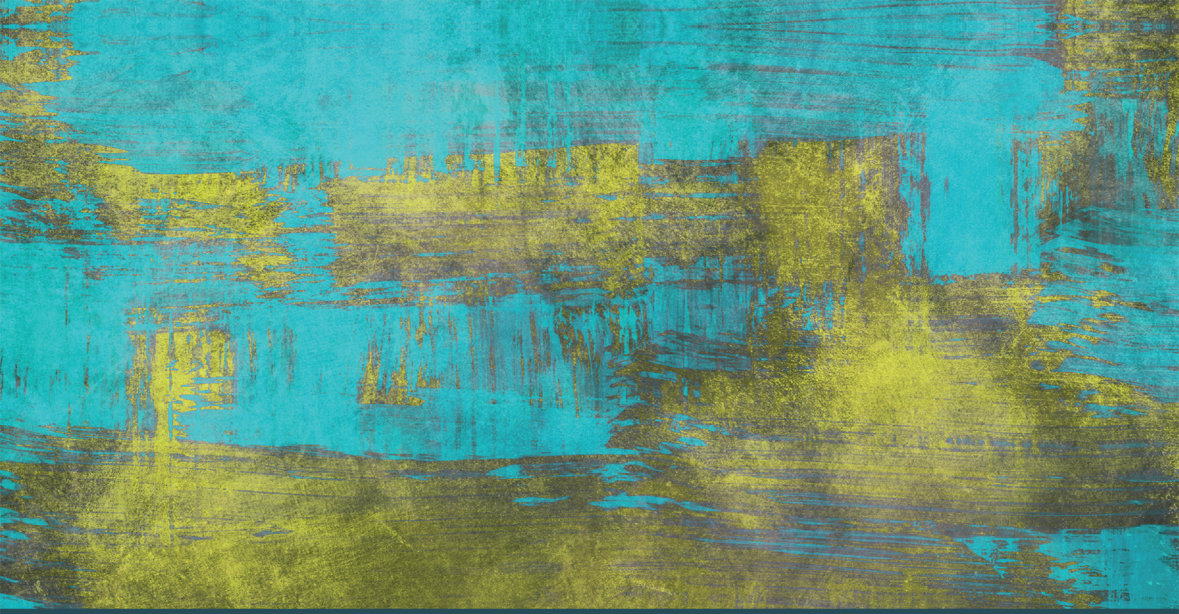
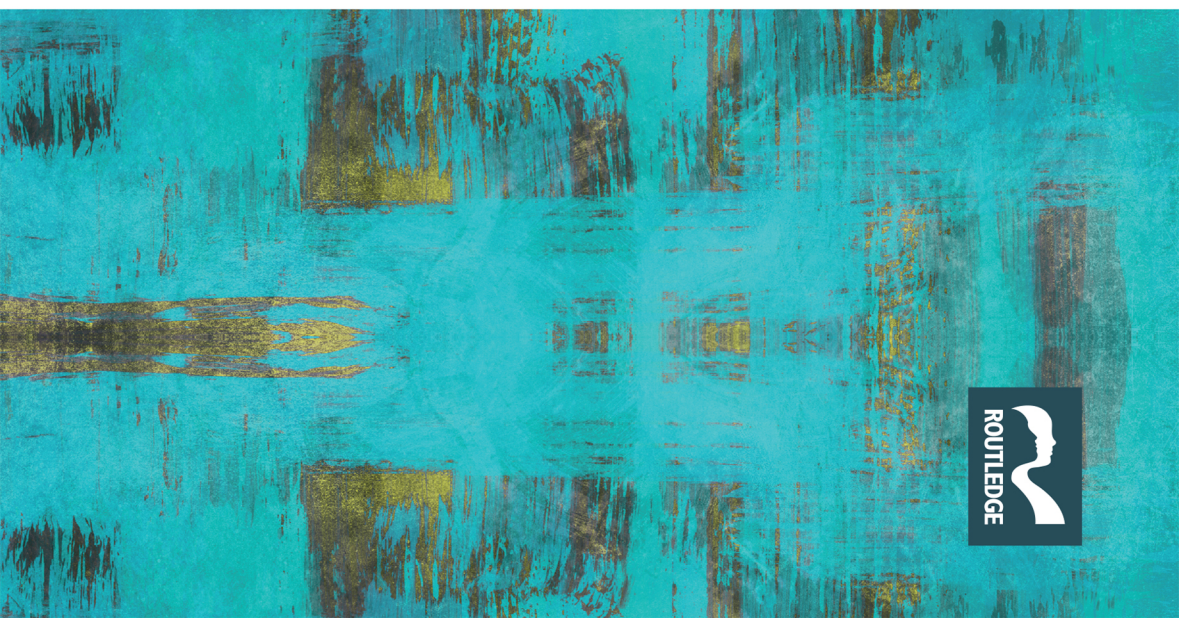


