



Influence of Job Stress and Safety Climate on Safety Performance in Indonesia Rock Mining Company

Muhammad Rifqi^{a 1}, Madju Yuni Ros Bangun^a

^a Institut Teknologi Bandung, Bandung, Indonesia

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Abstract

This study was carried out in one of Indonesia's rock mining companies. This company conducts mining operations with heavy equipment and strict safety protocols to ensure that mining is carried out safely. However, there are still a lot of accidents and complaints at this firm, and the employees are stressed out. This research aims to understand more about the safety climate and job stress and how they affect safety performance. An organization's perception of safety hazards in their workplace is known as the safety climate. Job stress is defined as a feeling of strain caused by an excessive workload and mental and emotional tension, which might impede individual performance. The quality of employee performance about safety objectives is referred to as safety performance. This study was carried out on all 85 employees of a mining company in Jambi, Indonesia, in the stone mining division. Using SPSS, this study used multiple linear regression to determine the impact of two factors on safety performance: safety climate and job stress. A simple linear regression test was used to examine the effect of safety performance on reputation and productivity. A simple linear regression test was used to investigate the impact of safety performance on reputation and productivity. A simple linear regression test was used to examine the effect of safety performance on reputation and productivity. The findings revealed that the two factors impacted safety performance if the sig value was less than 0.05 in this investigation. This study also discovered that performance level reputation and productivity.

Keywords: safety climate; safety performance; job stress; accidents; productivity; reputation

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1. Introduction

Mining is one of the most critical sectors in terms of economic growth. Mining is one of the significant sectors in Indonesia, and it has been growing for a long time. The mining sector encompasses

¹ Corresponding author.

E-mail address: muhammad_rifqi@sbm-itb.ac.id

many mining commodities, including hydrocarbons, metals, minerals, and building stones (Chincane and Sumant, 2021). Construction rock mining is one mining business that has much demand. This industry will produce rocks that may be utilized in various ways, including building construction. According to estimates, the rock market will reach 48,000 million dollars in 2026. This industry is expected to grow at a rate of 3.9 per cent. One factor for the stone industry's continued growth is economic development. Middle-income individuals began to utilize help to decorate their walls or play games. One of the causes of rising demand is the expansion of metropolitan areas (House, 2021).

The mining business cannot be established overnight. Before establishing this firm, make sure you have all of the necessary regulations, processes, and equipment in place. To obtain the desired results, all of this mining equipment needs specialized equipment. The tools are generally heavy and technical equipment that must be utilized to optimally carry out specific processes and skills without putting the user at risk (Sanmiquel et al., 2014). Accidents can happen at any stage of the manufacturing process, including selecting, cutting, and delivering. Accidents occur due to the rock's weight and the procedure, which involves heavy machinery and explosives that are hazardous to humans (Khoshakhlagh et al., 2021). The high number of workplace accidents, which are primarily caused by poor safety performance in high-risk industries, motivates occupational health and safety researchers to investigate and research this topic, mainly to obtain comprehensive answers about how workplace accidents occur and how improvements can be made (Jung, Woo, & Kang, 2020). According to researchers in the field of occupational safety and health, the safety climate has been discovered to have a substantial association with the phenomena of accidents in numerous industrial domains such as mining, chemical, and nuclear processes, according to researchers in the field of occupational safety and health (Hofmann & Stetzer, 1996). Simply put, the perception that people of an organization have about safety concerns in their workplace is known as the safety climate. As a result, a company's safety climate might represent how important work safety is to them (Liao et al., 2014).

Another aspect that may contribute to an increase in the frequency of accidents is the employee's well-being. Employee job stress is one of the most commonly addressed topics in well-being. Job stress may affect people in a variety of professions, including miners. A hefty workload is the source of this stress since most employees cannot complete all of the responsibilities set by the organization due to their restricted talents. They also feel pressure as a result of an undesirable work environment. Noise and heat temperatures in the workplace are not conducive (Kasim, 2016). According to other studies, workplace stress negatively affects worker safety behaviour. This suggests that the higher a person's stress level, the lower the degree of safety behaviour displayed by workers. The lesser a person's safety behaviour, the more likely an accident may occur (Khoshakhlagh et al., 2021).

