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## The Influence of Human Resource Quality and Occupational Health and Safety Programs on Employee Performance

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### Abstract

This study aims to describe and determine the influence of Human Resources Quality (HR) and Occupational Safety and Health (K3) Program on Employee Performance at PT. South Sulawesi Alam Perkasa. The sample used in this study was 30 people, with a sampling method using the census method. The data analysis technique used was multiple linear regression analysis to see the influence of the two independent variables on employee performance. The results of the study show that the Quality of Human Resources has a positive effect on Employee Performance. The better the quality of human resources, the better the performance of employees. In addition, the Occupational Safety and Health (K3) Program also has a significant influence on employee performance. A well-run K3 program contributes to improving employee performance in the company. Thus, the quality of human resources and the effective implementation of the K3 program are important factors in increasing employee productivity and performance at PT. South Sulawesi Alam Perkasa.

**Keywords:** Safety, Occupational Health, Performance

### Introduction

Human resources (HR) are the main factor that determines the operational success of a company. The quality of human resources is indispensable to carry out organizational activities optimally, especially in achieving the goals that have been set by the company (Goswami, 2018; Rigby & Ryan, 2018). In the industrial sector, the quality of human resources is closely related to the skills, competencies, and behaviors of employees in facing work challenges. In addition, to support the achievement of good performance, companies must implement the Occupational Safety and Health (K3) Program which aims to create a safe and free work environment from the risk of work accidents (Pulungan, 2020). K3 not only plays an important role in maintaining employee safety, but also has an impact on the company's overall

productivity and performance. At PT. Sulawesi Alam Perkasa, a company engaged in transportation and B3 waste management, the importance of quality of human resources and K3 programs is increasingly relevant. Employees involved in hazardous waste management must understand the risks and adhere to strict work safety protocols. Unfortunately, in practice, there are still many employee non-compliance with the use of complete personal protective equipment, which can increase the risk of work accidents (Abd Rahman & Daud, 2021). Therefore, this study aims to examine the influence of the quality of human resources and K3 programs on employee performance at PT. South Sulawesi Alam Perkasa.

The quality of Human Resources (HR) plays a crucial role in determining employee performance (Jawaad et al., 2019). HR quality includes not only technical skills and knowledge, but also the attitude and motivation of employees in carrying out their duties. Employees with a high level of competence will be better able to work efficiently and effectively, thereby contributing to increasing the company's productivity. In the industrial sector such as PT. Sultra Alam Perkasa, employees who have a deep understanding of the process and risks of B3 waste management are expected to reduce work errors that can endanger their safety. In this study, the quality of human resources will be measured in terms of knowledge, skills, and compliance with work procedures.

The Occupational Safety and Health (K3) program is another variable that plays a role in ensuring that employee performance remains optimal (Khair et al., 2022). The OSH program is designed to protect employees from workplace hazards and minimize the risk of accidents. At PT. Sulawesi Alam Perkasa, the implementation of K3 is very important considering the type of high-risk work. Although the company has implemented BPJS Kesehatan and BPJS Employment as part of the K3 program, compliance with the use of personal protective equipment has not been fully maximized. This shows that even though the K3 program already exists, the implementation in the field still needs to be improved. This study will measure the effectiveness of the K3 program in influencing employee performance based on compliance with safety protocols.

Research on the influence of human resource quality (HR) and occupational safety and health (K3) programs on employee performance has been carried out a lot, but there are still gaps that need to be explored further, especially in the hazardous waste management sector such as those carried out by PT. South Sulawesi Alam Perkasa. Most previous studies have tended to focus on the manufacturing sector or general industry, without taking into account the specific context of the B3 waste management industry, which has more complex occupational risks and requires more attention in terms of occupational safety.

In addition, although there have been many studies that have proven the positive influence of the K3 program on employee performance, there are still few studies that examine how the quality of human resources can moderate or mediate the relationship between K3 and employee performance. At PT. Sulawesi Alam Perkasa, even though the K3 program already exists, there are still many employees who do not fully understand the importance of personal protective equipment, which shows a gap in the understanding and implementation of the K3 program. This study aims to fill this gap by exploring how the quality of human resources can increase the effectiveness of the K3 program in improving employee performance.

This research was conducted at PT. Sulawesi Alam Perkasa, a company engaged in transportation and B3 waste management. The company operates in a work environment that has high risks related to occupational safety and health, given the nature of work related to

hazardous waste. Employees in this company are expected to use complete personal protective equipment (PPE), such as boots, helmets, earmuffs, and wearpacks. However, based on preliminary findings, there are still many employees who do not use PPE consistently, which can increase the risk of work accidents.