Routledge Studies in Transport Analysis

HUMAN RESOURCE MANAGEMENT IN SHIPPING

ISSUES, CHALLENGES, AND SOLUTIONS

Lijun Tang and Pengfei Zhang



ROUTLEDGE

Human Resource Management in Shipping

This book sheds light on the nature and causes of the issues and challenges in human resources in shipping and proposes fresh recommendations to manage them. It explains the multiple forces at play, including the global regulatory regime, national institutional frameworks, industrial practices, trade union responses, and pressures from customers and non-governmental organisations.

Human Resource Management in Shipping integrates seafarer employment data released by national maritime authorities and a large body of literature that discusses discrete human resources issues in shipping into a single volume, providing readers with a comprehensive understanding of the issues and challenges within human resources in shipping. Beyond this, the book also offers a fresh perspective on some of the long lasting HRM challenges in the industry, such as skills shortage and seafarer recruitment and retention.

This book aims to provide readers with systematic and in-depth knowledge of human resource management in shipping, and offers researchers a valuable source of reference and a solid foundation on which further development can be built.

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Pengfei Zhang is a senior lecturer at Solent University, teaching maritime business, ship and port management, international trade and commercial law; his main research areas include: seafarers; ship management; maritime safety and security.

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Issues, Challenges, and Solutions

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Abbreviations

AMOSUP	Associated Marine Officers and Seamen's Union of the Philippines
BIMCO	Baltic and International Maritime Council
CBA	Collective Bargaining Agreement
CoC	Certificate of Competency
CRM	Crew Resource Management
CSCWU	Chinese Seafarers and Construction Workers' Union
CSR	Corporate Social Responsibility
DfT	Department for Transport
DG Shipping	Directorate General of Shipping
DWT	Deadweight Tonnage
ECDIS	Electronic Chart and Displace System
EMSA	European Maritime Safety Agency
EU	European Union
FFCP	Foreign Flag Crewing Practices
FOC	Flags of Convenience
FSUI	Forward Seamen's Union of India
GLMS	Global Labour Market Survey
HR	Human Resources
ILO	International Labour Organisation
IMO	International Maritime Organisation
INTERCARGO	International Association of Dry Cargo Shipowners
INTERTANKO	International Association of Independent Tanker Owners
ISM Code	International Safety Management Code
ISPS Code	International Ship and Port Facility Security Code
ITF	International Transport Workers Federation
KPI	Key Performance Indicator
LCL	Labour Contract Law
MACN	Maritime Anti-Corruption Network
MARPOL	International Convention for the Prevention of Pollution from Ships
MET	Maritime Education and Training

MLC	Maritime Labour Convention, 2006
MoU	Memorandum of Understanding
MUI	Maritime Union of India
NGO	Non-Governmental Organisations
NTSB	National Transportation Safety Board
NUMAST	National Union of Marine, Aviation and Shipping Transport Officers
NUSI	National Union of Seafarers of India
OCIMF	Oil Company International Maritime Forum
OECD	Organisation for Economic Co-operation and Development
P&I Club	Protection and Indemnity Club
POEA	Philippine Overseas Employment Administration
POEA-SEC	POEA-approved Standard Employment Contract
PSC	Port State Control
RPS	Recruitment and Placement Service
SCP	Sponsored Cadet Program
SIRC	Seafarers International Research Centre
SIRE	Ship Inspection Report Program
SMarT	Support for Maritime Training
SMS	Safety Management System
SOLAS	International Convention for the Safety of Life at Sea
SRI	Seafarers' Rights International
STCW	Standards of Training Certification and Watchkeeping
TCC	Total Crew Cost
TMC	Traditional Maritime Country
TMSA	Tanker Management and Self-Assessment
TPSM	Third Party Ship Management
VLCC	Very Large Crude Oil Carrier

