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THE INFLUENCE OF RECRUITMENT AND SELECTION ON VESSEL OPERATIONS WITH HUMAN RESOURCE QUALITY AS A MEDIATOR (CASE STUDY AT PT. MITRABAHTERA SEGARA SEJATI, TBK): A CONCEPTUAL MODEL

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ABSTRACT

Despite being a leading shipping company in Indonesia, PT. Mitrabahtera Segara Sejati, Tbk, experienced a decline in the company's performance in conducting vessel operations from 2021-2023 from 87.0 to 82.4. In conducting vessel operations, good human resource quality is crucial; therefore, effective recruitment and selection are needed. This quantitative study examines the influence of recruitment and selection on vessel operations mediated by human resource quality in PT. Mitrabahtera Segara Sejati, Tbk.

Keywords
Recruitment, Selection, Vessel Operation, Human Resource Quality, Conceptual Model.

INTRODUCTION

Recruitment is a crucial stage in the development of human resources (HR) within an organization. An effective recruitment process not only helps fill vacant positions but also has a significant impact on the overall quality of HR. Meanwhile, selection is a critical stage in human resource management that has a significant impact on the quality of HR within an organization (Agus, 2019; Sartika, Hilmy, & Mulyani, 2022).

The quality of human resources (HR) plays a crucial role in vessel operations. Superior HR quality in terms of navigation knowledge, equipment maintenance, and emergency handling is a key factor in ensuring smooth vessel operations. Additionally, the ability to communicate and collaborate within a team is a vital aspect, given that vessel operations involve many elements requiring good coordination among crew members (Akyuz and Celik, 2018). The selection process in recruiting vessel crews has a significant impact on the smoothness and success of vessel operations.

PT Mitrabahtera Segara Sejati Tbk (MBSS) is a leading shipping company in Indonesia with a focus on energy, especially coal. The Operational Performance Index of PT. Mitrabahtera Segara Sejati, Tbk reflects the company's performance in conducting vessel operations during the period 2021-2023. In 2021, the index reached 87.0, reflecting excellent performance. However, there was a decline in 2022 to 84.6, and it continued to decrease in 2023 to 82.4. Despite the decline, the company remains committed to improving operational efficiency. A thorough analysis of the factors influencing the change in the index can serve as a basis for identifying areas that need improvement to support the company's sustainable growth. Therefore, this research is conducted to determine the influence of recruitment and selection on vessel operations, with HR quality as a mediator.

LITERATURE REVIEW

A. Recruitment

The definition of recruitment, as outlined by several experts, highlights its essential role in attracting and selecting candidates with the potential to work within an organization. It involves activities ranging from candidate search to application submission, resulting in a pool of potential employees who will undergo selection stages. Recruitment can be internal, involving the promotion of existing employees, or external, attracting individuals from outside the organization through advertisements, interviews, and other methods (Rivai, 2016; Sukirno, 2014).

Factors influencing the recruitment process play a significant role in candidate interest and participation. These factors include the level of compensation offered, employee status, available promotion opportunities, job specifications, the number of job openings, recruitment methods, solidarity within the company, and the availability of job offers. A careful consideration of these factors is necessary to design effective recruitment strategies (Sri Larasati, 2017).

Recruitment indicators provide insights into how organizations can attract and select suitable candidates. These indicators include compliance with job specifications, recruitment sources, and methods. Understanding these indicators is crucial for exploring the impact of recruitment variables on performance, particularly in the maritime sector, where mediation variables such as job placement are also considered (Hasibuan, 2016). A comprehensive analysis of recruitment variables can shed light on how this process influences organizational dynamics, especially in the distinctive maritime industry.

Previous research by Agus (2019) highlighted that an effective recruitment process has a positive impact on improving human resources quality, while Widarni (2022) provides a broader perspective by exploring ways to enhance human resource quality through the application of good psychology and human capital management. Jeon et al. (2016) outline that effective recruitment can be a key factor in achieving vessel operational success. Another study by Caesar (2016) indicates that proper recruitment is closely related to ship officer retention issues.

B. Selection

The definition of employee selection, according to various experts, emphasizes its critical role in human resource management, involving the selection and determination of applicants who meet the criteria to become employees of a company. Hasibuan (2016) describes employee selection as the process of determining applicants accepted or rejected by the company, while Sulistiyani and Rosidah (2003) depict it as a series of steps aimed at deciding the acceptance or rejection of an applicant after undergoing a series of tests. Thus, these definitions collectively convey that employee selection is a vital process in selecting individuals who are most suitable and meet the requirements to occupy specific positions within an organization.

