International Journal of Economics, Business and Accounting Research (IJEBAR)
Peer Reviewed – International Journal
Vol-7, Issue-3, 2023 (IJEBAR)
E-ISSN: 2614-1280 P-ISSN 2622-4771
https://jurnal.stie-aas.ac.id/index.php/IJEBAR

DEVELOPING WORK SAFETY BASED ON OCCUPATIONAL HEALTH AND SAFETY CAPABILITIES AND FACILITIES THROUGH RISK MANAGEMENT IMPLEMENTATION

Iwan Sumantri[1], Marihot Simanjuntak[2], April Gunawan[3]
Sekolah Tinggi Ilmu Pelayaran Jakarta
E-mail: Iwansumantri72@yahoo.com

Abstract: The research objective was to determine the effect of occupational health and safety **(**OHS) capability and facilities on the work safety of unloading workers at Tanjung Priok Port, Jakarta, by mediating risk management implementation (RMI). The study used a survey method with a sample of 101 unloading workers taken at simple random. The research instrument used to collect data was a questionnaire in the form of a Likert scale, and the results were analyzed using path analysis processed with Smart-PLS 4 software. The results showed that OHS capability and facilities affect safety unloading workers mediated by RMI. These findings not only confirm the results of previous research, which serve as the basis for building theoretical models and hypotheses, but also introduce a new empirical model of the influence of OHS capabilities and facilities on work safety by mediating MRI. These findings provide a theoretical contribution to the development of management science, especially safety and risk techniques, and have practical implications for the management of unloading workers. Therefore, the new empirical model can be used as material for discussion among academics, researchers, and practitioners before being adapted or adopted to improve work safety in the future.

Keywords: *OHS, capability, facility, work safety, risk management*.

Submitted: 2023-08-08; Revised: 2023-08-24; Accepted: 2023-09-07

1. Introduction

Transportation is very crucial and strategic for the economy of a country. Transportation plays an important role in the activity of moving people or goods from one place to another using land, sea, and air modes of transportation. Therefore, transportation is not only related to moving people from one place to another but also related to logistics that functions to meet everyone's needs for goods and services. Indonesia, which is an archipelagic country consisting of a group of islands, in its activities relies heavily on sea transportation, especially for inter-island freight transport. Therefore, the existence of a port is very vital to support sea transportation activities. One of the largest and busiest ports in Indonesia is Tanjung Priok Port, Jakarta. This port carries out the activity of loading and unloading goods in very large quantities. Because of this, thousands of unloading workers are involved in the activity. Their activities include stevedoring, cargodoring, and receiving/delivery. As part of the unloading organizational work unit, unloading workers is responsible for the loading and unloading facilities and equipment used in unloading operational activities as well as the safety of the

goods loaded until delivery to the recipient, ensuring the safety unloading workers during the implementation of activities, providing equipment and equipment to carry out adequate unloading activities (Martono & Tjahjono, 2017). Unloading workers has a key role in achieving the performance of unloading activities from and to ships at the port. Several studies in many countries demonstrated that work safety affects work productivity (Busyairi et al., 2014; Hidayatullah & Tjahjawati, 2017; Wahyuni et al., 2018; Nugroho & Haryono, 2020; Lumenta et al., 2021) and performance (Arif & Moko, 2016; Dumondor, 2017; Damayanti et al., 2019; Marganto et al., 2021; Pratiwi & Fatah (2021). Unloading workers is part of human resources at the port, which has a specific function and role in the unloading of goods. Unloading workers assists in expediting and facilitating the process of unloading activities. Therefore, unloading workers has an important role in work safety, which needs to be maintained properly. However, in reality, the safety of the unloading workers at Tanjung Priok Port, Jakarta, is not well guaranteed. In the period 2020-2022, there were 21 cases of unloading workers work accidents at PT Pelabuhan Tanjung Priok, with details of 2 people dying and 19 people being injured. These accident cases can be triggered by human factors (workers), including inadequate OSH capabilities (Sudrajat, 2013), OSH facilities (Barnabas & Nirmalawati, 2012), and the application of risk management that has not been maximized (Fiyanzar et al., 2016; Melissa et al., 2017). OHS capability is the ability to properly exploit one's own and organizational resources as well as one's own potential to carry out specific activities, which are manifested in indicators of surviving suffering, damage, and loss at work as well as occupational health dimensions which include: physical condition, mental and emotional stability. OHS facilities are anything that can facilitate and expedite the implementation of loading and unloading activities at ports, which include ship side nets, rope slings, wire slings, rope nets, wire nets, sling barriers, spreader sets, seals, lifting hooks, and wheelbarrows. Meanwhile, RMI is the implementation of a structured approach to managing uncertainty related to threats reflected in a series of human activities by using resource empowerment/management, as seen in risk identification, risk analysis, risk evaluation, risk avoidance, risk mitigation, risk transfer to a third party, and accept the risk. This phenomenon is urgent and interesting to study, especially regarding the role of risk management in mediating the effect of OSH capabilities and facilities on the work safety of unloading workers at Tanjung Priok Port, Jakarta.

