Recruitment and retention of seafarers

A synthesis of study evidence
Commissioned by the Nautilus Federation

March 2025

NAUTILUS
FEDERATION

FOREWORD

The shipping industry knows it has a recruitment and retention crisis. The signs were there before the Covid-19 pandemic, but the way maritime professionals were treated as the world went into lockdown severely impacted the attitudes of many seafarers in continuing to work at sea.

Now we face new pressures. Studies have shown that, in the context of the shipping industry's commitment to decarbonise, hundreds of thousands of maritime professionals must be trained in the safe use of new technology and alternative fuels. The ongoing recruitment and retention crisis will therefore become even more stark.

The elephant in the room is, we know exactly what needs to be done to address this crisis. It can often seem that at every working group, seminar, conference and other industry event or initiative I have attended — of which there have been literally hundreds over my nearly three decades at Nautilus — people are talking about the challenges the industry faces to recruit and retain talent, especially young people, women, and other underrepresented groups.

Many ideas and solutions have been considered, and many research hours have been expanded to identify the actions needed. Even the United Nations in the form of the International Labour Organization has gathered experts together in tripartite discussions to agree what needs to happen. But nothing seems to change.

Despite significant degrees of consensus across the industry, the pace of change is slow. As the industry wrestles with the journey to net-zero, we all agree that in maritime there must be a Just Transition. No-one must be left behind. Reskilling and upskilling of our existing seafarers and training of new entrants is of fundamental importance. Despite vocal commitments to ensure a Just Transition, it seems that many stakeholders are blind to the necessity of tackling the recruitment and retention crisis.

The affiliates of the Nautilus Federation have a long history of working together with the industry. We want to continue working together to resolve the deep-seated and systemic issues within the shipping industry, transforming it into one in which our current and future maritime professionals want to develop long and prosperous careers.

For that reason, the Nautilus Federation commissioned this 'synthesis of study evidence', which proves we already know what the issues are that are driving the recruitment and retention crisis. We also know what needs to be done to resolve them.

We know that more job satisfaction, more respect and better communication are essential for any maritime professional to feel valued. We know that employers need to enhance pay, working conditions, reduce fatigue, improve recruitment and training practices, promote diversity, and be more inclusive. Employers must cooperate with us to deliver these improvements in every forum where they are addressed. Governments too must play their part.

The affiliates of the Nautilus Federation hope that the shipping industry will welcome this report and consider the recommendations we have made. The issues are not that complex. We can quickly agree, as we have in the past, on what actions are needed, but the time for action is now.

Without action, the recruitment and retention crisis will deepen and there will be no Just Transition for the maritime industry.

Nautilus Federation affiliates stand ready to work with our social partners in our own jurisdictions. We also stand ready to collaborate on the crucial global aspect of this matter with the International Transport Workers' Federation. Together we want to ensure that the maritime industry is one that delivers for our people and delivers a Just Transition, based on continuous improvement of the living and working conditions of our collective membership.

Mark Dickinson
Director
Nautilus Federation

March 2025

ABSTRACT

This research study aims to conduct a non-exhaustive yet informative synthesis of the vast expanse of scholarly work already existing on recruiting and retaining seafarers and map out the key enabling factors in attracting and retaining seafarers, from a seafarer's perspective.
In particular, the research questions are as follows:
- What factors attract new entrants (including women seafarers and other under-represented groups) to join the industry as seafarers?
- What factors make experienced seafarers stay in the industry?

The results show a coherent pattern and that three main emerging themes influence the recruitment and retention of seafarers: (i) the importance of job satisfaction, career progression and good working conditions, (ii) respect, involvement and commitment shown by employers and (iii) the provision of adequate communication facilities. Four main recommendations to the attention of the industry, and in particular employers, are put forward: (a) to enhance working conditions and quality of life for seafarers, (b) to improve recruitment and training practices, (c) to promote diversity and inclusion in the maritime workforce and (d) to engage with international cooperation and collaboration. By implementing these complementary measures, the maritime industry can step forward to effectively address the seafarer shortage and ensure a sustainable and resilient sector for the future.

