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Factors Affecting the Retention of Junior Deck Officers in the Maritime Industry: A Qualitative Thematic Study

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ABSTRACT

The retention of junior deck officers remains a concern for maritime workforce sustainability because the transition from nautical education to early shipboard employment combines high technical responsibility with demanding living and working conditions. This qualitative study examines factors shaping decisions to remain at sea or leave the seafaring profession, with particular attention to recruitment, onboarding, training, supervision, career progression and wellbeing. The study reports semi-structured interviews with 20 active or former junior deck officers and a thematic analysis of their experiences. Seven interconnected themes were identified: recruitment clarity, structured onboarding, practical training, mentorship, supervisor support, transparent career development, and work–life balance and mental health. The reported thematic matrix illustrates selected respondent identifiers and qualitative observations rather than population-level frequencies or an empirically established ranking of factor importance. Findings suggest that early-career retention depends not only on remuneration or individual resilience but also on the continuity of organisational support across the employment lifecycle. A staged retention framework is proposed to integrate realistic recruitment information, competency-focused onboarding, mentoring arrangements, promotion guidance and welfare provision. As the interview-level audit trail and subgroup characteristics are not fully reported, the conclusions are exploratory and should not be interpreted as causal or statistically generalisable. The study offers practical considerations for shipping companies, maritime education and training institutions, and workforce policymakers.

Keywords: seafarer retention; junior deck officers; maritime employment; onboarding mentoring; work–life balance

1. Introduction

Maritime transportation depends on a steady supply of competent officers who can assume increasing responsibilities for navigational watchkeeping, cargo operations, shipboard safety and team coordination. Workforce planning must therefore consider not only how many cadets enter maritime education but also whether newly qualified officers remain in seagoing employment long enough to develop advanced competencies. The International Chamber of Shipping (2026) reported an estimated global shortfall of 39,100 certificated officers in 2026 and highlighted recruitment and retention as connected workforce priorities. These are international estimates and do not measure attrition among Malaysian junior deck officers.

The transition from cadetship to operational-level officer roles presents a critical point in the career pathway. New officers must transfer classroom and simulator learning into highly regulated environments while adapting to prolonged separation from home, watchkeeping routines, multicultural teamwork and shipboard hierarchy. Research on maritime students' career expectations links occupational decisions to perceptions of professional opportunity and working conditions (Lau et al., 2021); work on cadet attrition similarly points to a mismatch between training pathways and employment opportunities (Gekara, 2009).

This article investigates the experiences of junior deck officers who have remained in seafaring and those who have left. It addresses three objectives: to identify factors influencing retention; to examine how recruitment, onboarding and training shape early career commitment; and to propose practical retention measures for employers and maritime education providers. Because the available analysis is thematic, the study examines the reported importance and interaction of factors rather than claiming to produce a statistically validated ranking.

2. Literature Review

2.1 Recruitment, career expectations and the seafaring transition

Expectations developed before joining a vessel influence how new officers interpret their first employment experiences. Organisational communication regarding contract duration, vessel type, occupational responsibilities, working conditions and progression requirements may facilitate or impede adjustment. The Organisation for Economic Co-operation and Development (2004) emphasised the importance of accurate career information and accessible guidance, while Wang et al. (2022) found that expectation gaps, inadequate career preparation and difficulties adapting to shipboard work were relevant to unsuccessful career experiences among navigation graduates. Such findings provide a rationale for treating recruitment communication as a retention practice rather than merely a hiring procedure.

The maritime training–employment interface is also important. Gekara (2009) discussed cadet attrition as partly shaped by the institutional and labour-market organisation of training, and Heirs and Manuel (2021) argued for earlier maritime career awareness and sustained guidance. Maritime education therefore has a role in preparing realistic expectations alongside technical skills. As Caesar (2024) observes, workforce resilience requires linked approaches to recruiting, training and retaining maritime personnel.

