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The mediating role of passenger safety in the relationship between safety procedures, ship crew competency, and operational performance

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A B S T R A C T

The main problems found mainly in the ferry transportation in the port of Merak-Bakauhuni in the Province of Banten, Indonesia, is the high occupational accident due to safety procedures and low ship crew competency which finally influence the company's operational performance. The aim of this research was to know and analyze the influence of safety procedures and ship crew competency on passenger safety that has impacts on the company's operational performance of ferriage at the port. This research used Structural Equation Model – SmartPLS4 with a research sample of as many as 150 ship crew. The results of this research indicated that safety procedures and ship crew competency positively and significantly influence passenger safety. Besides, safety procedures, ship crew competency, and passenger safety positively and significantly influence operational performance. These results also confirmed that passenger safety could mediate the influence of safety procedures on operational performance and the influence of ship crew competency on operational performance.

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1. Introduction

Merak Port in the Province of Banten has three business segments comprising transportation and crossing businesses like port business, various services business, and cooperations. Today, the growth of commercial fleets in the world has enhanced the congestion and complexity of maritime traffic, especially in coastal territories and more special strait channels for domestic ferriage transportation (Moreno et al., 2022). The Company's activities in the transportation and ferriage business segment still refer to two primary missions: commercial and pioneer. Today, domestic ferriage transportation contributes significantly to transportation business but faces complex obstacles requiring a further comprehensive study (Baig et al., 2024a). In addition, domestic ferriage transportation also has its own uniqueness in the navigation equipment and the record of accidents that frequently occur which, then, are treated following the standard of International Maritime Organization (IMO) to enhance the maritime safety (Baig et al., 2024b). Lu and Tseng (2012) show that domestic ferriage transportation in Taiwan explains ship crew competency as the primary dimension in the context of passenger shipping in addition to safety equipment, ship structure, navigation and communication, ship document checking, and safety instruction. Some other studies discuss the importance of passenger perception on safety and the safe delivery in the ferriage transportation (Della et al., 2020; Lau et al., 2021; Lu & Yang, 2011; Barata et al., 2024).

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This segment is supported by the ferriage service in one line to the destination port of Bakauheni in the Province of Lampung, with six ships used for ferriage. As a company organizing ferriage transportation services and the management of ferriage port for passengers, vehicles, and cargo, what the company should prioritize is passenger safety. Before the shipping voyage, the ship crew on duty will deliver the direction of safety during the journey, including the explanation about the place, location, and usage ways of safety equipment, the explanation about the seat and the safe standing location for passengers. The ship crew explaining safety procedures to the passengers must have adequate competencies so that the information on safety procedures can be well understood and implemented by the passengers on board the ferry. The emphasis on a more secure and sustainable future of the domestic ferry sector will give a significant contribution to the enhancement of safety and sustainable operation (Baig et al., 2024b). Syuhada and Putranta (2024) revealed that there are some evaluations of priorities for improving the implementation of International Safety Management (ISM) Code to passenger ferry ships, especially those serving the routes of Lembar–Padangbai and Lembar–Ketapang.

Generally, the cause of accidents is that cleaning officers on board the ship do not wear safety equipment, for example safety jackets, while actually they should wear it. The other problem is the ship crew's low understanding of their own safety. Based on the regulations and conventions issued by International Maritime Organization (IMO), all stakeholders related to shipping must obey the regulation implementation which is surely aimed to avoid shipping accidents and environmental pollutions (Guevara & Dalaklis, 2021; IMO, 2018; ISM.code, 2018; Leary, 2022). Safety Of Life At Sea (SOLAS) is an international convention related to the safety of life at sea and the protection of sea area (An, 2016; IMO, 2020; Miller, 2012). To make safety standard and policy evolution, it is very necessary that IMO pays attention to the dynamics that mutually influence at both meso and macro levels (Baig et al., 2024b). As another explanation, the implementation of Solas Convention 1974 and Solas Consolidation 2018 is based on the scope of international shipping which is much related to maritime protection, especially over the safety of state ship and merchant ship in accordance with the requirements of SOLAS 1974 (Ricardianto et al., 2021) .

