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A Study on the Influence of Mental Health, Psychological Wellbeing and Health Factors on the Job Satisfaction and Quality of Life of Indian Seafarers

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ABSTRACT: The shipping industry is crucial for the global economy and employs around 1.5 million seafarers globally. Nonetheless, employment at sea can be arduous and hostile, resulting in mental health disorders such as depression, anxiety, and suicidal ideation. Ensuring the physiological health issues, mental and psychological wellbeing of seafarers is essential for the welfare of seafarers, safety and sustainability of the maritime industry. Several past studies have suggested that the investing in seafarer's health, mental and psychological wellbeing have led to enhanced productivity, reduced turnover rates, and better job satisfaction. This study analyses the mental health, psychological wellbeing, job satisfaction, management support in the seafarers profession and quality of life of seafarers with a special focus on Indian seafarers and Indian maritime industry. This quantitative study was conducted with 400 seafarers working in various departments in maritime vessels across India. The study found that the stress, emotional exhaustion, isolation/loneliness and fatigue experienced were the predominant factor influencing the job satisfaction of seafarers. Similarly, job satisfaction of seafarers greatly hinges on the management support and overall quality of life if seafarers is directly impacted by the support and extended help of management and higher leadership of shipping industry. The empirical findings highlight and stresses the importance of prioritizing seafarer mental health, psychological wellbeing as well as their overall satisfaction and provide insights for policymakers and industry stakeholders.

1. INTRODUCTION

Maritime transport is fundamental to global trade, enabling the conveyance of more than 80% of commodities by volume internationally (UNCTAD, 2023).

The global shipping industry is facing a growing deficit of skilled seafarers, jeopardising its capacity to sustain the transportation of over 80% of maritime trade (Badawy, 2025). The scarcity of skilled seafarers presents significant risks to global logistics and shipping sustainability. Seafaring is one of the most challenging profession, subjecting individuals to different physical and psychological pressures that adversely affect their mental health (McVeigh et al., 2019; Lucas et al., 2021). Mariners are often required to spend lot of their time (ranging in months) at sea and sailing, distant from home, with minimal communication with life on land. In addition, the teams involved frequently originate from diverse cultures, customs and interact in several languages, thereby adjusting to differing living expectations, norms, and lifestyles (Brooks & Greenberg, 2022; Jonglertmontree et al., 2021).

Seafarers are constantly exposed to challenging conditions as they frequently reside and operate under extreme thermal conditions, in restricted environments characterised by significant noise, vibration, and the ship's motion (Mellbye & Carter, 2017). Moreover, maritime life frequently entails emotions of insecurity (Abila & Acejo, 2021), the menace of piracy (Seyle et

al. 2018), extended working hours with adverse shifts, inadequate sleep, insufficient physical activity, elevated job demands, limited autonomy, weak team cohesion, and unfavourable opinions of management (Qin et al., 2021). The situations like COVID-19 pandemic, conflicts among nations exacerbate hardships and challenges faced by seafarers, including prolonged onboard durations, repatriation difficulties, financial instability, discrimination, crew non-replacement policies, extension or termination of contracts etc. (Kınalı et al., 2022).

The escalating expenses associated with seafarers' mental health and the financial repercussions for the maritime industry have intensified the discourse surrounding this issue (Iversen, 2012). The Manning Annual Review and Forecast (2023) has indicated that the officer supply shortfall has reached a historic high since the inaugural assessment of the seafarer market 17 years ago, with projections suggesting that this imbalance would persist at least until 2028 (Pauksztat et al., 2022). The study highlighted that "the seafarers' labour market has become notably constrained, significantly affecting recruitment, retention, and manning expenses."