From the description above, it can be seen that work safety is essential for a company. We also know from the description above that safety climate and job stress are essential in forming good safety performance. Therefore, researchers are interested in finding out these aspects in the following companies.

2. Literature Review

2.1. Safety

Safety is a limitation, which means that elements that can damage employees are limited or reduced. This harmful entity has the potential to interrupt corporate procedures. Policies, conduct, equipment, work culture, and the work atmosphere are examples of this type of safety (Sapuan et al., 2022). Workplace safety aims to provide a safe working environment for all employees. Furthermore, workplace safety directly impacts employee productivity and well-being and the quality of company

outcomes. As a result, businesses should establish a safe atmosphere for all employees with an acceptable degree of risk (Lavoue et al., 2013).

2.2. *Safety climate*

Safety climate comprises three components: organizational, environmental, and human. Safety-related policies and practices that might assist the organization allow safety are organizational components. Environmental aspects, such as co-workers and working conditions, relate to elements in a person's workplace that might help them stay safe. Personal characteristics, such as safety knowledge and attitudes, are derived from the individual and can aid safety. Combining these elements will impact people's views of the safety climate (Luo, 2020). Some of the characteristics of the safety climate basis are as follows:

a. Organizational

1. Management Safety Empowerment

This dimension refers to the company's management enabling existing human resources to improve workplace safety (Givehchi et al., 2017).

2. Management Safety Priority

This dimension means the company's management prioritizes employee safety over other factors, such as putting safety ahead of production targets (Givehchi et al., 2017).

3. Management Safety Justice

This dimension relates to the amount to which the company's management is committed to and responsible for employee safety through appropriate and adequate follow-up following the company's processes (Givehchi et al., 2017).

b. Individual

1. Worker Safety Commitment

This dimension refers to an individual's level of dedication and responsibility for their safety in the workplace. This dimension can include the degree to which employees are willing to follow all of the company's procedures (Givehchi et al., 2017).

2. Worker Safety Priority & Risk Non-Acceptance

This dimension relates to the level to which employees prioritize safety at work and the extent to which employees reject anything that could jeopardize workplace safety (Givehchi et al., 2017).

3. Worker Trust in Efficacy of Safety Systems

This dimension refers to how individuals believe in the efficacy or effectiveness of the entire safety system enforced in the company (Givehchi et al., 2017).

c. Environmental

This dimension relates to the amount to which individuals work in an atmosphere that promotes favourable work safety circumstances, such as (1) safe communication, (2) safe learning, and (3) safe co-workers (Givehchi et al., 2017).

2.3. *Stress*

Psychological stress is a relationship between a person and their environment that they feel is depleting or exceeding their resources and causing harm to their well-being. Two factors play a critical role in stress. In this relationship, cognitive assessments and coping are two crucial phases. The process of classifying an encounter and its many qualities in terms of their value to one's well-being is known as cognitive evaluation. Coping is described as cognitive and behavioural strategies to control, reduce, or accept the internal and external demands imposed by a stressful transaction. (1984, Lazarus & Folkman).

2.4. *Job stress*

Job stress is caused by interaction with a harmful or demanding external event or stressor, creating psychological, physiological, behavioural, and organizational disruptions. Job stress is also characterized as feeling under strain due to an excessive workload and mental and emotional tension in the form of responses to numerous job issues that might hinder an individual's ability to perform well at work (Parker and DeCottis, 1983). Job stress is a potentially dangerous physical and emotional reaction that occurs when a worker's abilities, resources, or requirements do not meet the job requirements. Job stress may cause problems to one's health and even lead to damage (Le Blanc, 2000).

2.4.1 *Physiological response*

Physiological response is a reaction that occurs when we are exposed to external stimuli. Physiological reactions can be triggered by various emotional states, including happiness, sadness, and even tension. When we are stressed, one of the symptoms is a physiological response. Stress can produce a variety of physiological reactions. Increased heart rate is one of the most prevalent physiological responses in stressed people. Hormones, one of which is adrenaline, cause this rise in heart rate. Physiological reactions such as changes in the rhythm are common when we are stressed. Breathing irregularly might disrupt the body's metabolism (Notarius and Lavenson, 1979).

