

Maritime Crew Management During Ships' Forced Immobilization: Navigating International Obligations and Financial Constraints

A Case Study of an Algerian Public Institution

BELBRIK Mohamed¹, HADJI Nadia ^{2*}

¹ Lecturer, University of Continuing Education – Didouche Mourad-Algeria
✉ mbelbrik@yahoo.fr

 <https://orcid.org/0000-0003-4343-037X>

² Lecturer , Polytechnic School of Architecture and Urban Planning-Algeria
✉ mastergaturbain@gmail.com

 <http://orcid.org/0009-0009-2887-1522>

Received: 18/02/2026

Accepted: 03/05/2026

Published: 30/06/2026

* *Corresponding Author*

Citation:

BELBRIK , M., & HADJI , N. (2026). Maritime Crew Management During Ships' Forced Immobilization: Navigating International Obligations and Financial Constraints A Case Study of an Algerian Public Institution. *Dirassat Journal Economic Issue*, 17(2), 111-130. <https://doi.org/10.34118/djei.v17i2.4670>



Abstract

This research paper examines the complex challenge of managing maritime human resources during prolonged forced immobilization of ships within an Algerian public institution. The study adopted a case study methodology combined with participatory observation throughout 2024 and analyzed data from 28 participants, including seafarers, administrators, and maritime experts. The findings reveal severe financial losses exceeding €7,000 per vessel per day and, in line with several previous studies, a clinically significant deterioration in seafarers' mental health, manifested through symptoms of depression and anxiety, alongside a collapse of the disciplinary and social structure onboard vessels. The study further highlights a profound implementation gap between international obligations—particularly the Maritime Labour Convention (MLC, 2006)—and the institution's financial and administrative capacities. The paper concludes that the crisis is systemic in nature and recommends the adoption of an integrated management model combining financial reform, psychological support, and legislative flexibility.

Keywords: Human resource management; forced immobilization; maritime legislation; seafarers' mental health; organizational collapse.

JEL classification codes: M12, J24, J28, J81, K31, L92

تسيير رجال البحر أثناء التوقف القسري للسفن: بين الالتزامات الدولية والإكراهات المالية: دراسة حالة مؤسسة عمومية جزائرية ¹ بلبريك محمد، ² حاجي نادية *

¹ أستاذ محاضر، جامعة التكوين المتواصل - ديدوش مراد، مخبر الرقمنة والذكاء الاصطناعي كاستراتيجيات للتطوير المستمر بالجامعة، (الجزائر)

✉ mbelbrik@yahoo.fr

 <https://orcid.org/0000-0003-4343-037X>

² أستاذة محاضرة، مدرسة متعددة التقنيات للهندسة المعمارية، (الجزائر)

✉ mastergaturbain@gmail.com

 <http://orcid.org/0009-0009-2887-1522>

الملخص:

تتناول هذه الورقة البحثية الإشكالية المعقدة لإدارة الموارد البشرية البحرية خلال فترات التوقف القسري الطويلة في مؤسسة عمومية جزائرية. اعتمدت الدراسة على منهجية دراسة الحالة والملاحظة بالمشاركة خلال عام 2024، مع تحليل بيانات 28 مشاركاً من بحارة وإداريين وخبراء. كشفت النتائج عن خسائر مالية فادحة تجاوزت 7000 يورو يومياً لكل سفينة، وبما يتوافق مع العديد من الدراسات السابقة، تدهوراً ذا دلالة سريرية في الصحة النفسية للبحارة تجلى من خلال أعراض الاكتئاب والقلق، وانهيار في الهيكل الانضباطي والاجتماعي على متن السفن. كما سلطت الدراسة الضوء على فجوة تطبيقية عميقة بين الالتزامات الدولية - ولا سيما اتفاقية العمل البحري MLC - 2006 والإمكانيات المالية والإدارية للمؤسسة. تخلص الورقة إلى أن الأزمة هي أزمة نظامية بطبيعتها، وتوصي باعتماد نموذج إداري متكامل يجمع بين الإصلاح المالي والدعم النفسي والمرونة التشريعية.

الكلمات المفتاحية: تسيير الموارد البشرية؛ التوقف القسري؛ التشريعات البحرية؛ الصحة النفسية للبحارة؛ الانهيار التنظيمي.

تصنيف JEL: M12, J24, J28, J81, K31, L92

استلم في: 2026/02/18

قبل في: 2026/05/03

نشر في: 2026/06/30

* المؤلف المرسل

كيفية الإحالة:

BELBRIK, M., & HADJI, N. (2026). Maritime Crew Management During Ships' Forced Immobilization: Navigating International Obligations and Financial Constraints A Case Study of an Algerian Public Institution. *Dirassat Journal Economic Issue*, 17(2), 111-130. <https://doi.org/10.34118/djei.v17i2.4670>



1. Introduction

In a global context characterized by accelerating logistical and operational transformations, the phenomenon of forced ship immobilization has emerged as one of the most complex challenges facing the maritime transport industry. Data issued by leading international bodies indicate approximately 10,000 cases of forced ship immobilization annually during the 2020–2023 period, according to reports by Lloyd's List Intelligence and UNCTAD. Despite a relative global decline of 24% since the peak of 2020, the phenomenon remains extremely costly and structurally complex. Technical failures constitute the primary cause (34%), followed by judicial and port detentions (28%), with average immobilization periods ranging from 60 to 180 days.