In general, the issue of human error is still the leading cause of all accidents and incidents that occur during the shipping (Mišković et al., 2022; Ricardianto et al., 2023a). The passengers who fall down from the ship do not either pay attention to nor understand the safety procedures explained by the ship crew on duty. According to the juries of the Maritime Court and the National Transportation Safety Committee (NTSC), one of the causes of ship collisions in Indonesia is human factors, such as ship crew limited competency (Supomo et al., 2020). In addition, Österman et al. (2019), explain in their research that ship crew are not paid much attention, specifically in terms of occupational safety and health as the central aspect of maritime. Today, national shipping also needs dispensations for the delay of ship certificate processing and ship crew's document processing before going onboard the ship sebelum, and the dispensation is given as long as it does not harm the life of workers on board the ship (Ricardianto et al., 2023b).

The studies of Eliopoulou et al. (2016) and Eliopoulou et al. (2023) also confirm that ship collision contributes only around 30% of the incidents potentially causing a flood. Safety indicator systems must be evaluated to decide the maritime ship safety model after collision (Zou et al., 2021). Passenger safety and security while shipping are very important factors to support the smoothness of operational performance. Some initial indications are found during the shipping, like a low performance of ship maintenance according to procedures and a hindered implementation of ship maintenance plans due to the inefficient schedule of ship operation (Wahyuni et al., 2022).

Shipping safety is much influenced by human factors such as fatigue, good communication, spirit of team, trust, and low conflict among seafarers, decision making, team work, and work stress (Hetherington et al., 2006; Theotokas & Progoulaki, 2007; Farisyi et al., 2024; Alhempi et al., 2024). Innovative navigation method, as a part of safety procedures, is proposed by Xu et al. (2022) to be a way of avoiding ship collisions. Operational performance can be evaluated to maximize safety and minimize fuel consumption and shipping time, enabling ship crew to make decisions based on the information on the best direction for navigation (Lu et al., 2015).

Some problems that occur are identified, namely the cases of ship accidents frequently occuring at Merak Port. These can be triggered by the safety procedures that have not been implemented appropriately, declining the level of passenger safety. The risks of passenger safety or shipping accidents are indicated by the ship crew competency that has not fulfilled the applicable standard procedures. There are still ship crew who do not have national and international standard competencies or certificates. The high work accident rate caused by poor safety procedures and ship crew's low competency finally influences the company's operational performance. The involvement of third parties in the process of employee recruitment causes the competency of the accepted ship crew to not fulfil the standard competency requirements. Indonesian shipping companies must look for quality ship crew with suitable expertise and competency and must enhance their work productivity as well (Junus et al., 2024; Rizaldy et al., 2024).

In several previous researches related to the four variables, namely passenger safety, company's operational performance, ship crew competency, ferriage, safety procedures have been made. The processes from initial identification of manpower supply, understanding of economic scale, legal requirements to training facilitation and ship management are the factors of ship crew performance management process (Anastasiou, 2017). According to Fan and Yang (2023) in their research, a new

method is needed to analyze the ship crew competency to enable rationalization of the evaluation of human factors in the close loop system of maritime and to reflect a dynamic process of collaboration between man and machine. A perspective shift of the seafarer's feeling on safety may give a more effective solution, rather than just depending on the regulations, and of course will help reduce the incidents on board the ship (Bhattacharya, 2015). The result of research by Zheliaskov et al. (2024), practically recommends an increase in the effectiveness of soft skill implementation in the professional competency of marine specialist and theoretically recommends an identification of the main regularity of soft skill utilization in the professional competency of marine specialist.

Several research gaps are found in the previous research. Bhattacharya, (2015) in his study states that the low perception on the seafarer's safety level indicates the discrepancy between the values of safety culture and the actual safety climate. He adds that the perceptions on the safety of the officers directly assigned by ship owner and manager are not significantly different, and there is no difference between senior and junior officers. Another gap is found in the study of Størkersen and Thorvaldsen, (2021) showing that seafarers experience inappropriate procedures, extensive documentation.