2.4.2 *Physical environment*

The amount of stress a person feels is influenced by their work environment. Workplace stimuli might cause stress. The resulting stimulus can be varied, such as sound, temperature, and other factors (Vischer, 2007). In the mining industry itself, the stimulus that can cause stress can be the sound of a noisy engine. In addition, the air around the mine can also cause stress because the air in the mining area itself sometimes has quite a lot of air pollution.

2.4.3 *Mental demand*

The amount of mental effort a person spends while doing a task is called mental demand. This mental effort involves thinking, analyzing, remembering, and other mental tasks. Everything that has to do with mental strain is linked to human cognitive processes. When a person's mental demand is too high, stress can interfere with physiological functioning (Birch et al., 2000).

2.4.4 *Job requirement*

Job requirements are the skills, education, experience, and characteristics that an employer expects an employee to thrive in a specific role. Candidates can utilize the job criteria to see if they are qualified. Job requirements may help workers understand the scope of their jobs, and managers and HR experts can use them to explain the actions employees must complete to change jobs or advance in their careers (Murphy, 2002).

2.4.5 *Job future*

Workers' perspectives on the future of their jobs are referred to as job futures. This viewpoint might be either excellent or negative. This outlook on the future might shape job advancement, future capacities, and worker confidence in their abilities in the future (Murphy, 2002).

2.4.6 *Financial Stress*

Financial stress is anxiety caused by a person's inability to manage their finances. Lack of funds, inadequate management skills, and other economic stressors contribute to financial incapacity feelings of stress result from this financial inadequacy (Heo et al., 2022).

2.5. *Safety performance*

Safety performance is defined as individual behaviour in the workplace that contributes to the safety of these individuals, their co-workers, and the firm. Essentially, safety performance is the level of employee performance that is connected to or in line with safety goals (Neal & Griffin, 2004).

2.6. *Productivity*

Increasing productivity is the dream of every company. Productivity contains an understanding of economic and philosophical concepts of productivity concerning the business or human activities to produce goods or services that are useful for fulfilling the needs of human life and society in general. Technically, productivity compares the output (results) with the total resources necessary (inputs). The term "productivity" refers to comparing the results gained via effort per unit of time. Productivity reductions have also become more constrained in terms of inputs and outputs. Productivity may also be defined as a mindset that feels that life was better yesterday than it is today. Today's working style must be superior to yesterday's, and the job accomplished tomorrow must be superior to today's (Fitri and Saefulah, 2021).

2.7. *Reputation*

A person's evaluation of a company's excellent or negative reputation is known as reputation. This judgment is often subjective, based on many characteristics that someone has evaluated. The company's reputation is linked to its past. This history might be about other parties and their previous performance. This positive relationship and corporate success can influence a person's faith in a firm (Eccles, 2007).

3. **Method**

3.1. *Sample / Participants*

The business sector that will be investigated is rock mining. All of the participants are workers of a rock mining company. A census sampling strategy was utilized in the research. Censuses, often known as "full enumeration," collect data from the whole population (Johnson & Christensen, 2010). Censuses are one of the most accurate ways for academics to learn about the status of a people. On the other hand, the census approach often necessitates a high sample size, which might be challenging to achieve. The study's goal is to interview 100 or 80% of the manufacturing department's personnel.

3.2. *Instrument(s) and data collection procedures*

This study will employ five different instruments. The first is to assess the worker's safety climate. The instrument used in this study was developed from several prior studies on safety climate in the chemical sector, including The Nordic Climate Safety Questionnaire NOSACQ-50, which was published in 2011. In this study, the author combines Lazarus (1984), Hoe, Cho, and Lee with the modified NIOSH Generic Job Stress Questionnaire (2022). This questionnaire has several dimensions, all of which are listed in the literature review. This study will change the Neal & Griffin 2004 safety

performance measuring instrument to assess safety performance. This study will modify the Neal & Griffin 2004 safety performance measuring device to determine safety performance, which comprises Safety Compliance and Participation. The author creates questionnaires to measure productivity and reputation. This questionnaire was based on Abad et al. (2013) and Fatimah (2007) for productivity.

