

The Influence of Occupational Safety and Health (K3), Individual Characteristics and Career Development on the Performance of Employees

Sulastri¹, Ahmad¹, Andi Mappatempo¹

¹Postgraduate Program in Master of Management, Muhammadiyah University of Makassar, Indonesia

Abstract. *This study aims to analyze the influence of Occupational Safety and Health (OHS), Individual Characteristics, and Career Development on Employee Performance at the Bulukumba Regency Fire Department. The background of this study is based on the importance of optimal human resource management, especially in high-risk work environments. The research approach used is quantitative with the causality method, where data were collected through questionnaires distributed to 183 respondents from a total population of 335 employees, using the Slovin formula in determining the sample. The results showed that OHS variables have a positive and significant effect on employee performance. The highest average value of OHS indicators was obtained for compliance with safety procedures, followed by the provision of PPE. This finding is reinforced by the results of interviews and field observations, which indicate that employees have a positive perception of OHS implementation, although there is still a need for improved health facilities and a comprehensive understanding of OHS. Other factors such as individual characteristics and career development were also found to contribute to improving employee performance. This study emphasizes the importance of implementing an effective OHS system, clear career development, and increasing individual capacity in creating a productive, safe, and sustainable work environment.*

Keywords: *Occupational Safety and Health, Employee Performance, Individual Characteristics, Career Development, Fire Department*

Received: June 11, 2025

Revised: July 19, 2025

Accepted: August 23, 2025

INTRODUCTION

Human resources are a crucial factor within any organization or company (Lendzion, 2015). This is because an organization or company will not function without proper human resource management. According to Carmeli (2004), human resources are a valuable asset and a crucial factor in supporting the successful implementation of any organization's activities, whether government or private. Human resources (HR) are individuals who work as the driving force of an organization, whether an institution or a company, and serve as assets whose capabilities must be trained and developed (Obi, 2015). As explained, the heart of an organization or company's success lies in the capabilities of its resources.

Human resources must be managed properly because they are a trust for which they will be held accountable before Allah SWT. Islam requires humans to be held in a high and noble order. Performance is the level of achievement attained by an individual or group in carrying out predetermined tasks or work (Shaddiq, 2023). Performance is not only measured quantitatively but also in terms of the quality and effectiveness of the work. In general, performance encompasses various factors, such as skills, knowledge, motivation, and working conditions,

which can influence results. In an organizational context, performance is often measured through productivity, efficiency, and the ability to achieve predetermined goals, both short-term and long-term.

Occupational Safety and Health (OHS) is a crucial aspect in maintaining employee productivity and well-being, particularly in high-risk occupations, such as the Fire Department (Jain et al., 2018). Firefighters face various safety threats, ranging from large fires and exposure to hazardous chemicals to the risk of physical injury from building collapses. Therefore, implementing an effective OHS system is essential to ensure occupational safety and improve employee performance. Good OHS implementation is not only about protecting against accident risks but also impacts employee psychological well-being and work motivation (Jain et al., 2021; Zwetsloot et al., 2017).

A safe and comfortable work environment can increase productivity and performance, while hazardous working conditions without adequate mitigation can cause stress and reduce work efficiency. Furthermore, career development factors have also been shown to significantly impact performance improvement, providing motivation and opportunities for employees to grow and contribute more (Wibowo, 2006; Ahsan, 2024). Research shows that career development has a positive effect on employee performance (Wau, 2021; Napitupulu et al., 2017). Career development is a crucial factor in improving employee performance. According to Hasmawati et al. (2024) and Jackson & Sirianni (2009), career development provides employees with opportunities to improve their skills and abilities, which in turn can improve their performance. Research shows that career development significantly impacts employee performance, as employees who feel they are given opportunities to develop tend to be more motivated and productive (Prayudi & Komariyah, 2023).

Furthermore, career development itself can be influenced by various internal and external factors that support individual advancement, such as training and providing new challenges relevant to the job position (Duffy & Dik, 2009; Nagy et al., 2019). Based on the researchers' observations, the phenomenon at the Bulukumba Regency Fire Department office revealed several factors related to employee performance and the factors that influence it. Many employees reported a high level of satisfaction, particularly with regard to the supportive work environment and career development opportunities (Ashraf, 2019).