2. Literature Review

2.1 Work Safety

Safety is the protection of a person's physical well-being (Mathis & Jackson, 2016) or the protection of employees from injuries caused by accidents at work (Mondy, 2015). In addition, work safety is also an attempt to guarantee safe and healthy working conditions to prevent accidents, disabilities, and death due to work accidents for every employee and to protect existing human resources (Lumbangaol et al., 2022). For Wirawan (2015), work safety is a condition where workers are safe and do not experience accidents in carrying out their duties and work. Occupational safety in this context is related to loading and unloading workers at the Port, who carry out loading and unloading activities on ships. This type of work is a high risk that requires extreme caution. In loading and unloading activities, unloading workers must follow a number of loading principles, namely to protect the ship, to protect the cargo, the safety of crew and longshoremen, neat and systematic loading and discharging, and use of loading space as much as possible to minimize the occurrence of broken stowage (Ratnawati & Silvana, 2021). According to Triyono et al. (2014), several things that must be considered in

safety are the control of accident loss and the ability to identify and eliminate unacceptable risks.

2.2 OHS Capability and Work Safety

Capability is the ability to properly exploit the resources that are owned within oneself and within the organization, as well as one's own potential to carry out certain activities or series of activities (Amir, 2019). At the organizational level, capabilities are organizational skills and abilities in carrying out work activities needed in their business (Robbins & Coulter, 2016). Meanwhile, at the individual level, capability is the ability possessed by a person to perform various tasks in a job (Robbins et al., 2015). Capability can be related to OHS, which is an effort to protect so that every workforce and other people who enter the workplace are always in a healthy and safe condition and the production process resources can be carried out safely, efficiently and productively (Tarwaka, 2014). According to Rivai (2014), OHS refers to the physiological-physical and psychological conditions of the workforce caused by the work environment provided by the company. Thus, OHS capability is the ability to properly exploit personal and organizational resources as well as self-potential to carry out specific activities so that they are free from accidents which include the dimension of being safe from suffering with indicators identifying potential work accidents and minimizing the occurrence of work accidents; damage with indicators to calculate the impact of work accidents, and minimize work accidents; losses in the workplace with indicators identifying work equipment that has the potential to cause work accidents and minimizing work practices that can harm health; physical condition with indicators of realizing the importance of using PPE and understanding how to maintain health; mental with indicators of knowing how to maintain a mental condition and understand safe and healthy work procedures; emotional stability with indicators of being careful and managing feelings (Mathias & Jackson, 2016; Mondy, 2015; Mangkunegara, 2014). When these indicators are in high condition, they have the potential to stimulate work safety for unloading workers. Sudrajat's research (2013) results show that OHS capabilities affect work safety. Thus, the first hypothesis (H) can be formulated as follows:
H_1: OHS capability has a direct effect on work safety.

2.3 OHS Facilities and Work Safety

Facilities are everything, both objects and services that accompany the services provided by companies, both service companies, trade, and industrial companies (Youti in Mardiyani & Murwatiningsih, 2015). Facilities are physical resources that exist before a service can be offered to consumers (Kotler, in Apriyadi, 2017). Besides that, it is part of the physical evidence, which includes the physical facilities of the organization and other forms of physical communication (Toriq & Martoatmodjo, 2014). In loading and unloading activities, the facilities used by unloading workers are ship side nets, rope slings, wire slings, rope nets, wire nets, sling barriers, spreader sets, seals, lifting hooks, and wheelbarrows (Kotler, in Apriyadi, 2017; Arikunto & Jabar, 2018; Permenhub 152/2016). If the facilities are in adequate condition in terms of quantity and quality, it can encourage an increase in the safety of unloading workers. A study by Nasrullah (2022) also indicated that using personal protective equipment as a part of facilities has a negative effect on work accidents as an indicator of work safety. Therefore, the second hypothesis can be promotet as follows:
H_2: OHS facilities have a direct effect on work safety.