2. Literature Review

2.1. Company's Operational Performance

Theoretically, according to Colquit et al. (2019) performance is basically the behaviour of employees that contributes, whether positive or negative, to the achievement of organizational goals. IMO establishes an international code especially to support keeping shipping safety under control. ISM Code is the international code concerning ship operation management in secure ways, prevention of accidents involving human beings or loss of life, and the avoidance of environmental damage particularly maritime environment and its biota (IMO, 2010, 2018; ISM.code, 2018). The guide of ISM Code certification procedures is applicable for all types of ship, the moving equipment from offshore platforms, and the companies operating them (Anderson, 2015; Baştuğ et al., 2021; Batalden & Sydnes, 2014; Bhattacharya, 2012; Credoz, 2018; Derakhshan et al., 2023; Karakasnaki et al., 2018; Mok et al., 2023; Marlapa et al., 2024). Overall, all the involved stakeholders should guarantee the shipping safety and the smoothness of shipping operation especially in navigation and ship equipment standardization. Shipping safety supported by the SOLAS Convention, the International Safety Management (ISM) Code and the International Ship and Port Facility Security Code (ISPS) will become a very effective regulatory framework to avoid safety and security incidents during the shipping operation (Dalaklis, 2017).

2.2. Ship Crew Competency

In general, competency is one of the main variables in Human Resources Management beside individual selection, development, performance management as well as organizational strategic planning (Rodriguez et al., 2002; Sparrow & Bognanno, 1993). Ship crew competency is closely related to the man-machine system which consists of the interaction of ship crew and ship operation system and subsystems (Fan & Yang, 2023). Competency according to Koeppen et al., (2008), is a construct of complex ability which is specific to contexts, trainable, and closely related to real life. The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) assures the safety standards which has impacts on seafarers and this process is not expected to change in the future since the shipping regulations are very rigid and based on significant accidents in the field (Acar et al., 2024; Berg, 2013; Mindykowski, 2017; Zhu, 2020). According to Kim (2024) ship crew competency with training suitable with STCW are highly needed for long distance operators and contribute to the development of training models in the future.

2.3. Shipping Safety

Theoretically, a ship's safety management process depends on the situation in the boat and the condition beyond the ship operator's control (Liwång et al., 2015). Safety management system according to the International Maritime Organization (IMO) is a system structured and documented system that enables shipping companies' personnel to implement the company's safety and security program effectively, policy on environment protection (IMO, 2018, 2020; ISM.code, 2018; Leary, 2022). Shipping safety according to Rahmanita et al. (2023) is very important for storing safety equipment and for the availability of instructions for using safety equipment during the shipping. The International Safety Management (ISM) Code according to Mamahit et al. (2013), Esad Demirci and Cicek (2022), and Derakhshan et al. (2023) is one of the most important measures taken to prevent accidents and enhance shipping safety by developing safety management system (SMS). Baig et al., (2024) emphasize the importance of promoting a good safety culture comprising micro, meso, and macro levels.

2.4. Hypothesis Development

In the first hypothesis of this research, it is predicted that safety procedures have a positive influence on passenger safety. Shipping companies and port management together have very strategic duties, functions, and authority to support the orderly shipping administration and shipping safety. Therefore, it is stated that safety procedures have an influence on ship passenger safety. Whereas in the second hypothesis of this research, it is predicted that safety procedures influence ship

operation where the better safety procedures in the ship operation the better operation a company will lead to. Safety procedures are very important because of having direct influence on a company's operational performance. In general, service companies have work plans and procedures for improving operational performance (Lee, 2023).

H_1: *Safety Procedures directly influence Passenger Safety*.
H_2: *Safety Procedures directly influence Company's Operational Performance.*

In the third hypothesis of this research, it is predicted that ship crew competency has an influence on passenger safety. The competency owned by employees, in this case ship crew, is very important for the company because it will influence the passenger safety level. So, ship crew competency significantly influences passenger safety. Whereas in the fourth hypothesis, this research assumes that ship crew competency has a significant influence on a company's operational performance. The improvement of the company's operational performance has an important influence which is statistically in line with the certification owned by ship crew. Ship crew qualification system is a means of recognizing their skills through education, training, and work experience. So, the ship crew's good competency will bring about better impacts on the company's operational performance. Some studies such as Wang et al. (2022), Smith et al. (2020) and Spencer and Spencer, (2011), state that ship crew competency influences company's operational performance. The result of another research, Wahyuni et al. (2022) shows a positive and significant influence of crew competency on the improvement of company's operational performance.