However, some employees remained dissatisfied with the incentive system and opportunities for advancement within the organization. The implementation of occupational safety and health (OHS) protocols at the Bulukumba Regency Fire Department is quite good, but several aspects still need improvement, such as more adequate health facilities or a deeper understanding of the importance of OHS among all employees.

Career development is a primary concern at the Bulukumba Regency Fire Department. Many employees feel they have opportunities to develop their skills and careers, but some complained about the lack of clear training programs or promotion opportunities. Observations revealed fairly good communication between employees and superiors, although some employees felt that certain policies or decisions were not always clearly communicated (Mishra et al., 2014). Collaboration between teams at work is also quite good, but there is still room for improved cooperation and mutual support between departments.

The performance of Bulukumba Regency Fire Department employees is quite optimal, but there is a difference between employees who feel motivated by career development opportunities and those who feel stagnant in their jobs. External motivational factors, such as incentives and rewards, play a significant role in motivating employees to improve their performance.

Challenges remain, such as clarifying career paths and improving the implementation of OHS and internal communication to support optimal performance (Robson et al., 2016). Based on the research background, this study will address the issue of how to improve employee

performance at the Bulukumba Regency Fire Department. The focus of this research will be exploring the factors that influence employee performance. This study will analyze the extent to which OHS implementation in the workplace impacts employee productivity and performance, and identify OHS aspects that need improvement to support optimal performance.

This study will examine how individual characteristics, such as motivation, skills, and experience, influence the performance of Bulukumba Regency Fire Department employees and identify ways to optimize individual potential to improve their performance. This study will examine how existing career development programs impact employee performance. This includes analyzing the role of training and promotion opportunities in motivating employees to achieve better performance.

METHODS

This study uses a quantitative approach because it focuses on testing the influence of several variables on other variables using data that can be measured and analyzed statistically. Quantitative research generally involves collecting numerical data which is then analyzed to test the relationship between variables. This study aims to determine whether there is an influence between several factors, namely Occupational Safety and Health (K3), Individual Characteristics, Career Development, and Employee Performance. Because the goal is to determine the causal relationship or influence of independent variables on the dependent variable, the approach used is causal or explanatory. The location of the study was carried out at the Bulukumba Regency Fire Department located at Cailé, Ujung Bulu District, Bulukumba Regency, South Sulawesi. Data collection was carried out from February to March 2025. This study will involve Bulukumba Regency Fire Department employees as a population of 335 employees. A sample of 183 respondents was selected using the Slovin Formula used to determine the appropriate sample size in research, especially when the population is large and the data distribution is unknown.

Data Collection Technique

The research instrument for the topic "The Influence of Safety and Health (K3), Individual Characteristics and Career Development on the Performance of Bulukumba Regency Fire Department Employees is usually in the form of a questionnaire designed to collect data from employees regarding their perceptions and experiences related to the factors studied. To measure the indicators above, you can compile a questionnaire with a Likert scale (for example, from 1 = strongly disagree to 5 = strongly agree) for each relevant item. Validity and Reliability Before conducting data analysis, researchers need to test the validity and reliability of the instrument (questionnaire): (1) Validity Test: To ensure whether each question item in the questionnaire measures the intended variable. Validity testing can be done by construct validity testing (for example using factor analysis) or item validity testing; (2) Reliability Test: Measuring the consistency of the instrument using Cronbach's Alpha. If the Cronbach's Alpha value is greater than 0.7, then the instrument is declared reliable. Questionnaire Distribution, Questionnaires are distributed to employee samples in several ways, such as: (1) Filling Instructions: Researchers provide instructions that clear about how to fill out the questionnaire, ensuring that respondents understand each item asked; (2) Time of Completion: Determine the right time for employees to fill out the questionnaire, for example during break time or after work hours, to avoid disruption to their work; (3) In person: The questionnaire is distributed to employees physically at the workplace; (4) Online: The questionnaire can be distributed via email or online survey platforms such as Google Forms, SurveyMonkey, or similar platforms for ease of data collection.