2.2 Workplace culture, supervision and mentoring

Junior officers operate within organisational and interpersonal environments in which feedback, role modelling and trust affect learning. A positive shipboard culture allows inexperienced officers to ask questions, report uncertainties and improve without fear of humiliation. Kim and Jang (2018) associated perceived organisational culture and self-efficacy with quality of life among seafarers. More generally, Rasool et al. (2021) identified associations between toxic working environments, engagement, organisational support and employee wellbeing, although their sample was not maritime-specific. These findings support the relevance of supportive supervision but do not by themselves establish causal effects on officer retention.

Mentorship is especially relevant in the period after certification when officers move from supervised cadet tasks to independent watchkeeping. A mentor can clarify company procedures, explain professional judgement, support the safe escalation of concerns and provide feedback on competence gaps. Formal induction and mentorship should complement, rather than substitute for, the master's and chief officer's statutory and operational responsibilities.

2.3 Practical training and competence development

Shipboard performance depends on the integration of technical understanding, procedural knowledge and practical situational awareness. Magsino et al. (2023) documented the value of onboard training experience for cadets and identified the role of training arrangements in professional preparation. Lau et al. (2021) similarly underscored the significance of aligning maritime education with students' expectations of future employment. These findings are consistent with the argument that simulator exercises, practical bridge familiarisation, emergency drills and structured debriefings may support early-career confidence. Nevertheless, competence improvement should be assessed using objective training records rather than inferred from retention intention alone.

2.4 Promotion, remuneration and career opportunities ashore

Although the occupational route from officer of the watch to senior deck positions is formally structured, actual advancement depends on experience, certification, opportunities, company policies and available berths. Unclear promotion conditions may create uncertainty and discourage commitment. Wang et al. (2022) identified promotion difficulty and the perceived appeal of land-based opportunities among factors affecting navigation graduates' professional adjustment. Yıldırım et al. (2022) examined how compensation relates to the assessment of decent work and showed why pay must be considered alongside wider employment conditions. Career guidance should also explain shore-based roles without depicting any transition ashore as inherently unsuccessful.

Ashoreside employment may offer different contract patterns, family access, autonomy and professional pathways. However, the attractiveness of particular jobs varies by employer, location and individual career stage. For this reason, generic salary comparisons should not be treated as evidence of a universal financial advantage. The present study considers shore-based alternatives as an aspect of career choice and perceived opportunity rather than an independently measured pay differential.

2.5 Work–life balance, fatigue and mental health

Time away from family, irregular sleep, watchkeeping demands, social isolation and limited private space can influence wellbeing and satisfaction. Occupational evidence shows that seafaring involves distinct physical and psychosocial hazards (Oldenburg et al., 2010). In a systematic review, Brooks and Greenberg (2022) documented associations between seafaring environments and psychological wellbeing; Jonglertmontree et al. (2022) mapped mental health problems and relevant factors in the seafaring literature. Toygar et al. (2023) further linked work–family conflict with emotional exhaustion and work alienation among seafarers. These studies support attention to psychosocial risks but do not justify diagnosing individual interview participants from narrative descriptions.

The Maritime Labour Convention, 2006 (International Labour Organization, 2006) establishes an international framework for work and rest, living conditions, repatriation, welfare and other seafarers' rights. Organisational retention practices are more credible when linked to the practical implementation and monitoring of such minimum standards.

3. Methodology

3.1 Research design and scope

A qualitative research design was used to examine how junior deck officers interpret early-career experiences and decisions about continuing employment at sea. Semi-structured interviews were the principal means of obtaining participants' perspectives, supported by a literature review. The unit of interpretation is the reported experience and associated theme, not a numerical retention rate or company-level hazard estimate. The study includes both active and former officers to capture perspectives on staying and leaving.

The research sequence is introduced in Figure 1. It connects problem definition and literature identification with qualitative material, thematic synthesis and development of retention recommendations. The diagram describes the analytical process; it does not imply that a longitudinal experiment or an intervention trial was conducted.

