indicates a fairly high level of loyalty and job retention in the company. Thus, the characteristics of these respondents show that the workforce of TM Systems International Trading (Shanghai) Co., Ltd. is dominated by male employees with secondary to undergraduate education, work in the operational field, and have a relatively stable working period.

Hypothesis Test Results

Hypothesis testing in this study with the SEM PLS model was carried out on a structural model assessment using the Smart-PLS software with the bootstrapping method, the results can be used to answer the hypothesis in this study. A hypothesis (alternative hypothesis) is acceptable if it has a T-statistic value greater than 1.96 and a Pvalues of less than 0.05 (Hair et al., 2020). The test value of the hypothesis of direct influence and indirect influence can be seen as follows:

Direct Influence

Significant values are obtained by bootstrapping procedure to see the influence that also results in t-values (t-statistics). If the statistics are greater than the critical values for two tailed, including 1.65 (at the significance level of 10%), 1.96 (at the significance level of 5%), and 2.58 (at the significance level of 1%), then it is concluded that the path coefficient is significant and vice versa. In this study, the accepted hypothesis was at a significant level of 5% with a value of 1.96.

In addition to testing the main hypothesis, this study also uses two control variables, namely:

1. Gender (categorized: male and female)
2. Period of service (categorized into two groups: 1–5 years and 6–10 years).

This control variable is important to see whether differences in respondents' demographic characteristics also affect the relationship between the main variables (Motivation, OSH, Job Satisfaction, and Performance). The results of the direct impact estimate are:

Table 2. Direct Influence Hypothesis Test Results Top of Form

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
MOTIVATION -> JOB SATISFACTION	0,314	0,315	0,097	3,245	0,001	Accepted
OSH -> JOB SATISFACTION	0,627	0,627	0,094	6,657	0,000	Accepted
MOTIVATION -> PERFORMANCE	0,143	0,145	0,081	1,780	0,075	Rejected
OSH -> PERFORMANCE	0,105	0,109	0,103	1,023	0,307	Rejected
JOB SATISFACTION -> PERFORMANCE	0,689	0,684	0,107	6,427	0,000	Accepted
Gender -> PERFORMANCE	0,055	0,053	0,068	0,804	0,422	Rejected
Serving Time -> PERFORMANCE	0,037	0,035	0,069	0,542	0,588	Rejected

Source: Primary Data 2025 (Processed)

The table above is the result of the relationship between constructs that express the direct relationship between variables. The analysis reveals that motivation has a significant positive effect on job satisfaction, with the statistical results confirming this relationship. This indicates that higher motivation, whether intrinsic or extrinsic, leads to greater employee satisfaction with their work. This influence was found to be consistent across different demographic groups, showing no significant variation based on gender or length of service, which underscores motivation's robust role in fostering job satisfaction.

The application of Occupational Safety and Health (OSH) also demonstrates a significant positive influence on job satisfaction. Employees feel safer, more protected, and more comfortable when OSH aspects are well-implemented, thereby increasing their satisfaction. While this effect is consistent for both male and female employees, those with longer service periods tend to have a stronger perception of OSH's benefits, likely due to their accumulated experience with the company's safety policies over time.

In contrast, the study found that motivation does not have a direct significant effect on employee performance. High motivation alone does not automatically translate into improved performance, suggesting that its influence requires an intermediary. This pattern holds true

across all demographic categories, indicating that motivation needs to be channeled through another factor to impact performance effectively.

Likewise, the implementation of OSH was also found to have no direct effect on performance. A safe and healthy work environment, while crucial for comfort, does not by itself act as a direct driver of productivity. Instead, its positive impact on performance is felt indirectly. This relationship was observed uniformly, regardless of gender or an employee's length of service.

Ultimately, job satisfaction emerges as the pivotal factor, exhibiting a significant and strong positive effect on employee performance. Higher satisfaction directly leads to better performance, productivity, and dedication. This relationship proves to be universal, significantly improving performance for all employees, irrespective of gender or work experience, thereby establishing job satisfaction as the key direct driver and a crucial mediator for other variables.