RESULTS AND DISCUSSION

Occupational Safety and Health (K3)

Occupational Safety and Health (K3) variables are measured using 4 indicators, namely the provision of personal protective equipment (PPE), compliance with occupational safety standards, provision of health facilities, and K3 socialization and training. Respondents'

responses or perceptions regarding occupational safety and health can be seen in the following table.

Table 1. Frequency/Percentage Table of Occupational Safety and Health Variable Indicators

Occupational Safety and Health (K3)											
Indicator	1		2		3		4		5		Mean
	F	%	F	%	F	%	F	%	F	%	
X1.1	5	2,73	22	12,02	32	17,49	36	19,67	88	48,09	3,984
X1.2	3	1,64	21	11,48	33	18,03	48	26,23	78	42,62	3,967
X1.3	0	0,00	19	10,38	23	12,57	60	32,79	81	44,26	4,109
X1.4	0	0,00	17	9,29	17	9,29	43	23,50	106	57,92	4,301
Mean of Occupational Safety and Health Variables											4,090

Source: Primary Data Processed (2025)

The table above illustrates the evaluation results of the Occupational Safety and Health (OHS) variable based on four indicators, namely X1.1 to X1.4, assessed using a Likert scale of 1 to 5. The mean calculation reveals that indicator X1.4 obtained the highest score of 4.301, followed by X1.3 with a score of 4.109, X1.1 with a score of 3.984, and finally, X1.2 with a score of 3.967. These scores indicate that respondents generally gave a positive assessment of the implementation of OHS in the workplace. Indicator X1.4, which had the highest mean score, indicates that this aspect is perceived most strongly by employees. This could be related to compliance with occupational safety procedures or the availability of a robust OHS support system. Consistent implementation of this aspect provides a sense of security to employees, which ultimately increases their focus and productivity at work. Furthermore, X1.3, which also scored high, is likely related to the provision of personal protective equipment (PPE) or other occupational safety facilities.

The availability and optimal use of PPE can reduce the risk of workplace accidents, maintain employee health, and ensure the continuity of organizational operations. Meanwhile, indicators X1.1 and X1.2 had slightly lower mean values, although still in the high category. This indicates that there is still room for improvement, such as in occupational safety training or outreach on the importance of OHS for all employees. Increasing employee awareness and active participation in OHS will strengthen the occupational safety culture and have a direct impact on employee performance. Overall, these data indicate that the higher the positive employee perception of the implementation of occupational safety and health, the higher the level of comfort and security they feel. This will have a significant impact on improving employee performance, as they can work optimally without worrying about risks that endanger their safety.

Research Instrument Validity Test

The data instrument tests referred to are validity and reliability tests. Validity is the degree of accuracy or reliability of the instrument's measurement of the question content. This test is conducted to check for errors in each statement item in measuring its variable. This validity test is conducted to determine whether the questions used in the questionnaire accurately measure what is being tested in this study. Validity testing is carried out by examining the correlation between item scores and the total score of each variable. Validity is tested using outer loading with a significance level of 0.05. If the calculated $r > r$ table or the correlation coefficient is less than 0.05 (calculated $r < 0.05$), then the correlation coefficient is significant, indicating that the instrument is valid.

However, if the calculated $r < r$ table or r calculated $r < 0.05$, then the instrument is invalid. The r table in this study was determined by determining the total sample size (n), resulting in r table = $N - 2 = 183 = 0.675$. An instrument is considered reliable if a person's answers to the questions are consistent or stable over time. A variable is considered reliable if it produces a

Cronbach's alpha value > 0.60 (Ghozali, 2006). The following are the results of the validity and reliability calculations between variables:

Table 2. Summary of Validity and Reliability Test Results

Variable	Item	r	Sig	Inf	Reliability	Inf
K3	X1.1	.872**	.000	Valid	0,893	Reliable
	X1.2	.859**	.000	Valid		
	X1.3	.856**	.000	Valid		
	X1.4	.883**	.000	Valid		
Individual Characteristics	X2.1	.949**	.000	Valid	0,833	Reliable
	X2.2	.942**	.000	Valid		
	X2.3	.958**	.000	Valid		
	X2.4	.907**	.000	Valid		
Career Development	X3.1	.943**	.000	Valid	0,849	Reliable
	X3.2	.949**	.000	Valid		
	X3.3	.913**	.000	Valid		
	X3.4	.917**	.000	Valid		
Employee Performance	Y1	.931**	.000	Valid	0,847	Reliable
	Y2	.930**	.000	Valid		
	Y3	.877**	.000	Valid		
	Y4	.835**	.000	Valid		