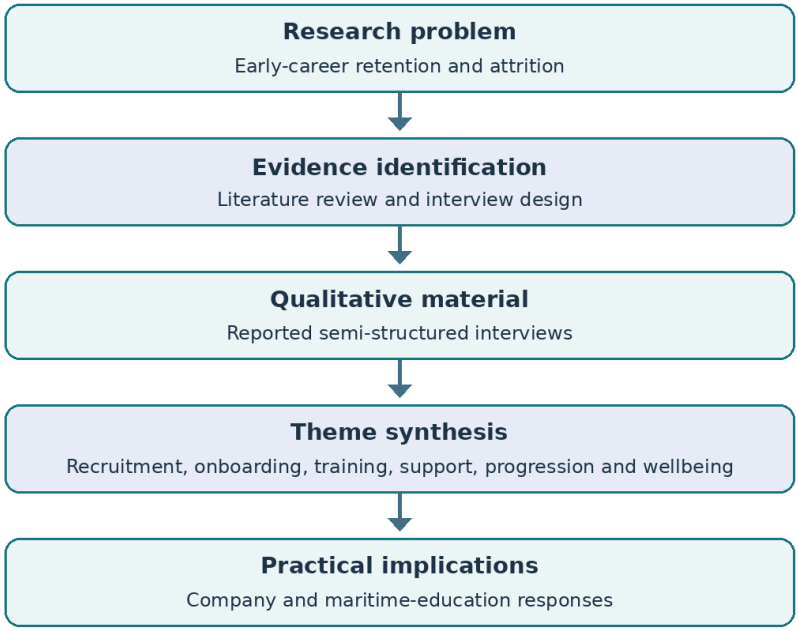


Figure 1. Research sequence for the junior deck officer retention study.

3.2 Sampling and interview material

The study reports 20 interview participants drawn from junior deck officers who were active at sea or had left seafaring. The reported interview framework sought to capture recruitment, onboarding, training, mentorship, supervisor feedback, promotion and wellbeing experiences.

A detailed breakdown of respondents by age, rank, employer, contract history or active/former status is not presented, and the method used to identify and approach participants is not specified in sufficient detail to evaluate recruitment bias. Consequently, the sample should be interpreted as a purposive exploratory group rather than a probability sample representative of Malaysia's junior officers.

3.3 Thematic analysis and interpretation

Interview experiences were organised into recurring themes using a qualitative thematic approach consistent in broad terms with Braun and Clarke (2006). The reported sequence involved familiarisation with responses, initial coding, searching for themes, reviewing and naming themes, and writing the synthesis.

The results table records seven themes and selected respondent identifiers. It is therefore useful as a thematic summary, but it does not establish exact mention frequencies across all 20 participants. Transcript excerpts, coding decisions, reflexive notes and an independently replicated coding audit are not reported; accordingly, no inter-coder reliability, saturation or formal significance testing is claimed.

The themes were interpreted in relation to the literature, with particular care to separate evidence reported by participants, theoretical explanations and proposed employer interventions. References to participants in the matrix are descriptive identifiers rather than attributable quotations. No new verbatim statements have been reconstructed.

4. Results

4.1 Overview of the seven thematic findings

Seven themes were identified in the interview-based synthesis: recruitment, onboarding, training, mentorship, supervisor support, career development and work–life balance/mental health. Table 1 presents the thematic labels and the reported respondent notes. The listed IDs are reproduced as qualitative trace markers; they cannot be converted into proportions of the stated 20-person sample without a complete participant-by-code matrix.

Table 1. Qualitative synthesis of the seven retention themes

Theme	Code	IDs noted	Reported observation
Recruitment	Clarity of process	R3, R6, R10	Recruitment and expectations described as unclear
Onboarding	Structured onboarding	R3, R6, R8, R10	Orientation described as minimal or unhelpful
Training	Practical skills and simulations	R2, R5, R7, R9	Hands-on exercises perceived as motivating
Mentorship	Guidance and support	R1, R3, R6, R8, R10	Limited mentorship associated with lower commitment
Supervisor support	Encouragement and feedback	R2, R4, R5, R7, R9	Supportive supervisors perceived as improving retention
Career development	Clear promotion pathway	R1, R3, R6, R10	Promotion pathway described as unclear
Work–life balance and mental health	Wellbeing and stress management	R6, R8, R10	Stress and isolation identified as concerns

Table 1 demonstrates that organisational support features across several stages of the career journey. The narrative below interprets each theme; it does not assume that a theme cited by more displayed identifiers necessarily has greater prevalence or causal importance across all participants.