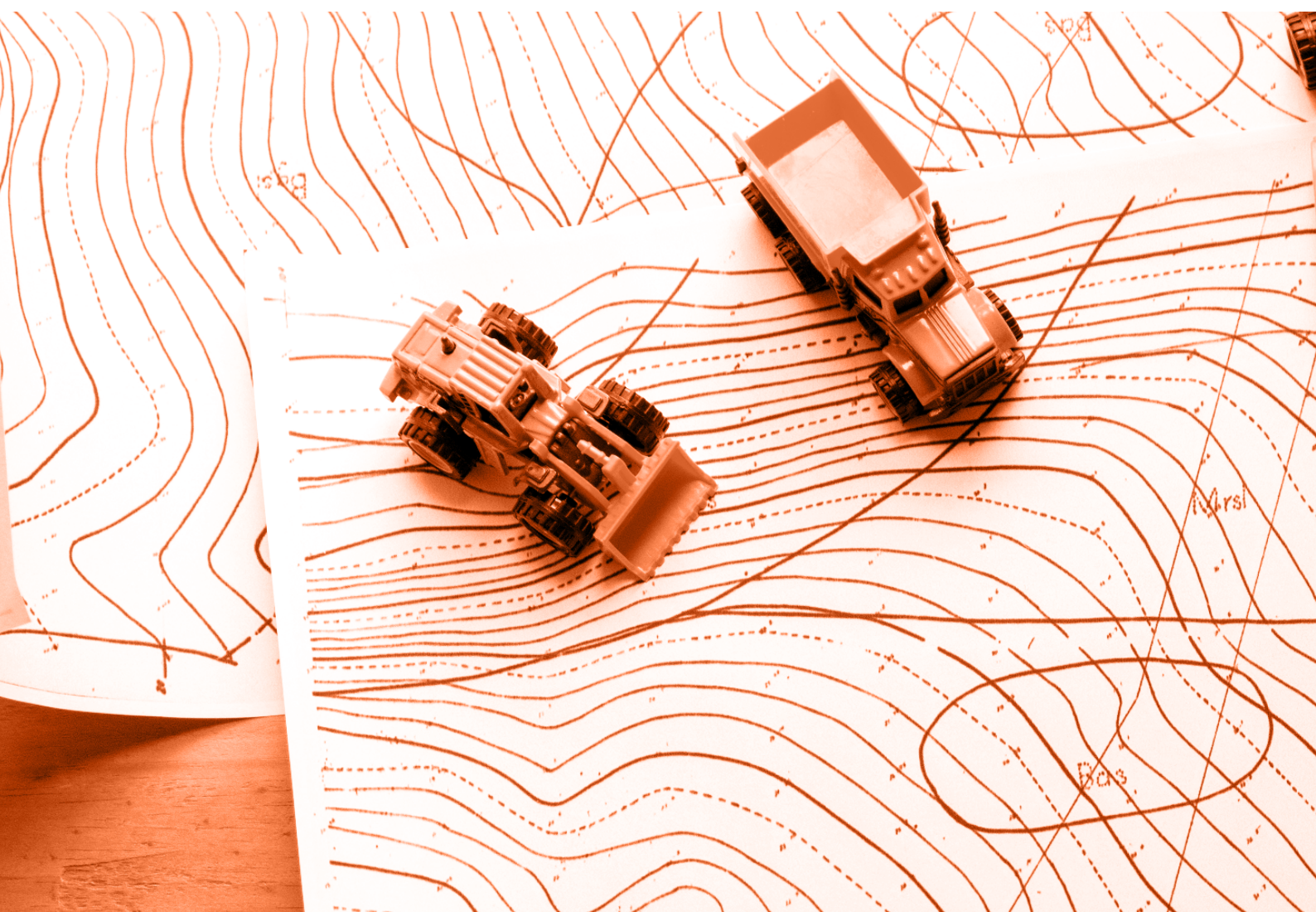*Keywords: Seafarers, recruitment, retention, shipping industry*

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ABBREVIATIONS

BIMCO	**Baltic and International Maritime Council**
ECSA	**European Community Shipowners' Associations**
ETF	**European Transport Workers' Federation**
ICS	**International Chamber of Shipping**
ILO	**International Labour Organization**
IMEC	**International Maritime Employers' Council**
IMO	**International Maritime Organization**
ITF	**International Transport Workers' Federation**
MLC	**Maritime Labour Convention**
NGO	**Non-Governmental Organisation**
OECD	**Organisation for Economic Co-operation and Development**

01

INTRODUCTION

This Chapter presents the problem, aim and objectives of this research project.

The worldwide population of seafarers serving on internationally trading merchant ships is estimated at 1,892,720, of which 857,540 are officers and 1,035,180 are ratings. The Philippines, the Russian Federation, Indonesia, China and India are the largest suppliers of ratings and officers working on merchant ships. It is predicted that there will be a need for an additional 89,510 officers by 2026 to operate the world merchant fleet (ICS/BIMCO Seafarer Workforce Report 2021).

However, as already noted in 2006 at the 94th (Maritime) Session of the International Labour Conference, in a resolution concerning recruitment and retention of seafarers, there is a:

"Shortage of suitably qualified seafarers, that many essential shore-based shipping positions require trained seafarers and that filling some of these positions with suitably qualified seafarers is essential to overall maritime safety"
(ILO 2006)

A comprehensive report on career mobility and progression initiated by the European social partners ECSA (European Community Shipowners' Association) and ETF (European Transport Workers' Federation) and with financial support from the European Commission (CM2 project 2013), found that more should be done to attract new talents at sea and give broader opportunities in the maritime industry to experienced seafarers whose skills are invaluable.

An ILO Sectoral Meeting took place in 2019 in Geneva, with representatives from governments, shipowners' and seafarers' organisations, to discuss specifically the recruitment and retention of seafarers and the promotion of opportunities for women seafarers (ILO 2019). The outcomes of the meeting identified several issues that needed special attention:

- Number and space of cadet and trainee berths
- Inconsistency in law and practice in how the recruitment and placement of seafarers are regulated and operated
- Impact of automation and digitalisation
- Loneliness and isolation, and social media and internet connectivity
- Governmental responsibilities towards seafarers about issues such as abandonment, criminalisation and shore leave

- Government incentives to shipowners for the retention of seafarers
- The prohibition of discrimination in employment and occupation
- Equal opportunities and treatment of seafarers, including women seafarers (equality and anti-discrimination legislation, diversity in the hiring of seafarers)
- Harassment and bullying
- Age discrimination
- Social Dialogue
- Government incentives to shipowners for the retention of seafarers

The issue of recruitment and retention of seafarers remains high on the agenda of the maritime transport social partners at both the European and international levels. This is a joint concern of both workers and employers' organisations. Moreover, the humanitarian and safety crisis seafarers and the shipping industry faced due to the COVID-19 pandemic accelerated the need to address recruitment and retention.

Recent industry position papers and research into new opportunities to support a decarbonised shipping industry, the future skills and competencies required to attract and keep a broader pool of maritime professionals have been developed (ITF 2021; DNV 2022; HSBA 2022; Maritime Just Transition Task Force 2022; SkillSea 2023; World Maritime University 2023; Maritime Skills Commission 2024). At the time of writing, discussions are also ongoing under the auspices of the Maritime Just Transition Task Force[1] to boost efforts to attract and retain seafarers in light of different humanitarian, technological, and geopolitical challenges (Maritime Just Transition Task Force 2022).