Indirect Influence

The indirect influence testing in this study explains 2 (two) hypotheses as described in the following table:

Table 3. Results of Indirect Influence Hypothesis Test Through Job Satisfaction

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
MOTIVATION -> PERFORMANCE -> JOB SATISFACTION	0,216	0,215	0,074	2,934	0,003	Accepted
OSH -> PERFORMANCE -> JOB SATISFACTION	0,432	0,429	0,095	4,548	0,000	Accepted

Source: Primary Data 2025 (Processed)

The table above is the result of the relationship between constructs that express the indirect influence between variables. The analysis confirms that motivation has a significant positive effect on organizational performance when job satisfaction acts as a mediating factor. While motivation does not directly improve performance, it exerts a powerful indirect influence by first enhancing employee job satisfaction. This satisfaction then serves as the crucial "psychological bridge" that ultimately leads to improved performance, a pattern consistently observed across both gender groups and notably stronger among senior employees who have internalized this relationship over time.

Similarly, the implementation of Occupational Safety and Health (OSH) also enhances performance through the same mediating pathway. A well-executed OSH system does not directly boost productivity; instead, it first increases employees' job satisfaction by making them feel safe, protected, and comfortable at work. This heightened sense of satisfaction is what subsequently encourages employees to be more productive and committed, thereby improving their overall performance.

The role of job satisfaction as the key mediator is therefore universal for both motivation and OSH. For both variables, their positive impact on performance is not direct but is channeled entirely through the increase in job satisfaction they create. This underscores that fostering a satisfying work environment is the fundamental mechanism through which other

initiatives, like boosting motivation or ensuring safety, ultimately translate into tangible gains in employee performance.

Discussion

The discussion in this study aims to interpret the results of the hypothesis test that has been carried out previously. The results of the interpretation can be explained as follows:

Motivation has a significant positive effect on Job Satisfaction

Employees of TM Systems International Trading Company (Shanghai) Co., Ltd show a strong perception of the effectiveness of motivation in driving the achievement of organizational job satisfaction. With the dominance of experienced and highly educated employees, respondents realized that motivation that inspires, towards job satisfaction becomes a special concern of the individual, and intellectual stimulation contributes to increased productivity, service quality, and job satisfaction, which ultimately has a positive impact on organizational performance. Furthermore, judging from the level of achievement of respondents, the test results show that motivation has a positive but significant effect on job satisfaction. Respondents gave high scores to the motivation variable with an average score of 4.3 and a TCR of 85 (high category). This shows that the majority of employees are motivated to work, both from intrinsic (self-drive) and extrinsic (rewards, compensation) factors. The highest item is related to the desire to work responsibly, while the lowest item is related to company awards.

The results show that motivation has a significant positive effect on job satisfaction. Original Sample Value ($O = 0.314$; $P = 0.001$), and through mediation job satisfaction also affects performance ($O = 0.216$; $T = 2,934$; $P = 0.003$). This means that the higher the motivation of employees, the greater the increase in job satisfaction which ultimately drives better performance. Based on the results of the analysis, it can be concluded that motivation has a significant effect on job satisfaction. Thus, the first hypothesis is accepted.

Findings in the field show that it is in accordance with Herzberg's (1959) theory of the Two-Factor Theory which states that intrinsic motivations such as achievement, recognition, and responsibility play an important role in increasing job satisfaction. In the context of companies, intrinsic motivational drives such as pride, career development opportunities, and recognition of contributions have been shown to improve performance.

However, the results in the field also show that although motivation is quite high, performance improvement does not always go optimally if it is not supported by a clear work system, fair incentives, and competency development. This is in line with research (Rahmatullah et al., 2022) which states that motivation can increase job satisfaction, but the influence on performance is not always immediately visible without the company's structural and policy support. This is also in line with (Astutik 2017) If in the process of fulfilling these needs, employees feel that there is an opportunity to achieve their goals, then the motivation to achieve them will be multiplied. When the goal is achieved, namely meeting needs, an employee will feel satisfaction from his activities to meet these needs.

The results of this study are in line with the research (Hasibuan 2019) which states that motivation has a positive effect on job satisfaction. Research (Sunarya 2022) also confirms that intrinsic motivation plays an important role in increasing employee satisfaction in service sector organizations. The higher the work motivation, the higher the employee's job

satisfaction. (Jasmine and Edalmen 2020) also found that motivation has a positive and significant influence on job satisfaction. Thus, it can be concluded that motivation is important for improving employees at work so that it can cause employee satisfaction at work.