4.2 Recruitment and expectation clarity

Recruitment-related concerns centred on incomplete communication about role expectations, contract arrangements and prospects for progression. The synthesis indicates that some officers entered employment with assumptions that differed from shipboard reality. Such expectation gaps can generate disappointment early in a contract, particularly when officers are required to perform responsibilities they had not anticipated. Clear descriptions of watchkeeping demands, vessel routines and advancement requirements may improve informed entry into the profession, even though the present study does not quantify their effects on turnover.

4.3 Onboarding and adaptation to shipboard responsibilities

Onboarding was described as insufficiently structured for some new officers. Minimal orientation, reliance on trial-and-error learning and uncertain reporting arrangements may increase cognitive workload during the first months aboard. These observations suggest that familiarisation should extend beyond basic safety briefings to include standing orders, bridge-team interfaces, routine operational tasks and accessible points of contact. A written onboarding checklist, supervised task progression and regular feedback can make expectations observable and support accountability.

4.4 Practical training and simulation exposure

Practical training was viewed positively when it connected learning to navigational watchkeeping, vessel operations and emergency response. Participants' reported interest in hands-on activities reinforces the value of simulator-supported practice and onboard coaching. However, the positive narrative should not be equated with a measured improvement in competence or confirmed retention; such outcomes would require follow-up performance assessments, certification records or longitudinal employment data.

4.5 Mentorship and supervisor behaviour

Mentorship and supportive supervision emerged as related but distinct themes. Mentorship concerns the availability of sustained guidance from experienced personnel, while supervisor support involves feedback, recognition and constructive leadership within formal reporting relationships. Where mentoring was perceived as weak, officers described uncertainty and isolation; supportive feedback was associated in the thematic account with confidence and motivation. A shipboard mentor programme should therefore make responsibilities explicit and distinguish developmental support from operational command and assessment duties.

4.6 Transparent career development

Participants expressed concern about uncertainty surrounding promotion criteria and timelines. Junior officers may experience a mismatch between formal certification pathways and actual advancement opportunities within an employing company. This creates a need for clear written criteria, regular career reviews and access to training and qualifying sea service. Career plans should also account for legitimate transitions to shore-based maritime employment without presuming that leaving a vessel is synonymous with leaving the maritime industry.

4.7 Work–life balance and psychosocial wellbeing

Long working hours, separation from family and limited rest were described as pressures on wellbeing and occupational commitment. The analysis links these conditions to perceptions of stress and isolation, but it does not provide diagnostic measures or records of clinically assessed mental illness. Retention initiatives should emphasise fair scheduling, compliance with work/rest safeguards, opportunities for communication with family, confidential help-seeking routes and supportive leadership. Any company programme should monitor the accessibility and uptake of welfare measures rather than assuming that published policies guarantee practical support.

4.8 Integrative interpretation

The seven themes suggest an interconnected rather than singular explanation of early-career retention. Figure 2 presents a conceptual grouping of the themes into entry and transition, onboard support, and longer-term career sustainability. The arrows indicate a practical sequence for planning support; they should not be interpreted as estimated causal paths or tested mediation relationships.