This research study aims to conduct a non-exhaustive yet informative synthesis of some of the vast expanse of scholarly work already existing on recruiting and retaining seafarers and give a broad perspective of the key enabling factors in attracting and retaining seafarers, from a seafarer's point of view.

In particular, the research questions are as follows:
1. What factors attract new entrants (including women seafarers and other under-represented groups) to join the industry as seafarers?
2. What factors make experienced seafarers stay in the industry?

02

METHOD

This Chapter presents the methodological approach of this paper and its delimitations.

A literature review has been undertaken to identify and collate different sources of information on the factors influencing the recruitment and retention of seafarers.

Recruitment can be generally defined as the process of finding new people to join an organisation.

Retention can be defined as the continuance of employees with their current organisation, and can refer to the "systematic effort by employers to create and foster an environment that encourages current employees to remain employed by having policies and practices in place that address their needs" (Mckeown 2002 in Bhattacharya 2015: 297).

In addition to the publications (i.e. articles within published collections and peer-reviewed articles from journals identified through database searches) which have been identified and analysed for the discussion Chapter of this paper, the following sources inform the empirical background of the study:

1. Reports of international organisations such as the International Labour Organization (ILO) reports. The ILO, through its tripartite work involving representatives of employers, trade unions and governments, has regularly published reports on the global seafarer workforce, including analysis of the shortage and potential solutions.
2. Reports, surveys, case studies and best practices from the industry: various employers' associations and trade union organisations regularly conduct surveys of seafarers and shipping companies to gather insights into the challenges and opportunities related to seafarer

recruitment and retention. They also publish successful initiatives to attract and retain seafarers.
3. Reports commissioned to various academic institutions examining the factors contributing to the seafarer shortage.

Works published between 2007 and 2023 (i.e. since the adoption of the Maritime Labour Convention in 2006 and its entry into force in 2013) have been prioritised for discussion.

The review of literature has been conducted using the Web of Sciences (all collections) and Google Scholar search databases. The search terms used are: "recruitment OR retention AND seafarers". Results in English have been selected. Inclusion criteria

for the review comprise whether the report, monograph or article addresses factors in attracting new entrants or retaining experienced seafarers. Studies are excluded if they do not address recruitment or retention issues from a seafarer's perspective.

As illustrated in Figure 1 above, 23 studies have been selected using the Web of Sciences (all collections) and Google Scholar search databases and included in the report. A summary table of their contributions can be found in the appendix (Table 3).

In the next stage, a flexible, qualitative analysis has been performed to identify the key recruitment and retention factors in the selected papers.

Identification of studies via databases 30.10.2023

Identification

Records identified from*:
Databases Google Scholar and WoS
(n = 233)

Records removed before screening:
Duplicate records removed
Records marked as ineligible (out of scope or unable to access) (n= 175)

Screening

Records screened and assessed for eligibility
(n = 58)

Records excluded
(n = 35)

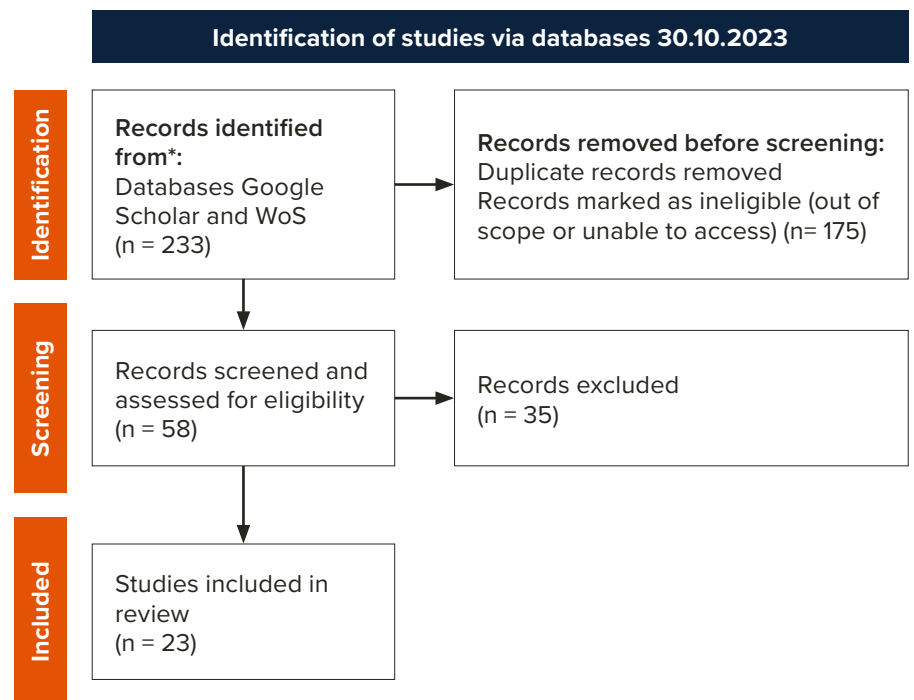**Included**

Studies included in review
(n = 23)

Figure 1 *Selection process of studies identified for the review*

03
BACKGROUND

This Chapter will give some general background to the problems and challenges faced by merchant seafarers which can have an impact on their recruitment and retention in the shipping industry.

Stress, fatigue, burn-out and mental health issues (e.g. depression, suicide) affecting seafarer]s due to a range of problems are recurring themes in the extensive research literature and reports, as illustrated in Figure 2 below (An *et al.* 2020; Carotenuto *et al.* 2012; Gu *et al.* 2020; Jepsen *et al.* 2015; Mellbye and Carter 2017; McLaughlin 2015; Oldenburg *et al.* 2012; Patchiappane and Rengamani 2017; Pauksztat 2017; Slišković and Penezić 2015).

From poor shipboard working conditions to high workload, no appreciation nor recognition of work, isolation from family and friends and no proper internet connectivity and the list goes on, many factors leading to fatigue, stress and mental health issues have been identified.