In addition, even though PT. Sulawesi Alam Perkasa has implemented the K3 program through BPJS Kesehatan and BPJS Ketenagakerjaan, the quality of employee human resources in the operational department is still not optimal. Most employees do not have a specific background in B3 waste handling and do not receive adequate training regarding their job risks. Therefore, this study aims to evaluate the influence of the quality of human resources and K3 programs on employee performance at PT. South Sulawesi Alam Perkasa, and provide recommendations for future improvements

This study aims to analyze the influence of quality of human resources (HR) and occupational safety and health (K3) program towards Employee Performance at PT. South Sulawesi Alam Perkasa, with a focus on three main aspects. First, the study evaluates the extent to which HR quality affects employee performance, taking into account that individual employee qualities, including skills, knowledge, and competencies, play an important role in determining work productivity and effectiveness. Second, this study analyzes the effectiveness of OSH programs implemented by companies, with the aim of assessing how occupational safety and health measures can improve employee performance through reducing the risk of accidents and creating a safe work environment. Third, this study examines the interaction between HR quality and OSH programs, with the aim of finding out whether HR quality can moderate or mediate the relationship between OSH programs and employee performance, which means that employees with better HR quality may be more effective in utilizing OSH programs to improve their performance. The results of this research are expected to make a practical contribution to the management of PT. Sulawesi Alam Perkasa, in the form of recommendations to improve the quality of human resources through more focused training and ensuring a more effective implementation of the K3 program, in order to reduce the risk of work accidents and improve overall employee performance.

## **Research Method**

This research was conducted at PT. Sultra Alam Perkasa which is located on Jalan Imam Bonjol No. 53, Kendari City, with a focus on the quality of human resources (HR) and occupational safety and health (K3) programs, as well as their influence on employee performance. The study population includes all employees of the operational department totaling 30 people, and because the population is relatively small, all respondents were made through the census method. The type of data used consists of quantitative data, which is in the form of numbers such as the number of employees and other related information, as well as qualitative data that includes an overview of the company, questionnaire results, and other supporting information. The data sources in this study consist of primary data and secondary data. Primary data was obtained directly from the field through observations and questionnaires

distributed to respondents, while secondary data was collected from various sources that were already available, such as company documents and other reports relevant to the research.

**Result**

**Multiple Linear Regression Analysis**

In the previous discussion, it has been stated that in order to be able to validate the hypothesis proposed in this study, namely the independent variable to the bound variable both simultaneously and partially carried out by multiple linear regression analysis, in this study can be seen in the following table:

<b>Multiple Regression Analysis Table</b>			
Independent Variable	Standardized Coefficient (b)	Calculation	Significant
Quality of Human Resources	1.681	7.414	000
Occupational Safety and Health (K3)	-.797	-3.517	002
R Square = 889			N= 30
R = 943			$\alpha = 0.05$
Fcal = 108,476			ttable= 1,703
Fsignificant = .000			Ftable= 2.57

Based on the results of the multiple linear regression analysis in the table above, the regression equation for the variables of Human Resource Quality (X1) and Occupational Safety and Health (K3) (X2) on Employee Performance (Y) is obtained as follows:  $Y = 1.68X1 - 0.797X2$ . This shows that an increase of one unit in the Human Resource Quality variable (X1) will increase Employee Performance (Y) by 1.68 units, while an increase of one unit in the Occupational Safety and Health variable (X2) will actually decrease Employee Performance (Y) by 0.797 units. An R Square value of 0.889 indicates that 88.9% of the variation in Employee Performance can be explained by Human Resource Quality and Occupational Safety and Health, while the remaining 11.1% is explained by other variables that are not included in this model. An R value of 0.943 shows a strong relationship between independent and dependent variables with a correlation of 94.3%.

Hypothesis testing is carried out simultaneously and partially. For simultaneous testing (F Test), an F-significant value of 0.000 was obtained which is smaller than alpha 0.05, and an F-count value of 108.476 which is greater than Ftable of 2.57. This shows that simultaneously, the Quality of Human Resources and Occupational Safety and Health have a significant effect on Employee Performance. The partial test (t-test) for the Human Resource Quality variable showed a significant t-value of 0.000 (less than 0.05) and a t-count value of 7.414, which was greater than the t-table of 1.703. This indicates that partially, the Quality of Human Resources has a positive and significant effect on Employee Performance. Furthermore, for the Occupational Safety and Health (K3) variable, a tsignificant value of 0.002 (less than 0.05) and a tcount value of -3.517 were obtained, which was greater than the ttable of 1.703. This means

that even though the regression coefficient value is negative, partially, the Occupational Safety and Health variables still have a significant influence on Employee Performance

## **Discussion**

Based on the results of the analysis in this study, it was found that the Quality of Human Resources (HR) and Occupational Safety and Health (K3) had a significant influence on Employee Performance at PT Sultra Alam Perkasa (Ahmad, 2022; Gamal et al., 2022; Pradja & Wibowo, 2022). These results confirm that both variables, both simultaneously and partially, make an important contribution in improving employee performance. This is supported by the results of the F test, where the F-significant value obtained is less than 0.05, and the F-count value is greater than the Ftable, which shows that the HR and K3 variables together have a significant influence on employee performance. This simultaneous influence shows that the quality of human resources and the implementation of effective occupational safety and health programs are key in improving individual performance within the company.