Within this global context, Algeria occupies a distinctive position that warrants focused scholarly attention. Although the Algerian fleet represents only 0.2% of the global fleet (UNCTAD, 2023), the repercussions for Algerian public maritime institutions are disproportionately severe. National data indicate that technical immobilizations account for 45% of cases, significantly exceeding the global average of 34% (ONSM, 2023; Court of Auditors, 2022; Allianz, 2024; Lloyd's List Intelligence, 2023). This exceptional reality places Algerian maritime institutions at the intersection of a stark contradiction between binding international legal obligations—namely the Maritime Labour Convention (MLC, 2006), the Safety of Life at Sea Convention (SOLAS), and the Standards of Training, Certification and Watchkeeping (STCW)—and acute financial and administrative constraints. This contradiction generates a multidimensional systemic crisis extending beyond direct financial costs to the disintegration of organizational, social, and psychological structures among seafarers. This

study explores this crisis through an integrated analytical lens.

2. Research Problem and Questions

2.1 Central Research Question

The research question guiding this study is :

How can an Algerian public maritime institution reconcile international and national legal obligations toward seafarers with financial and administrative constraints during prolonged ship immobilization?

2.2 Sub-questions

In order to address this research question, the study is structured around the following sub-questions:

- 2.2.1 What are the psychological and organizational impacts of prolonged immobilization on seafarers?
- 2.2.2 How do financial constraints affect compliance with international obligations?
- 2.2.3 What sociological mechanisms of organizational disintegration emerge onboard?
- 2.2.4 How can legal requirements and financial realities be balanced?

2.3 Research Hypotheses

Based on the research question and sub-questions, the following hypotheses are proposed:

- H1: Prolonged forced immobilization leads to organizational and social disintegration onboard ships.
- H2: The gap between international legislation and financial capacity exacerbates the systemic crisis.
- H3: An integrated management model mitigates negative impacts.

3. Methodology

3.1 Researcher's Positionality and Field Access

The methodological framework of this study is inseparable from the researcher's field position. The researcher served as a senior executive within the institution under study (seconded from the university), which enabled direct observation of an exceptional reality: the entire fleet was undergoing prolonged forced immobilization due to technical failures lasting several months, with some exceeding one year. This situation was compounded by financial incapacity to carry out repairs and by restrictions on repairing Algerian vessels in European shipyards.

This unique positionality enabled extended participatory observation throughout 2024 and facilitated deep contextual understanding that informed research design, data collection tools, and analysis.

3.2 Research Design and Data Collection Tools

This study adopted a qualitative case study design to generate an in-depth, context-sensitive understanding of maritime crew management during prolonged ship immobilization. A case study approach is particularly suitable where the phenomenon is complex, institutionally embedded, and best examined through multiple sources of evidence rather than a single dataset (Creswell, 2009; Mtisi, 2022).

3.2.1 Semi-structured interviews

Data were collected primarily through semi-structured interviews with a purposive sample of participants selected for their roles and experience with crew management under immobilization conditions. Semi-structured interviewing was chosen because it allows the researcher to maintain a consistent line of inquiry while remaining flexible enough to capture

participants' lived experiences and institutional perspectives (Dunwoodie et al., 2022; Roulston & Halpin, 2022). Interview questions were organized across five analytical dimensions: (1) psychological and disciplinary impacts, (2) daily practices and behaviors, (3) administrative and leadership relations, (4) living and operational conditions, and (5) future intentions and proposed solutions.

3.2.2 Participatory observation

To complement interview accounts and reduce reliance on self-reported narratives alone, the study also used participatory observation. The researcher conducted routine on-site observation and maintained daily field notes to document behaviors, interactions, informal practices, and operational dynamics as they unfolded in real time. This observational component strengthened the study's contextual depth and helped capture discrepancies between formal procedures and day-to-day realities (Noble et al., 2025).

3.2.2 Document analysis

Finally, the study included document analysis to reconstruct institutional decision-making and verify reported practices. More than 50 internal documents were reviewed, including disciplinary reports, attendance records, and administrative files. Document analysis was conducted systematically to extract relevant information, track changes over time, and triangulate interview and observation findings, thereby enhancing the credibility and robustness of the case study evidence (Bowen, 2009; Ullrich et al., 2024).

3.3 Research Population and Sample

The study sought to construct a comprehensive understanding of the phenomenon of forced ship immobilization from the perspectives of all relevant stakeholders. To achieve this objective,

a purposive sampling strategy was adopted, ensuring representation of all key categories directly associated with the phenomenon, both at the level of immobilized vessels and central administration.

The study sample included the following groups:

- **Active maritime crews:** Onboard the four vessels under study, all senior officers in service were interviewed (captains, chief mates, and chief engineers), in addition to a diverse sample of officers and ratings representing different specialties.
- **Senior institutional management:** Interviews were conducted with directors of the central departments directly concerned with the issue, namely: the

Director of Human Resources, the Director of Equipment, the Director of Finance, and the Director of Technical Operations.