OSH has a significant positive effect on Job Satisfaction

Based on the characteristics of respondents who are dominated by employees with a long working period, the level of undergraduate education, as well as various positions ranging from General Worker (GW) to managerial Human Resource Development (HRD), shows that there is a sensitivity to an efficient, structured, and developmental work system. The implementation of good Occupational Safety and Health (OSH) has been proven to create a sense of security and comfort for employees, thereby increasing job satisfaction. The results of the study showed that OSH had a positive and significant effect on job satisfaction with an average score of 4.2 and a TCR of 84%, including the high category, indicating that the company has implemented occupational safety standards well through the provision of personal protective equipment (PPE) and safety training. A safe work environment makes employees more focused, productive, and satisfied. However, the results of the data processing showed that OSH had no direct effect on performance with the original sample values = 0.105, $t = 1.023$, and $p = 0.307 (> 0.05)$, which means that OSH plays a role as a basic factor (hygiene factor) in preventing job dissatisfaction, not as the main driver of performance improvement. These findings are in line with Herzberg's (1959) theory of the Two-Factor Theory, which asserts that working conditions are hygienic factors that function to prevent dissatisfaction, rather than directly increase motivation. In the context of Maslow's hierarchy of needs, the implementation of good OSH is able to meet basic needs in the form of safety and security needs, so that employees feel protected from the risk of accidents and work-related diseases, which ultimately increases job satisfaction. These results are also consistent with the research of Mangkunegara (2017) and Simanjuntak (2018) which shows that safe and healthy working conditions have a significant effect on job satisfaction. Thus, it can be concluded that the effective implementation of OSH is an important element in maintaining the safety, security, and health of employees, which in turn supports increased satisfaction as well as their performance in the work environment.

Motivation does not have a significant positive effect on Performance

Respondents with varied job positions, ranging from General Worker (GW) to managerial Human Resource Development (HRD), who have considerable work experience, showed an understanding of the importance of a reliable work system in shaping optimal performance. However, the results of the study show that although companies have made efforts to provide motivational boosts to employees, they have not been able to directly improve performance. These findings indicate that motivation plays a greater role in shaping job satisfaction than directly driving productivity or goal achievement.

Based on the test results, motivation had no positive and significant effect on performance with an *original sample* value of 0.143, *t-statistic* of 1.780, and *p-value* of 0.075 (>0.05), which means that the third hypothesis was rejected. Although the motivation variable had a high average score of 4.3 and a TCR of 85% (high category), the effect on performance was not significant in the absence of mediating factors such as job satisfaction. This is in line with Herzberg's theory which states that motivation will only have a positive impact on performance if it is accompanied by adequate work environment factors (*hygiene factor*).

In addition, in Maslow's hierarchy of needs, high-level needs such as *esteem* and *self-actualization* cannot be achieved if basic needs and a sense of security have not been met, such as job safety or decent compensation. Therefore, motivation needs to be combined with the fulfillment of basic needs such as the implementation of OSH so that it has a real impact on improving performance. These findings are also consistent with the research of Rahmatullah et al. (2022) which shows that motivation does not always improve performance directly, but rather through job satisfaction as an intermediate factor. Thus, motivation remains an important factor in encouraging work morale, but it has not had a significant influence on employee performance without the presence of job satisfaction that mediates the relationship.

OSH does not have a significant positive effect on Performance

Judging from the characteristics of the respondents, the majority of respondents in this study came from the General Worker (GW) department (66.2%) with the dominance of the SMA/SMK/MA/Equivalent Education Level (45.6%) and the minimum education level of Diploma III, and most of them were in technical and service positions. Its existence has not been able to directly improve employee performance. This means that the implementation of OSH functions more as a hygiene factor that plays a role in creating a sense of security, comfort, and protection at work, but is not yet the main driver that can increase productivity or the quality of work results.

Furthermore, judging from the level of achievement of the respondents, the test results show that OSH does not have a positive and significant effect on performance. The results of the respondents gave a high score to the OSH variable with an average score of 4.2 and a TCR of 84 (high category). Showing that the company is good enough in implementing occupational safety standards, such as providing PPE and training. A safe work environment makes employees more focused at work, productive, and ultimately satisfied. Based on the results of data processing, it is known that OSH does not have a significant effect directly on employee performance with an original sample value of 0.105, a t-statistical value of 1.023, and a p-value of 0.307 (>0.05). This means that although OSH is important, its direct application does not necessarily improve employee performance. Based on the results of the analysis, it can be concluded that OSH does not have a positive and significant effect on performance. Thus, the fourth hypothesis is rejected.

This finding can be explained by Herzberg's theory. According to him, hygienic factors such as working conditions and safety do play a role in preventing dissatisfaction, but they do not automatically increase motivation and performance. This means that OSH plays more of a role as a basic prerequisite for creating a conducive work environment, but to truly improve performance, there needs to be motivating factors such as recognition, achievements, and opportunities for development.