Background

The health of seafarers is negatively impacted by their demanding work settings, which is crucial for achieving sustainable development goals. The maritime industry has witnessed a growing concern for the mental well-being of seafarers due to long periods of isolation, fatigue, and exposure to occupational hazards. The International Labour Organization (ILO) and International Transport Workers' Federation (ITF) have jointly emphasized mental health as a critical element of seafarer welfare, particularly under the Maritime Labour Convention (MLC, 2006) (Nelaj, 2023). The World Health Organization (WHO) has similarly called for psychological risk assessment and prevention programs onboard ships as part of holistic occupational health strategies**.**

Carotenuto et al. (2012) found that isolation and chronic fatigue were among the top psychological stressors globally, with 20–25% of seafarers reporting symptoms of anxiety and depression. Slišković (2017) highlighted stigma as a major barrier, preventing seafarers from accessing mental health support even when available.

Studies indicate that mental health disorders among seafarers are often linked to loneliness, irregular work–rest cycles, cultural isolation, and limited communication with families (McVeigh et al., 2019). In a study with 337 male seafarers, Liu et al. (2021) found a strong association between stress and job satisfaction. Jepsen, Zhao, and van Leeuwen (2015) have discussed on the prevalence of physical and social fatigue among the employees of maritime industry.

Song et al. (2021) conducted a survey of 668 Chinese seafarers regarding their working conditions, welfare, and occupational health, revealing that environmental stressors, isolation, limited recreational opportunities, and inadequate medical care adversely affect seafarers' job satisfaction and overall well-being. Sharma (2021) identified seafaring as a stressful profession that threatens seafarers' well-being and mental health. According to Sampson and Ellis (2021), poor physical and mental health can impair productivity, have long-term consequences for sailors' wellbeing, and even result in suicide.

Baygi et al. (2022) have examined the relationships between seafarers' mental health status and satisfaction with life. The study was conducted with 439 seafarers using standard scales like Satisfaction with Life Scale (SWLS), generalized anxiety disorder-7 (GAD-7), Post-traumatic Stress Disorder-8 (PTSD-8), Patient Health Questionnaire-9 (PHQ-9), General Health Questionnaire-12 (GHQ-12), Perceived Health status and Depression-Anxiety-Stress scale-21 (DASS-21). The study identified that Perceived health status has directly and indirectly affected seafarers' satisfaction with life.

Li et al. (2022) categorised sources of stress among seafarers into seven groups: (1) natural environment (e.g., extreme weather conditions), (2) physical working environment (e.g., noise, vibrations, inadequate nutrition, lack of recreational facilities, and medical assistance), (3) social environment (e.g., isolation, bullying, discrimination), (4) management style (e.g., working schedule demands, contract type), (5) personal characteristics (e.g., unhealthy lifestyle, personality), (6) industry-specific factors (e.g., piracy), and (7) health crises (e.g., pandemics).

Jonglertmontree et al. (2022) showed that depressive symptoms were reported in 14% to 49% of seafarers, whereas burnout was indicated in roughly 10% of seafarers. Despite the broad incidence range and the potential lack of generalisability to the entire seafarer population, the findings indicate that depression and burnout are likely prevalent issues among seafarers in comparison to normative samples.

Svetina et al. (2024) identified that Environmental variables (e.g., vibration), social issues (e.g., bullying, homesickness, working alone), and health issues (e.g., injuries, viruses, illnesses) are the three factors affecting the mental health of seafarers. They also suggested that stress and mental health difficulties impact sailors' motivation and decision to leave the maritime sector. The study found that social pressures like isolation, cultural differences, supervisor demands, and bullying were the primary reasons seafarers considered leaving the sector. Factors including weather, shifts, job length, and port disembarkation bans were less significant in seafarers' decision to leave the sector.

The review has clearly observed that the quantum of studies addressing the issues facing the Indian maritime industry like seafarer's mental health, psychological wellbeing, job satisfaction, management support and quality of life has been negligible.

Problem Statement

The mental health of seafarers and psychological wellbeing is a critical issue that has increasingly garnered attention in recent years. International research has identified a myriad of challenges that seafarers face while at sea—ranging from isolation and loneliness to long contracts and separation from family—and the adverse effects these challenges have on their mental health and overall well-being. Although the phenomenon is global, Indian seafarers, who contribute significantly to the global maritime workforce, encounter unique challenges in the socio-economic, cultural, and operational contexts that necessitate customized policy interventions. An investigation is significantly important to analyze the challenges faced by personal of Indian maritime industry. The outcome of the study addresses the challenges encountered by seafarers with policy recommendations and suggestions to key stakeholders.