- **Experts and related stakeholders:** To deepen the analysis, interviews were conducted with the Director General of the National Higher Maritime Institute of Bou Ismaïl, as well as several captains and officers who had previously served onboard the vessels concerned and left during the immobilization period.

This comprehensive sampling structure provides a solid foundation for an integrated analysis linking lived shipboard experiences with broader administrative and financial contexts, thereby ensuring full coverage of all dimensions of the research problem.

Table N° 1

Distribution of Participants by Category and Number

Category	Number	Remarks
Captains in service during the study	4	All captains of the four vessels
Chief mates in service during the study	4	All chief mates of the four vessels
Chief engineers in service during the study	4	All chief engineers of the four vessels
Officers and ratings	8	Diverse sample from each vessel
Central administration directors (equipment, finance, technical, HR)	4	Senior management
Former captains and officers	4	Left the vessels during immobilization
Total	28	

This diversity of participants illustrates a **source triangulation strategy**, enabling comparison between the perspectives of those directly experiencing the problem onboard vessels, those responsible for decision-making within the administration, and those who were affected by the crisis and subsequently left the organization.

In addition, the researcher relied on **external maritime experts** who regularly operate onboard vessels to issue mandatory certification authorizing ships to sail (DOC – Documents of Compliance). These experts provided substantial support in understanding the realities of the situation from an objective and professional standpoint, given their extensive experience in

the maritime industry, both technically and in terms of human resource management.

3.4 Data Analysis

To analyze the qualitative data derived from interviews, field observations, and documentary sources, the study employed Thematic Analysis, following the six-phase model developed by Braun and Clarke (2006), progressing systematically from data familiarization to the identification of core themes.

To ensure the credibility and trustworthiness of the findings, a rigorous methodological triangulation strategy was applied across the following dimensions:

- **Source triangulation:** Narratives provided by different participant groups (maritime crews, senior management, and experts) were cross-validated against extended field observations (exceeding 30 days) and official documentary materials (more than 50 documents). For example, the theme of “*administrative legitimacy collapse*”, which emerged from interview analysis, was corroborated through direct observation of *order-challenging behaviors* onboard vessels, as well as through disciplinary reports documenting cases of insubordination.
- **Method triangulation:** Findings derived from interview analysis were

systematically compared with insights obtained from field observations and document analysis, enabling the construction of a comprehensive and multidimensional understanding of the phenomenon.

- **Analyst triangulation:** Preliminary findings and interpretations were reviewed and validated by a panel of academic and professional experts in the maritime field to enhance analytical accuracy and objectivity.

To ensure transparency of the analytical process, the analytical trajectory was meticulously documented, tracing the transformation of concrete field statements (e.g., “*procedures have become meaningless paperwork*”) into abstract analytical concepts (e.g., “*bureaucratic collapse*”), while indicating the frequency of each theme and the diversity of its data sources. This integrated approach ensured internal data coherence and enabled the identification of deep-seated patterns and causal relationships underlying the phenomenon under investigation.

4. Conceptual and Institutional Framework

4.1 Conceptual Framework

The study draws on a set of fundamental international concepts and terms that constitute the legal and professional framework governing maritime transport operations, as presented in Table (2).

Table N° 2
Conceptual Framework of Core International Maritime Terminology

Term	Abbreviation	Brief Definition	Primary Reference
International Maritime Organization	IMO	United Nations agency responsible for establishing maritime safety and environmental protection standards	Official IMO website
International Convention for the Safety of Life at Sea (1974)	SOLAS	International treaty setting minimum safety standards for ships	Chapter I of SOLAS Convention
International Safety Management Code	ISM Code	Mandatory requirements for implementing a safety management system in maritime companies	Section 1.2 of the ISM Code
Safety Management System	SMS	Documented system developed by the company to implement safety and environmental protection policies	Section 1.4 of the ISM Code
Maritime Labour Convention (2006)	MLC 2006	International convention guaranteeing seafarers' rights and working conditions	Preamble and core articles of MLC 2006
United Nations Convention on the Law of the Sea (1982)	UNCLOS	Comprehensive legal framework governing all ocean-related activities	Preamble of UNCLOS

Source: Official websites of the above-mentioned organizations, adapted by the researcher.

4.2 Institutional Context (Field of Study)

To ensure clarity while fully adhering to research ethics, the institution under study is presented in general terms without disclosing its identity. The institution is a newly established Algerian public enterprise (2023) operating under the authority of the Ministry of Transport and providing integrated maritime and logistics services.

The institution inherited significant financial and administrative challenges from its predecessor entity, which it absorbed. These challenges are clearly reflected in the condition of its fleet,

composed of nine vessels, six of which were under forced technical immobilization during the study period. This situation makes the institution an ideal case for examining the research problem, particularly given the presence of 298 employees (seafarers and shore-based staff) operating within a highly centralized organizational structure, which further exacerbated the crisis.