In a study on seafarers' welfare, Exarchopoulos *et al.* (2018) identified in particular three major areas of problems: (i) crew reduction leading to aggravated fatigue and stress, (ii) social isolation affecting mental health, and (iii) criminalisation of seafarer and unfair treatment in case of accidents at sea.

Findings from a recent survey carried out by Pauksztat *et al.* (2022) suggest that the impact of the COVID-19 pandemic has increased seafarers' fatigue and mental health problems. As a striking example, it is also worth mentioning that it is estimated that the number of UK seafarers active at sea in 2022 remains below pre-pandemic levels (UK Accredited Official Statistics 2023).

In addition to the job demands and the constraints of life at sea, the maritime work environment isn't free from harassment and bullying, sexual violence against women at sea is a serious issue and has been reported in various studies and reports (Gunawan and Fahmi 2023). It is important to stress that the Maritime Safety Committee of IMO, at its 105th session (20 to 29 April 2022)[2], recognised the need for joint action with ILO to tackle bullying and harassment in the maritime sector, including sexual assault and sexual harassment, to ensure a safe workplace for seafarers, and instructed the Joint ILO/IMO Tripartite Working Group to Identify and Address Seafarers' Issues and the Human Element to work on these matters.

Specific ILO Resolutions of the Joint Maritime Commission (2001) concerning respectively women seafarers and the structural changes within the industry (including the growth of shipping companies switching to
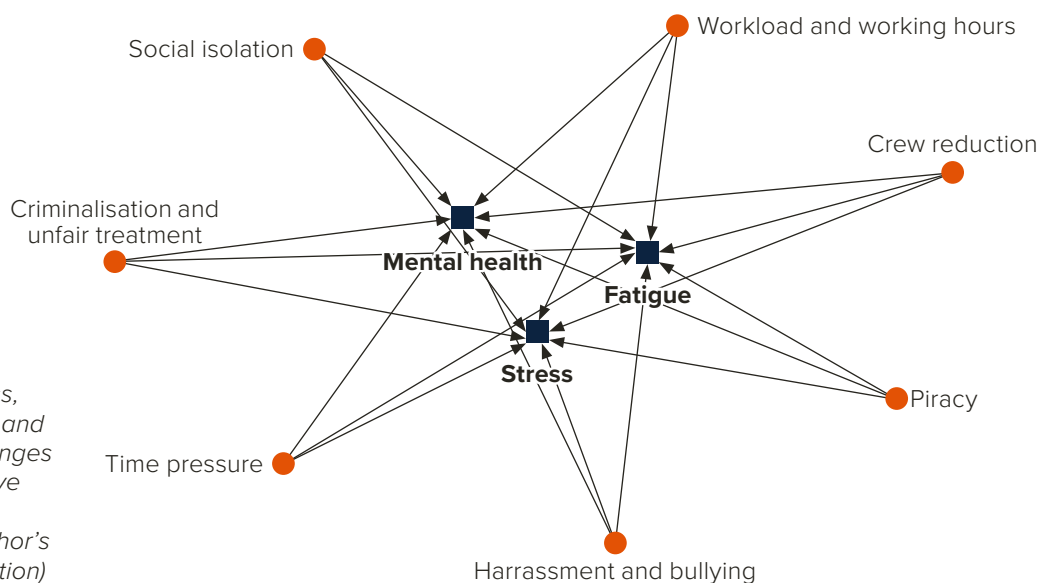

Figure 2
Relationship between stress, mental health and diverse challenges (non-exhaustive list) faced by seafarers (author's conceptualisation)

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2. Maritime Safety Committee (MSC 105), 20-29 April 2022: https://www.imo.org/en/MediaCentre/MeetingSummaries/Pages/MSC-105th-session.aspx

flags of convenience or relocating to certain countries to take advantage of more relaxed regulations and taxation schemes) put to the fore more than twenty years ago problems related to maternity rights, discrimination and employment opportunities.

Already in 2003, a study by Thomas *et al.* (p. 74) proposed that more efforts should be pursued to ensure for all seafarers:

- "Shorter trips (preferably no longer than 4 months);
- Paid leave of a comparable duration to sea time;
- Continuous employment rather than employment by voyage;
- Training time to be added to the leave period;
- Opportunities for partners (and where possible, children) to sail;
- Improved access to cheaper communication;
- Increased contact between seafarers' partners and seafarers' employers; and
- Opportunities for seafarers' families to make contact with each other".

Progress has been made since the International Commission on Shipping inquiry into ship safety (ICONS 2000:3), which featured the following remarkable quote:

"For thousands of today's international seafarers life at sea is modern slavery and their workplace is a slave ship."

The Maritime Labour Convention 2006 has since been adopted, and social partners at the international and European levels have worked together to try and improve working conditions. However, while wages have increased and seafarers appear to be on the whole satisfied with a career at sea (Danica Seafarers' Survey 2023), many decent work challenges remain, from unpaid wages[3] to timely repatriation, bullying issues to lack of adequate crew connectivity (Nautilus International 2022; Danica Seafarers' Survey 2023). These surveys demonstrate that reasonable access to ship-to-shore telephone communication, email and internet facilities (Nautilus International n.d.) remain serious matters.

A recent survey of Cadets in the UK reports that the top three perceived biggest challenges of a maritime career are being away from home, limited access to phone and internet, and working long hours (Nautilus International 2023). A study commissioned by the International Transport Workers' Federation Seafarers' Trust and conducted by the World Maritime University (2020:10) on occupational safety and health and safety at sea highlighted systemic failures in work and rest hours regulations and reported in particular that:

"Consequently, there is an apparent inability to enforce existing work/rest hour rules which may seriously affect ship safety as well as seafarers' health and safety, cognitive performance, and their retention in shipping."