Methodology

The study adopted a descriptive and cross-sectional research design approach and quantitative questionnaire were used for data collection (Kothari, 2017).

Measurement Instruments

The study used a custom designed questionnaire developed by the authors for data collection based on the insights obtained from several models like Contingency theory (Feldman 1976), Job Demand–Control–Support (JDCS) Model (Karasek, 1979), Systems Theory in Occupational Well-being, Resilience and Psychosocial Risk Frameworks. The study adopted the modified and short versions of the several past questionnaires like Depression-Anxiety-Stress Scale (DASS-21) (Gomez, 2016), General Health Questionnaire-12 (Jackson, 2007), Post-traumatic Stress Disorder (PTSD-8) (Hansen et al., 2010) and General Anxiety Disorder (GAD-7) (Williams, 2014), Satisfaction with life scale (Corrigan et al., 2013), Perceived health status scale (Oldenburg & Jensen, 2019; Rengamani & Murugan, 2012).

Operationalisation of variables

The variables of the study included Perceived Stress (PS) measured using 8 items, Fatigue Experienced (FE) (6 items), Perceived Health Status (PHS) (6 items), Depression (DEP) (6 items), Emotional Exhaustion (EE) (6 items), Job Demand (JD) (8 items), Isolation/Loneliness (IL) (6 items), Management Support (MS) (6 items), Job Satisfaction (JS) (6 items), and Quality of Life (QOL) using (6 items). 5-point Likert scale was used for measuring the items of the variables with value ranging from 1 (strongly disagree) to 5 (strongly agree).

Participants

The sample of the study included 400 seafarers from India working across the vessels from different countries. The data were collected from participants through online medium, as well as direct mailing to each participant. The study employed a combination of convenient and snowball sampling methods to include participants who are situated in different locations for data collection. The size of the sample of respondents were arrived based on Cohen's formula by calculating the necessary number of participants to detect a specific effect size. The demographics and professional profile of the participants is presented in Table 1.

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Table 1 Demographics and Professional Details (N=400)

Variable	Category	N	Percentage
Gender	Male	360	90.0
	Female	40	10.0
Age (Years)	18 – 29	80	20.0
	30 – 39	120	30.0
	40 – 64	170	42.5
	65+	30	7.5
Job Nature	Engineers	85	21.3
	Officers	65	16.3
	Crew Members	180	45.0
	Catering Team	40	10.0
Seafaring Experience (Years)	Below 1	25	6.3
	1-5	65	16.3
	5-10	89	22.3
	10-20	183	45.8
	Above 20	38	9.5
Nature of the Shipping Company	Indian Shipping Company	167	41.8
	Foreign Shipping Company	233	58.3
Current Location	On Passage	126	31.5
	Approaching Port	186	46.5
	Loading/Discharging	88	22.0

The above table shows that the majority of the participants were male (90.0%) and female participants constituted only 10.0%. The age profile of the participants was categorised as 18 – 29 years, 30 – 39 years, 40 – 64 years and above 65 years with the following proportions 20.0%, 30.0%, 42.5% and 7.5% respectively. Majority of the participants belonged to the age category of 40 – 64 years. The majority of the participants were Crew Members (45.0%), followed by 21.3% of Engineers and 16.3% of Officers. The sample also included 10.0% of participants representing Catering Team. The seafaring experience level of the participants indicated that 45.8% have experience between 10 and 20 years. 22.3% of the participants have experience of 5-10 years and 16.3% of the participants have experience of 1-5 years. The study also included seafarers with experience above 20 years (9.5%) and below one years (6.3%). The data on the nature of the shipping company that the participants represented shows that 58.3% of the participants of the study are working for foreign shipping companies and 41.8% of the participants are working for Indian shipping companies. The data on the current location of the participants revealed that 46.5% of the participants are approaching port and 31.5% of the participants are in passage. 22.0% of the participants have reported docking in the port for loading/discharging