Factors influencing employee selection, as described by Rivai (2016), include labor supply conditions, external organizational factors, and organizational tools such as job analysis, HR planning, and workforce procurement (recruitment). Labor supply conditions, such as the number of qualified applicants, significantly affect the ease of obtaining quality employees. External organizational factors, such as ethical considerations and budgetary constraints, also play a crucial role in the selection process. Moreover, organizational tools like job analysis and HR planning guide the selection process by providing job descriptions, determining the required number of candidates, and ensuring the availability of qualified applicants.

Indicators of employee selection, as outlined by Rivai (2016), encompass education, work experience, health, written tests, and interviews. Education reflects an individual's ability to complete tasks, while work experience indicates readiness and understanding of job responsibilities. Health status is crucial for effective job performance, as individuals in good health are better equipped to fulfill their duties. Written tests assess various skills and intelligence levels, providing deeper insights into applicants' capabilities. Interviews, on the other hand, are formal conversations used to evaluate candidates' suitability for the job. By considering these indicators, the employee selection process can be conducted holistically, providing a comprehensive overview of applicants' abilities and suitability for available positions.

Sartika, Hilmy, & Mulyani (2022) demonstrate that the online selection process has a significant impact on improving the quality of healthcare personnel. Another study by Sarewo, Tasnim, & Kamalia (2021) reflects the importance of assessment factors in influencing human resource quality, which is a key element in the selection process. Alexopoulos and Karagiannidis (2017) propose new recruitment tools that can enhance the selection and placement process of ship officers, which in turn can affect vessel operational quality. Fışkın and Zorba (2015) show that selection factors in the recruitment process of vessel crew can influence the overall operational performance of the vessel.

C. Human Resource Quality

The definition of human resources, as highlighted by Hullah et al. (2012), underscores its vital role in facilitating organizational functions and achieving objectives. Human resources encompass the capabilities of individuals, organizations, or systems to perform their functions or duties effectively and efficiently. Employees possessing sufficient knowledge are essential to avoiding performance barriers and preventing wastage of resources. Anggraeni (2013) emphasizes the crucial role of human resources in organizational planning and implementation, stating that the availability of adequate human resources, both in terms of quantity and skills matching task demands, is a determinant of success. Quality human resources, as noted by Widodo (in Afrianti, 2011), entail the ability to perform assigned tasks and responsibilities supported by adequate education, training, and experience. Rahardjo (2010) further elaborates that

human resource quality encompasses not only physical aspects like skills and physical strength but also education, experience, attitude, and values.

Factors influencing human resource quality, according to Sugiyanto, Endarto, & Nugroho (2016), involve education and training, nutrition, and public health, as well as environmental and socio-cultural conditions. Education and training play a pivotal role in shaping human resource quality by creating a skilled workforce, enhancing productivity, and fostering innovation. Quality education and training systems in advanced countries give them a competitive edge across various sectors. Nutrition and public health are critical in determining human resource quality, as healthy individuals with adequate nutrition can perform daily activities and work with high productivity. Conversely, poor health conditions can hinder an individual's ability to contribute optimally to society. Environmental and socio-cultural conditions also play a role in shaping human resource quality. Living in low-quality environments, including exposure to various pollutants, can negatively impact health and work morale.

The indicators of human resource quality, presented by Sedarmayanti (2013), include physical abilities (health), intellectual abilities (intelligence), and psychological abilities (mental). In the context of ship crews, physical health is crucial, with good health and adequate physical fitness being key indicators of crew quality. Furthermore, intellectual abilities, such as higher education levels, proficiency in various languages including maritime languages, and knowledge and skills in relevant fields of science and technology, are important indicators of crew quality. Additionally, in assessing psychological abilities, ethical behavior, attitudes, mental functions, and other factors such as adaptability, discipline, and legal awareness are essential indicators of crew quality. Understanding and measuring these aspects allow fleet operators to design appropriate policies and training programs to enhance crew quality, thereby improving safety, operational performance, efficiency, and contributing positively to the overall advancement of the maritime industry.

Akyuz and Celik (2018) demonstrate that human factors have a significant contribution to the assessment of environmental risks in maritime settings, particularly in the context of Ballast Water Treatment (BWT) systems on vessels. The quality of human resources, which includes personnel capabilities and skills, plays a crucial role in overall efficiency and safety in vessel operations. Further research by Žagar et al. (2020) reviews human factors in ship navigation, emphasizing the measurement of cognitive load during navigation simulation tasks. The results highlight the importance of human resource quality, particularly cognitive abilities, in maintaining safe and efficient vessel operations.

Research by Agus (2019) serves as a crucial foundation for understanding the interconnection between recruitment, employee development, and human resource quality in specific organizational contexts. Meanwhile, the study by Akyuz and Celik (2018) underscores the significance of human factors in the context of vessel operations. The research conducted by Sartika, Hilmy, and Mulyani (2022) contributes to understanding how online recruitment and selection can influence human resource quality in specific contexts. On the other hand, the study by Žagar, Svetina, Košir, and Dimc (2020) highlights the importance of human factors in vessel operations.