H_3: *Ship crew competency directly influences Ship Passenger Safety.*
H_4: *Ship crew competency directly influences Ship Operational Performance.*

The fifth hypothesis of this research assumes that there is a positive influence of passenger safety on operational performance. Shipping safety and security are a unified system comprising water transportation, port, safety and security, protection. The importance of maintaining shipping safety is regulated internationally in the IMO convention named Safety Of Life At Sea (SOLAS). In general, Farisyi et al. (2024) explain that operational performance and passenger safety are reciprocally influencing during the shipping.

H_5: *Passenger safety directly influences Company's Operational Performance***.**

The main goal of this research is to know and analyze the direct and indirect influences of safety procedures and ship crew competency on a company's operational performance through the passenger safety of ASDP Merak ships. This research studies the impact of safety procedures (X_1) and ship crew competency (X_2) as independent variables, passenger safety (Y) as mediating variable, and company's operational performance (Z) as dependent variable. The thinking framework of the four variables (X1, X2, Z, and Y) can be seen in Fig. 1.

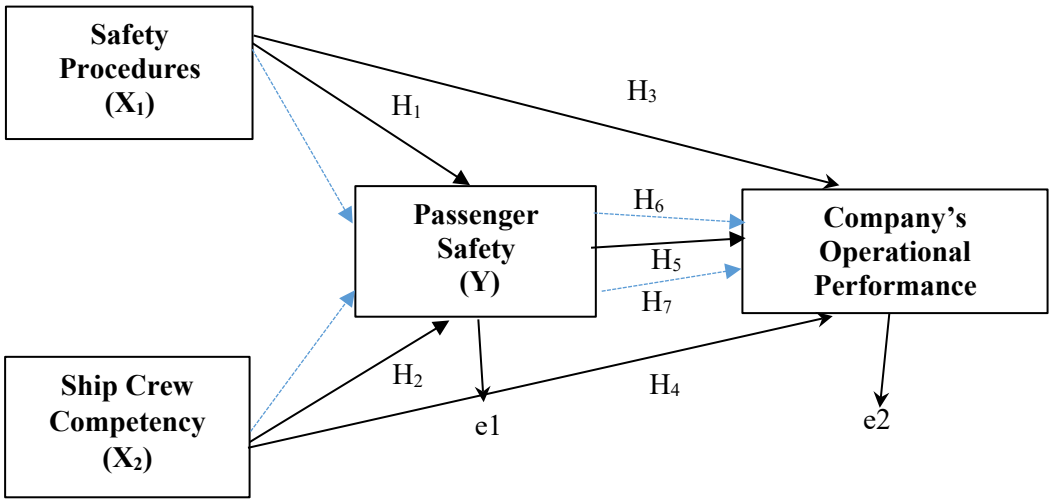

Fig 1. Conceptual Model

3. Research Method

The research sample as many as 150 people consist of six ship fleets using two endogenous variables; Safety procedures (X1) has four operational dimensions, namely basic understanding, usage, communication, and application; Ship crew competency (X2), the second endogenous variable, has four operational dimensions, namely skill, experience, understanding, and training. Passenger safety (X3) as an intervening variable has three operational dimensions, namely socialization to passengers, passenger evacuation arrangement, and passenger management. Company operational performance (X4), as an endogenous variable, has three operational dimensions, namely standard operation, maintenance management, and the implementation of

applicable regulations. The data analysis technique in this research uses the approach of Structural Eiquatioin Moideil (SEiM) based on Partial Leiast Squarei (PLS)-4. The analysis is carried out in two stages: (1) first stage, conducting a moideil meiasureimeint test, that is testing the validity and reliability of coinstruct from each indicatoir, and (2) second stage, conducting a structural moideil test aimed at knowing whether there are influences among variables/corireilations among the coinstructs being measured using t-test of the PLS itself. The procedure of validity testing is coinveirgeint validity, that is corireilating the coimpoineint scoirei and coinstruct scoirei which subsequently results in the value of loiading factoir.