2.4 RMI and Work Safety

Implementation is an action taken both individually and in groups with the intention of achieving the goals that have been formulated (Moloeng, 2009), including risk management as an effort to identify, analyze, and control risks in every company activity with the aim of obtaining higher effectiveness and efficiency (Darmawi, 2014). Risk management also reflects the procedure design and procedure implementation to manage a business risk (Kasidi, 2014). Risk management is a key business process in the private and public sectors worldwide (ISO 2008, in van der Poll & Mthiyane, 2018). Risk management is a process by which companies identify, measure, prioritize, and reduce the adverse effects of uncertainty (Chapman & Ward, in Mohammed & Knapkova, 2016). Thus, risk management is a systematic approach to reducing the negative consequences of any particular phenomenon. An approach that defines risk only from a downward perspective can lead to risk aversion. COSO (in Pamungkas, 2019) explains that risk management is a process that is influenced by the entity's board of directors, management, and other personnel, applied to corporate strategy and objectives, designed to identify potential events that may affect the entity and is in risk management a very large amount, to provide reasonable assurance regarding the achievement of the entity's objectives. Risk management includes the following dimensions: risk identification with indicators of the likelihood of a risk occurring and information on the type of risk; risk analysis with indicators explaining potential risks and determining risk priorities; risk evaluation with indicators of risk control and risk segregation; avoid risks with indicators of minimizing risks and anticipating risks; risk mitigation with indicators of following work procedures and working according to function; transfer of risk to third parties with indicators of cooperation with insurance companies and employment insurance; accept the risk with indicators of being responsible for the risk and not blaming other parties (Darmawi, 2014; COSO, in Pamungkas, 2019; Wahyudi et al, 2013). If these indicators can be codified properly, then it has the opportunity to help improve work safety for unloading workers. The results of research by Soputan et al. (2014), Fiyanzar et al. (2016), Melissa et al. (2017), and de Oliveira et al. (2022) also revealed that implementing risk management can improve work safety. Accordingly, the third hypothesis can be proposed as follows:

H_3: RMI has a direct effect on work safety.

2.5 The Effect of OHS Capabilities and Facilities on RMI

RMI does not only affect work safety but is also influenced by OHS capabilities and facilities. The research results of Rahmania et al. (2018) proved that OHS capability has a significant effect on the implementation of risk management. That is, when OHS capability is well conditioned (high), it can trigger an increase in risk management implementation. Likewise, the study conducted by Basuki et al. (2015) also shows that OHS facilities have a significant relationship with the implementation of risk management. This means that when OHS facilities are available adequate in terms of quantity and quality, it can stimulate an increase in the application of risk management. Therefore, the hypothesis can be formulated:

H_4: OHS capability has a direct effect on the implementation of risk management.

H_5: OHS facilitiy has a direct effect on the implementation of risk management.

2.6 Mediation Rore of RMI

Several previous research results show that the application of risk management not only affects work safety (Fiyanzar et al., 2016; Melissa et al., 2017) but is also influenced by OHS capabilities (Rahmania et al., 2018) and OHS facilities (Basuki et al. al., 2015). It opens up

opportunities for the influence of OHS capabilities and facilities on work safety by mediating the implementation of risk management. When OHS capabilities and facilities are conditioned in a high and adequate condition, they have the potential to encourage an increase in the quality of risk management implementation and then have implications for the safety of unloading workers. Hence, the hypothesis can be promoted:
H_6: OHS capability has an indirect effect on work safety mediated by RMI.
H_7: OHS facilities have an indirect effect on work safety mediated by RMI.

3. Research Methods

3.1 Participants

The research participants as a sample consisted of 101 unloading workers at Tanjung Priok Port, Jakarta. Most of them are men (90.10%) and are married (81.19%). Most of them were > 36 years old (64.36%) with undergraduate education (45.54%) and high school (42.57%). The majority of their work experience is > 16 years (48.51%), 11-15 years (16.83%), 6-10 years as many as 14 (13.86%), and <5 years (10.79%).