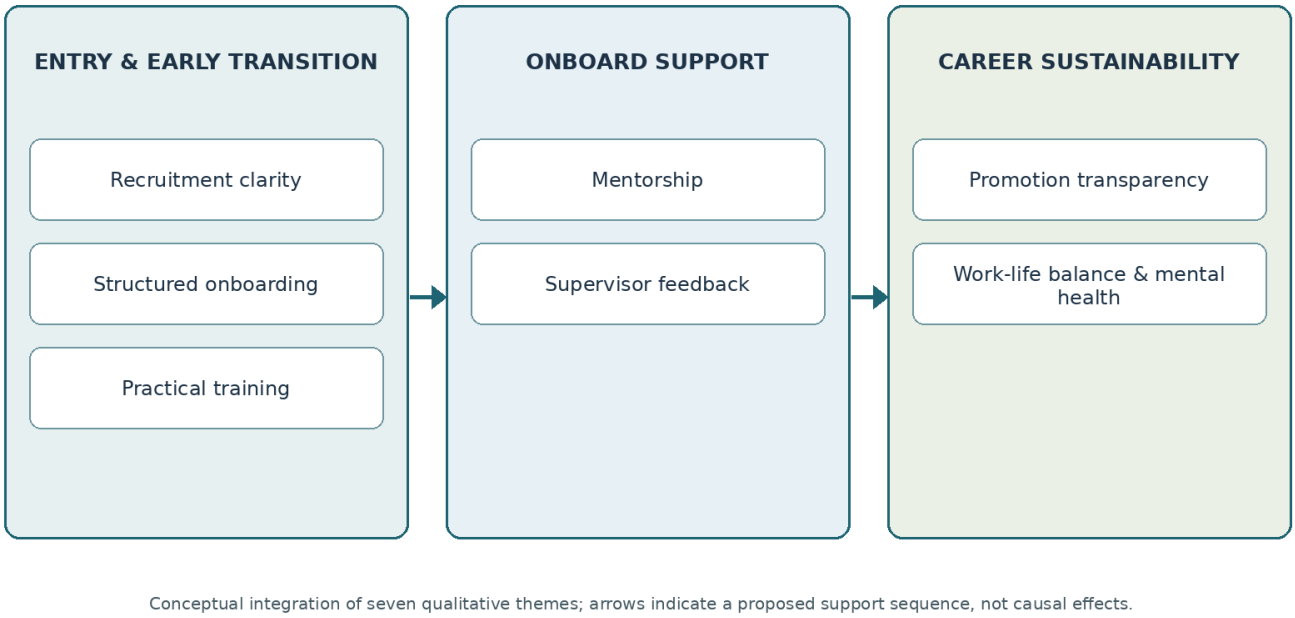


Figure 2. Conceptual retention-support framework synthesised from seven qualitative themes.

4.9 Active and former officer perspectives

The narrative comparison indicates that active officers more often described supportive supervision, practical learning and mentoring as reasons for maintaining motivation, whereas former officers emphasised unclear expectations, limited support and accumulated work-related strain. The study does not report the size or demographic composition of each subgroup, nor participant-level comparisons; consequently, these contrasts should be considered exploratory qualitative patterns rather than tested differences between two populations.

5. Discussion

5.1 A lifecycle rather than single-factor approach to retention

Taken together, the findings imply that retention risks can develop before the first contract and accumulate across subsequent operational assignments. Recruitment communication shapes expectations; onboarding establishes early competence and trust; mentoring and supervisory practice influence the learning climate; and career progression and wellbeing affect the perceived sustainability of seafaring as a livelihood. This integrated interpretation is consistent with the workforce-resilience approach of Caesar (2024) and with evidence on career adjustment among navigation graduates (Wang et al., 2022). The study cannot determine which theme has the largest population-level effect, but it does identify practical decision points at which support may be improved.

5.2 Translating the themes into organisational practices

Retention policy should combine information quality, operational competence, managerial accountability and welfare safeguards. Table 2 translates the seven themes into proposed actions and indicators that a shipping company could monitor in future implementation studies. The suggested indicators are recommendations, not outcomes measured in this research.

Table 2. Proposed retention measures and prospective monitoring indicators

Theme	Proposed action	Prospective indicator
Recruitment	Realistic role and contract briefings	Record briefing completion and expectation alignment
Onboarding	Standardised 30/60/90-day familiarisation and review	Checklist completion and training sign-off
Practical training	Supervised bridge tasks and simulator refreshers	Competency assessments and remediation records
Mentorship	Named mentor with scheduled check-ins	Mentor meeting logs and feedback access
Supervisor support	Constructive performance reviews and safe escalation	Review frequency and anonymous support feedback
Career progression	Documented certification and promotion pathway	Career-plan updates and access to qualifying sea time
Wellbeing	Work/rest assurance, family connectivity, welfare access	Rest-hour compliance and confidential service availability

Table 2 can guide a future company-level implementation and evaluation programme. The actions should be tailored to vessel type and contractual arrangements, with participation by junior officers and senior shipboard leaders. The work/rest and welfare proposals are compatible with the general protections of the Maritime Labour Convention (International Labour Organization, 2006).