Trade unions and employers in the maritime industry called on governments throughout the COVID-19 pandemic to recognise seafarers as "key workers"[4], and have highlighted the value of seafarers to national economies and the need for better collaborative efforts to address the recruitment and retention of seafarers. A recent summit supported by the International Chamber of Shipping (ICS), the International Transport Workers' Federation (ITF) and the International Maritime Employers' Council (IMEC) discussed the future skills requirements, education and training "to deliver a skilled workforce and the environment in which seafarers of the future should operate" (Seafarer 2050 Summit 2023).

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3. Inspectors from the International Transport Workers' Federation (ITF) recovered USD $118,529,663 in wages owed to seafarers between 2020 and 2022 (ITF 2023): https://www.itfseafarers.org/en/news/itf-recovers-almost-us120-million-unpaid-wages-seafarers-over-last-three-years
4. See various statements of the Officers of the ILO Special Tripartite Committee of the Maritime Labour Convention, 2006, as amended, on the Coronavirus disease (COVID-19).

04

DISCUSSION

Based on the specific literature review carried out, this Chapter presents an overview of the factors that may attract and retain seafarers in the profession.

The papers examined (a total of 23 papers) applied various methodological approaches to survey data collection and analysis. An overview of the articles and their contributions can be found in the Appendix.

Three main themes, which are interlinked, appear to emerge as follows: (i) job satisfaction, career progression and good working conditions, (ii) respect, involvement and commitment, and (iii) adequate communication facilities.

Officers	Working hours, rotation systems, holidays, lack of work-life balance, stress, poor HR practices (contracts, communications, workload, shore leave), cultural differences
Cadets	Unsupportive attitude of superiors and mentors onboard, learning difficulties, confinement, restricted diet
All	Separation from family, isolation and loneliness

Table 1 *Overview of retention issues for Officers and Cadets (adapted from Caesar et al. 2015)*

4.1 Job satisfaction, career progression and good working conditions

Caesar *et al.* (2015), who conducted a systematic literature review on factors that influence the retention of officers, identified a vast array of factors not sufficiently managed by employers and drew attention to difficulties specifically faced by cadets. Table 1 below provides an overview of these factors.

The study of Caesar *et al.* (2015) highlights that retention issues along the career path, from Cadets to Officers and Ship Masters, mainly revolve around three themes: satisfaction with the job and the employer, opportunities for career progression and good working conditions, as illustrated in figure 3.

These results echo the findings of a study by Nguyen *et al.* (2014) on recruitment and retention challenges in Vietnam. The authors identified poor management and human resources (HR) practices, lack of equal opportunities for career progression, a low salary and generally poor working and living conditions as major

challenges. These results have also been validated by a recent study by Liu *et al.* (2021) looking into the brain drain of Chinese seafarers. Social recognition, promotion mechanisms and a competitive salary were identified as key factors in retaining seafarers. Generally, the environment, the job demands and the risk of burnout have been found to have an impact on turnover intention (Wan *et al.* 2023).

Maritime piracy and criminalisation of seafarers are also major problems influencing the recruitment and

Cadets
- Difficult nature of working conditions at sea
- Unsupportive attitude of superiors
- Learning difficulties

Junior Officers – Senior Officers
- Lack of progression opportunities
- stagnating salary
- Poor organisational policy

Ship Masters
- Poor working conditions
- Family or Personal reasons
- Piracy and criminalisation

Figure 3 *Retention issues over time (adapted from Caesar et al. 2015)*

retention of seafarers. A study from Caesar *et al.* (2021) on global maritime piracy elucidates that the risk of being captured by pirates is a reason for leaving the sea and moving to a shore-based job. The prospect of dealing with pirates at sea is also unattractive for new entrants. At the time of writing, the ongoing attacks on shipping in the Red Sea that have killed and injured seafarers are a stark reminder that seafarers can risk their lives at sea by just performing their jobs in the global supply chain[5].

A recent study from Baum-Talmor and Kitada (2022) found that limited skills development for both junior and senior seafarers, coupled with a lack of employer support for seafarers' skills development are critical factors hindering the industry's image and the retention of seafarers. Beyond payment, welfare and opportunity for personal development have been found significant determinants of job satisfaction (Tsai & Liou 2017).

Good working conditions are critical reasons for choosing a career at sea. Career prospects coupled with a stable income and guaranteed employment play a role in recruiting new talents in the case of Singapore (Thai *et al.* 2013). Gonzales *et al.* (2014) surveyed maritime students' perceptions of the seafaring profession in Latvia and similarly found that stable employment, a good salary, as well as travelling and seeing new places were important career motivations. The main career barriers mentioned were difficulties with family life and expensive studies.

4.2 Respect, involvement and commitment

In all the studies the underpinning themes of respect for seafarers, involvement and commitment of maritime industry employers are recurring.

A study by Chen *et al.* (2022:7) on the influence of occupational images on the willingness of students to embark on a seafarer career stressed as follows:

"Industry image is positively related to the industry's ability to attract more talented people to engage in this industry. (...) continuous commitment and investment is the necessity to create a positive shipping image"

Several studies have highlighted the importance of the employer's commitment to securing seafarers' retention. They found that the widespread absence of a genuine link between the ship and the State of registration goes hand in hand with a lack of genuine employment link and real commitment to the personnel (Fei *et al.* 2009; Bhattacharya 2015). Further, due to the liberalisation of the contracting of crews (Silos *et al.* 2012), and the gap between the ship and the crew's nationalities, ship operators have lost their capacity to control the required skills and proficiency of the workforce (Bloor *et al.* 2014; Chiong 2023). A study by Tsai and Liou (2017), mainly focused on Taiwanese seafarers, found that when the seafarers and the company are based in the same country, seafarers' commitment and loyalty improve. Hult and Snöberg (2014) analysed Swedish seafarers' commitment to work in times of flagging out. They found a sharp decline in commitment for all seafarers, mainly due to dissatisfaction with the social security structure. A study looking into the motivation factors of Indian Officers also highlights the importance of fringe benefits such as social security which is often missing on foreign flag ships (Wadhwa & Mahadevan 2019).