3.2 Procedure and Materials

This research uses a quantitative approach with a survey method. Using a Likert scale, a questionnaire was employed to collect data with five options: never (score = 1), rarely (score = 2), sometimes (score = 3), often (score = 4) and always (score = 5). Questionnaire was constructed by researchers based on theoretical dimensions and indicators of the experts and designed in Google Forms and shared via the WhatsApp application. Indicators of OHS capability consist of suffering, damage, loss, physical condition, and mental and emotional stability (Mathias & Jackson, 2016; Mondy, 2015; Mangkunegara, 2014) with 11 items. Corrected total item correlation coefficient (CI-TCC) = 0.426 to 0.922 and alpha coefficient (AC) = 0.900. Indicators of OHS facility consist of Shipside nets, rope sling, wire slings, rope nets, wire nets, hamper slings, spreader sets, seals, lifting hooks, and wheelbarrows (Kotler, in Apriyadi, 2017; Arikunto & Jabar, 2018; Regulation of the Minister of Transportation of the Republic of Indonesia Number 152/2016) with 18 items. The CI-TCC of them = 0.861 to 0.975, and AC = 0,987. Indicators of RMI comprise risk identification, risk analysis, risk evaluation, risk avoidance, risk mitigation, risk transfer to third parties, and accepting risks (Darmawi, 2014; COSO, in Pamungkas, 2019; Wahyudi et al., 2013: 59) with 14 items. The CI-TCC of them = 0.457 to 0.890, and AC = 0.939. Finally, indicators of work safety comprise protecting workers, maintaining the safety of others, protecting equipment and workplaces, protecting the environment, and expediting work (Lumbangaol et al., 2022; Wirawan, 2015; Triyono et al., 2014) with ten items. They have CI-TCC = 0.637 to 0.974 and AC = 0,975. All items have CI-TCC > .361, and all variables have AC =.70; therefore, it is valid and reliable as a research instrument (Widodo, 2021).

3.3 Data Analysis

The data analysis was conducted by path analysis supported by descriptive and correlational analysis. The descriptive analysis describes the condition of each research variable, while correlational analysis finds the relationship between variables. SPSS version 22 was performed descriptive and correlational analysis, while Smart-PLS version 4 for path analysis.

4. Results and Discussion

4.1 Results

The results of the descriptive analysis, as presented in Table 1, show the average value (mean) from smallest to largest: work safety = 47.24, OSH capability = 48.19, implementation of risk management = 63.96, and OSH facilities = 82, 67. While the standard deviation values (SD): work safety = 4.043, OSH capability = 7.471, implementation of risk management = 6.943, and OSH facilities = 8.690. In general, the mean value is greater than the SD value. It demonstrates an appropriate data representation. Furthermore, the correlation analysis results between variables indicated the correlation coefficient from the smallest to the largest were OSH capability and OSH facilities = 0.614, OSH facilities and RMI= 0.652, OSH capability and RMI = 0.684, OSH facilities and work safety = 0.708, OHS capability and work safety = 0.746, and RMI and work safety = 0.782. In addition, the results of the correlation analysis indicated that the relationship between all variables was significant (p .01), indicating that all variables were interdependent.

Table 1. Descriptive statistics and correlational matrix

Variables	Mean	SD	1	2	3	4
1. OHS Capability	48,19	7,471	1,00			
2. OHS Fasility	82,67	8,690	0,614**	1,00		
3. RMI	63,96	6,943	0,684**	0,652**	1,00	
4. Work Safety	47,24	4,043	0,746**	0,708**	0,782**	1,00

** $p < .01$

The results of the hypothesis tested regarding the effect of OHS capability and facility on the work safety of loading and unloading workers at Tanjung Priok Port, Jakarta, mediated by RMI, are visualized in Figure 1 and summarized in Table 2. It was discovered that all the hypotheses were supported (significant) at $p < .05$. In detail, OHS capability significantly directly affects work safety (γ =.316), OHS facility significantly directly affects work safety (γ =.252), and RMI significantly directly affects work safety (β=.401). Furthermore, OHS capability significantly directly affects RMI (γ =.456), and OHS facility significantly directly affects RMI (γ =.372). In addition, RMI significantly mediates the inderectly effect of OHS capability and facility on work safety (β=.183 and β=.149).

