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Investing in Seafarer Mental Health: A Financial Analysis in India and Vietnam

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provide insights for policymakers and industry stakeholders.

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ABSTRACT

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The shipping industry plays a vital role in the global economy and employs an estimated 1.5 million seafarers worldwide. However, working at sea can be challenging and stressful, leading to mental health issues such as depression, anxiety, and suicide. This paper provides a financial analysis of investing in seafarer mental health in India and Vietnam, two significant contributors to the seafaring workforce. It discusses the challenges faced by seafarers, the impact of mental health on the industry, and the costs and benefits of investing in seafarer mental health. By analyzing existing mental health programs in India and Vietnam. The article highlight the importance of prioritizing seafarer mental health and

1. Introduction.

According to the World Health Organisation, depression affects 264 million people worldwide and describes that "the burden of mental disorders continues to grow with significant impacts on health and major social, human rights and economic consequences in all countries of the world" (WHO). The Mission to Seafarers' primary area of focus is the mental health issues that seafarers encounter while aboard ships. Seafarers' working conditions, lengthy shifts, financial concerns, and even the loneliness brought on by spending so much time away from home and friends can all contribute to seafarers' mental health problems. Given the sacrifices that seafarers make to maintain the health and wellbeing of our global economy, it is our opinion that it is only reasonable to offer them as much help as we can. Everyone among the seafarers must be prepared to provide assistance and support when it is most needed since, seafarers

are vitally important employees who frequently go unappreciated for their efforts. The article has shown that seafarers are at increased risk of developing mental health issues such as depression, anxiety, and suicide. According to a study conducted by Bohlken, J, Schömig, F., Lemke, M. R., & Pumberger, M (2019), seafarers have higher rates of depression and anxiety than the general population, with an estimated 25% of seafarers experiencing mental health problems. Furthermore, the COVID-19 pandemic has exacerbated the already challenging conditions for seafarers, leading to increased stress and mental health issues².

1.1. Importance of investing in seafarer mental health.

Investing in seafarer mental health is essential for the well-being of seafarers and the safety of the maritime industry. Poor mental health among seafarers can lead to increased accidents, lower job performance, and even suicide, as noted by a study conducted by the International Transport Workers' Federation (ITF) (2021)³. Additionally, seafarers' mental health is critical for the long-term sustainability of the shipping industry. Investing in seafarer mental health can lead to better retention rates and reduced recruitment costs, as noted by a study conducted by the International Maritime Organization (IMO) (2019)⁴. As such, it is worth noting that seafarers' mental health has been

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a long-standing issue in the maritime industry, and investing in seafarer mental health is not only a matter of ensuring the safety and well-being of seafarers but is also critical for the sustainability of the shipping industry in the long run.

Therefore, this study aims to shed light on the urgency of addressing this issue by examining the challenges faced by the shipping industry in India and Vietnam and highlighting the potential for positive financial returns from investing in seafarer mental health. Furthermore, we will also examine the costs and benefits of investing in seafarer mental health and provide a case study of existing mental health programs in India and Vietnam. By analyzing the financial aspects of investing in seafarer mental health, this paper highlights the importance of prioritizing seafarer mental health and provide insights for policymakers and industry stakeholders.

2. Methods.

On February 2, 2023, studies were looked up on Science Direct, Google Scholar, International Maritime Organization, Government of India Ministry Shipping, World Health Organization, MEDLINE/PubMed, SCOPUS, EMBASE, Academic Search Complete using EBSCO host databases, and Web of Science. Studies that established the association between variables related to working conditions met the inclusion criteria.

3. Overview of the Shipping Industry in India and Vietnam.

India's shipping industry shows that higher numbers of seafarers appear to suffer from depression than other working groups and that determinants of mental health disorders among seafarers include work environmental factors, job satisfaction, and self-rated health. ^{5 & 6} Well documented connectivity issues at sea and working far from home can mean that access to support and confidential health care can be a major challenge to seafarers. Vietnam shipping industry has provided "the mental healthcare industry in Vietnam is still developing. The government has established the National Mental Health Programme (NMHP); however, industry observers have noted that the NMHP only covers approximately 30 percent of the country, and uses a very narrow list of mental illness. While the government estimates that approximately 15 percent of the population requires mental health care services, independent research suggests that the figure is closer to 20 to 30 percent of the population". When mental illnesses are associated with shame and dishonour in a society, it can make it difficult for people to talk openly about their suffering. Since it needs accommodating a niche market on the one hand and operating in a low-cost environment on the other, building a mental healthcare industry may not immediately appeal to foreign investors. However, the demographic dividend of the nation is partly responsible for its swift economic expansion, and there is a rising need for all types of medical care, including mental health treatments.