Reliability Test of Research Instruments

Reliability is a process that indicates the extent to which a measuring instrument is trustworthy or reliable. A measuring instrument is considered trustworthy or reliable if it consistently produces consistent results from unchanged measurement phenomena conducted at different times. To test reliability, the Conbach's Alpha technique can be used. A research instrument is considered reliable if it has a reliability coefficient, or alpha, of 0.06 or higher. Therefore, reliability testing is a crucial step in ensuring that a research instrument is reliable and capable of producing valid data for further analysis. Based on the results of the research instrument reliability test, as shown in Table 2, the test results indicate that all research instruments are reliable. This can be seen from the fact that all research variables have a coefficient of constraint/alpha greater than 0.6. When these reliability test results are associated with the reliability coefficient index criteria according to Arikunton, the research instrument's alpha is high. Therefore, the research data is reliable and suitable for use in testing research hypotheses.

Regression Analysis

Regression analysis was conducted to prove the hypothesis proposed in this study, namely to analyze the influence of the independent variables on the dependent variable, and to test the previously stated research hypotheses. The basis for hypothesis testing in this study used probability values for partial tests. In general, the hypotheses proposed in this study are as follows:

Ho: There is no influence between the independent variables on the dependent variable

Ha: There is an influence between the independent variables on the dependent variable

The basis for the decision-making is:

$P \leq 0.05$, then Ho is rejected

$P > 0.05$, then Ho is accepted

This hypothesis testing was conducted using multiple linear regression statistical analysis techniques, the following explanation according to the formulated hypotheses.

Hypothesis Testing

Based on the empirical model proposed in this study, the proposed hypotheses can be tested using regression coefficients. The test results are presented in the following table:

Table 3. Hypothesis Testing

HIP	Independent Variables	Dependent Variable	B	Beta	T	sig	Information
H1	Occupational Safety and Health (K3)	Employee Performance (Y)	0.207	0.237	3.699	0.000	Significant
H2	Individual Characteristics	Employee Performance (Y)	0.189	0.211	3.281	0.001	Significant
H3	Career Development	Employee Performance (Y)	0.319	0.367	5.402	0.000	Significant
R = 0,628 R Square = 0,394 F = 38,842 Sig F = < 0,000							

$$Y = 4.628 + 0,207x_1 + 0,187x_2 + 0,319x_3 + \epsilon$$

Based on the table above, the following multiple linear regression equation model is obtained: (1) Occupational safety and health K3 has a positive and significant effect on employee performance with a sig value of $0.000 < 0.05$ with a calculated t value of $3.699 < t$ table value... and a coefficient of 0.207, this coefficient shows that occupational safety and health encourages increased employee performance at the Bulukumba Regency Fire Department; (2) Individual Characteristics have a significant effect on employee performance with a sig value = $0.001 < 0.05$ with a calculated t value of $3.281 < t$ table... and a coefficient of 0.189, this coefficient shows that the better the individual characteristics of employees, the more employee performance at the Bulukumba Regency Fire Department will increase; (3) Career Development has a positive and significant influence on Employee Performance with a sig value of $0.000 < 0.05$ with a calculated t value of $5.402 < t$ table.... and a coefficient of 0.319, this coefficient shows that the better the career development, the better the employee performance will be; (4) The F test is significant with a sig value of 0.05, meaning that the model built describes the conditions at the research location or the results of this research can be generalized to the Bulukumba Regency Fire Department; (5) R square produces a value of 0.394, meaning that the model built describes the conditions at the research location by 60.6% and the remaining 39.4% is a fact beyond the researcher's capabilities or there are still things that the researcher did not include as indicators of each research variable.