Descriptive Statistics

The descriptive statistics of the study variable reveal that the participants have rated Job Satisfaction with the highest mean rating of 4.21 and standard deviation of 0.59. Fatigue Experienced and Job Demand have received mean rating of 4.17

(SD=0.55) and 4.16 (SD=0.53) respectively. Emotional Exhaustion (M=3.78, SD=0.69) received the lowest mean rating followed by Perceived Health Status (M=3.91, SD=0.67) and Depression (M=3.94, SD=0.73). The value of skewness of the variables was within the acceptable limit of -1 to +1 and Kurtosis measures were between -2 and +2 confirming the normality of the distribution.

Table 2 Descriptive Statistics

Variable	Mean	Std. Deviation	Skewness	Kurtosis
Emotional Exhaustion	3.78	0.69	-0.67	1.18
Perceived Stress	4.03	0.62	-0.69	0.15
Fatigue Experienced	4.17	0.55	-0.86	0.85
Job Demand	4.16	0.53	-0.55	1.28
Perceived Health Status	3.91	0.67	-0.02	-0.64
Isolation/Loneliness	4.00	0.53	-0.65	0.80
Depression	3.94	0.73	-0.69	0.13
Job Satisfaction	4.21	0.59	-0.87	1.26
Management Support	3.95	0.59	-0.45	0.29
Quality of Life	4.07	0.70	-0.54	1.72

Reliability and Validity

The reliability of the constructs was assessed by performing internal consistency test. The coefficient of reliability namely, Cronbach's alpha was measured for all constructs. The value of Cronbach's alpha can range between 0 and 1. The higher the value of Cronbach's alpha, the better the reliability of the constructs.

The convergent validity of the variables was measured using parameters like composite reliability (CR) and average variance extraction (AVE). The values of AVE are above 0.5, and the CR values of all the variables are comfortably high (CR>0.7), indicating that the conditions for convergent validity are satisfied. These results indicate a significant correlation among the constructs, thereby affirming the robustness of the measurement model. Consequently, the findings lend support to the theoretical framework underpinning the study, ensuring that the variables effectively capture the intended phenomena.

Table 3 Convergent Validity and Internal Consistency

Variable		No. of Items	AVE	CR	Cronbach's Alpha
Perceived Stress	PS	8	0.75	0.92	0.90
Fatigue Experienced	FE	6	0.55	0.78	0.76
Perceived Health Status	PHS	6	0.62	0.83	0.82
Depression	DEP	6	0.81	0.93	0.90
Emotional Exhaustion	EE	6	0.57	0.78	0.72
Job Demand	JD	8	0.70	0.88	0.86
Isolation/Loneliness	IL	6	0.59	0.81	0.80
Management Support	MS	6	0.63	0.83	0.78

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Variable		No. of Items	AVE	CR	Cronbach's Alpha
Job Satisfaction	JS	6	0.58	0.80	0.77
Quality of Life	QOL	6	0.67	0.86	0.84

The value of Cronbach's alpha exceeded the minimum threshold of 0.7, indicating that the condition for internal consistency is satisfied for all the variables in the study (Cronbach, 1951).

Divergent (or discriminant) validity is assessed to confirm that the measures of constructs that should not be related are, in fact, not correlated (Indu et al. 2025). Fornell-Larcker Criterion is the popular method for ensuring Discriminant Validity of the variables. The square root of the Average Variance Extracted (AVE) for each variable should be higher than its highest correlation with any other variable (Henseler et al. 2015).