Meanwhile, Fiona Francisca's questionnaire assesses reputation (2011). The respondent must describe and support each answer option given a score in this research. The author produced five levels of a Likert scale in a questionnaire, which the selected respondents will fill out.

A validity test is conducted to verify that the questionnaires can measure the intended variable. From this validity test, it can be seen that most of the questionnaire items are valid. There are only three invalid items. Those items are number 17 on the safety climate questionnaire and number 3 and 8 on the Job Stress questionnaire. Those items are going to be removed for the following analysis. A reliability test was also conducted. From this research, all of the questionnaires are considered reliable.

The questionnaires are distributed online to the respondent. This online distribution is chosen because of the limitation during the pandemic. The respondents are all workers from one of the rock mining companies in Indonesia.

3.3. *Data analysis*

Before conducting the data analysis, several tests are conducted. The first one is the validity test, and the second one is the reliability test. In this study, multiple linear regression was conducted to determine the effect of the independent variables Job Stress and Safety climate on the dependent variable, namely Safety performance. Two simple linear regression analyses will be carried out as well, where the first analysis aims to determine the effect of safety performance on the company's reputation. All of the calculations are done by using SPSS software. There are going to be four hypotheses that are going to be tested. The details of the hypothesis above are as follows:

First hypothesis

H0: Job stress has no significant effect on safety performance.

H1: Job stress has a significant effect on safety performance.

Second Hypothesis

H0: Safety climate does not have a significant effect on safety performance.

H1: Safety climate has a significant influence on safety performance.

Third Hypothesis

H0: Safety performance has no significant effect on productivity.

H1: Safety performance has a significant effect on productivity.

Fourth Hypothesis

H0: Safety performance has no significant effect on reputation.

H1: Safety performance has a significant influence on reputation.

4. Results

Table 1. Regression analysis job stress and safety performance

Independent variable	Dependent variable	Beta	Sig.	Result
Job stress	Safety performance	-0,573	0.00	Accepted

We can observe from this table that the Sig. Value is less than 0.05, indicating that job stress has a considerable impact on safety performance. We can also notice that the Beta number is negative in this table, indicating that the greater the value of Job Stress, the lower the number of safety performance.

Table 2. Regression analysis safety climate and safety performance

Independent variable	Dependent variable	Beta	Sig.	Result
Safety climate	Safety performance	0,338	0.01	Accepted

The Sig value is less than 0.05 in this table, showing that Safety Climate significantly influences safety performance. We can also notice that the Beta number is positive in this table, indicating that the greater the value of Job Stress, the higher the number of safety performance.

Table 3. Regression analysis safety performance and reputation

Independent variable	Dependent variable	Beta	Sig.	Result
Safety Performance	Reputation	0,799	0.00	Accepted

The Sig value is less than 0.05 in this table, indicating that Safety Performance substantially impacts reputation. The Beta number is positive in this table, indicating that the greater the value of Safety Performance, the better the reputation level.

Table 4. Regression analysis safety performance and productivity

Independent variable	Dependent variable	Beta	Sig.	Result
Safety performance	Productivity	0,338	0.01	Accepted

We can see from this table that the Sig. Value is less than 0.05, indicating that Safety Performance substantially impacts productivity. The Beta number is positive in this table, indicating that the greater the value of Safety Performance, the higher the productivity.