Classical Assumption Testing

To obtain an unusual and efficient estimator value from a multiple regression equation, the data must meet the following classical assumption criteria.

Multicollinearity

The multicollinearity test is one of the classical assumption tests that is very important in multiple linear regression analysis. This test aims to detect a strong correlation between independent variables in a model. Multicollinearity occurs when there is a strong linear relationship between two or more independent variables. This condition causes difficulty in separating the effects of each independent variable, instability of the regression coefficients, and an increase in the standard error of the estimate. To detect multicollinearity, $VIF = 1 / \text{Tolerance}$. $\text{Tolerance} = 1 - R^2_i$ (where R^2_i is the coefficient of determination when the i-th independent variable is regressed against the other independent variables). The following table shows the variance inflating factor (VIF):

Table 4. Multicollinearity Table

Independent Variable	Tolerance	VIF	Information
Occupational Health and Safety (X1)	0.827	1.208	Non-Multicollinearity
Individual Characteristics (X2)	0.819	1.221	Non-Multicollinearity
Career Development (X3)	0.735	1.361	Non-Multicollinearity

Based on the results above, all independent variables have tolerance values well above 0.10. All independent variables have VIF values well below 10. Therefore, it can be concluded that there is no multicollinearity among the independent variables in the regression model. This means there is no strong correlation between the variables K3 (X1), Individual Characteristics (X2), and Career Development (X3). Therefore, the regression model is suitable for further analysis and decision-making because there are no multicollinearity issues among the independent variables.

Heteroscedasticity

This test is performed to determine whether there is non-constant variance in the regression model. A frequently used method is the scatterplot (if the point distribution pattern is random, there is no heteroscedasticity).

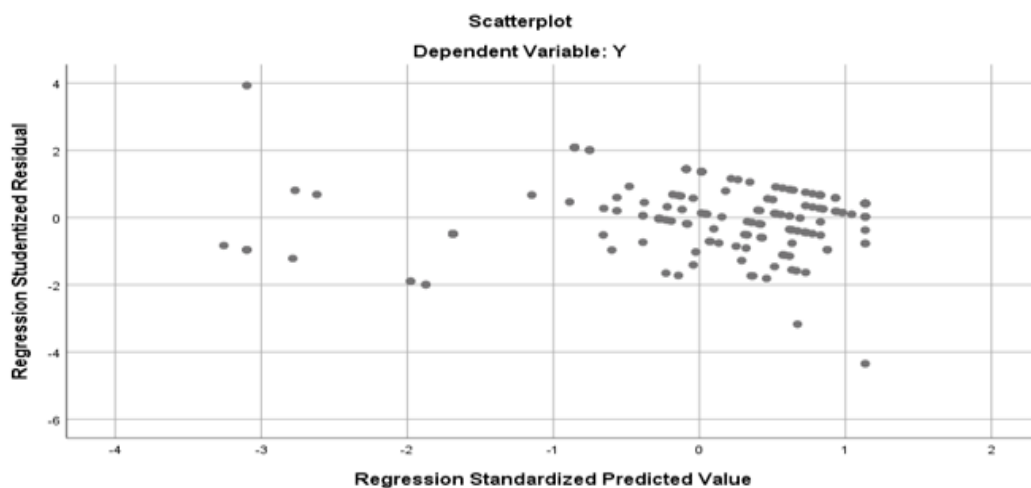


Figure 1. Scatterplot

Generally, visually, the data points in a scatterplot show a pattern that tends to increase from the bottom left to the top right. This indicates a positive relationship between the variables plotted on the X-axis and the Y-axis. The strength of the relationship, as the data points are not spread too far from the implied straight line, indicates a fairly strong relationship between the two variables. However, the data points are not very closely distributed, indicating that the relationship is not perfect. The direction of the relationship, as the value of the X variable increases, the value of the Y variable tends to increase as well. In other words, there is a positive correlation between the two variables. The linearity, as the pattern of the data points tends to be linear, although there are some deviations. This indicates that a linear model may be appropriate to describe the relationship between the two variables. There are no extreme data points or significant outliers that deviate significantly from the overall pattern.

Normality

A normality test is performed to ensure that the data used in the regression analysis is normally distributed.