Table N°3
Distribution of Employees by Type of Employment Contract
(as of 31 December 2024)

Type of Employment Relationship	Number	Percentage
Shore-based staff (Sédentaire)	108	36.24%
Permanent contract	97	
Fixed-term contract	11	
Seafarers (Navigant)	190	63.76%
Permanent contract	103	
Fixed-term contract	87	
Total	298	100%

Source: Human Resources Directorate.

5. Literature Review and Scientific Contribution

Global literature consistently agrees that seafarers' mental health faces exceptional challenges inherent to the maritime working environment (Oldenburg et al., 2010). Şenbursa's (2024) comprehensive review reinforces these findings, indicating that seafarers are exposed to a unique constellation of psychological and physical stressors resulting from the isolated, demanding, and high-risk nature of maritime work. The review highlights the widespread prevalence of depression, anxiety, post-traumatic stress disorder, and burnout among seafarers. These challenges were further exacerbated during the COVID-19 pandemic, as studies conducted across multiple national contexts—including China (Qin et al., 2021), Iran (Baygi et al., 2021), and Europe (Pauksztat et al., 2022a)—reported sharp increases in depression and anxiety levels. In several cases, these psychological impacts exceeded those recorded following earlier traumatic events such as maritime piracy (Seyle et al., 2018).

A large-scale joint study conducted by the International Transport Workers' Federation

(ITF) and Yale University (2019) underscores the severity of this phenomenon. Based on data from 1,572 seafarers, the study documented high prevalence rates of depression (25%), anxiety (17%), and suicidal ideation (20%). Importantly, these outcomes were not attributed to individual vulnerability alone, but were directly linked to occupational and organizational factors, including unsupportive work environments, exposure to violence, and deteriorating working conditions (ITF & Yale University, 2019). Moreover, the effects of dual isolation—from both the broader world and the family sphere (Sliskovic, 2020)—combined with extended periods away from home (Devereux & Wadsworth, 2021), generated unprecedented psychological strain. Şenbursa (2024) identifies these factors as particularly aggravated during the pandemic due to contract extensions and restrictions on shore leave.

Recent literature converges with the findings of earlier studies in demonstrating that ships function not merely as workplaces, but as high-pressure environments that significantly undermine seafarers' psychological well-being when compared to their familial and social settings (Oldenburg et al., 2010; Şenbursa, 2024). A study by Sampson and Ellis (2019), involving 1,507 seafarers, revealed a profound

emotional and psychological divide between life ashore and life at sea. While 92.8% of respondents reported feeling happy or very happy at home, only 66.9% expressed similar feelings onboard ships. Furthermore, 20.2% reported persistent or recurrent loneliness at sea, compared to just 4.2% at home. This stark disparity reflects the psychological toll of isolation, separation from social and family routines, and spatial confinement onboard vessels (Sliskovic, 2020; Devereux & Wadsworth, 2021). Notably, participants in the same study identified free and unlimited internet access as one of the most effective measures shipping companies could adopt to improve mental well-being, highlighting the growing importance of connectivity in mitigating isolation and emotional distress (Sampson & Ellis, 2019).

These findings are further reinforced by the ITF–Yale University study (2019), which revealed alarming indicators of serious psychological disorders among seafarers, including depression (25%), anxiety (17%), and suicidal ideation (20%). Crucially, the study linked these outcomes to structural and organizational determinants rather than individual pathology, emphasizing factors such as poor managerial support, exposure to threats or violence, mistreatment, and low job satisfaction (ITF & Yale University, 2019).

Subsequent research conducted during and after the COVID-19 pandemic confirmed persistently high levels of depression and anxiety among seafarers across diverse geographical contexts, including China (Qin et al., 2021), Iran (Baygi et al., 2021), and Europe (Pauksztat et al., 2022a). In some cases, these levels surpassed those recorded following other severe maritime stressors, such as piracy incidents (Seyle et al., 2018). More recently, Svetina et al. (2024) identified three major categories of occupational

stressors associated with mental health deterioration: environmental stressors (e.g., noise and vibration), social stressors (e.g., bullying, isolation, and homesickness), and health-related stressors (e.g., injuries and illness). Their findings indicate that social stressors—particularly prolonged separation from family, cultural differences, and experiences of harassment or bullying—were among the most influential factors driving seafarers' intentions to leave the profession (Svetina et al., 2024).

Collectively, this body of evidence demonstrates that social and organizational pressures, rather than the hazardous nature of maritime work alone, constitute the most powerful determinants of seafarers' mental health deterioration (Sliskovic, 2020; Şenbursa, 2024). These findings underscore the urgent need for maritime transport institutions to reassess their social and human-centered policies and to integrate mental health considerations into management strategies and compliance frameworks aligned with decent work standards and international conventions safeguarding seafarers' dignity and well-being.

Despite this broad consensus on the nature of the problem, a critical gap remains in the literature. Existing studies predominantly focus on psychological dimensions during temporary or crisis-driven disruptions, leaving limited space for integrated analyses that combine financial, organizational, and psychological perspectives on prolonged forced immobilization, particularly within the Algerian context. This study addresses this gap by systematically documenting—through extended field observation—the transformation of ships from hierarchical organizations into “confined communities”, and by proposing an integrated applied model that links graduated psychological support, financial restructuring, and legislative flexibility.