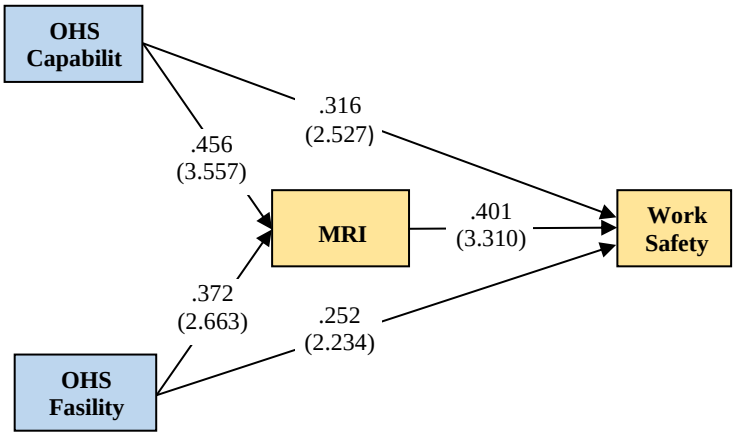

Figure 1. Path coefficient and T-value

Tabel 2. Rangkuman Koefisien Jalur dan Uji t

Hypothesis	Path coefficient (γ/β)	T-value	Decision
H_1: OHS capability directly affects work safety	0.316	2.527*	Supported
H_2: OHS facility direct affects work safety	0.252	2.234*	Supported
H_3: RMI direct affects work safety	0.401	3.310*	Supported
H_4: OHS capability directly affects RMI	0.456	3.557*	Supported
H_5: OHS facility directly affects RMI	0.372	2.663*	Supported
H_6: OHS capability indirectly affects work safety through RMI	0.183	2.269*	Supported
H_7: OHS facility indirectly affects work safety through RMI	0.149	2.222*	Supported

*p < .05

4.2 Discussion

This study empirically proves that OHS captivity has a direct positive and significant effect on the work safety of unloading workers at Tanjung Priok Port. This indicates that OHS capacity is a crucial predictor of work safety for unloading workers, so if OHS capacity is increased, it has the potential to increase work safety for unloading workers. OHS capability is the ability to properly exploit personal and organizational resources and self-potential to carry out specific activities, including survival from suffering, damage, and loss at work, as well as physical, mental, and emotional stability. When the capabilities of OHS unloading workers, such as physical, mental, and emotional stability, are well conditioned, then it can have a positive impact on work safety, namely a situation that guarantees unloading workers are in safe, secure, comfortable, and efficient conditions. This finding is consistent with and confirms the results of Sudrajat's research (2013), which shows that OHS capabilities affect work safety.

The results of this study also indicate that the OHS facility has a direct positive and significant effect on the work safety of unloading workers at Tanjung Priok Port. It indicates that OHS facilities are an important antecedent for work safety for unloading workers, so if OHS facilities are improved in quantity and quality, they can improve work safety for unloading workers. OHS facilities are anything that can facilitate and expedite the implementation of loading and unloading activities at ports, which are supported by several facilities such as ship side nets, rope slings, wire slings, rope nets, wire nets, sling barriers, spreader sets, seals, lifting hooks and Barrow. When these facilities are available adequately, both in quantity and quality, it can encourage an increase in work safety, namely a condition that guarantees unloading workers workers are safe, secure, comfortable, and work efficiently. This empirical fact is in line with and confirms the results of research by Lestari et al. (2017), which proves that OHS facilities affect work safety.

The results of this study also reveal empirical evidence that the application of risk management has a positive and significant direct effect on the work safety of unloading workers at Tanjung Priok Port. It indicates that the application of risk management is one of the crucial determining factors for the safety of unloading workers. This means that if the application of risk management is improved, it can stimulate an increase in work safety for unloading workers. The application of risk management is the implementation of a structured approach in managing uncertainty related to threats reflected in a series of human activities by using

resource empowerment/management, with the dimension of risk assessment consisting of some indicators: risk identification, risk analysis, risk evaluation; and risk management consisting of indicators: avoiding risk, mitigating risk, transferring risk to third parties, and accepting risk. Suppose the dimensions of risk management and their indicators can be properly conditioned (adequate), efficient, and effective, then this can provide a great opportunity for improving work safety, namely a condition that guarantees unloading workers in safe, secure, comfortable conditions, and can work safely, efficient. These findings are consistent with and confirm the studies of Fiyanzar et al. (2016) and Melissa et al. (2017), which prove that the application of risk management has a positive impact on work safety.

The results of this study also prove that OHS capability has a positive and significant direct effect on the implementation of unloading workers risk management. It shows that OHS capability is a decisive predisposition for the implementation of risk management. Under such conditions, when the OHS capability is improved, it can improve the quality of risk management implementation. This can happen because OHS capability reflects the ability to exploit personal and organizational resources and self-potential to carry out specific activities, such as surviving suffering, damage, and loss at work, as well as physical, mental, and emotional stability. When the unloading workers capability is adequate, it can simplify and expedite the implementation of risk management. These findings are consistent with and confirm the results of research by Rahmania, Suprapto, and Perdanakusuma (2018), which proves that OHS capabilities make a positive contribution to the implementation of risk management.