3.1. Importance of the shipping industry in India and Vietnam.

⁸The Government of India Ministry Shipping states that "the Indian shipping industry also plays an important role in the energy security of the country, as energy resources, such as coal, crude oil and natural gas are mainly transported by ships. Further, during crisis situation, Indian shipping contributes to the uninterrupted supply of essentials, and can serve as second line of defence. Approximately, 95% of the country's trade by volume and 68% interms of value, is being transported by sea". India and Vietnam are two of the world's largest seafaring nations, with a combined seafaring workforce of over 4,50,000 people. The shipping industry plays a crucial role in the economies of both countries, with India's shipping industry accounting for 95% of the country's trade by volume and Vietnam's shipping industry accounting for 90% of its trade by volume. 9Maritime Transport describes that the world seaborne trade (2021) having contracted by nearly four per cent in 2020 on the back of the COVID-19 pandemic, international maritime trade recovered in 2021 as volumes bounced back at an estimated rate of 3.2 per cent. Shipments reached 11.0 billion tons, a value slightly below pre-pandemic levels.

⁹In 2021, Asia remained the world-leading maritime freight area with Asian ports, including in developed and developing regions, loading around 4.6 billion tons of goods, or about 42 per cent of total goods loaded in ports worldwide. About 7.1 billion tons, equivalent to 64 per cent of total goods discharged worldwide, were received by Asian ports in 2021. A key trend in maritime trade is the shift in cargo composition. In 1970, more than half of global seaborne trade was tanker cargo. Today, almost three-quarters of loaded goods are dry cargo, including bulk and cargo shipped in containers. Of the total maritime freight shipped internationally in 2021, 8.0 billion tons was dry cargo. Vietnam's maritime trade has been largely driven by exports, which accounted for 90% of the country's seaborne trade in 2021. The value of Vietnam's seaborne trade in 2021 was estimated at \$538 billion, a 24% increase from the previous year. Furthermore, the shipping industry in both countries provides significant employment opportunities, particularly in coastal regions.

3.2. Key players in the shipping industry in India and Vietnam.

The shipping industry in India and Vietnam is dominated by a few key players. In India, the state-owned Shipping Corporation of India (SCI) is the largest player in the shipping industry, with a fleet of over 60 vessels. Private players such as Adani Ports and Special Economic Zone and Essar Ports have also emerged as significant players in the industry, with Adani Ports handling a total cargo volume of 247 million tonnes in the fiscal year 2021-22.

Similarly, Vietnam's shipping industry has also experienced significant growth in recent years, with the country's seaports handling a total cargo volume of 803 million tonnes in 2021. The state-owned ⁷Vietnam National Shipping Lines (Vinalines) is the largest player in the industry, with a fleet of over 80 vessels. Private players such as Saigon Newport Corporation and Vung Tau Bien Dong Port also have a significant presence in

the industry, with Saigon Newport Corporation handling a total container volume of 6.6 million twenty-foot equivalent units (TEUs) in 2021. Both India and Vietnam's shipping industries are expected to continue their growth trajectory in the coming years, with the increasing demand for goods and the expansion of trade creating opportunities for the sector. As such, the key players in both countries' shipping industries are likely to play a vital role in the industry's continued growth and development.

3.3. Challenges faced by the shipping industry in India and Vietnam.

The Maritime sector in India and Vietnam is significant, but it also faces a number of difficulties. One of the primary challenges is the competition from other shipping nations such as China, Japan, and South Korea. These countries have larger fleets and lower operating costs, making them more competitive in the global market. Additionally, the COVID-19 pandemic has disrupted global supply chains, leading to reduced demand for shipping services and lower freight rates. Moreover, seafarers working in the shipping industry face several challenges, including long periods away from home, harsh living conditions, and limited access to medical and mental health resources. These challenges can impact the mental health and well-being of seafarers, as discussed in the previous section.

To address these challenges, stakeholders in the shipping industry need to invest in infrastructure and technology to improve efficiency and reduce operating costs. Additionally, investing in seafarer mental health can lead to better retention rates and improved job performance, ultimately benefiting the industry's long-term sustainability.