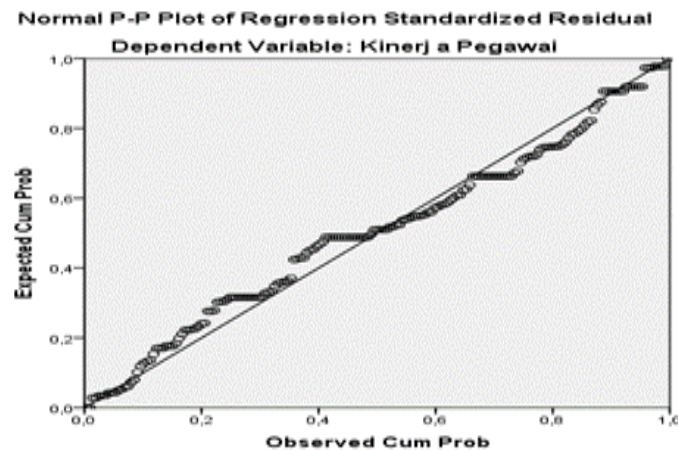


Figure 2. Normal P-Plot

The Normal P-Plot is used to evaluate whether a data set (or residuals from a statistical model) is normally distributed. In this plot, the observed data are plotted against the expected data from a standard normal distribution. A straight line on the plot represents a perfectly normal distribution. If the observed data are normally distributed, the data points will tend to lie along or very close to this line. In the figure shown, the data points appear to be fairly close to the straight line. This indicates that the data are quite close to a normal distribution. Although the data points do not lie exactly on the line, their deviations from the line are relatively small. This indicates that the assumption of normality is met. There is no systematic pattern in the deviations of the data points from the line (e.g., a clear curve or a distinct pattern). This supports the conclusion that the data do not exhibit significant deviations from normality. Overall, this Normal P-Plot provides visual evidence that the analyzed data are quite close to a normal distribution. In other words, the assumption of normality, often important in statistical analysis (such as regression), appears to be met for these data.

The Influence of Occupational Safety and Health (K3) on Employee Performance

To answer the problem formulation and the first hypothesis, the regression analysis results in Table 3 show that Occupational Safety and Health (OHS) has a positive and significant effect on employee performance. This indicates that effective OHS implementation in the workplace has the potential to improve employee performance. This finding aligns with various previous studies that emphasize the importance of a safe and healthy work environment as a primary foundation for increasing employee motivation and productivity. Bira et al. (2025), this study also emphasizes the importance of OHS implementation in improving employee performance. However, other studies, such as Rahayu et al. (2024), found that OHS had a significant negative effect on employee performance at PT Sampharindo Perdana Semarang. Based on data obtained at the research location through interviews and questionnaires, employees at the Bulukumba Regency Fire Department generally expressed a positive view of OHS implementation in the workplace. Employees felt that OHS had been implemented adequately.

The questionnaire revealed that employees expressed appreciation for various aspects of OHS, including training provided, the availability and implementation of OHS policies and procedures, and a clean and orderly work environment (Manduku, 2015). While the general perception of OHS tended to be positive, interviews and field observations identified several areas requiring further attention. Employees provided feedback regarding the need for improved health facilities and a more comprehensive understanding of OHS among all employees. The implementation of OHS protocols at the Bulukumba Regency Fire Department has generally been quite successful. However, there are areas that require improvement, such as the provision of more adequate health facilities and a deeper understanding of the importance of OHS among employees. This study highlights various factors influencing employee performance at the

Bulukumba Regency Fire Department, and these findings have important implications for organizational and individual dynamics.