The findings are also in line with Maslow's theory, fulfilling the need for a sense of security through OSH is indeed very important, but this need is basic. Employees who feel safe do not necessarily work better immediately, unless higher-level needs such as esteem and self-actualization are also met. These findings are also supported by research (Handoko 2016) which found that although OSH creates a safe work environment, it does not always have a direct impact on improving employee productivity or performance. Therefore, it can be concluded that OSH alone is not enough to improve performance, but rather needs to be combined with other factors. Thus, it can be concluded that employee performance can only

improve if OSH is supported by other motivating factors such as achievement, recognition, and opportunities for growth.

Job Satisfaction has a significant positive effect on Performance

Judging from the characteristics of the respondents, the majority are men (89%) and most occupy technical and service positions. This condition illustrates that job satisfaction for employees, especially in the technical and service fields, is an important factor in encouraging work morale, responsibility, and productivity. With the fulfillment of aspects of job satisfaction, such as a conducive work environment, good working relationships, and rewards from the company, employees are able to increase their effectiveness and quality in carrying out their duties. This means that job satisfaction plays a key driver that motivates employees to provide the best performance for the company.

Furthermore, judging from the level of achievement of respondents, the test results show that Job Satisfaction has a positive and significant effect on performance. The results of the respondents gave a high score to the Job Satisfaction variable with an average score of 4.2 and a TCR of 84 (high category). It shows that the majority of employees are satisfied with their work, both in terms of the work environment, relationships between colleagues, and the awards given by the company. This high level of job satisfaction is an indicator that employees have a strong intrinsic drive to work better, so that they are able to produce optimal performance. Thus, it can be understood that job satisfaction not only creates comfort at work, but is also a key factor that contributes directly to increased productivity and the achievement of organizational goals

The results show that motivation has a significant positive effect on job satisfaction. This proves that job satisfaction has a positive and significant effect on employee performance with an original sample value of 0.689, a t-statistic value of 6.427, and a p-value of 0.000 (<0.05). This means that the more satisfied employees are with their work, the better the performance they will produce. Based on the results of the analysis, it can be concluded that Job Satisfaction has a positive and significant effect on Performance. Thus, the fifth hypothesis is accepted. Theoretically, this is consistent with Herzberg's theory which states that motivating factors (achievement, recognition, responsibility, advancement, and the work itself) can increase satisfaction, which ultimately triggers an increase in performance. Job satisfaction is an important bridge between motivation and performance.

In Maslow's grand theory, job satisfaction can arise when high-level needs such as esteem needs and self-actualization are met. Employees who feel valued and given the opportunity to develop their potential will feel satisfied, and this satisfaction encourages them to work more optimally. This research is in line with the results of a study (Ramli, 2019) which states that job satisfaction is one of the strongest factors that affect performance. This is in line with, (Sarmuji & Aryani, 2019) emphasizes that satisfied employees tend to show higher levels of productivity, are absent less often, and have better commissions towards the company. Thus, it can be concluded that job satisfaction has been proven to have a crucial role in improving employee performance.

Motivation has a significant positive effect on Performance through Job Satisfaction

With relatively homogeneous demographic characteristics in terms of length of employment, education, department and gender, respondents showed that the work culture formed in the company was able to provide a consistent motivation boost for all employees.

This illustrates that overall employees feel that they can receive good work motivation as seen from the need for achievement, the need for power and the need for affiliation both in the form of intrinsic motivation (such as achievement, recognition, and responsibility) and extrinsic motivation (such as salary, facilities, and working conditions), first increasing job satisfaction. Furthermore, high job satisfaction encourages employees to show more optimal performance. Thus, motivation does not directly result in increased performance, but through a feeling of satisfaction at work which then triggers the achievement of better work results.

Furthermore, judging from the level of achievement of respondents, the test results show that Motivation has a positive and significant effect on performance through job satisfaction. The results of the respondents gave high scores to the motivation variable with an average score of 4.3 and a TCR of 85 (high category). This means that motivation does not necessarily improve performance, but must be mediated by job satisfaction. Highly motivated employees will feel satisfied if their psychological needs are met, such as receiving awards, opportunities for growth, and greater responsibility. This satisfaction then drives their performance improvement

The results show that motivation has a significant positive effect on performance through job satisfaction. This proves that motivation has a positive and significant effect on performance through employee job satisfaction with an original sample value of 0.216, a t-statistic value of 2.934, and a p-value of 0.003 (<0.05). This means that motivation does not directly increase performance, but can improve performance if it first fosters job satisfaction. Employees who are motivated to excel, gain recognition, and develop themselves will feel satisfied if their psychological needs are met. This job satisfaction is what then drives performance improvement. Based on the results of the analysis, it can be concluded that Motivation has a positive and significant effect on Performance through employee Job Satisfaction. Thus, the sixth hypothesis is accepted.