A study (Bhattacharya 2015) aiming at understanding the link between engagement levels of Indian officers and their intention to stay, highlighted six top drivers of retention illustrating the employer's commitment to encourage seafarers to remain employed: quality of shipboard life (including recreational and communications facilities, onboard living conditions and shore leave), feeling valued, recognition of good work and career planning, pay (fairness of the pay system), "no blame" culture and job security. The findings of this study validate the results of an earlier survey from de Silva *et al.* (2011) which analysed the determinants of retention of officer-seafarers from Bangladesh, India and Sri Lanka in the shipping industry. De Silva *et al.* found that the dimensions of respect and recognition were significant. Ship operators should become "employers of choice" by providing a stimulating environment and regular contractual employment. According to the research (Yuen *et al.* 2018), a rewards system approach and more recognition from management are significant determinants of job satisfaction and performance.

According to Caesar *et al.* (2014), shipowners should show more commitment towards providing more training berths and ensuring a definite and resilient career path for future seafarers. A pragmatic Maritime Education and Training (MET) pedagogy that caters for different expectations and career ambitions, as well as a well-defined career pathway would respond in some way to the issues of recruitment and retention of seafarers (Caesar *et al.* 2014).

The social environment which includes a supportive work environment, has significant effects on job satisfaction for merchant seafarers (Pantouvakis *et al.* 2023). A study by Boström and Österman (2022) on harassment and bullying in the maritime industry shows that from the seafarers' perspective, support from managers and colleagues is key

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5. Shipping industry calls for action following the attack on the MV Tutor and cargo ship Verbena (ICS 2024). https://www.ics-shipping.org/statement/shipping-industry-calls-for-action-following-the-attack-on-the-mv-tutor-and-cargo-ship-verbena/
The ITF demands immediate action to ensure the safety of seafarers in the Red Sea (ITF 2024). https://www.itfseafarers.org/en/news/itf-demands-immediate-action-ensure-safety-seafarers-red-sea#:~:text=The%20ITF%20demands%20immediate%20action%20to%20ensure%20the,Red%20Sea%20that%20have%20killed%20and%20injured%20seafarers.

(Papachristou *et al.* 2015) highlight that adequate communication facilities, and in particular internet connectivity on-board, allowing contact with family and friends are critical to seafarers staying in the industry. The analysis of the study's findings shows that the respondents perceive separation from family coupled with inadequate access to communication facilities while at sea to keep in touch with family and friends as fundamental issues that would make them leave the profession. Access to a fast and reliable internet connection while at sea is therefore a major element of job satisfaction, and the role played by communication in increasing retention rate within the seafaring profession is key and cannot be underrated.

Sun *et al.* (2020:672) surveyed Chinese ocean crews and found that internet access is key to life on board to reduce anxiety. The authors suggest that shipping companies should make every effort to provide internet access to reduce anxiety among their crews.

A survey of seafarers residing in Mumbai and Navi Mumbai region (Raut and Saxena 2021) confirmed the hypothesis of a strong link between achievement motivation and the availability of the internet on board:

"The presence of the internet is an important motivating factor for seafarers joining the vessels. The probability of a seafarer signing a joining contract is higher when there is internet connection on-board. It is the second most important factor enquired by the seafarers before joining the ship after salary."
(Raut and Saxena 2021:35)

A recent study on entrants' attitudes and awareness of their future occupation in Poland (Wróbel *et al.* 2022) highlights the fears and concerns of new talents including separation from land-based networks and isolation from family and friends. These results show the importance of being able to be in touch with relatives and friends to combat social isolation.

to creating a "trustful and sustainable" working environment. Shifting from a "blame culture" to a "just culture" in safety-related matters would also be conducive to a trustful working environment (Wadhwa & Mahadevan 2019).

Diversity and inclusion also appear to be major factors that will affect the willingness to apply for a job as an aspiring candidate (Go & Juanola 2022). An overall work environment perceived by seafarers as supportive, equal and just is critical to the psychological well-being of seafarers and impacts on turnover intentions (McVeigh *et al.* 2019).

Improving employment and working conditions for seafarers working life can be considered a matter of respect, beyond fulfilling legal requirements

4.3 Adequate communication facilities

Life at sea is unique and several studies and industry reports

05

CONCLUSIONS AND RECOMMENDATIONS

This chapter revisits the aim of the study, presents practical and policy implications, and suggests some recommendations. What action may be necessary from the various stakeholders to address the recruitment and retention crisis?

The objective of this project was to map out the key enabling factors in attracting and retaining seafarers, from a seafarer's perspective. The research questions were as follows:

What factors attract new entrants (including women seafarers and other under-represented groups) to join the industry as seafarers?

What factors make experienced seafarers stay in the industry?

The research shows that most factors highlighted in the scientific literature can be interpreted as falling within three broad complementary themes: job satisfaction, career progression and good working conditions; respect, involvement and commitment of the employer; and

provision of adequate communication facilities.

Good employment, working and living conditions, opportunities to advance one's career and the possibility to keep often and regularly in touch with family and friends are recurring themes. The findings show a broad consensus to state that to recruit the quality workforce they need, employers need in particular to demonstrate in practice to seafarers that they genuinely value them and recognize their contribution.

Table 2 below sums up the interlinked dimensions and many factors influencing the recruitment and retention of seafarers, from a seafarers' perspective.