D. Vessel Operations

Operational vessel management involves intricate planning and execution of various navigation activities. It encompasses navigation equipment usage, route management, as well as logistical and cargo management. According to D.A. Lasse (2012) and Suratno (2004), this extends beyond technical navigation aspects to include logistical considerations such as cargo selection, loading processes, and cargo condition maintenance, all crucial for safety and efficiency during voyages.

External and internal factors significantly influence vessel operations, affecting vessel performance and safety. External factors, like wind, waves, currents, and water conditions, pose challenges during navigation, while internal factors such as vessel shape, propulsion power, and cargo conditions impact maneuverability and efficiency (Maritime World, 2011).

Navigational activities, route management, and logistical and cargo management are crucial indicators of vessel operations. These involve using advanced navigation equipment, choosing optimal routes, and ensuring proper cargo selection, loading, and maintenance. By focusing on these indicators, navigation experts and vessel managers can optimize vessel performance, ensuring safety, efficiency, and smooth sailing amidst the complexities of maritime navigation.

CONCEPTUAL MODEL

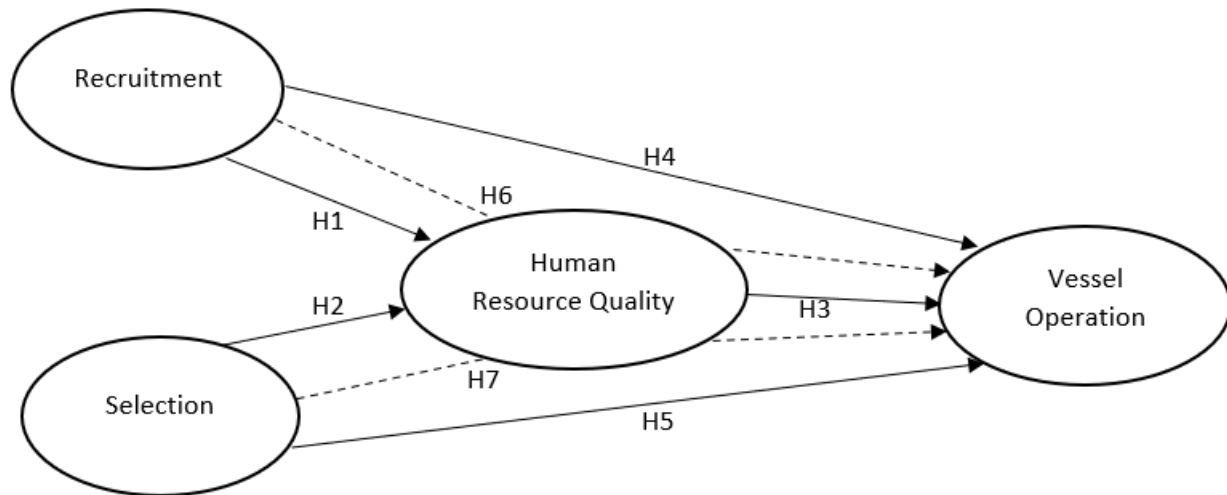Based on the literature review above, the conceptual model is formulated as follows:

Figure 1. Conceptual Model

HYPOTHESES

Based on the conceptual model and literature review, the hypotheses can be formulated as follows:

H_1: Recruitment has a positive and significant direct effect on HR Quality.

H_2: Selection has a positive and significant direct effect on HR Quality.

H_3: HR Quality has a positive and significant direct effect on Vessel Operation.

H_4: Recruitment has a positive and significant direct effect on Vessel Operation.

H_5: Selection has a positive and significant direct effect on Vessel Operation.

H_6: HR Quality mediates the relationship between Recruitment and Vessel Operation.

H_7: HR Quality mediates the relationship between Selection and Vessel Operation.

METHODOLOGY

This study is an exploratory research with a quantitative method. The population in this study consists of the crew of PT. Mitrabahera Segara Sejati Tbk, totaling 58 individuals. The sampling method used is saturation sampling due to the limited population size, resulting in a sample size of 58 individuals. The data used in this study are primary data collected using a questionnaire. Data analysis in this study utilizes path analysis technique, which is an extension of multiple linear regression analysis and is used to analyze the cause-and-effect relationship between exogenous and endogenous variables in the context of multiple linear regression, both directly and indirectly. This analysis is followed by hypothesis testing.

CONCLUSION

This study aims to develop a conceptual model regarding the influence of recruitment and selection on vessel operation, mediated by human resource quality. It includes background research, literature review, hypotheses, and research methodology. The status of the influence of recruitment and selection on vessel operation, through the mediation of human resource quality, can be determined by applying the conceptual model proposed in this study.

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