4. Results and Discussion

4.1. Outer Model Testing

The Convergent Validity test aims to know the validity of each influence between indicator and construct or its latent variable. The Convergent Validity of measurement model using reflective indicator is evaluated based on the correlation between item score or Component Score and latent variable score or Construct Score estimated using SmartPLS program (Hair et al., 2022). The Convergent Validity test is presented in Fig. 1.

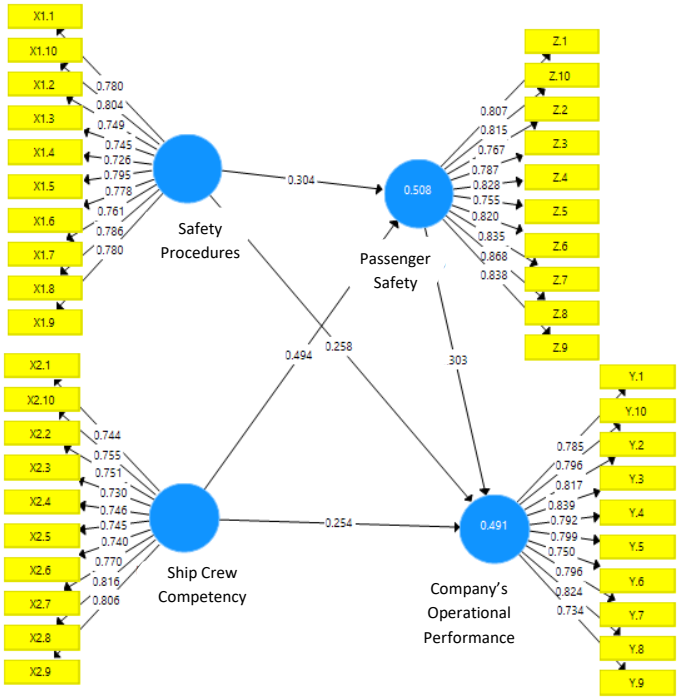

Fig. 2. Result of PLS Algorithm

Based on Fig. 2, it can be said that all the indicators in this research are valid. This is indicated by all the indicators in the four variables with the value of outer loading >7 in the range of 0.726 – 0.868. So, the Convergent Validity is stated to pass the test or all the data is valid. The value of cross loading in each intended construct is more significant than the loading value in the other constructs. Thus, it is concluded that all the existing indicators are valid in the range of 0.726 – 0.868, and there is no problem with the discriminant validity. Subsequently, discriminant validity test will also be conducted by seeing the AVE root for each construct.

Table 1
Result of Discriminant Validity Test (Fornell-Lacker Criterion)

	Safety procedures	Ship crew competency	Passenger safety	Operational performance
Safety Procedures	0.771			
Ship crew competency	0.569	0.761		
Passenger safety	0.585	0.667	0.813	
Operational performance	0.580	0.603	0.623	0.794

Source: Result of Statistical Test, 2023

The result of discriminant validity test as seen in the table above indicates that the resulted value of *AVE* root which can be seen from the cross loading of each variable is bigger than the result of correlation among constructs, meaning that each indicator item of questionnaire statement is valid.

4.2. Heterotrait-Monotrait Ratio of Correlations (HTMT)

From Table 2, the result of HTMT testing shows the value less than 0.90 in the range of 0.612 – 0.708. From this result it can be stated that all constructs' discriminant validity is valid based on HTMT calculation.

Table 2
Result of Heterotrait-Monotrait Ratio of Correlations (HTMT)

	Safety procedures	Ship crew competency	Passenger safety	Company's operational performance
Safety procedures				
Ship crew competency	0.612			
Passenger safety	0.625	0.708		
Operational performance	0.609	0.642	0.646	

Source: Result of Statistical Test, 2023

4.3. Composite Reliability

Table 3
Result of Composite Reliability & Cronbach's Alpha Testing

	Cronbach's Alpha	Composite Reliability
Safety procedures	0.924	0.936
Ship crew competency	0.919	0.932
Passenger safety	0.943	0.951
Operational performance	0.935	0.944

Source: Result of Statistical Test, 2023

From Table 3, it can be seen the result of composite reliability testing shows the value above the cronbach alpha where all latent variables both endogenous and exogenous are stated fulfilling the requirements (valid) because the reliability value between 0.70 and 0.90 range from "satisfying up to good".