6. Theoretical and Legal Framework

This study is grounded in an integrated theoretical and legal framework that combines five core theories with an in-depth analysis of the regulatory environment. This integrative approach provides a comprehensive understanding of the psychological, organizational, social, and legal implications of prolonged forced immobilization on both seafarers and the maritime institution.

6.1 The Integrated Theoretical Framework

The study adopts an integrated theoretical framework drawing on five major theories that collectively offer a multidimensional explanation of the psychological, organizational, and social consequences of prolonged forced immobilization. The strength of this framework lies in its capacity to interpret the studied phenomenon across interconnected analytical levels.

At the individual level, the study employs organizational justice theory (Adams, 1965) to explain seafarers' perceptions of unfairness arising from the contradiction between continued wage payment and the absence of meaningful work, and the resulting decline in motivation and organizational commitment. In parallel, conservation of resources theory (Hobfoll, 1989) provides an analytical lens for understanding the psychological mechanisms underlying health and behavioral deterioration, as seafarers experience a cumulative depletion of material, psychological, and social resources, leading to maladaptive coping strategies in response to chronic stress.

At the organizational level, the study draws on structural functionalism (Durkheim, 1893) to analyze the state of *anomie* experienced onboard immobilized vessels. The breakdown of organic solidarity—originally produced through the division of labor—leads to the collapse of core

organizational functions. Furthermore, institutional theory (Merton, 1968) is applied to examine comprehensive institutional failure by tracing the disintegration of the institution's three foundational pillars: organizational, normative, and cultural. This process is accompanied by the emergence of informal and alternative goals that replace official institutional objectives.

At the interactional level, social network theory provides analytical tools for understanding the transformation of both formal and informal networks within immobilized vessels. Alliances and social relationships are reconfigured, patterns of information flow shift, and new sources of power emerge, explaining the evolving dynamics of authority and social interaction within this closed environment.

6.2 The Legal and Regulatory Framework Between Normative Texts and Practical Implementation

The legal framework operates across two interrelated levels. At the international level, seafarers' rights are anchored in the Maritime Labour Convention (MLC, 2006)—often described as the "*Seafarers' Bill of Rights*"—supplemented by the SOLAS and UNCLOS conventions. At the national level, the framework is constituted by Algerian legislation, most notably Law No. 10-04 of 15 August 2010, which codifies Algerian maritime law, and Executive Decree No. 05-102 of 26 March 2005, which provides the sector-specific legal framework governing employment contracts and working conditions for seafarers.

Central to this national framework is Presidential Decree No. 15-260 of 7 October 2015, which ratified the Maritime Labour Convention (2006) and incorporated its provisions into the Algerian legal system.

Comparative legal analysis reveals varying degrees of alignment between national and international legislation, as follows:

- Full compliance in provisions related to wage payment (Article 49 of Executive Decree No. 05-102 aligned with Regulation B2.2 of the MLC);
- Partial compliance in healthcare provisions, as incorporated through

Presidential Decree No. 15-260, corresponding to Regulation A4.2 of the MLC;

- Non-compliance with respect to fundamental rights such as repatriation, which is not explicitly stipulated in Algerian legislation, in contrast to Regulation B2.5.2 of the MLC.

Table N° 4

Compliance Analysis Between International and National Legislation

Degree of Compliance	Algerian Legislation	MLC 2006	Legal Provision
Full compliance	Article 49, Executive Decree No. 05-102	Regulation B2.2	Wage payment
Partial compliance	Presidential Decree No. 15-260	Regulation A4.2	Healthcare
Non-compliance	Not explicitly stipulated	Regulation B2.5.2	Repatriation

Source: Prepared by the researcher based on legal text analysis.

The compliance analysis highlights a clear imbalance in implementation: full alignment in wage payment provisions, partial alignment in healthcare, and a striking gap regarding the fundamental right to repatriation. This legislative gap, combined with jurisdictional conflicts between national and international legal regimes (Nguyen & Notteboom, 2022; United Nations, 1982) and implementation deficiencies resulting from limited enforcement mechanisms within Algerian institutions (Bendall & Brooks, 2023; Slišković, 2020), collectively constitutes a dysfunctional legal framework. This framework explains the core contradiction between international obligations and national institutional capacity, thereby fueling the systemic crisis experienced by maritime crews.

Documentary analysis further reveals that legal protection of seafarers' health within Algerian legislation is not a recent development, but rather rooted in historical maritime customs that

recognized the shipowner's obligation to provide medical care as early as the Middle Ages (Hariz Asma, 2024, p. 1). This principle is codified in Article 428 of the Algerian Maritime Code, which obliges the shipowner to ensure legally compliant health and safety conditions onboard vessels. This confirms that the national legal framework possesses the necessary protective foundations, and that the core issue lies in implementation mechanisms rather than legislative texts.