5.3 Work–life balance and reward are not interchangeable

Seafaring compensation may attract applicants but does not necessarily offset adverse conditions indefinitely. Yıldırım et al. (2022) showed the need to consider pay in the context of decent working conditions; Toygar et al. (2023) linked work–family conflict to emotional exhaustion. Kim and Jang (2018) and Brooks and Greenberg (2022) similarly suggest that organisational culture and psychosocial wellbeing warrant direct attention. As a result, retention programmes should not rely exclusively on salary increases or require officers to choose between professional development and basic welfare.

5.4 Implications for maritime education and policy

Maritime education providers can improve the transition into shipboard roles through realistic career briefings, coaching in communication and leadership, and close coordination with employers over cadetship and junior-officer competency requirements. Magsino et al. (2023) and Heirs and Manuel (2021) offer relevant perspectives on shipboard training and earlier maritime career guidance. From a policy perspective, reliable seafarer workforce tracking should distinguish continued seagoing service, temporary career breaks and

transitions to shore-based maritime roles. International workforce projections (International Chamber of Shipping, 2026) underline the importance of retaining qualified officers, but local intervention outcomes require Malaysia-specific follow-up data.

5.5 Limitations and directions for future research

Several features constrain interpretation. First, the total of 20 participants is reported without a complete recruitment log, demographic profile or stratification of active versus former officers. Second, only selected respondent identifiers, up to R10, appear in the displayed theme matrix; the full set of interview transcripts, supporting quotations and a case-by-theme coding ledger is not reported. Third, the framework was not subjected to a structured intervention, longitudinal follow-up or statistical prioritisation. Therefore, claims about the magnitude, frequency or causal effect of individual retention drivers cannot be inferred. Fourth, perspectives may differ among ship types, companies, flags, contract lengths and career stages; these characteristics are not analysed independently here.

Future work should specify sampling criteria and interview recruitment procedures, document informed consent and ethics approvals as applicable, maintain an anonymised audit trail, report sufficient quotations to evidence each theme, and describe researcher reflexivity. A longitudinal study could measure retention intention, actual subsequent employment and professional progression after a structured mentoring or onboarding intervention. Cross-company comparisons could assess whether reported support conditions differ by vessel sector, crewing arrangements and employment contract.

6. Conclusion

Junior deck officer retention emerges from an interconnected set of conditions rather than a single isolated employment factor. This qualitative synthesis identifies seven relevant themes—recruitment clarity, structured onboarding, practical training, mentorship, supervisor support, career development and work–life balance/mental health—and demonstrates how they can be assembled into an operational support framework. For shipping companies, the immediate practical priority is to align recruitment promises with shipboard reality and establish consistent onboarding and developmental support. Maritime education providers can strengthen the preparation of officers for real-world demands, while employers and regulators should maintain credible work/rest and wellbeing safeguards. These findings provide a basis for developing retention practices, not proof of their effectiveness; future interview-level verification and prospective evaluation will be required to determine their measurable impact on long-term seafaring careers.

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Declaration of Generative AI and AI-Assisted Technologies

AI-assisted tools were used to support language refinement and structural clarity. The authors remain responsible for the accuracy, interpretation and integrity of the research presented.

Conflict of Interest

No competing interests were reported.

Author Contributions

Ahmad Amirun Ahmad Arbak contributed to the conceptualization of the research and reviewing and editing the manuscript. Noor Apandi Osnin contributed to the supervision and oversight of the research.

Data Availability

A thematic summary and selected anonymised respondent identifiers are reported in this article. Interview transcripts and respondent-level coding records are not included in the published dataset.