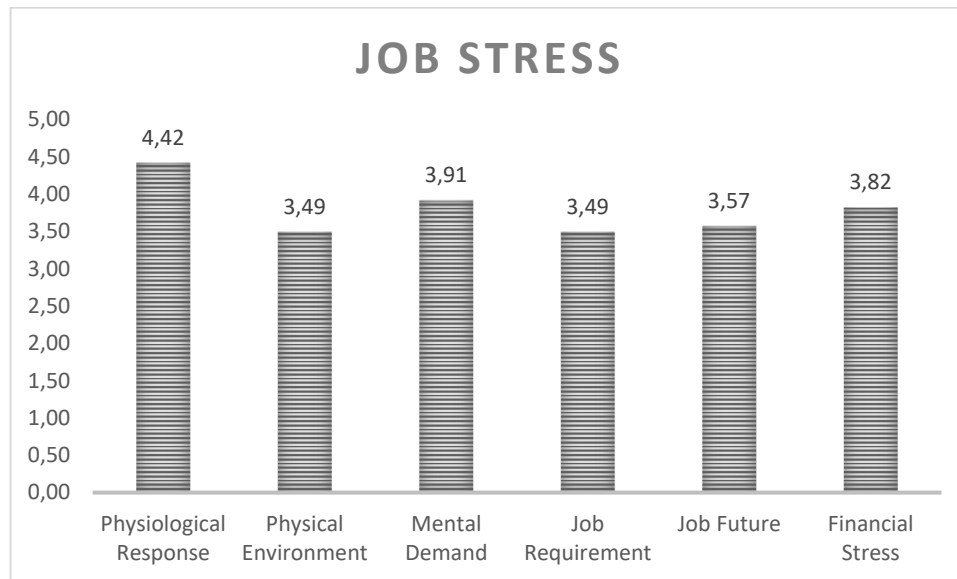


Figure 1. Job stress descriptive result

The average stress score from each dimension is shown in this graph. We can see that most of the data is over three, indicating moderate to high. The following is the value of each dimension. The physical environment has a value of 3.49, Mental demand has a value of 3.91, Job Requirement has a value of 3.49, Job Future has a value of 3.57, and financial stress has a value of 3.82. The phycological reaction has the most significant average score, whereas physical environment and work need have the lowest average score.

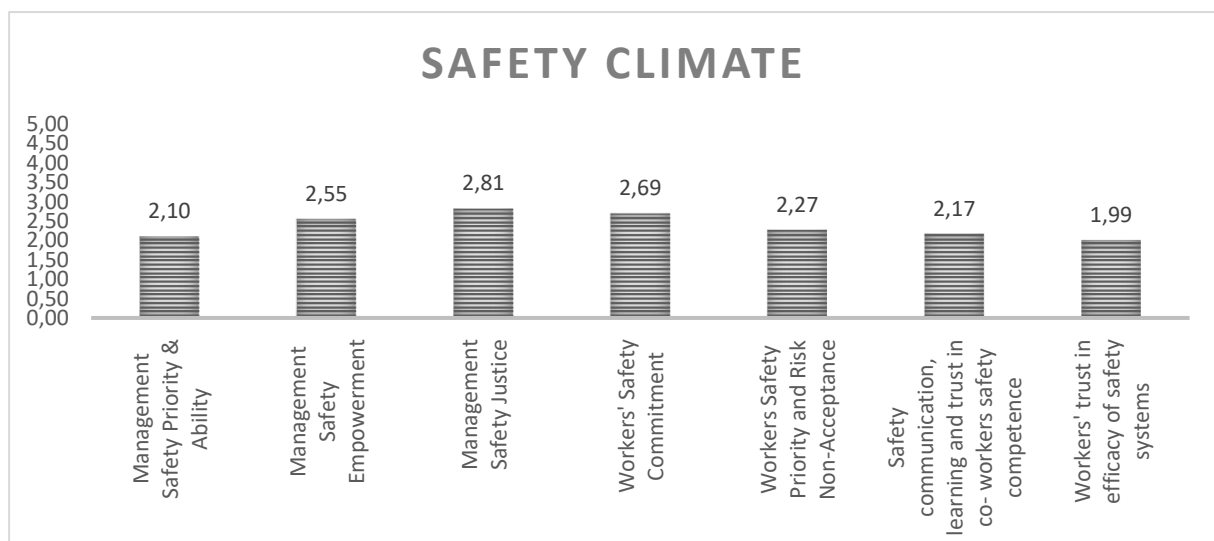


Figure 2. Safety climate descriptive result

This graph depicts the average score for each Safety Climate dimension. This graph reveals that all of the data falls below three, indicating that the safety climate at this firm is moderate to poor. The following is the value of each dimension area. Workers' Safety Commitment is 2.69, Worker Safety Priority and Risk Non-Acceptance is 2.27, and Safety Communication Learning and Trust in Coworkers' Safety Competence is 2.17. The percentage of workers that believe safety mechanisms are ineffective is 1.99. The most important aspect of the safety climate is management safety justice, whereas the least important one is workers' belief in safety systems.