6.3 Integration of the Theoretical and Legal Frameworks

The integration of the theoretical and legal frameworks provides a comprehensive explanation of the interactive relationships among psychological, organizational, social, and legal variables. While the theoretical framework elucidates the sociological and psychological mechanisms of institutional breakdown, the legal framework offers the structural basis for

understanding the central contradiction between international obligations and national capacities.

Individual psychological deterioration (as explained by conservation of resources theory) contributes to organizational disintegration (structural functionalism). Conversely, organizational collapse and legal constraints exacerbate psychological distress, creating a reciprocal feedback dynamic that intensifies the phenomenon under study.

Through this integrated framework, the study contributes to academic knowledge by applying established theories and rigorous legal analysis to a novel context conceptualized as “confined non-working communities.” It further offers a comprehensive explanatory model capable of informing the development of more effective crisis-management strategies in the maritime sector.

7. Results and Discussion

7.1 Integrated Analysis of Financial Constraints, Institutional Gaps, and the Crisis of Legitimacy

The field data provide a clear answer to Sub-question (B) concerning the impact of financial constraints on the institution's ability to comply with international obligations. Data collection instruments revealed a multi-layered financial crisis, manifested in cumulative daily losses exceeding €7,000 per vessel (based on internal financial reports and daily information sheets submitted to the supervising ministry), the depletion of nearly 40% of the operational budget to pay wages for crews under forced inactivity (as reported in interviews with financial and human resources managers), and emergency maintenance costs surpassing €15,000 per vessel per month (according to maintenance contracts and technical reports).

This reality was summarized by the Head of Equipment, who stated: *“We are facing an escalating inability to cover operational expenses due to prolonged immobilization... suppliers now refuse to work with us because of accumulated debts”* (June 2024).

These financial indicators form the nucleus of a self-reinforcing crisis loop, beginning with operational losses and culminating in the flight of highly skilled personnel, a pattern consistent with the cumulative risk dynamics identified by Brooks and Greenberg (2022). Costs do not remain linear but expand through three amplification channels: variable costs adding approximately 30% (Lloyd's, 2022), penalty fees due to delays (BIMCO, 2021), and a documented decline in the market value of vessels immobilized for more than 60 days (Stopford, 2009). Collectively, these mechanisms increase total costs by 40–50%, necessitating the application of an emergency coefficient ranging between 1.4 and 1.5.

This financial deficit has evolved into a primary driver of a deep institutional gap between legislation and implementation, observed at two levels. First, at the legislative and regulatory level, payroll analysis revealed salary payment delays of up to three months, despite explicit legal provisions, while voyage logs confirmed the systematic denial of repatriation rights upon contract completion—an internationally guaranteed right. Second, at the procedural level, jurisdictional conflicts emerged as a central obstacle. As the Human Resources Director noted: *“Overlapping competencies between our administration and the Ministry of Transport paralyze decision-making, even when decisions are legally mandated”* (July 2024). Seafarers expressed profound frustration, with one officer questioning *“the very purpose of laws if their application depends on complex administrative constraints”* (May 2024).

This acute disjunction between legal texts and actual practice constitutes a systemic crisis of legitimacy. The persistence of structural violations of the Maritime Labour Convention (MLC, 2006)—including delayed wages, denial of repatriation, and the suspension of travel allowances—under conditions of financial insolvency confirms the validity of Hypothesis (B). While Hebbar and Mukesh (2020) documented such violations globally during the COVID-19 pandemic, their continuation in the Algerian context beyond the pandemic highlights a structural and cultural organizational dysfunction, as warned by Stannard (2020). This gap extends to national legislation itself, where the stark contrast between the punitive provisions of Article 549 of the Algerian Maritime Code and the practical denial of basic healthcare rights reveals the collapse of enforcement and oversight mechanisms within the national maritime system.

7.2 Clinical and Psychological Consequences: Resource Depletion and Normative Breakdown

The study provides a comprehensive response to Sub-question (A) regarding the psychological and organizational effects of prolonged forced inactivity. Extended field observations documented a marked decline in social interactions, accompanied by increased isolation and withdrawal across the four vessels studied.

Interviews revealed profound psychological distress, with one seafarer describing the situation as “*a floating prison*” (March 2024). Officers reported a breakdown of disciplinary control, stating: “*We have lost control of the crew*” (May 2024). Former captains consistently confirmed the erosion of discipline. Medical and disciplinary records corroborated these findings, indicating an average of five disciplinary cases per vessel per month and three emergency

medical evacuations linked to severe psychological deterioration.

From a theoretical standpoint, the loss of functional roles generated a severe identity crisis, as articulated by a captain: “*We are no longer captains or engineers—we are merely guards of rusting steel structures*” (April 2024). This aligns with Conservation of Resources Theory (Hobfoll), wherein chronic financial insecurity and role deprivation result in systematic psychological resource depletion (Wilson et al., 2020).

The suspension of travel allowances represented not only a material loss but also a depletion of symbolic and organizational support, reinforcing perceptions of worthlessness (Rhoades & Eisenberger, 2002). As one seafarer stated: “*Denying us the allowance is a message that we deserve nothing*” (June 2024). This cascading resource loss explains the shift toward maladaptive coping mechanisms, consistent with findings among maritime trauma survivors (Seyle et al., 2018).