Ethics

The study describes qualitative interviews with maritime professionals. An ethics-approval or exemption identifier and specific consent procedures are not reported.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brooks, S. K., & Greenberg, N. (2022). Mental health and psychological wellbeing of maritime personnel: A systematic review. BMC Psychology, 10(1), Article 139. https://doi.org/10.1186/s40359-022-00850-4

Caesar, L. D. (2024). Emerging dynamics of training, recruiting and retaining a sustainable maritime workforce: A skill resilience framework. Sustainability, 16(1), Article 239. https://doi.org/10.3390/su16010239

Gekara, V. O. (2009). Understanding attrition in UK maritime education and training. Globalisation, Societies and Education, 7(2), 217–232. https://doi.org/10.1080/14767720902908190

Heirs, S., & Manuel, M. E. (2021). Sustainable maritime career development: A case for maritime education and training (MET) at the secondary level. TransNav: International Journal on Marine Navigation and Safety of Sea Transportation, 15(1), 91–99. https://doi.org/10.12716/1001.15.01.08

International Chamber of Shipping. (2026, June 25). BIMCO and ICS report warns of potential future shortage of officers. https://www.ics-shipping.org/press-release/bimco-and-ics-report-warns-of-potential-future-shortage-of-officers/

International Labour Organization. (2006). Maritime Labour Convention, 2006 (as amended). https://www.ilo.org/global/standards/maritime-labour-convention

Jonglertmontree, W., Kaewboonchoo, O., Morioka, I., & Boonyamalik, P. (2022). Mental health problems and their related factors among seafarers: A scoping review. BMC Public Health, 22(1), Article 282. https://doi.org/10.1186/s12889-022-12713-z

Kim, J.-H., & Jang, S.-N. (2018). Seafarers' quality of life: Organizational culture, self-efficacy, and perceived fatigue. International Journal of Environmental Research and Public Health, 15(10), Article 2150. https://doi.org/10.3390/ijerph15102150

Lau, Y.-Y., Dragomir, C., Tang, Y.-M., & Ng, A. K. Y. (2021). Maritime undergraduate students: Career expectations and choices. Sustainability, 13(8), Article 4297. https://doi.org/10.3390/su13084297

Magsino, R. G., Paraggua, V. Q., Mobo, F. D., Acuavera, R. C., Villavicencio, L. D., Pasa, G. C., & Guiang, S. L. A. (2023). Students' onboard experiences: Basis for improved shipboard training program policy. International Journal of English Literature and Social Sciences, 8(2), 259–274. https://doi.org/10.22161/ijels.82.38

Organisation for Economic Co-operation and Development. (2004). Career guidance and public policy: Bridging the gap. OECD Publishing. https://doi.org/10.1787/9789264105669-en

Oldenburg, M., Baur, X., & Schlaich, C. (2010). Occupational risks and challenges of seafaring. Journal of Occupational Health, 52(5), 249–256. https://doi.org/10.1539/joh.K10004

Rasool, S. F., Wang, M., Tang, M., Saeed, A., & Iqbal, J. (2021). How toxic workplace environment effects the employee engagement: The mediating role of organizational support and employee wellbeing. International Journal of Environmental Research and Public Health, 18(5), Article 2294. https://doi.org/10.3390/ijerph18052294

Toygar, A., Nart, S., & Yıldırım, U. (2023). Work-family conflict and work alienation among seafarers: The mediating role of emotional exhaustion. Marine Policy, 155, Article 105759. https://doi.org/10.1016/j.marpol.2023.105759

Wang, L., Ye, J.-H., Lee, Y.-S., & Miao, C.-J. (2022). Analysis of influencing factors of subjective career unsuccessfulness of vocational college graduates from the Department of Navigation in China. Frontiers in Psychology, 13, Article 1015190. https://doi.org/10.3389/fpsyg.2022.1015190

Yıldırım, U., Toygar, A., & Çolakoğlu, C. (2022). Compensation effect of wages on decent work: A study on seafarers attitudes. Marine Policy, 143, Article 105155. https://doi.org/10.1016/j.marpol.2022.105155

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