1 Introduction

HRM in maritime shipping – a framework

People are the most valuable asset of an organisation. This truism just as surely applies in the maritime shipping industry, which carries more than 80 percent of global trade and employs more than 1.6 million seafarers worldwide (UNCTAD 2019). This book focuses on human resource management (HRM) issues that are related to seafarers. It is a general consensus among shipping companies that the recruitment and retention of a competent workforce at sea is one of the most important issues in their business operations (Deloitte 2011). Nevertheless, the shipping industry, in many ways, is different from other industries. First, its workplace – the ship – is mobile, transporting cargo from one port to another across seas and oceans. Second, the mobile nature of ships has facilitated the common practice known as 'flagging out,' which enables owners/managers to register their ships in Open Registers (OR). Some of these registers are identified and labelled as Flag of Convenience (FOC) countries, such as Liberia and Panama (Lillie 2013). Furthermore, FOC registries do not impose any restriction on the nationality of seafarers, which allows ship owners and managers to employ seafarers from any labour supply countries and gives rise to a global seafaring labour market. Third, as shipping operations are international in scope, the process of regulating it takes place at a global level and involves individual states and industry stakeholders together engaging in multilateral deliberations in worldwide forums, such as the International Maritime Organization (IMO) and the International Labour Organization (ILO), with the aim to adopt internationally agreed regulations. Once a regulatory consensus is reached, the responsibility for implementing and enforcing the agreed global rules and standards is transferred to individual nations.

Thus, unlike most other industries where only capital is mobile, the shipping industry is fluid in terms of its assets, workplace, and labour, and ship owners/managers are able to choose and re-choose the jurisdiction of their assets and the nationalities of the seafarers they employ. Such global mobility and fluidity has set HRM in the shipping industry apart from that in other industries. Furthermore, even though the labour market is global, seafarers

are nevertheless embedded in their national contexts. National employment frameworks and local economic conditions influence, and sometimes determine, the terms of seafarers' participation in this global market, and this produces disparities and inequalities. Moreover, such disparities and inequalities blatantly confront each other directly in the workplace as a multinational crew is the norm, rather than being spatially separated. Thus, HRM in shipping sits at the intersection between global economic integration and local or national peculiarities; this intersection allows ship managers to constantly optimise their crewing operations and shop around for most cost-effective labour supply across the world. The pursuit of cost-effectiveness nevertheless brings about issues and challenges regarding the sustainability of human resources in shipping. These features make HRM in shipping unique and intriguing.

This aim of this book is twofold. First, there is a large body of literature discussing human resources issues in the shipping industry. However, these discussions focus on discrete concerns, such as seafarer training, recruitment and retention, occupational health and safety, employment relations, and labour demand and supply, in the form of journal articles, book chapters, and research reports that are scattered across various places. This book aims to integrate, organise, and structure these dispersed bits of knowledge into a coherent whole. To this end, a conceptual framework as depicted in Figure 1.1 is adopted. It not only allows examinations of individual HRM themes, but also makes it possible to discuss the links and relationships between these themes. In this framework, HRM has two outcomes: safety management performance, and seafarer retention, commitment, and competence. Shipping is a 'safety-critical' industry and one corporate objective of shipping companies is to provide safe and efficient transport services. Hence, good safety management is a key outcome (or objective) of HRM. The ability to retain competent and committed seafarers is another logical outcome of HRM, which also enables the industry to achieve better safety outcomes. Both outcomes are directly influenced by a number of HRM

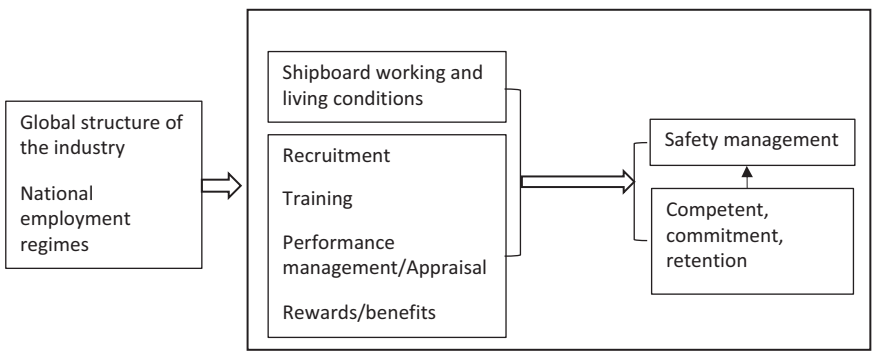

Figure 1.1 The framework of HRM in shipping.

processes, including seafarer cadet recruitment, training, performance management, appraisals, remuneration, and the shipboard working and living conditions. At the macro level, the interaction and intersection between the global structure of the industry and national employment regimes (institutional frameworks related to seafarer employment) condition all the HRM processes and outcomes. Each of these themes will be discussed in detail and the relationships between them will be teased out in the following chapters.