Organizational Justice Theory further explains disciplinary collapse, as wage payments without productive work fostered profound perceptions of inequity, undermining motivation and encouraging oppositional behavior. Strain theory provides an additional lens for understanding the emergence of deviant behaviors as responses to chronic psychological stress in this closed environment.

7.3 Sociological Disintegration: From Hierarchical Organizations to “Confined Communities”

The findings reveal a fundamental structural transformation in onboard social organization. Drawing on Durkheim’s functionalism and Merton’s institutional theory, immobilized vessels have shifted from hierarchical organizations to what may be termed “confined

communities.” The absence of an operational purpose produced acute organizational anomie, dissolving norms and stripping the social system of its functional meaning (Devereux & Wadsworth, 2021).

This disintegration manifested empirically through declining social interactions, increased isolation, and escalating disciplinary breakdowns. At the institutional level, the analysis demonstrates a simultaneous collapse of the organizational pillar (operational inactivity), the normative pillar (systematic violation of maritime labor standards), and the cultural pillar (erosion of collective work values). Informal networks, once sources of cohesion, transformed into channels of resistance and conflict, leading to the erosion of social capital (Bourdieu).

Medical and disciplinary data confirm this trajectory, reinforcing the conclusion that Hypothesis (A) is fully supported: forced immobilization produces not only financial and psychological deterioration but a systematic disintegration of organizational and social structures, converting vessels into chaotic confined communities governed by informal power struggles.

7.4 Dysfunctional Governance Mechanisms: Certification Restriction and the Collapse of the Psychological Contract

The study identifies an exceptional institutional mechanism—the restriction of maritime certificate validity to six months—as a concrete manifestation of systemic governance failure. Documentary analysis and testimonies reveal clear legal deviations, justified by officials as a *“pressure mechanism to recover debts”* (October 2024), while inspectors described the practice as *“an indicator of systemic crisis threatening legal compliance and maritime safety.”*

This practice exemplifies the collapse of the psychological contract (Rousseau, 1995) across its transactional, relational, and balanced dimensions. From an organizational justice perspective, certificate restriction constitutes a triple injustice—distributive, procedural, and interactional. A former chief engineer captured this breach: *“How can I trust my future to a certificate that expires before I finish paying for my car?”* (November 2024).

Through a Bourdieusian lens, certificates—forms of symbolic capital—are transformed from empowerment tools into instruments of exclusion, stripping seafarers of professional identity (Cech & Hiltner, 2022). This dynamic fuels selective brain drain, with the loss of captains and chief engineers within a single year, reinforcing what HR literature describes as a talent death spiral.

7.5 Integrating Dimensions: Toward a Comprehensive Explanatory Model

The integrated analysis demonstrates that the crisis confronting the maritime institution is fundamentally systemic. Financial constraints (UNCTAD, 2022) triggered organizational injustice, leading to psychological resource depletion (Hobfoll), sociological disintegration (Durkheim; Bourdieu), and ultimately a collapse of institutional meaning (Weick). Talent loss and certificate restriction further exacerbate financial and operational fragility, transforming an economic crisis into a full-scale legitimacy crisis (Stannard, 2020).

7.6 Long-Term Operational and Symbolic Impacts of Prolonged Immobilization

Field analysis of daily maintenance during prolonged immobilization exposes a critical implementation gap between collective agreement provisions and operational reality. Chronic shortages of materials render contractual obligations functionally impossible, producing a state of “contractual paralysis.”

From the perspective of the psychological contract and social exchange theory, this reality induces psychological withdrawal rather than negligence. The environment contradicts principles of organizational citizenship behavior, undermining any call for voluntary commitment. Systemic failure theories, explain how operational breakdown escalates into reputational collapse, transferring institutional stigma to individuals through spillover effects.

7.7 Institutional Stigma and Human Capital Degradation

Forced vessel immobilization constitutes a model of systemic collapse, signaling institutional insolvency to the market (Williamson; Merton). This stigma erodes symbolic and social capital (Bourdieu), contaminating crew members' professional identities (Tajfel & Turner; Goffman). Under signaling theory (Spence), accumulated experience becomes a negative signal, reflecting skill erosion and declining standards, reinforcing labor market exclusion.

Consequently, seafarers face an existential dilemma: remaining implies participation in an organizational death spiral, while leaving entails confronting a labor market that perceives them with suspicion. Addressing this crisis requires strategic reconstruction of institutional legitimacy and symbolic capital, rather than isolated financial or administrative fixes.

7.8 Limitations of the Study

This study is subject to several methodological and contextual limitations that should be considered when interpreting its findings. First, the research relies on a qualitative case study design focused on a single Algerian public maritime institution. While this approach allows for in-depth, context-sensitive analysis, it necessarily limits the generalizability of the findings to other national or organizational

settings. The results should therefore be understood as analytically transferable rather than statistically representative, offering theoretical and conceptual insights applicable to comparable contexts of prolonged ship immobilization.