5. Discussion

The regression result of occupational stress and safety performance is shown in Table 1, and stress has a negative impact on safety performance. This suggests that work-related stress lowers safety performance. This is consistent with a prior study, which found that stress might reduce safety performance. Workers' stress causes them to disregard current safety measures to accomplish their jobs as soon as possible. Workplace pressure leads workers to become stressed and disregard current safety rules, lowering their safety performance. Reducing a worker's stress levels may result in improved safety performance. The favourable impact of the safety atmosphere on safety performance is seen in Table 2. Previous studies support the outcomes of this inquiry. Previous research has shown that the safety climate influences safety performance. The safety climate may affect safety performance, including knowledge, motivation, compliance, and involvement. When the safety climate improves, so does the safety performance. The favourable impact of safety performance on productivity and reputation is seen in Tables 3 and 4. The way a person performs in terms of safety might impact their productivity. When accidents occur, safety performance may minimize impediments and improve workers' impressions of corporate productivity. The company's productivity might lead to more outstanding results in all areas, including financial results and employee well-being. Companies that do well in terms of safety will have a better safety reputation. The greater a company's safety performance, the higher its degree of safety. It improves the employee's perspective and attitude and the perception and attitude of others surrounding the organization.

The descriptive result reveals that this company's overall safety climate is poor. The low number of each dimension demonstrates this. Safety Management Priority & ability refers to the company's approach to safety compared to other factors like objectives and earnings. Based on the information gathered, the average score is 2.10, which is considered poor. This low figure indicates that most employees still believe the corporation prioritizes other factors than worker safety.

The importance of management's involvement in involving current human resources in enhancing workplace safety is referred to as management safety empowerment. This dimension has an average of 2.55, which is still rated as medium to low in this investigation. Figure 2 illustrates that some employees still believe the company's management cannot include employees in enhancing workplace safety.

The extent to which a company's commitment and responsibility for its employees' safety is referred to as management safety justice. In this scenario, a score of 2.81 was achieved as the average. Among the other climate safety parameters, this has the highest score. This dimension falls under the moderate group, indicating that employees in this firm view safety justice as neither excellent nor terrible.

Every worker's obligation and responsibility to their work environment is referred to as "worker safety commitment." With a score of 2.69, the average Worker Safety commitment falls into the medium range, according to the findings of this study. This finding demonstrates that workers' commitment to their safety is still present, even though they may occasionally break it.

Worker safety priority and risk non-acceptance refer to how workers place safety as their top priority. The extent to which they are willing to refuse work poses a high safety risk. The average score obtained

from this dimension is 2.27, which is a low figure. This means that most of the workers here do not prioritize safety, and most of them do not reject jobs with a high safety risk.

The amount to which individuals have a work environment that fosters favourable work safety circumstances, which includes (1) safety communication, (2) safety learning, and (3) competent colleagues in safety, is measured by safety communication, learning, and trust in co-workers. The average value of this study's findings is 2.17. This is still a low number, implying that their workplace lacks safety communication, learning, and co-workers who are concerned about their safety.

Workers' trust in the efficacy of the safety system refers to how secure the existing safety system in the company is effective in maintaining their safety. The results of this study indicate an average score of 1.99, where this number is classified in the low category. It means that most workers do not believe in the safety system within this company.

When we look at the descriptive result from the work stress, we can see that this organization has much stress. Figure 1 shows that the average is more than three, which began with a physiological response. The physiological symptoms that employees feel while under stress are physiological reactions. According to the findings of this study, the average physiological response score is 4.42, which is considered relatively high. This suggests that most workers endure physiological symptoms as a result of stress.