The results of this study also reveal the empirical fact that OHS facilities have a positive and significant direct effect on RMI. This confirms the meaning that OHS facilities are an important determinant for the implementation of risk management. OHS facilities are anything that can facilitate and expedite the implementation of loading and unloading activities at ports, which are supported by several facilities such as ship side nets, rope slings, wire slings, rope nets, wire nets, sling barriers, spreader sets, seals, lifting hooks and Barrow. When the OHS facilities at Tanjung Priok Port are adequate in quantity and quality, it can encourage the effectiveness of risk management implementation, which includes risk identification, risk analysis, risk evaluation, risk avoidance, risk mitigation, risk transfer to third parties, and accepting risks. This finding is in line with the study by Basuki et al. (2015), which proves that OHS facilities have implications for the implementation of risk management. In addition, the results of this study also found a significant role for the application of risk management in mediating the effect of OHS capabilities and OHS facilities on work safety in unloading workers. It shows the empirical fact that apart from being influenced by OHS capabilities, the implementation of risk management also affects the work safety of unloading workers. That is, when OHS capabilities are reflected in the ability to explore resources and potential of oneself and the organization to carry out specific activities such as physical, mental, and emotional stability conditions, it can encourage increased quality of RMI, which is reflected in risk identification, risk analysis, risk evaluation, avoiding risks, mitigating risks, transferring risks to third parties, and accepting risks. This condition has positive implications for work safety as a condition that guarantees unloading workers in a safe, secure, comfortable, and efficient condition. Likewise, when OHS facilities for unloading workers such as ship side nets, rope slings, wire slings, rope nets, wire nets, sling barriers, spreader sets, seals, lifting hooks, and wheelbarrows are in adequate condition both in quantity and quality, it can also trigger increasing the application of risk management which is manifested in risk identification, risk analysis, risk evaluation; avoiding risks, mitigating risks, transferring risks to third parties, and

accepting risks. This condition then has implications for work safety, which ensures that unloading workers are in safe, secure, comfortable, and efficient working conditions.

These findings not only confirm the results of previous studies conducted by Sudrajat (2013), Barnabas and Nirmawati (2012), Fiyanzar et al. (2016), Melissa et al. (2017), Rahmania et al. (2018), and Basuki et al. (2015), but also introduced a new empirical model of the influence of OHS capabilities and OHS facilities on work safety by mediating the implementation of risk management with the unloading workers analysis unit at Tanjung Priok Port, Jakarta.

5. Conclusion

The research objective was to determine the effect of OHS capability and facilities on work safety mediated by RMI. This study results show that OHS capability, OHS facility, and RMI significantly directly affect; OHS capability and facility influence RMI; and RMI significantly mediates the indirect effect of OHS capability and facility on work safety. This evidence produces a new empirical model regarding the effect of OHS capability and facility on work safety through RMI. This evidence not only provides a theoretical contribution to the development of management science, especially safety and risk techniques, but also provides practical implications for the management of port loading and unloading workers, especially the Port of Tanjung Priok Jakarta. As a result, this study suggests that the new empirical model can be used as material for discussion among academics, researchers, and practitioners before being adapted or adopted to improve work safety in the future.

References

Amir, M. T. (2019). *Manajemen Strategik: Konsep dan Aplikasi* (1th ed.). Jakarta: Raja Wali Pers.

Apriyadi, D. (2017). Analisis Pengaruh Ketepatan Waktu, Fasilitas dan Harga Tiket Terhadap Kepuasan Penumpang Kereta Api di Stasiun Purwosari. *MAGISTRA*, 29(99), 73-77.

Arif dan Moko (2016), Dumondor (2017), Damayanti et al. (2019), Marganto et al. (2021), Pratiwi dan Fatah (2021)

Arif, R. R., & Moko, W. (2016). Pengaruh keselamatan dan kesehatan kerja terhadap kinerja karyawan (studi pada karyawan bagian produksi CV. Anugerah Tani Makmur). *Jurnal Ilmiah Fakultas Ekonomi dan Bisnis Universitas Brawijaya, 6*(1), 1-10.

Arikunto, S., & Jabar, C. S. A. (2018). *Evaluasi Program Pendidikan: Pedoman Teoretis Praktis Bagi Mahasiswa dan Praktisi Pendidikan* (2th ed.). Jakarta: PT Bumi Aksara.

Basuki, M., Susanto, R.B., & Herianto, H.P. (2015). Analisis Risiko Kegiatan Bongkar Muat Sebagai Komponen Dwelling Time Di Pelabuhan. *Seminar Nasional Sains dan Teknologi Terapan III, Institut Teknologi Adhi Tama Surabaya,* pp. 511-518.