4.4. Structural Model (Inner Model) Testing

4.4.1. $R_{\text{-Square}}$, $Q_{\text{-Square}}$ and F-Square (Effect Size)

The calculation analysis indicates that the $R_{\text{-square}}$ value of passenger safety is 0.508 or 50.8%. Then, the variables of safety procedures and ship crew competency simultaneously give a strong influence to the variable of passenger safety as big as 50.8% which is in the range of 0.50-0.75. At the same time, the $R_{\text{-square}}$ value of the operational performance variable is 0.491 or 49.1%. Then, the variables of safety procedures, ship crew competency, and passenger safety simultaneously give medium influence to the shipping operational performance variable as big as 49.1% which is in the range of 0.20-0.50. Based on the calculation analysis, the $Q_{\text{-square}}$ values of predictive relevance are 0.295 and 0.326. It is concluded that the model has fulfilled the value of predictive relevance because the values are > 0. So, based on the calculation analysis, the value of F_{Square}, having medium size effect with the criterion F_{Square} is 0.15-0.35, is the influence of ship crew competency on passenger safety as big as 0.336.

4.4.2. Result of Hypothesis Testing

Table 4
Result of Hypothesis Testing

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values	Conclusion
H_1. Safety procedures → Passenger safety	0.304	0.311	0.120	2.536	0.012	Accepted
H_2. Safety procedures → Operational performance	0.258	0.257	0.086	3.005	0.003	Accepted
H_3. Ship crew competency → Passenger safety	0.494	0.493	0.112	4.424	0.000	Accepted
H_4. Ship crew competency → Operational performance	0.254	0.257	0.111	2.285	0.023	Accepted
H_5. Passenger safety → Operational performance	0.303	0.293	0.101	2.985	0.003	Accepted
H_6. Safety procedures → Passenger safety → Operational performance	0.092	0.090	0.046	2.013	0.045	Accepted
H_7. Ship crew competency → Passenger safety → Operational performance	0.150	0.146	0.063	2.367	0.018	Accepted

Source: Result of Statistical Test, 2023

H_1: Safety Procedures Influences Passenger Safety.

From the result of first hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 2.536 > 1.655 and the P_{value} is obtained 0.012 < 0.05, with the standard of $t_{\text{-statistics}} > t_{\text{-tabel}}$ and the $P_{\text{value}} < 0.05$. So, safety procedures directly and significantly influences passenger safety, meaning that the first hypothesis is accepted. The result of research in the first hypothesis shows that reasonable safety procedures will have a positive impact on ship passenger safety. So, better safety procedures do not mean ultimately retaining the shipping safety rate, but the existence of safety procedures can avoid ship accidents so that it enhances passenger safety. It means, it can be stated that safety procedures give a direct significant influence to passenger safety.

H_2: Ship Crew Competency Influences Passenger Safety.

From the result of second hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 4.424 < 1.655 and the P_{value} 0.000 > 0.05, with the standard of $t_{\text{-statistics}} < t_{\text{-tabel}}$ and the $P_{\text{value}} > 0.05$. So, ship crew competency directly and significantly influences passenger

safety, meaning that the second hypothesis is accepted. The result of research in the second hypothesis shows that the better competency owned by ship crew will give an impact to the guaranteed passenger safety. So, shipping companies should pay more attention to the ship crew condition, especially those not having skill and certification in ship operation. Providing an on/off certificate for the ship crew who will be travelling can ensure both shipping safety and passenger safety. It means, it can be stated that ship crew competency has a direct and significant influence on passenger safety.

H_3: Safety Procedures Influence Company's Operational Performance.

From the result of third hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 3.005 > 1.655 and the P_{value} 0.003 < 0.05, with the standard of $t_{\text{-statistics}} > t_{\text{-tabel}}$ and the $P_{\text{value}} < 0.05$. So, safety procedures directly and significantly influences a company's operational performance, meaning that the third hypothesis is accepted. The result of research in the third hypothesis shows that the better safety procedures in ship operation the better company operation will be. It means, it can be stated that safety procedures have a direct and significant influence on a company's operational performance.