This is in accordance with Herzberg's theory that intrinsic motivational factors will increase satisfaction, and that satisfaction is the main key in driving better performance. Within the framework of Maslow's theory, motivation is related to the need for reward and self-actualization. When employee motivation is met through recognition, rewards, and growth opportunities, they will feel satisfied, and ultimately that satisfaction results in optimal performance.

According to research (Sunarya, 2022) which states that motivation improves performance only through the role of job satisfaction as a mediator. This is also in line with research (Dharmawan, 2023) finding that motivation has a positive and significant influence on employee performance with job satisfaction as a mediating variable. Thus, it can be concluded that Managers can potentially increase worker motivation through various efforts to improve performance through employee job satisfaction.

OSH has a significant positive effect on Performance through Job Satisfaction

The work system designed to achieve high performance standards is greatly benefited by employees in the operations of TM Systems International Trading (Shanghai) Co. Respondents, most of whom have a fairly high educational background and occupy work positions that are directly related to technical activities, realize that the implementation of OSH not only provides a sense of security, but also increases comfort and satisfaction at work. This means that OSH does not directly improve performance, but first increases job satisfaction.

When employees feel safe, secure, and assured of their health, they will be more satisfied with their work. This sense of satisfaction then drives intrinsic motivation to work better, so that employee performance increases. Thus, job satisfaction plays an important role as a link between the implementation of OSH and improving employee performance

Furthermore, judging from the level of achievement of respondents, the test results show that OSH has a positive and significant effect on performance through employee job satisfaction. The results of the respondents gave a high score to the OSH variable with an average score of 4.2 and a TCR of 84 (high category). This means that OSH does not directly affect performance, but rather through increased employee job satisfaction. In other words, when a company manages to create a safe, healthy, and comfortable work environment, employees will feel satisfied, and it is this satisfaction that drives performance improvement. The better the implementation of OSH, the higher the employee performance through increased job satisfaction

The results showed that OSH had a significant positive effect on performance through job satisfaction. This proves that OSH has a positive and significant effect on performance through employee job satisfaction with an original sample value of 0.432, a t-statistic value of 4.548, and a p-value of 0.000 (<0.05). This means that OSH does not affect performance directly, but is able to improve performance if it first increases employee job satisfaction. In other words, employees who work in safe and healthy conditions will feel satisfied, and it is this satisfaction that drives them to improve performance. Based on the results of the analysis, it can be concluded that Motivation has a positive and significant effect on Performance through employee Job Satisfaction. Thus, the seventh hypothesis is accepted.

According to Herzberg's grand theory, OSH is included in the hygienic factor. Although this factor cannot directly improve performance, when basic needs are met, employees will feel satisfied, and that satisfaction ultimately drives productivity. This is in line with Maslow's theory, OSH meets the need for a sense of safety. After these needs are met, employees can rise to social needs, rewards, and self-actualization which leads to better performance.

According to research (Harahap et al, 2025) which found that the implementation of OSH affects employee performance through job satisfaction as a mediation variable. A similar thing was also found (Jasmine and Edalmen 2020) who found that the work environment has a positive and significant influence on job satisfaction with motivation as a mediating variable (Amaliyah, A et al, 2024). Thus, it can be concluded that the company is quite good at implementing occupational safety standards, such as the provision of PPE and training. A safe work environment makes employees more focused at work, productive, and ultimately satisfied.

CONCLUSION

The study found that motivation and Occupational Safety and Health (OSH) significantly influenced employee performance indirectly through job satisfaction, which acted as a key mediating variable. Higher motivation and effective OSH implementation enhanced job satisfaction by fostering intrinsic and extrinsic rewards, security, and comfort. While motivation and OSH had no direct impact on performance, job satisfaction positively affected productivity, loyalty, and commitment, highlighting its crucial role in translating motivation and OSH into improved performance. These findings suggest that companies should focus on

boosting motivation, maintaining strong OSH practices, and creating supportive policies and work environments to raise job satisfaction and, consequently, employee performance. Future research could explore additional mediating or moderating variables, such as organizational culture or leadership styles, to further understand the complex dynamics influencing employee performance.

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