Second, in the process of piecing the jigsaw puzzle together, this book aims to identify, discuss, and propose solutions to human resources related issues and challenges in shipping. To this end, this book incorporates another source of maritime human-resources-related materials – seafarer employment data and policy documents released regularly by the national maritime authorities of major labour supply countries. This source of secondary data serves to triangulate the existing knowledge contained in the research literature by substantiating and/or modifying it. In other words, it helps create a more accurate, up-to-date, and comprehensive picture. Needless to say, this picture informs a better understanding of the issues and challenges, as it makes visible where the fault lines and gaps are and helps trace and highlight the areas where underlying factors and forces are situated.

One dominant human resources issue in shipping is the labour shortage. Since ship owners and managers are able to source seafarers globally, it would seemingly follow that the labour supply would be abundant in the industry. In reality, however, a shortage of qualified seafarers has been a serious concern. Since the 1990s, the BIMCO/ISF Maritime Manpower Survey has been conducted every five years, and in each one, a current as well as future shortage of qualified seafarers has been reported. The survey results have set in motion follow-up studies in the maritime research community. While some researchers have focused on measures that could be taken to mitigate the shortage crisis, others have challenged the methodology of the BIMCO/ISF survey (e.g., Leggate 2004; Li & Wonham 1999). The challengers have showed that since many countries do not have an accurate record of the seafarer population, the data collected lacks accuracy. They further demonstrated that the BIMCO/ISF survey results were inconsistent with other sources of information. Nevertheless, the discourse of a shortage has been in the centre stage of discussion in the industry and the maritime research community, and the consensus among stakeholders is that, despite problems with the data, the shortage is an issue (though to differing extents in different sections) and needs to be managed. Furthermore, there are also attempts to go beyond the dry numbers presented in the survey results and to find out if and how this shortage was manifested in practice. Such research (e.g., Leong 2012) has suggested that the shortage is more likely to be experienced in senior ranks (e.g., Master, Chief Engineer, Chief Officer) and in special ship sectors (e.g., gas carriers).

To mitigate the shortage crisis, various measures related to recruitment and retention have been suggested (Bhattacharya 2015; Caesar et al. 2015; De Silva et al. 2011; Fei & Caesar 2018; Nguyen et al. 2014). However, the 'why' question – why there is a shortage – remains to be adequately understood. Shipping draws seafarers from a global pool including countries with rich human resources. Furthermore, major seafarer supply countries are competing fiercely to provide seafarers to the industry. The Philippines, China, and India have been expanding their training capacities and adopting policies to boost employment of their seafarers. As a response to the global competition and the decline in the number of their seafarers, the UK government has also implemented policies to support seafarers' training since the 1990s in the hope of increasing their seafaring skills. Similarly, measures to promote seafarers' training and employment have been taken in other seafaring labour supply countries. In light of the enormous efforts made by various labour supply countries to keep ahead of the competition, the persistent shortage seems to defy common sense and the 'why' question still begs a satisfactory answer. In the process of taking stock of existing research evidence and analysing it in combination with the recent government reports and statistics, this book will shed new light on this question and provide possible solutions at the end.

The human element

On the safety management front, one buzzword is the 'human element.' An early use of the term is found in Moreby's (1975) book entitled *The Human Element in Shipping*. In this book, the human element issues examined are the recruitment, retention, satisfaction, and commitment of seafarers in the UK against the background of technological development and the volatile shipping market.

In the 1990s, the human element gained popularity in the maritime domain. However, this was born out of a recognition that human error was the major contributory factor of maritime accidents and its purpose was changed to study and avoid this. Human error was emphasised in the UK P&I Club's (1997) analysis of major claims (over US$100,000), which unveiled that it accounted for 58 percent of all the claims. According to the analysis (UK P&I Club 1997: 15),

> Where there is a direct human act or decision which is immediately causative of the incident giving rise to the major claim, the claim is attributed to human error. Where the incident is directly caused by structural, mechanical and/or equipment failure, we have attributed the claim to ship failure.

The UK P&I Club acknowledged that this distinction between human error and ship failure is artificial because structural, mechanical, and equipment

failure may in turn be caused by human error, such as poor design, standards of maintenance, and operational practices.