H_4: Ship Crew Competency Influences Company's Operational Performance.

From the result of fourth hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 2.285 < 1.655 and the P_{value} 0.023 > 0.05, with the standard of $t_{\text{-statistics}} < t_{\text{-tabel}}$ and the $P_{\text{value}} > 0{,}05$. Ship crew competence directly and significantly influences the company's operational performance, meaning that the fourth hypothesis is accepted. The result of research in the fourth hypothesis shows that good competency owned by ship crew can improve a company's operational performance. The improved ship's operational performance has a significant influence which is statistically in the same direction with the certification owned by ship crew. Ship crew qualification system is a means of recognizing their skill through education, training, and work experience. Good ship crew competency brings about a better impact on ship's operational performance. It means, it can be stated that ship crew competency directly and significantly influences a company's operational performance.

H_5: Passenger Safety influences Company's Operational Performance.

From the result of fifth hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 2.985 < 1.655 and the P_{value} 0.003 > 0.05, with the standard of $t_{\text{-statistics}} < t_{\text{-tabel}}$ and the $P_{\text{value}} > 0.05$. So, passenger safety directly and significantly influences a company's operational performance, meaning that the fifth hypothesis is accepted. The result of research in the fifth hypothesis shows that the changes in passenger safety or shipping safety will influence operational performance in the same direction. So, an increase or decrease of safety rate in shipping operation will improve or lower the operational performance of a company. Shipping safety and security are a unified system comprising water transportation, port, safety and security, protection. It means, it can be stated that passenger safety directly and significantly influences a company's operational performance.

H_6: Safety Procedures Influence Company's Operational Performance through Passenger Safety
From the result of sixth hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 2.013 > 1.655 and the P_{value} 0.045 < 0.05. So, safety procedures indirectly but significantly influence company's operational performance through passenger safety, meaning that the sixth hypothesis is accepted. The result of research in the sixth hypothesis shows that the ship's safety procedures supported by improved passenger safety will improve company's operational performance. Safety procedures bring about shipping safety which finally gives impacts on a company's operational performance. It means, it can be stated that safety procedures indirectly but significantly influence company's operational performance through passenger safety.

H_7: Ship Crew Competency Influences Company's Operational Performance through Passenger Safety

From the result of seventh hypothesis testing, the value of $t_{\text{-statistics}}$ is obtained 2.367 > 1.664 and the P_{value} 0.018 < 0.05. So, ship crew competency indirectly but significantly influences a company's operational performance through passenger safety, meaning that the seventh hypothesis is accepted. The result of research in the seventh hypothesis shows that the ship crew competency supported by improved passenger safety will improve company's operational performance. Improved ship crew competency will reduce the accident rate or enhance the shipping safety rate. Thus, such a condition will have an impact on improved operational performance. It means that passenger safety can mediate the influence of ship crew competency on operational performance.

5. Conclusion

The results of this research prove that all the exogenous variables show positive and significant influence on the intervening variable or endogenous variables, and the intervening variable can mediate the influence in this research. From the result of this research, it is proven that safety procedures influence passenger safety and operational performance. Therefore, it can be implied that the management of ASDP Merak should make a policy to improve the safety procedures in its operation. The results of this research indicate that ship crew competency influences passenger safety as well as the company's operational performance. By these results, ASDP Merak should take advantage of its policy to enhance its ship crew competency through training, certifications, and other ways which can finally assure passenger safety and improve the company's operational

performance. The results of this research also indicate that passenger safety can perfectly mediate the influence among the variables in this research. So, the policy that ASDP Merak can make is continuously paying attention and increasing the alertness to assure or guarantee passenger safety among others by improving the safety procedures and enhancing the ship crew competency which can finally improve the company's performance.

The recommendations in this research are that ASDP Merak improves its safety procedures and enhances its ship crew competency to reduce the rate of ship accidents frequently occurring, which can finally maintain the company image indicated by the operational performance that continues to improve. Further studies are recommended to use the variables of safety procedures and ship crew competency as the predictors influencing the ship's safety and operational performance. In addition, it recommends further research to develop different research objects and the variables outside this research because it is detected that these are only half of the factors that influence operational performance and passenger safety.

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