The maritime industry is facing a global shortage of seafarers, which is threatening the smooth operation of the shipping industry and the global supply chain. A

Dimensions	Factors
Satisfaction with the job and the employer	• Human Resources (including recruitment process) • Recognition • Respect and ethics • Commitment • Job security, regular contractual employment • Relationships
Career progression opportunities	• Long-term career prospects • Promotion mechanisms and career planning • Training and development
Good onboard and working conditions	• Remuneration, benefits, paid leave, compassionate leave • Organisational structure and culture including a dignified work environment, free from bullying and harassment • Hours of Work and Hours of Rest • Accommodation, leisure time and space • Communications (internet access etc.) and opportunities to maintain links with families and friends • Medical care

Table 2 *Recruitment and retention of seafarers: dimensions and factors (author's conceptualisation)*

recent industry survey (Nautilus Federation 2024) on how to secure a just, equitable and human-centred future for maritime professionals in light of technological change, also highlights the concerns of seafarers with the impact of new technology on their jobs, working conditions and pay.

The industry therefore needs to be proactive in that respect and not merely "reactive". The industry needs to promote the maritime industry as a rewarding and attractive career path, where seafarers have a key role to play. Seafaring should also mean opportunities for travel, adventure, and personal growth, and not at the outset a stressful, high-risk occupation.

Beyond mere branding and marketing campaigns and promotions, several measures can be taken by employers, with the help of trade unions, to promote the recruitment and retention of seafarers, including:

5.1 Enhance working conditions and quality of life for all seafarers

- Improve pay and benefits packages. Support collective bargaining. Ensure that seafarers are compensated appropriately for their skills and experience, and provide permanent employment and comprehensive benefits packages, including healthcare, retirement plans, and paid leave.
- Improve onboard living conditions. Provide comfortable and safe accommodations for all seafarers, including cadets and trainees, nutritional food, access to recreational facilities, and opportunities for social interaction and relaxation.
- Address workload and stress issues. Implement measures to reduce workload pressures, reduce hours of work increase rest hours, and promote a culture of mutual respect and work-life balance (that could include shorter stay on board and more paid holidays). Provide support services for mental health and well-being. Improve social connectivity by such means as free and unlimited access to high-speed internet, allowing contact with home via video, email, and telephone.
- Maximise hygiene and medical care on board for all seafarers, including women, and prevention of work-related accidents. This can for example be translated by a holistic approach to the provision and disposal of day-to-day hygiene and sanitary products, and the regular

use of personal protective equipment or PPE to prevent or minimize exposure to hazards.

5.2 Improve recruitment and training practices

- Establish strong partnerships with maritime training institutions. Collaborate with vocational schools and universities to develop high-quality maritime training programmes that meet industry standards and attract recruits.
- Enhance outreach to potential seafarers. Reach out to high schools, vocational centres, and minority communities to promote seafaring careers and provide guidance on training opportunities you can provide.
- Streamline the recruitment process and provide a true service to seafarers. Simplify and expedite the application and onboarding process for seafaring jobs, reducing administrative burdens and delays, and helping seafarers with the process.
- Implement career advancement pathways and opportunities for life-long learning and training. Training and retraining must be carried out during work hours and the cost must be borne by the employer. Put into practice the various officer and leadership roles available to seafarers and the competitive salaries they command.

5.3 Promote diversity, equity and inclusion in the maritime workforce

- Encourage women and people from all walks of life to pursue seafaring careers. Actively recruit and support new talents in maritime training programmes and employment opportunities.
- Create a welcoming and inclusive workplace culture. Foster a positive and respectful work environment that embraces diversity and values the contributions of all seafarers.
- Address barriers to entry for women and underrepresented groups. Identify and address any obstacles that hinder them from accessing maritime training and employment opportunities.

5.4 Engage with international cooperation and collaboration

- Support international initiatives to address the seafarer

shortage. Collaborate with trade unions, the International Maritime Organization (IMO), the International Labour Organization (ILO), and other relevant bodies to develop and implement effective seafarer recruitment and retention strategies.

- Share best practices and promote knowledge exchange through European and international representative organisations of employers and trade unions. Encourage the exchange of best practices in seafarer recruitment, training, and retention among maritime nations and industry stakeholders.
- Address regulatory and administrative barriers to seafarer mobility through European and international representative organisations and trade unions. Actively engage in initiatives to harmonise standards to facilitate the movement of seafarers across borders and shore leave.

By implementing these measures, the maritime industry can step forward to effectively address the seafarer shortage and ensure a sustainable and resilient sector for the future.

However, it is not up to social partners alone to support the job creation, recruitment, retention and training of seafarers. While this paper has focused on what the industry can do to respond to seafarers' expectations, national governments also need to provide an enabling environment in which the shipping industry can provide training, employment and decent work. This means that national governments need to change their approach to ensure that any favourable fiscal treatment should without a doubt support employment and training. As put forward by a recent study from the International Transport Forum of the OECD (ITF 2023), national governments must ensure that the "genuine link" between state and ship required by the United Nations Convention on the Law of the Sea is enforced in their shipping registries, including the open and second registries, to improve both safety and labour standards in general, on board ships. In line with the 10-point Action Plan to Achieve a Just Transition for Seafarers (Maritime Just Transition Task Force 2022), national governments should coordinate with sector skills councils (where existing) and industry partners to establish nationwide apprenticeship programmes for the maritime industry. When it comes to the number and space of cadet and trainee berths, IMO Member States should review the accommodation rules still restricted under the International Convention on Tonnage Measurement of Ships.

Continuous work is therefore needed by all stakeholders to ensure that maritime policies truly deliver for the seafaring profession and encourage young people and new talents, in general, to consider a career at sea.

In light of the challenges still faced by seafarers and the maritime industry, we believe that these continuous efforts to ensure sufficient numbers of skilled seafarers should be connected to addressing decent work and guaranteeing fundamental principles and rights at work in the sector, as well as adequate labour and social protection.