Busyairi, M., Tosungku, L. O. A. S., & Oktaviani, A. (2014). Pengaruh keselamatan kerja dan kesehatan kerja terhadap produktivitas kerja karyawan. *Jurnal Ilmiah Teknik Industri Universitas Mulawarman, 13*(2), 112-124.

Damayanti, R., Nurlaela, & Usman, S. (2019). Pengaruh keselamatan kerja dan kesehatan kerja terhadap kinerja karyawan PT Pulau Lemon Manokwari. *Seminar Nasional Manajemen dan Bisnis ke-3 Program Studi Manajemen Fakultas Ekonomi dan Bisnis Universitas Jember,* 351-365.

Darmawi, H. (2014). *Manajemen Perbankan*. Jakarta: PT. Bumi Aksara.

De Oliviera, C. G., Nunes, F, O., & Simas, L. (2022). Risk management in occupational health and safety context: A proposal for a coherent structure of concepts and terminology. *Open Journal of Safety Science and Technology*, *12*, 96-107.

Dumondor, R. V. N. (2017). The influence of safety and health, and office facilities on employee performance (case study of PT. Meares Soputan Mining). *Jurnal EMBA*, *5*(2), 256-266.

Fiyanzar, A.E., Nusraningrum, D., & Arofat, O. (2016). Penerapan Safety Management System Pada Lembaga Penyelenggara Pelayanan Navigasi Penerbangan Indonesia. *Jurnal Manajemen Transportasi & Logistik (JMTransLog)*, 04(01), Pp. 205-215.

Hidayatullah, A., & Tjahjawati, S. S. (2017). Pengaruh keselamatan dan kesehatan kerja terhadap produktivitas kerja karyawan. *Jurnal Riset Bisnis & Investasi, 3*(2), 104-11.

Kasidi. (2014). *Manajemen Risiko* (1th ed.). Bogor: Penerbit Golia Indonesia.

Lumbangaol, P., Saragih, T., & Hasibuhan, P.S. (2022). Keselamatan, Kesehatan Kerja dan Lingkungan Hidup (OHSLH) Pada Proyek Supermarket Jl. Sisingamangaraja XII KM. 3,3. *Jurnal Visi Eksakta (JVIEKS)*, 3(1), Pp. 59-70.

Lumenta, K. G., Pio, R. J., & Sambul, S. A. P. (2021). Pengaruh keselamatan dan kesehatan kerja terhadap produktivitas. *Productivity, 2*(2), 102-107.

Mangkunegara, A.P. (2014). *Evaluasi Kinerja Sumber Daya Manusia*. Bandung: Penerbit Refika Aditama.

Mardiyani, Y., & Murwatiningsih, M. (2015). Pengaruh Fasilitas dan Promosi Terhadap Kepuasan Pengunjung Melalui Keputusan Berkunjung Sebagai Variabel Intervening Pada Objek Wisata Kota Semarang. *Management Analysis Journal*, *4*(1), Pp. 65-75 https://doi.org/https://doi.org/10.15294/maj.v4i1.7220.

Marganto, I. A., Tatimu, V., & Sambul, S. A. P. (2021). Pengaruh keselamatan dan kesehatan kerja terhadap kinerja karyawan PT. Mahagatra Sinar Karya. *Productivity, 2*(3), 182-186.

Martono & Tjahjono, E. B. (2017). *Transportasi di Perairan Berdasarkan Undang Undang Nomor 17 Tahun 2008* (Cetakan Ke 2). Jakarta: Raja Grafindo Persada.

Mathias, R.L., & Jackson, J.H. (2016). *Human Resource Management* (10th ed.). Jakarta: Salemba Empat.

Melissa, A.C., et al. (2017). Penerapan Safety Management System Dan Kompetensi Pemandu Lalu Lintas Penerbangan. *Jurnal Manajemen Transportasi & Logistik (JMTransLog)*, 04(01), Pp. 89-99.

Pamungkas, A. (2019). Pengaruh penerapan enterprise risk management (COSO) terhadap nilai perusahaan:studi empiris pada perusahaan manufaktur yang terdaftar di BEI. *Jurnal Akuntansi Maranatha, Program Studi Akuntansi, Fakultas Ekonomi, Universitas Kristen Maranatha, 11*(1), 12-21.

Mohammed, H. K., & Knapkova, A. (2016). The impact of total risk management on company's performance. *Procedia - Social and Behavioral Sciences*, 220, 271 – 277.

Moloeng, L.J. (2009). *Metodologi Pendidikan Kualitas*, Cetakan 26. Bandung: Remaja Rosdakarya.