Effective OHS implementation has been shown to have a significant positive impact, not only in creating a safe and healthy work environment but also in increasing employee productivity and satisfaction. When employees feel protected and cared for, their motivation and work efficiency tend to increase. Furthermore, superior individual characteristics, such as high motivation, technical skills, and the ability to calmly handle emergencies, also play a crucial role in determining employee performance (Abraham, 2004). Employees with these characteristics tend to be more productive and able to make greater contributions to the organization (Kour et al., 2019). Good career development has also been shown to be a powerful motivator, providing employees with opportunities to grow and feel valued, which in turn increases performance and loyalty. This study also highlighted several challenges and areas for improvement. Lack of employee satisfaction with incentive systems and opportunities for advancement within the organization can hinder motivation and performance (Alkandi et al., 2023). Furthermore, while the implementation of OHS protocols is generally good, there is still a need to improve health facilities and OHS understanding among employees. The lack of clear training and promotion programs is also a concern, as this can lead to employee stagnation and a lack of motivation. Finally, ineffective communication within the organization can hinder employee understanding of policies and decisions, which can ultimately impact performance. Overall, this study emphasizes the importance of an integrated approach to human resource management, focusing on OHS, individual characteristics, and career development, to achieve optimal employee performance.

CONCLUSION

Occupational Safety and Health (K3) has a positive and significant impact on employee performance. Findings: A safe work environment, the availability of personal protective equipment (PPE), and well-implemented safety procedures contribute to increased work effectiveness and reduced risk of workplace accidents.

SUGGESTION

The Fire Department needs to improve the quality and availability of personal protective equipment (PPE) and occupational safety equipment to ensure employee safety while on duty. Conduct regular training on occupational safety procedures, the use of fire extinguishers, and fire simulations to improve employee preparedness and skills in dealing with emergencies. Improve health facilities and psychological support, such as regular health checks and counseling services for employees experiencing stress due to high work pressure.

REFERENCES

- Abraham, R. (2004). Emotional competence as antecedent to performance: A contingency framework. *Genetic, Social, and General Psychology Monographs*, 130(2), 117-145. <https://doi.org/10.3200/MONO.130.2.117-145>
- Ahsan, K. P. (2024). Peran Mutasi dan Promosi dalam Pengembangan Karir dan Kinerja Pegawai. *PRODUKTIF: Jurnal Kepegawaian dan Organisasi*, 3(1), 49-59. <https://doi.org/10.37481/jko.v3i1.131>
- Alkandi, I. G., Khan, M. A., Fallatah, M., Alabdulhadi, A., Alanizan, S., & Alharbi, J. (2023). The impact of incentive and reward systems on employee performance in the Saudi primary, secondary, and tertiary industrial sectors: A mediating influence of employee job satisfaction. *Sustainability*, 15(4), 3415. <https://doi.org/10.3390/su15043415>
- Ashraf, M. A. (2019). The mediating role of work atmosphere in the relationship between supervisor cooperation, career growth and job satisfaction. *Journal of Workplace Learning*, 31(2), 78-94. <https://doi.org/10.1108/JWL-12-2017-0113>