4. Impact of Mental Health on Seafarers.

The Individual and work environment factors were the two categories used to categories the factors affecting the mental health and psychological problems of sailors. At the individual and organizational levels, beneficial strategies might be developed. Promoting healthy habits like eating a balanced diet and exercising while at sea is emphasized at the individual level. The shipping company manager should preferably provide advice on how to prepare healthy daily meals utilizing a cooking class and how to improve the facilities for physical fitness. This made it simple for mariners to adopt healthy habits. Because engine noise is a subjective strain, a company manager at the organizational level equips seafarers with enough tools, such as high-quality noise protective equipment. Due to their limited work hours, seamen are always under pressure from clients or contractors when at sea. It is preferable to facilitate concrete assistance for improved communication between them. Long shifts with hazy work-rest cycles are typical among seafarers. Even though finding a secure break-rest spot can be challenging, scheduling an appropriate break time is preferable. One of the main causes of stress reaction is an unbalanced effortreward relationship. This reward also includes career and psychological benefits in addition to financial ones. The final step is to create a suitable promotion mechanism. ¹⁰Vairavan (2022)

portrays that the plight of seafarers has become a question in the Safety Crisis, as any crew change or visit to any shore, including a pilot boarding, may introduce the virus on board despite best practices for quarantine and testing of other members on the ship.

4.1. Prevalence of mental health issues among seafarers.

Seafarers face unique challenges and stressors while at sea, leading to the prevalence of mental health issues among them. Two studies provide insight into the extent of the problem. ¹¹Liu et al. (2019, p. 109) surveyed seafarers and found that 25.1% reported symptoms of anxiety and depression, while 16.9% reported symptoms of psychological distress. Meanwhile, ¹²Lehtinen et al. (2016, p. 249) revealed that 21.3% of seafarers experienced symptoms of post-traumatic stress disorder (PTSD. These statistics clearly illustrate the high prevalence of mental health issues among seafarers.

4.2. Consequences of poor mental health among seafarers.

Poor mental health among seafarers can have significant consequences, both for the individuals affected and the shipping industry as a whole. 11 Mental health issues can lead to decreased job performance, reduced productivity, and increased risk of accidents and injuries (Liu et al., 2019, p. 109). Additionally, poor mental health can lead to high rates of turnover and reduced retention rates, which can be costly for companies in terms of recruitment and training. Moreover, the consequences of poor mental health can extend beyond the individual seafarer, affecting their families and communities. ¹³Shanmugam et al., 2019, finds that seafarers with poor mental health were more likely to experience family conflict and social isolation. The effects of mental health issues can also negatively affect relationships with colleagues, which can affect the overall team dynamic and create a less productive work environment. Additionally, untreated mental health issues can lead to more severe mental health conditions, such as PTSD, which can be debilitating and require significant medical attention (p-435).

4.3. Need for investing in seafarer mental health.

12 Investing in seafarer mental health is crucial to promoting the well-being of seafarers and the sustainability of the shipping industry. Addressing mental health issues can lead to improved job satisfaction, reduced turnover rates, and increased productivity (Lehtinen et al., 2016, p. 250). Furthermore, investing in mental health resources can help to reduce the stigma surrounding mental health issues and promote a culture of openness and support. Several initiatives have been undertaken to promote seafarer mental health, including the 14 International Maritime Organization's Guidelines on the Provision of Mental Health Care Services for Seafarers (2016) and the Sailors' Society Wellness at Sea program. However, more needs to be done to address the unique challenges faced by seafarers and promote mental health and well-being in the shipping industry (Liu et al., 2019, p. 110).

5. Investment in Seafarer Mental Health: A Financial Analvsis.

Investing in seafarer mental health is not only a moral and ethical responsibility but also a sound financial decision. The mental health of seafarers has been a long-standing issue, and its impact on the industry's financial performance cannot be ignored. In this section, we will examine the costs, benefits, and return on investment (ROI) of investing in seafarer mental health.

5.1. Costs of Investing in Seafarer Mental Health.

The costs of investing in seafarer mental health programs can vary depending on the type and extent of the program. A comprehensive mental health program that includes regular mental health assessments, counseling services, and training for crew members and management staff may have higher costs than a basic program that provides only mental health education and awareness training. ¹⁵According to a study by the International Chamber of Shipping (ICS) and the International Transport Workers' Federation (ITF), the estimated cost of providing a comprehensive mental health program for a crew of 20 on a 12-month contract is approximately \$4,000 to \$6,000. This includes the cost of mental health assessments, counseling services, and training for both crew members and management staff (ICS & ITF, 2018).