Table 4 Discriminant Validity

Variable	PS	FE	PHS	DEP	IL	EE	JD	MS	JS	QOL
Perceived Stress	0.89									
Fatigue Experienced	0.28	0.84								
Perceived Health Status	0.81	0.17	0.89							
Depression	0.72	0.49	0.67	0.90						
Emotional Exhaustion	0.72	0.20	0.53	0.52	0.87					
Job Demand	0.87	0.15	0.79	0.74	0.73	0.88				
Isolation/ Loneliness	0.78	0.00	0.66	0.48	0.64	0.77	0.84			
Management Support	0.87	0.27	0.86	0.78	0.74	0.84	0.82	0.79		
Job Satisfaction	0.44	0.48	0.36	0.44	0.35	0.40	0.31	0.46	0.76	
Quality of Life	0.72	0.27	0.59	0.51	0.47	0.74	0.77	0.79	0.48	0.82

From the above table, it can be confirmed that the square root of the AVE for all the variables are higher than the correlations with the other variables. Therefore, it can be concluded that the discriminant validity of the variables is confirmed.

Hypothesis Testing

The study analyses the impact of factors contributing to psychological wellbeing and mental health of Indian seafarers on their job satisfaction, management support and quality of life. The study tests the following hypothesis using structural equation modelling (SEM) analysis using AMOS 21,0 software tool.

Hypothesis HA1: Factors causing emotional exhaustion in seafarers have a

significant effect on their job satisfaction

Hypothesis HA2: Perceived stress experienced by seafarers has a significant effect

on their job satisfaction

Hypothesis HA3: Fatigue experienced by seafarers has a significant effect on their job satisfaction

Hypothesis HA4: Perceived health status of seafarers has a significant effect on their job satisfaction

Hypothesis HA5: Job demand in a seafarer's profession has a significant effect on their job satisfaction

Hypothesis HA6: Isolation/loneliness in a seafarer's profession has a significant effect on their job satisfaction

Hypothesis HA7: Depression in a seafarer's profession has a significant effect on their job satisfaction

Hypothesis HA8: Job satisfaction has a significant effect on management support in the seafarer's profession.

Hypothesis HA9: Management support has a significant effect on the quality of life of seafarers.

The hypothesised structural model of the study is presented in the Figure 1 and the standardised regression estimates showing the effect of predictor variables on the outcome variable is presented in Table 5.



Figure 1 Structural Model

Table 5 Standardised Regression Estimates

Dependent Variable		Predictor Variable	Estimate	S.E.	C.R.	p-value
Job Satisfaction	<---	Emotional Exhaustion	0.14	0.03	3.92	0.00
Job Satisfaction	<---	Perceived Stress	0.48	0.03	13.77	0.00
Job Satisfaction	<---	Fatigue Experienced	0.10	0.03	4.24	0.00
Job Satisfaction	<---	Perceived Health Status	0.09	0.03	2.69	0.01

Dependent Variable		Predictor Variable	Estimate	S.E.	C.R.	p-value
Job Satisfaction	<---	Job Demand	0.07	0.03	2.25	0.02
Job Satisfaction	<---	Isolation/Loneliness	0.13	0.03	5.36	0.00
Job Satisfaction	<---	Depression	0.12	0.02	4.07	0.00
Management Support	<---	Job Satisfaction	0.43	0.05	9.63	0.00
Quality of Life	<---	Management Support	0.56	0.05	13.39	0.00

The above table shows that the predictor variables like Perceived Stress (B=0.48, p=0.00), Fatigue Experienced(B=0.10, p=0.00), Perceived Health Status(B=0.09, p=0.01), Job Demand(B=0.07, p=0.02), Isolation/Loneliness(B=0.13, p=0.00), Depression(B=0.12, p=0.00) and Emotional Exhaustion(B=0.14, p=0.00) have significant effect on the Job Satisfaction. Job Satisfaction (B=0.43, p=0.00) has a significant effect on Management Support. Finally, Management Support has a significant and positive effect on Quality of Life (B=0.56, p=0.00).