- Bira, S., Zanabazar, A., Purev, B., Otgonbayar, A. E., & Gansukh, B. A. (2025). Examining the Linking between the Occupational Health and Safety Practices, Employee Awareness and Performance. *European Journal of Business and Management Research*, 10(3), 162-167. <https://doi.org/10.24018/ejbmr.2025.10.3.2702>
- Carmeli, A. (2004). Strategic human capital and the performance of public sector organizations. *Scandinavian Journal of Management*, 20(4), 375-392. <https://doi.org/10.1016/j.scaman.2003.11.003>
- Duffy, R. D., & Dik, B. J. (2009). Beyond the self: External influences in the career development process. *The career development quarterly*, 58(1), 29-43. <https://doi.org/10.1002/j.2161-0045.2009.tb00171.x>
- Hasmawati, H., Winarti, W., Jumriani, J., Akbardin, M., & Kallabe, A. (2024). The Influence of Performance Assessment and Employee Abilities on Employee Career Development. *Economics and Digital Business Review*, 5(2), 1071-1083. <https://doi.org/10.37531/ecotal.v5i2.1613>
- Jackson Jr, D. W., & Sirianni, N. J. (2009). Building the bottom line by developing the frontline: Career development for service employees. *Business Horizons*, 52(3), 279-287. <https://doi.org/10.1016/j.bushor.2009.01.005>
- Jain, A., Hassard, J., Leka, S., Di Tecco, C., & Iavicoli, S. (2021). The role of occupational health services in psychosocial risk management and the promotion of mental health and well-being at work. *International journal of environmental research and public health*, 18(7), 3632. <https://doi.org/10.3390/ijerph18073632>
- Jain, A., Leka, S., & Zwetsloot, G. I. (2018). Work, health, safety and well-being: Current state of the art. *Managing health, safety and well-being: Ethics, responsibility and sustainability*, 1-31. https://doi.org/10.1007/978-94-024-1261-1_1
- Kour, J., El-Den, J., & Sriratanaviriyakul, N. (2019). The role of positive psychology in improving employees' performance and organizational productivity: An experimental study. *Procedia Computer Science*, 161, 226-232. <https://doi.org/10.1016/j.procs.2019.11.118>
- Lendzion, J. P. (2015). Human resources management in the system of organizational knowledge management. *Procedia manufacturing*, 3, 674-680. <https://doi.org/10.1016/j.promfg.2015.07.303>
- Manduku, F. M. (2015). *Extent of the implementation of the occupational safety and health act 2007 in the Sarova group of hotels in Nairobi* (Doctoral dissertation, University of Nairobi).
- Mishra, K., Boynton, L., & Mishra, A. (2014). Driving employee engagement: The expanded role of internal communications. *International Journal of Business Communication*, 51(2), 183-202. <https://doi.org/10.1177/2329488414525399>
- Nagy, N., Froidevaux, A., & Hirschi, A. (2019). Lifespan perspectives on careers and career development. In *Work across the lifespan* (pp. 235-259). Academic Press. <https://doi.org/10.1016/B978-0-12-812756-8.00010-4>
- Napitupulu, S., Haryono, T., Laksmi Riani, A., Sawitri, H. S. R., & Harsono, M. (2017). The impact of career development on employee performance: an empirical study of the public sector in Indonesia. *International Review of Public Administration*, 22(3), 276-299. <https://doi.org/10.1080/12294659.2017.1368003>
- Obi, J. N. (2015). Effective human resources management practices as the key to organizational performance. *International journal of educational research*, 3(1), 1-26.

- Prayudi, A., & Komariyah, I. (2023). The impact of work motivation, work environment, and career development on employee job satisfaction. *Jurnal Visi Manajemen*, 9(1), 100-112. <https://doi.org/10.56910/jvm.v9i1.268>
- Rahayu, A. D., Indiworo, R. H. E., & Setiawati, I. (2024). Pengaruh keselamatan dan kesehatan kerja (K3), karakteristik individu serta pengembangan karir terhadap kinerja karyawan (Studi kasus bagian operator produksi di PT Sampharindo Perdana Semarang). *Innovative: Journal Of Social Science Research*, 4(3), 13423-13435. <https://doi.org/10.31004/innovative.v4i3.12082>
- Robson, L. S., Amick III, B. C., Moser, C., Pagell, M., Mansfield, E., Shannon, H. S., ... & South, H. (2016). Important factors in common among organizations making large improvement in OHS performance: Results of an exploratory multiple case study. *Safety science*, 86, 211-227. <https://doi.org/10.1016/j.ssci.2016.02.023>
- Shaddiq, S. (2023). The influence of leadership, work motivation and discipline on teacher performance in private Madrasah Aliyahin Tapin district. *Journal of Educations*, 2(1).
- Wau, J. (2021). The effect of career development, work motivation, and job satisfaction on employee performance. *Jurnal Aplikasi Bisnis Dan Manajemen (JABM)*, 7(2), 262-262. <https://doi.org/10.17358/jabm.7.2.262>
- Wibowo, F. D. (2006). *Analisis Pengaruh Peran Kepemimpinan dan Pengembangan Karir Terhadap Komitmen Organisasi Dalam Meningkatkan Kinerja Karyawan (Studi Kasus: PT. Bank Maspion Indonesia Cabang Semarang)* (Doctoral dissertation, program Pascasarjana Universitas Diponegoro).
- Zwetsloot, G., Leka, S., & Kines, P. (2017). Vision zero: from accident prevention to the promotion of health, safety and well-being at work. *Policy and Practice in Health and Safety*, 15(2), 88-100. <https://doi.org/10.1080/14773996.2017.1308701>