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APPENDIX

Table 3 Selected studies for the discussion chapter and their contributions

	Author and date	Title	Main results or contributions
1	Bhattacharya 2015	Employee Engagement as a Predictor of Seafarer Retention. A Study among Indian Seafarers	6 top factors/drivers of retention: 1. Quality of shipboard life 2. Feeling valued 3. Recognition of good work and career planning 4. Pay (fairness of the pay system) 5. "No blame" culture 6. Job security
2	Boström and Österman 2022	Creating Clarity and Crew Courage: Preventive and Promotive Measures for a Maritime Industry Without Bullying and Harassment	A sustainable working life (improving employment and working conditions for seafarers' working lives) is key to the recruitment and retention of seafarers.
3	Caesar *et al.* 2014	Challenging the Current Paradigms of Seafarer Training and Careers	MET institutes and Employers need to rethink pedagogies to match the career ambitions of trainees and ensure better recruitment and retention of seafarers
4	Caesar *et al.* 2015	Exploring the Range of Retention Issues for Seafarers in Global Shipping: Opportunities for Future Research	Retention issues evolve around three main themes: 1. Satisfaction with the job and employer 2. Opportunities for career progression 3. Good working conditions
5	Caesar *et al.* 2021	Global maritime piracy: Impact on seafaring and the factors shaping confrontational outcomes	Piracy risk, taken together with hijacking and robbery, is unattractive for new entrants and a factor in moving to land-side jobs
6	Chen *et al.* 2022	The influences of seafaring advertising and shipping image on the willingness of students' seafaring career: A moderating effect of social information	Students' attitudes toward seafaring advertising and shipping image (which encompasses continuous industry commitment and investment) are linked and influence the students' willingness to have a seafaring career.

	Author and date	Title	Main results or contributions
7	Baum-Talmor and Kitada 2022	Industry 4.0 in shipping: Implications to seafarers' skills and training	Importance of developing skills and advancing careers in the context of the shipping industry 4.0
8	Go and Juanola (2022)	Effects of Diversity and Inclusion on the Domestic Shipping Company to Seafarers' Willingness to Apply for a Job Vacancy through Brand, Opportunity, and Purpose	Shipping companies need to consider diversity and inclusion in their HR strategies
9	Gonzales *et al.* (2014)	Youngsters' motivations and difficulties for choosing seafarer careers. The case of Latvia.	The main "reasons for choosing the seafarer profession" according to maritime students' perceptions were "stable employment" and "travelling and seeing new places" followed by "good salary". The main "dissuading factors" were "difficulties for family life" and "studies are too expensive".
10	Hult and Snöberg (2014)	Swedish Seafarers' Commitment to Work in Times of Flagging out	Decline in organisational commitment for all seafarers when the ship is flagged out.
11	Liu *et al.* (2021)	Empirical analysis of brain drain of Chinese seafarers: Reasons and countermeasures	Key issues: unsatisfactory salary, low social status, difficulty in promotion, insufficient English proficiency, etc.
12	McVeigh *et al.* (2019)	Identifying Predictors of Stress and Job Satisfaction in a Sample of Merchant Seafarers Using Structural Equation Modeling	A supportive, equal and just overall work environment is key to the psychological well-being of merchant seafarers
13	Nguyen *et al.* (2014)	Current Challenges in the Recruitment and Retention of Seafarers: An Industry Perspective from Vietnam	The following recommendations are suggested: a competitive salary and package of benefits, a recognition and incentive programme, transparent promotion and training opportunities, improved working and living conditions, and an effective communication service.
14	Pantouvakis *et al.* (2023)	The Impact of Maritime Service Quality on Employee Satisfaction by Seafarers Rank: Evidence from a Global Survey Grounded on ERG Theory	The social environment has significant effects on job satisfaction and retention of merchant seafarers.
15	Papachristou *et al.* (2015)	The role of communication to the retention of seafarers in the profession	Separation from family combined with inadequate communication are major retention barriers.

	Author and date	Title	Main results or contributions
16	Raut and Saxena (2021)	The Relationship between Achievement Motivation and Availability of Internet on-board Ships among Seafarers: Implications for Maritime Industry Development.	A significant relationship was found between achievement motivation and the availability of the internet on board ships.
17	Sun *et al*. (2020)	The Psychological Dilemma of Chinese Ocean Crews	A salary incentive system, internet access, leisure space and time, medical care and psychological counselling were key to the well-being of ocean crews.
18	Thai *et al*. (2013)	Revisiting the seafarer shortage problem: the case of Singapore	Retention criteria include a competitive salary, together with bonus benefits, and the implementation of welfare and CSR policies. Recruitment criteria encompass career prospects, a stable income and guaranteed employment.
19	Tsai and Liou (2017)	Determinants of work performance of seafarers	Welfare and the opportunity to grow within the job are determinants of job satisfaction. Hiring local seafarers contributes to more commitment and loyalty.
20	Wadhwa and Mahadevan (2019)	Factors influencing Indian seafaring officers' motivation	Salary and fringe benefits have a positive impact on motivation, whereas a blame culture has been found to have a significant negative impact on motivation.
21	Wan *et al*. 2023	Burnout and work ability: A study on mental health of Chinese seafarers from the job demand resource model perspective	High job burnout, low engagement and poor work ability have an impact on turnover intention
22	Wróbel *et al*. 2022	Towards maritime employment and retention policy – A longitudinal study on entrants' perspectives	Motivation factors: travel and money Fears and concerns: separation from land-based networks, social isolation and inability to find a suitable job at sea and later ashore.
23	Yuen *et al*. 2018	Determinants of job satisfaction and performance of seafarers	The amount of stress and the attractiveness of the rewards have a determining impact on job satisfaction and performance.

About Nautilus Federation

The Nautilus Federation is a group of like-minded trade unions in shipping and inland waterways transport that have come together to improve and expand the services they offer to their members.

Our mission is to foster the development of a strategic partnership between member unions with relationships that are ongoing, focused on mutual respect, trust and a shared vision for the success of our common understanding of progressive trade unionism, organising and professional support to our respective members.

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