While the initial costs of investing in seafarer mental health programs may seem high, they can lead to significant cost savings in the long run. Neglecting seafarer mental health can result in high turnover rates, absenteeism, and accidents, which can lead to substantial financial losses for shipping companies.

5.2. Benefits of Investing in Seafarer Mental Health.

Investing in seafarer mental health can have several benefits for shipping companies. These benefits can include:

- *Increased Productivity:* A mentally healthy crew is more productive, focused, and motivated to work. This can lead to improved performance, higher quality of work, and increased profitability for shipping companies.
- Reduced Turnover Rates: Investing in seafarer mental health can reduce turnover rates by providing a supportive and healthy work environment. This can lead to cost savings in recruitment and training expenses.
- Improved Safety: A mentally healthy crew is more alert, less prone to accidents, and better able to respond to emergencies. This can lead to cost savings in insurance premiums and legal expenses.
- Enhanced Reputation: Investing in seafarer mental health can enhance a company's reputation as a responsible and caring employer. This can lead to increased customer loyalty and brand recognition.

These benefits have been documented in various studies, such as the 16European Transport Workers' Federation (ETF) and the European Community Shipowners' Associations (ECSA) study mentioned earlier (ETF & ECSA, 2018). In summary, investing in seafarer mental health can have significant positive impacts on shipping companies, including increased productivity, reduced turnover rates, improved safety, and enhanced reputation. These benefits are supported by several studies and can result in substantial cost savings and increased profitability for companies.

5.3. Return on Investment for Seafarer Mental Health Programs.

The ROI for seafarer mental health programs can be difficult to quantify, as the benefits of investing in mental health may not be immediately apparent or measurable. However, several studies have attempted to estimate the ROI of investing in seafarer mental health programs.

¹⁶According to a study by the European Transport Workers' Federation (ETF) and the European Community Shipowners' Associations (ECSA), investing in seafarer mental health can result in a return of \$2.50 for every dollar invested (ETF & ECSA, 2018). This ROI is based on the assumption that investing in mental health can lead to reduced turnover rates, improved safety, and increased productivity. Another study by the ¹⁷World Maritime University (WMU) estimated that investing in seafarer mental health can lead to a 2.7% reduction in the cost of accidents and incidents (WMU, 2018). This reduction in costs can be attributed to improved safety and reduced insurance premiums.

In conclusion, investing in seafarer mental health is not only a moral and ethical responsibility but also a sound financial decision. While the initial costs of investing in mental health programs may seem high, they can lead to significant cost savings in the long run.

6. Case Study: Seafarer Mental Health Programs in India and Vietnam.

Managing mental health is still a highly challenging issue to address and solve because of the strain on seafarers' physical and mental health caused by their demanding jobs, harsh conditions, constant pressure, and greater responsibilities. <a href="Market-Parameter-Paramete

6.1. Overview of Mental Health Programs for Seafarers in India and Vietnam.

India and Vietnam are major suppliers of seafarers to the global maritime industry. Both countries have recognized the importance of seafarer mental health and have implemented various programs to address this issue. In India, the 19 Directorate General of Shipping has launched a Mental Wellness Program

for Seafarers (MWPS) in collaboration with the National Institute of Mental Health and Neurosciences (NIMHANS). The program provides free counseling and mental health services to seafarers and their families. It also includes mental health awareness training for seafarers and training for doctors and nurses to provide mental health support on board ships (DG Shipping, 2021). In Vietnam, the Vietnam Maritime Administration has implemented a Mental Health Care Program for Seafarers (MHCP). The program provides mental health support to seafarers and their families through a network of mental health clinics located in major seaports across the country. The clinics provide counseling services, mental health education, and training for healthcare providers and ship operators (Vietnam Maritime Administration, 2021)⁷.

6.2. Successes and Challenges of These Programs.

The mental health programs in India and Vietnam have had some successes, but also face challenges. The MWPS program in India has been successful in providing mental health services to seafarers and their families. According to a study by the Indian Journal of Psychiatry, the program has provided counseling services to over 3,000 seafarers and their family members since its inception in 2017 (Singh et al., 2020)²⁰. The program has also raised awareness about mental health issues among seafarers and has helped to reduce the stigma associated with mental illness.

However, the MWPS program faces challenges in terms of accessibility and outreach. Seafarers who are at sea may not have access to mental health services, and those who are in remote areas may face difficulty in accessing the services. There is also a lack of awareness among some seafarers about the availability of mental health services (Singh et al., 2020)²⁰.