Partially, Human Resource Quality has also been proven to have a positive influence on employee performance. In the world of work, quality human resources are one of the main factors that determine the success of a company's operations (Darmawan et al., 2020). Human resources who are competent, have adequate skills, and knowledge, will be better able to carry out their duties well and achieve the targets that have been set. The quality of human resources includes various aspects, such as technical skills, soft skills, work experience, and professional attitudes. When HR within a company is of high quality, they will be more proactive, better able to face challenges, and more motivated to work efficiently (Chen et al., 2017). This directly increases employee productivity and work effectiveness, which ultimately has an impact on improving the overall performance of the company.

In addition to the quality of human resources, Occupational Safety and Health (K3) also has an important role in influencing employee performance. K3 is a program that aims to create a safe and healthy work environment, so that employees can work without worrying about the risk of accidents or diseases due to work. The implementation of good OSH can improve employee comfort and safety during work, which can ultimately increase work motivation and lower stress levels (Kineber et al., 2023; Schall Jr & Chen, 2022). When the work environment is considered safe, employees can focus more on their tasks without worrying about their safety. It also reduces the likelihood of work accidents, which can lead to absenteeism, decreased productivity, or even the loss of experienced workers. Therefore, the implementation of good OSH not only serves to protect employees but also contributes to improving performance directly.

The results of this study show that although K3 in some aspects may not always be prioritized in some companies, in the context of PT Sultra Alam Perkasa, the effective implementation of K3 proves to be important in maintaining and even improving employee performance. OSH is a supporting factor that ensures that the workforce can work safely and without physical or mental barriers, which ultimately encourages them to achieve higher productivity. The combination of quality human resources and good implementation of K3 forms a synergy that supports employees to work better.

This research also underscores the importance of a holistic approach in HR and K3 management. In an increasingly competitive business world, companies need to not only recruit qualified employees, but also ensure that they work in conditions that support productivity (Bilan et al., 2020). Therefore, company management needs to focus on continuously developing employees' skills and abilities through training, while continuously updating and implementing better occupational safety standards. Thus, the company can create a conducive work environment and support the continuous improvement of employee performance. Overall, this study confirms that Human Resource Quality and Occupational Safety and Health are two key factors that affect Employee Performance at PT Sultra Alam Perkasa. By paying attention to these two aspects, companies can create a better work environment and ensure that their employees are able to work optimally. Consistent implementation of a good OSH program, as well as continuous human resource development, will help companies to achieve higher and more sustainable performance in the future.

### **Conclusion**

Based on the results of this study, it can be concluded that the Quality of Human Resources (HR) and Occupational Safety and Health (K3) have a significant effect on Employee Performance at PT. South Sulawesi Alam Perkasa. Simultaneously, these two variables make a significant contribution to improving employee performance. Partially, the quality of human resources has a positive and significant effect on employee performance, which confirms that employees with better skills and competencies are able to work more effectively and efficiently. However, occupational safety and health (OSH) partially shows a significant negative influence on employee performance, which may be caused by other factors such as ineffective program implementation or excessive administrative burden related to the implementation of OSH.

This research provides several practical implications for company management. First, improving the quality of human resources through continuous training and development is an important priority to encourage better performance in the work environment. Improving employee skills and competencies is directly related to increasing the productivity and operational efficiency of the company. Second, although occupational safety and health (OSH) is supposed to create a safer work environment, the results of this study suggest that the implementation of OSH may require a review. Companies need to evaluate the effectiveness of OSH programs, especially in terms of their impact on employee performance, and ensure that OSH does not hinder performance through administrative burdens or inefficient practices.

This research has several limitations. First, the research was only conducted on one branch of PT. Sulawesi Alam Perkasa, so the results may not be generalized to other companies or other industries. Second, the relatively small number of samples, which is only 30 people, can affect the validity of the research results. With a larger sample, it is possible to obtain more representative results. Third, this study only uses two independent variables, namely HR quality and K3, while other factors that may also affect employee performance are not included in this research model, such as work motivation, work environment, and job satisfaction.

Further research is expected to expand the scope by involving more companies and branches to provide more generalizable results. In addition, a larger sample size will increase

the external validity of the study. Further research may also consider adding other independent variables that may affect employee performance, such as motivation, job satisfaction, and organizational culture, thus providing a more comprehensive picture of the factors that affect performance. Finally, further studies can explore more deeply why occupational safety and health (OSH) in this study has a negative influence on performance, to find solutions in improving the effectiveness of OSH programs.

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