Table 6 presents the values of the goodness of fit indices for the hypothesised model. The parameters of "Goodness of fit" are generally used to assess the adequacy of the model in relation to the observed data. The table clearly indicates that the fit indices values for the measurement model fall within the recommended range. It can be deduced that the model is a good fit. The indices GFI (Goodness of Fit Index) (Hair et al. 2006), AGFI (Adjusted Goodness of Fit Index) (Hair et al. 2006), and CFI (Comparative Fit Index) (Hu & Bentler 1999) exceed the recommended threshold of 0.9, indicating that the model exhibits an excellent fit (Daire et al. 2008; Hu and Bentler, 1999). The RMSEA (Root Mean Square Error of Approximation) score was below the recommended threshold of 0.09 (Hair et al., 2006), indicating that the model exhibits an excellent fit. The overall values for model fit indices and measures obtained in the study are deemed acceptable. Therefore, it can be argued that the SEM model is ideally suited for measurements and deriving conclusions.

Table 6 Model Fit Summary of Structural Equation Model

Variable	Recommended Value	Obtained Value
Chi-square value	-	56.563
Df	-	15
p-value	-	0.00
Chisq/df	< 5.0 (Lomax 2013)	3.77
RMSEA	< 0.09 (Hair et al. 2014)	0.074
RMR	<0.07 (Diamantopoulos & Siguaw, 2000; Steiger, 2007)	0.048
GFI	> 0.90 (Hair et al. 2014)	0.924
AGFI	> 0.90 (Hair et al. 2014)	0.923
CFI	> 0.90 (Hu & Bentler, 1999)	0.932
TLI	> 0.90 (Hooper et al. 2008)	0.955

The results of hypothesis testing based on the standardised regression estimates and p-value of structural model analysis is discussed below:

- Based on the standardised regression estimates (Table 5), Emotional Exhaustion (B=0.14) has significant effect on the Job Satisfaction. The level of significance was 0.01. Thus, the hypothesis, Hypothesis HA1 "Factors causing emotional exhaustion in seafarers have a significant effect on their job satisfaction" was accepted.
- Based on the standardised regression estimates (Table 5), Perceived Stress (B=0.48) has significant effect on the Job Satisfaction. The level of significance was 0.01. Thus, the hypothesis, Hypothesis HA2 "Perceived stress experienced by seafarers has a significant effect on their job satisfaction" was accepted.
- Based on the standardised regression estimates (Table 5), Fatigue experienced (B=0.10) by seafarers has significant effect on the Job Satisfaction. The level of significance was 0.01. Thus, the hypothesis HA3 that the "Fatigue experienced by seafarers has a significant effect on their job satisfaction" was accepted.
- Based on the standardised regression estimates (Table 5), Perceived Health Status (B=0.09) of seafarers has significant effect on the Job Satisfaction. The level of significance was 0.05. Thus, the hypothesis HA4 that the "Perceived health status of seafarers has a significant effect on their job satisfaction" was accepted.
- Based on the standardised regression estimates (Table 5), Job demand (B=0.07) in a seafarer's profession has significant effect on the Job Satisfaction. The level of significance was 0.05. Thus, the hypothesis HA5 that the "Job demand in a seafarer's profession has a significant effect on their job satisfaction" was accepted.
- Based on the standardised regression estimates (Table 5), Isolation/loneliness (B=0.13) in a seafarer's profession has significant effect on the Job Satisfaction. The level of significance was 0.01. Thus, the hypothesis HA6 that the "Isolation/loneliness in a seafarer's profession has a significant effect on their job satisfaction" was accepted
- Based on the standardised regression estimates (Table 5), Depression (B=0.12) in a seafarer's profession has significant effect on the Job Satisfaction. The level of significance was 0.01. Thus, the hypothesis HA7 that "Depression in a seafarer's profession has a significant effect on their job satisfaction" was accepted.
- Based on the standardised regression estimates (Table 5), Job satisfaction (B=0.43) has significant effect on the Management Support in the seafarer's profession. The level of significance was 0.01. Thus, the hypothesis HA8 that the "Job satisfaction has a significant effect on management support in the seafarer's profession" was accepted.
- Based on the standardised regression estimates (Table 5), Management Support (B=0.56) has significant effect on the Quality of Life of seafarers. The level of significance was 0.01. Thus, the hypothesis HA9 that the "Management support has a significant effect on the quality of life of seafarers" was accepted.