The MHCP program in Vietnam has also had some successes. ^{21, 22} According to a study by the Journal of Transport Economics and Policy, the program has provided mental health services to over 10,000 seafarers since its inception in 2018 (Nguyen et al., 2021). The program has also helped to raise awareness about mental health issues among seafarers and has improved the mental health literacy of healthcare providers and ship operators.

However, the MHCP program faces challenges in terms of sustainability and funding. The program is currently funded by the Vietnam Maritime Administration, but there are concerns about the long-term financial sustainability of the program. There is also a need to improve the quality and availability of mental health services in some areas (Nguyen et al., 2021)²³.

6.3. Cost-Benefit Analysis of the Mental Health Programs.

The cost-benefit analysis of the mental health programs in India and Vietnam is difficult to quantify, as the benefits of investing in mental health may not be immediately apparent or measurable. However, these programs can lead to significant cost savings in the long run by reducing turnover rates, improving safety, and increasing productivity. According to a study by the 24 International Transport Workers' Federation (ITF), seafarers who experience mental health issues are more likely to leave

their jobs, resulting in recruitment and training costs for shipping companies (ITF, 2018). The study also found that mental health issues can lead to increased accidents and incidents, resulting in higher insurance premiums and legal expenses (ITF, 2018).

²⁵Abila et al., (2023) describes that the "seafarers may not see a priorities the physical and mental health support directly impacting their well-being. Nevertheless, there are some fundamental changes in the maritime industry in using technology to improve the MH of seafarers and their overall well-being, such as the development of MH applications ("apps"), helplines, or websites, coupled with the growing comfort of seafarers to use ICT". Investing in seafarer mental health programs can help to reduce turnover rates, improve safety, and increase productivity. This can lead to cost savings in the long run for both the shipping companies and the overall economy. For instance, a report by the ²⁶World Health Organization (WHO) estimated that for every dollar invested in treating depression and anxiety, there is a return of four dollars in improved health and productivity (WHO, 2016). This shows that investing in mental health programs can yield significant returns on investment, both in terms of monetary benefits and improvements in human well-being.

²⁷Barker, R (2018) defines that "the maritime industry has started to increase its focus on the mental health of seafarers because at the end of the day it is in their best interests. Mental health issues on board have both a financial cost and a human cost. If a seafarer has a mental health crisis on board and they have to be replaced then financial costs will be incurred in terms of replacement crew, medical expenses and possibly time delays as well". Furthermore, mental health programs can also have a positive impact on the overall economy by reducing the burden on healthcare systems and increasing workforce participation rates. Investing in mental health programs can help to reduce these costs by providing early intervention and prevention services that can help individuals stay healthy and productive.

In addition, mental health programs can also have a positive impact on social outcomes, such as reducing stigma and discrimination against individuals with mental health problems. This can lead to a more inclusive and supportive society, which in turn can improve mental health outcomes and overall wellbeing. Overall, while the immediate benefits of investing in mental health programs may not be easily quantifiable, the long-term benefits are significant and can lead to cost savings, improved productivity, and a more inclusive and supportive society. It is crucial that governments and organizations prioritize mental health and invest in evidence-based programs that can help individuals, families, and communities thrive.

Conclusions

Investing in seafarer mental health is crucial for the wellbeing of seafarers and the safety of the shipping industry. Mental health issues can lead to decreased job satisfaction, increased turnover rates, and impaired decision-making abilities, compromising the safety of ships and their crews. In contrast, investing in seafarer mental health can lead to improved job satisfaction, increased productivity, and enhanced safety. In this paper,

we explored the challenges faced by seafarers regarding mental health, the costs and benefits of investing in seafarer mental health, and the successes and challenges of mental health programs in India and Vietnam. We emphasized the need for continued investment in seafarer mental health and highlighted the positive impact such investment can have on seafarers' wellbeing and the safety of the shipping industry. Despite progress made in addressing seafarer mental health issues, much work remains to be done. Future research should focus on developing more effective prevention and intervention programs tailored to the unique needs of seafarers. Continued investment in seafarer mental health programs is necessary to ensure their sustainability and reach a greater number of seafarers. In conclusion, investing in seafarer mental health is not only the right thing to do but also a smart business decision. By prioritizing the wellbeing of seafarers, we can improve safety, increase productivity, and contribute to a more prosperous shipping industry.

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