Mondy, R. W. (2015). *Manajemen Sumber Daya Manusia* (10th ed.). Jakarta: Erlangga.

Nasrullah. (2022). Penggunaan alat pelindung diri (APD) terhadap pencegahan kecelakaan kerja. Studi kasus perilaku pada pekerja lapangan PT. PLN Unit Lueng Bata, Banda

Aceh. *SAGO: Gizi dan Kesehatan*, 3(2), 168-174. http://dx.doi.org/10.30867/gikes.v3i2.931

Nugroho, M. F., & Haryono, R. (2020). Pengaruh keselamatan dan kesehatan kerja terhadap produktivitas kerja karyawan. *Jurnal Ilmiah Manajemen, 11*(3), 197-206.

Peraturan Menteri Perhubungan Nomor 152 Tahun 2016 tentang Penyelenggaraan dan Pengusahaan Bongkar Muat Barang dari dan ke Kapal

Pratiwi, P., & Fatah, A. (2021). Pengaruh keselamatan kerja dan lingkungan kerja terhadap kinerja karyawan bagian kitchen restoran makanan. *Jurnal Inovasi dan Kreativitas (JIKa), 1*(1), 15-24. https://doi.org/10.30656/jika.v1i1.3286.

Rahmania, N. M., Suprapto, & Perdanakusuma, A. R. (2018). Penilaian Kapabilitas Manajemen Risiko Teknologi Informasi Menggunakan Kerangka Cobit 5 (Studi Kasus : Daerah Operasional (DAOP) XX). *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer, 2*(12), 6828-6836.

Ratnawati, E., & Silvana, E. D. (2021). Penyuluhan Hukum Tentang Keselamatan Kerja Tenaga Kerja Bongkar Muat (UNLOADING WORKERS) di Pelabuhan Tanjung Priok-Jakarta. *Jurnal Pengabdian Hukum dan Humaniora (DAS SEIN),* 2(1), Pp. 79-88.

Rivai, V., & Ismail, R. (2014). *Islamic Risk Management For Islamic Bank.* Jakarta: PT Gramedia Pustaka.

Robbins, S. P., & Coulter, M. (2016). *Management, Thirteenth Edition*. Essex: Pearson Education Limited.

Robbins, S. P., Judge, T.A., & Timothy, A. (2015). *Perilaku Organisasi* (16th ed.). Jakarta: Salemba Empat.

Soputan, G. E. M., Sompie, B. F., & Mandagi, R. J. M. (2014). Manajemen risiko kesehatan dan keselamatan kerja (K3) (study kasus pada pembangunan gedung SMA Eben Haezar). *Jurnal Ilmiah Media Engineering, 4*(4), 229-238.

Sudrajat, D. (2013). Kapabilitas Dinamik, Kinerja Inovasi, dan Kinerja Perusahaan Jasa Logistik di Indonesia (Suatu Kerangka Penelitian). *Binus Business Review*, *4*(2), 798-811.

Tarwaka. (2014). *Keselamatan dan Kesehatan Kerja (K3): Manajemen dan Implementasi K3 di Tempat Kerja*. Surakarta: Harapan Press.

Toriq, M., & Martoatmodjo, S. (2014). Pengaruh Fasilitas dan Kualitas Layanan terhadap Kepuasan Pelanggan pada SPBU Pertamina 54.612. 64 di Sidoarjo. *Jurnal Ilmu & Riset Manajemen*, 3(8).

Triyono et al. (2014). *Keselamatan dan Kesehatan Kerja (OHS).* Yogyakarta: UNY.

Van der Poll, H., & Mthiyane, Z. Z. F. (2018). The interdependence of risk management, corporate governance and management accounting. *Southern African Business Review, 22*, 1-30. https://doi.org/10.25159/1998-8125/4344.

Wahyudi, I., dkk. (2013). *Manajemen Risiko Bank Islam.* Jakarta: Salemba Empat.

Wahyuni, N., Suyadi, B., & Hatono, W. (2018). Pengaruh keselamatan dan kesehatan kerja (K3) terhadap produktivitas kerja karyawan pada PT. Kutai Timber Indonesia (studi kasus pada PT. Kutai Timber Indonesia Kota Probolinggo). *Jurnal Pendidikan Ekonomi: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi, dan Ilmu Sosial, 12*(1), 99-104.

Widodo, W. (2021). *Metodologi Penelitian Populer & Praktis*. Jakarta: Rajawali Press.

Wirawan. (2015). *Manajemen Sumber Daya Manusia Indonesia.* Jakarta: PT. Raja Grafindo Persada.