Physical environment refers to how much the influence of the surrounding environment affects the stress experienced by workers. These environmental influences can be in the form of noise, hot temperatures, and dirty air. The average score obtained from this research is 3.49, which is classified into the high category. This means that workers still assume that their work environment makes them experience stress.

Mental demand is how their job requires workers to use their mental cognitive abilities. From the results of this research, an average score of 3.91 was obtained. This score indicates that the cognitive demand required to work in this job is high. Workers assume that work in this company requires high cognitive abilities.

Employees' amount of work when working for a corporation is called job requirements. Workers' workload is evaluated as high, according to the data. The average score achieved, which is 3.49, demonstrates this.

The amount of their anxiousness over their career's future thus far is referred to as Job Future. This study received a 3.57, which is considered a high level. This research indicates that most workers are still concerned about their job prospects.

Financial stress describes how employees deal with money troubles and concerns. This study's findings reveal an average score of 3.82, which falls into the high category.

6. Conclusions

According to this study, job stress and the safety climate impact safety performance. This implies that the two factors play a role in determining whether or not company x's safety performance is good. Overall, there is a good correlation between the safety climate and safety performance. It indicates that the higher the company x's safety climate, the higher the company's safety performance. There is a negative association with the stress variable. This statement implies that the higher the company's stress level, the poorer its safety performance. It is clear that this organization still has a low safety climate when considered descriptively. The obtained average is no more than 3. As a result of this discovery, businesses must continue to enhance their safety performance. Most of the respondents were classified in the high category for variable stress. This statement implies that many workers still feel stressed in this company. This increased stress means that companies must pay more attention to and deal with workers' stress problems. In addition, researchers also see whether there is a relationship between safety

performance and reputation and productiveness. From the research results, it was found that the two variables can be influenced by safety performance. The better the safety performance of this company, the higher the reputation and productivity.

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References

- Abad, J., Lafuente, E., & Vilajosana, J. (2013). The OHSAS 18001 certification process assessment: Objective drivers and consequences on safety performance and labour productivity. *Safety Science*, 60, 47-56.
- Birch, L., Juul-Kristensen, B., Jensen, C., Finsen, L., & Christensen, H. (2000). Acute response to precision, time pressure and mental demand during simulated computer work. *Scandinavian journal of work, environment & health*, 299-305.
- Eccles, R. G., Newquist, S. C., & Schatz, R. (2007). Reputation and its risks. *Harvard Business Review*, 85(2), 104.
- Fatimah, F. (2007). Pengaruh tingkat pendidikan, motivasi, usia dan pengalaman kerja terhadap produktivitas kerja karyawan bagian keperawatan pada rumah sakit PKU muhammadiyah Surakarta (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Givehchi, S., Hemmativaghef, E., & Hoveidi, H. (2017). Association between safety leading indicators and safety climate levels. *Journal of Safety Research*, 62, 23–32. <https://doi.org/https://doi.org/10.1016/j.jsr.2017.05.003>
- Fitri, S. R. N., & Saifullah, S. (2021). Pengaruh Perilaku Organisasi Terhadap Peningkatan Produktivitas Kerja Pegawai Di Dinas Perpustakaan Dan Kearsipan Kabupaten Sidenreng Rappang. *JIA: Jurnal Ilmiah Administrasi*, 9(1), 49-53.
- Heo, W., Cho, S. H., & Lee, P. (2020). APR Financial Stress Scale: Development and validation of a multidimensional measurement. *Journal of Financial Therapy*, 11(1), 2.
- Johnson, B., & Christensen, L. (2010). *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. SAGE Publications. Retrieved from <https://books.google.co.id/books?id=BTMiAQAAQBAJ>
- Khoshakhlagh, A. H., Yazdanirad, S., Hatamnejad, Y., Khatooni, E., Kabir, S., & Tajpoor, A. (2021). The relations of job stress dimensions to safety climate and accidents among the workers. *Heliyon*, 7(9), e08082.
- Lavoue, J., Friesen, M. C., & Burstyn, I. (2013). Workplace measurements by the US Occupational Safety and Health Administration since 1979: descriptive analysis and potential uses for exposure assessment. *Annals of occupational hygiene*, 57(1), 77-97.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Le Blanc, P., de Jonge, J., & Schaufeli, W. B. (2000). *Job stress and health*. Blackwell Publishing.