In general, it is estimated that 75 to 96 percent of marine accidents can be attributed to, at least partially, human error (Rothblum 2000). An analysis of about 15,000 marine liability insurance claims made between 2011 and 2016 shows that human error was a major contributing factor in three-quarters of the value of all these claims, equating to more than $1.6bn in losses (Allianz 2018).

In this context, the IMO has increasingly paid attention to the people involved in shipping and adopted a resolution on the human element in 1997. In this resolution, the human element is defined as

> a complex multi-dimensional issue that affects maritime safety and marine environmental protection. It involves the entire spectrum of human activities performed by ships' crews, shore-based management, regulatory bodies, recognized organizations, shipyards, legislators, and other relevant parties, all of whom need to cooperate to address human element issues effectively.

It is concerned about taking human capabilities, skills, limitations, and needs into account in the design and operation of ships (Lloyd's Register 2007). According to Grech et al. (2008: 11–12), this concept is another name for human factors or ergonomics, and

> whatever the name, a vital element of all this is the notion of fitting between the person(s) and their surrounding environment. That is, fitting the task, equipment, or environment to the capabilities and limitations of person(s), rather than trying to adapt or fit the person(s) to the tasks and running the risk of forcing them to operate unsuitable or poorly designed equipment or work systems.

A work system is commonly defined as one in which human participants and machines interact and perform work using information, technology, and other resources to produce products/services for customers. People are seen as 'factors' or 'an element' of work systems. The human element as it is currently understood concerns the fit between people and machines/equipment. In the maritime domain, it focuses on shipboard work systems with the aim to 'fit the job to the person' and improve safety in shipping (Lloyd's Register 2007: 9). The IMO stresses that 'consideration of human element matters should aim at decreasing the possibility of human error as far as possible.' To achieve this aim, it examines a range of issues (Grech et al. 2008; Gregory & Shanahan 2010; Hetherington et al. 2006; Lloyd's Register 2007), including individual capabilities and limitations, fatigue and stress, communication and teamwork, work environment, human-technology interaction, training and competence, and safety culture.

Clearly, compared with the earlier use of the term by Moreby (1975), the current understanding of the human element has changed. Moreby used the term to discuss labour issues in British shipping and his direct concern was not about shipboard work systems or even safety. In contrast, the term as it is applied today focuses on designing and improving work systems so as to reduce human error, while labour and employment issues are side-lined. This is perhaps not surprising, as labour and employment issues are the primary focus of the ILO. The IMO is responsible for the safety and security of shipping and the prevention of environmental pollution by ships. Nevertheless, research has demonstrated that labour issues and employment relations have a decisive impact on human element issues such as safety culture, training, communication, and fatigue (Aspers & Sandberg 2020; Bhattacharya 2011, 2012; Bhattacharya & Tang 2013a, 2013b; Sampson & Tang 2016; Tang & Sampson 2018; Walters & Bailey 2013; Xue et al. 2017, 2018; for more detail, see Chapter 9). It is fair to say that these issues underpin safety management at the workplace – the core concern of the human element as it is understood today.

There is no doubt that safety and environmental protection are critical to shipping. To address the issues, however, it is necessary to jump out of the box of work systems and look beyond the rather confined conceptual space of the human element. In this book, an HRM perspective is adopted to addresses recruitment, retention, employment relations, and employee competence, commitment, and satisfaction, on top of fitting the job to the person. By addressing these issues in a holistic and critical way, an HRM approach is able to make a broader contribution to maritime safety and environmental protection.

Drivers for good HR practices

As ship owners and operators are able to shop around the world for labour, it would not be surprising that they often choose to employ seafarers from countries with a cheap labour supply, such as the Philippines, China, India, and Eastern European countries. This trend nevertheless is associated with many issues, such as questionable labour standards and poor training qualities in some of these countries.[1] To manage these issues, stakeholders in the industry have undertaken measures to improve HR practices.

As there are different groups of stakeholders, the forces or pressures driving improvement in HR practices are from a few directions and sources. One driver is the regulatory pressure. The IMO has developed, and regularly updates, a number of international conventions concerning issues related to health and safety (SOLAS) and seafarer training and certification (STCW). In 2006, the ILO adopted the Maritime Labour Convention (MLC),[2] 2006, which came into force globally in 2013. The aim was to build work and employment protections for seafarers and promote decent work in the sector. It imposes regulatory requirements on issues related to