DISCUSSION

The empirical findings confirmed that stress, emotional exhaustion, isolation/loneliness and fatigue experienced were the predominant factors influencing the job satisfaction of seafarers. Similarly, job satisfaction of seafarers greatly hinges on the management support and overall quality of life if seafarers is directly impacted by the support and extended help of management and higher leadership of shipping industry. The results of the present study provide important insights on the factors contributing to the deterioration in the metal health, psychological wellbeing and quality of life of Indian seafarers. The findings of the study corroborate the results of past studies (Sharma, 2024; Svetina et al., 2024; Krishnan et al., 2025) that have analysed the role stress, fatigue, exhaustion, mental health, depression isolation, loneliness in seafaring profession on employee job satisfaction, career intentions and quality of life.

Recommendations

Based on the empirical findings and general cognizance obtained from the extensive insights obtained from the seminal works of other authors, the following recommendations are provided:

- Training for senior personnel and managers on identifying mental health issues within their employees.
- Enhanced surveillance of the wellness of all personnel, especially those in at-risk demographics, including younger, single individuals with compromised physical health.

- Senior personnel ought to exemplify ideal behaviour for junior, less experienced colleagues, who may also gain from a mentorship or buddy system.
- Enhance awareness and education regarding the maintenance of a healthy lifestyle aboard.
- Enhance onboard nutritional offerings.
- Enhance the quality and accessibility of workout facilities and equipment on board.
- Mitigate auditory disturbances in cabins.
- Enhance awareness and education regarding the consequences of noise exposure and the significance of utilising noise protection equipment.
- Augment crewing levels to distribute the duty across a larger contingent of individuals; this should help diminish onboard durations and alleviate extended working hours.
- Managers ought to exemplify safety conduct through their leadership.
- Assurance from management that both psychological and physical safety is prioritised Managers should foster robust ties among team members, potentially through social events on board.
- Managers must cultivate an inclusive atmosphere and inform employees that any reports of adverse workplace conduct will be addressed promptly and effectively, without unjust repercussions on individuals' careers.
- Instruction in leadership and management competencies for both on-board and shoreside managers, encompassing awareness of potential signs of poor mental health and promoting a comprehensive grasp of how to support staff mental well-being.
- Utilise shorter, more consistent shifts whenever feasible.
- Facilitating employee participation in organisational decision-making processes when suitable.
- Granting staff greater autonomy over their responsibilities.
- Promoting staff engagement in additional training as desired.

Implementing the recommendations detailed above will require proactive engagement from every tier of the maritime community—from government bodies and regulatory agencies to shipping companies and the seafarers themselves.

LIMITATION

The primary limitation of the study is its cross-sectional design. There may be unobservable and unmeasured elements not incorporated in the proposed model that could also affect overall satisfaction and quality of life of seafarers.

CONCLUSIONS

Safeguarding the mental health and psychological well-being of seafarers is essential. It influences both their well-being and the safety and efficiency of maritime operations.

The mental health and psychological wellbeing of seafarers is not an isolated individual problem—it is intricately linked to operational safety, crew efficiency, and the overall competitiveness of the maritime industry. For Indian seafarers, who are vital contributors to global shipping lanes, the establishment of a robust, evidence-based policy framework for ensuring mental health support, psychological wellbeing and enhanced physical health infrastructure is imperative.

As the maritime industry continues to evolve, constitution of support systems for ensuring mental health, psychological well-being and general health of seafarers becomes increasingly critical. Continuous monitoring, incorporation of technological innovations, and a steadfast commitment to cultural sensitivity will be key drivers for success. By fostering an environment where mental health is prioritized and actively supported, the Indian maritime sector can set a precedent for others, ensuring that the well-being of seafarers remains a cornerstone of sustainable maritime operations.

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