- Murphy, L. R. (2002). Job stress research at NIOSH: 1972–2002. In Historical and current perspectives on stress and health. Emerald Group Publishing Limited.
- Neal, A., & Griffin, M. A. (2004). Safety climate and safety at work. In The psychology of workplace safety. (pp. 15–34). Washington, DC, US: American Psychological Association. <https://doi.org/10.1037/10662-002>
- Notarius, C. I., & Levenson, R. W. (1979). Expressive tendencies and physiological stress response. *Journal of Personality and Social Psychology*, 37(7), 1204
- Parker, D. F., & DeCotiis, T. A. (1983). Organizational determinants of job stress. *Organizational behaviour and human performance*, 32(2), 160-177.
- Sapuan, S. M., Ilyas, R. A., & Asyraf, M. R. M. (2022). Occupational Safety and Health Administration in Composite Industry. In *Safety and Health in Composite Industry* (pp. 229-252). Springer, Singapore.
- Sanmiquel, L., Rossell, J. M., Vintró, C., & Freijo, M. (2014). Influence of occupational safety management on the incidence rate of occupational accidents in the Spanish industrial and ornamental stone mining. *Work*, 49(2), 307-314.
- Vischer, J. C. (2007). The effects of the physical environment on job performance: towards a theoretical model of workspace stress. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 23(3), 175-184.

Pengaruh Stres Kerja dan Iklim Keselamatan Terhadap Kinerja Keselamatan di Perusahaan Tambang Batuan Indonesia

Abstrak

Penelitian ini dilakukan di salah satu perusahaan pertambangan batu di Indonesia. Perusahaan ini melakukan operasi penambangan dengan alat berat dan protokol keselamatan yang ketat untuk memastikan penambangan dilakukan dengan aman. Namun, masih banyak kecelakaan dan keluhan di perusahaan ini, dan karyawan stres. Penelitian ini bertujuan untuk lebih memahami tentang iklim keselamatan dan stres kerja serta bagaimana pengaruhnya terhadap kinerja keselamatan. Persepsi organisasi tentang bahaya keselamatan di tempat kerja mereka dikenal sebagai iklim keselamatan. Stres kerja didefinisikan sebagai perasaan tegang yang disebabkan oleh beban kerja yang berlebihan dan ketegangan mental dan emosional, yang dapat menghambat kinerja individu. Kualitas kinerja karyawan tentang tujuan keselamatan disebut sebagai kinerja keselamatan. Penelitian ini dilakukan pada 85 karyawan sebuah perusahaan pertambangan di Jambi, Indonesia, di divisi pertambangan batu. Menggunakan SPSS, penelitian ini menggunakan regresi linier berganda untuk menentukan dampak dua faktor terhadap kinerja keselamatan: iklim keselamatan dan stres kerja. Sebuah uji regresi linier sederhana digunakan untuk menguji pengaruh kinerja keselamatan pada reputasi dan produktivitas. Sebuah uji regresi linier sederhana digunakan untuk menyelidiki dampak kinerja keselamatan pada reputasi dan produktivitas. Sebuah uji regresi linier sederhana digunakan untuk menguji pengaruh kinerja keselamatan pada reputasi dan produktivitas. Temuan mengungkapkan bahwa kedua faktor tersebut mempengaruhi kinerja keselamatan jika nilai sig kurang dari 0,05 dalam penyelidikan ini. Studi ini juga menemukan bahwa kinerja tingkat reputasi dan produktivitas.

Kata kunci: iklim keselamatan, kinerja keselamatan, stress kerja, kecelakaan, produktifitas, reputasi

Biographies of authors

Muhammad Rifqi

muhammad_rifqi@sbm-itb.ac.id

Madju Yuni Ros Bangun

yuniros@sbm-itb.ac.id