Second, the empirical investigation faced structural constraints inherent to the maritime sector. Prolonged forced immobilization, crew rotation, irregular schedules, and restricted access to vessels significantly limited opportunities for sustained, repeated interviews and continuous onboard observation. These operational conditions reduced the possibility of longitudinal engagement with the same participants and may have constrained the capture of evolving psychological states and informal social dynamics over time. As a result, certain dimensions of seafarers' lived experiences—particularly subtle shifts in interpersonal relations and coping strategies—may be underrepresented.

Third, the researcher's positionality constitutes both a strength and a limitation. As a senior executive within the institution (seconded from academia), the researcher benefited from exceptional access to internal documents, strategic decision-making processes, and prolonged field observation. However, this insider position may have influenced participants' responses. Despite assurances of anonymity and confidentiality, some respondents—particularly subordinate staff—demonstrated reluctance to openly express critical views, disclose sensitive practices, or directly challenge institutional authority. This tendency toward self-censorship, well documented in organizational ethnography, may have limited the expression of dissenting narratives and amplified socially desirable responses.

Fourth, the study's reliance on self-reported data introduces the risk of subjective bias, particularly in the assessment of psychological distress and perceptions of organizational injustice. Although interview data were systematically triangulated with documentary evidence (disciplinary reports, attendance records, administrative correspondence) and extended field observation, the absence of standardized clinical assessment tools limits the precision with which mental health outcomes can be quantified.

Finally, external constraints related to legal sensitivity and institutional confidentiality restricted access to certain financial and contractual documents, particularly those involving ongoing litigation or negotiations with foreign shipyards. While available financial data were sufficient to establish the magnitude and structure of losses, the inability to access complete financial records may have limited the granularity of cost analysis.

To mitigate these limitations, the study adopted rigorous triangulation strategies (source, method, and analyst triangulation) and maintained a reflexive analytical stance throughout the research process. Nevertheless, the findings should be interpreted with due consideration of these constraints, which reflect not methodological weakness but the empirical complexity of researching prolonged crisis conditions within highly regulated and politically sensitive maritime institutions.

To enhance conceptual clarity and avoid redundancy, the reference list prioritizes foundational theories, authoritative international reports, and recent systematic reviews, while limiting repetitive empirical studies with overlapping findings.

8. Conclusion and Recommendations

This study offers an integrated model to address the central research question concerning how to reconcile legal obligations with financial realities

in the maritime sector, through a comprehensive diagnosis of a multidimensional systemic crisis. The research makes several original theoretical and empirical contributions, notably by documenting the structural transformation of vessels from hierarchical organizations into "confined communities," analyzing the phenomenon of institutional stigma and human capital degradation, and examining the operational and psychological consequences of prolonged forced immobilization on maritime crews. In addition, the study proposes an explanatory model capturing the dynamic interaction between financial, psychological, social, and legal dimensions, while introducing the concept of "dual functional legitimacy" within the maritime context.

The findings demonstrate that institutional stigma extends far beyond financial loss to encompass the erosion of symbolic and social capital (Bourdieu, 1986), whereby organizational reputation shifts from a strategic asset to a liability that excludes the institution from networks of commercial trust. This stigma does not remain confined to the organization itself; rather, it spills over—in line with spillover theory—to individual crew members, who become perceived by the labor market as carriers of an exhausted institutional reputation. Moreover, prolonged forced immobilization generates a profound identity crisis among seafarers (Tajfel & Turner, 1979), in which professional identity ceases to be a source of pride and instead becomes a source of shame, prompting concealment strategies as a form of stigma management (Goffman, 1963).

At the operational level, the study reveals a critical implementation gap between contractual provisions and field realities. Chronic shortages of essential materials produced a state of "contractual paralysis," preventing the effective execution of key clauses of the collective

agreement (CNAN NORD SPA, 2018). This phenomenon is explained through the collapse of the psychological contract (Rousseau, 1995) and the decline of organizational citizenship behaviors (Organ & Ryan, 1995) in the absence of a supportive work environment, resulting in a shift from active engagement to passive compliance among seafarers.

In light of this integrated analysis, the study advances a set of strategic, root-oriented recommendations, including the establishment of a national maritime emergency fund based on shared financing mechanisms, the activation of a graduated psychological support model, and a comprehensive revision of the legal and regulatory framework governing maritime labor. The study further emphasizes the importance of introducing a "Welfare Officer" position aboard each vessel, developing flexible crew rotation systems, and mandating the adoption of clear institutional contingency plans.

If effectively implemented, this integrated policy package would contribute to building a resilient, equitable, and sustainable maritime system, capable of achieving the desired balance between legal compliance and financial feasibility, while preserving human capital as an irreplaceable strategic resource.

References

- الأمر رقم 76-80 المؤرخ في 23 أكتوبر 1976 هو القانون البحري الجزائري الأصلي. تم تعديله وتتميمه بموجب القانون رقم 98-05 المؤرخ في 25 يونيو 1998.
- بوعيشة، بشير. (2019). اقتصاديات رأس المال البشري والاجتماعي في المؤسسات الجزائرية: معوقات وآفاق. *مجلة الباحث*، 15 (2)، 45-60.
- حريز أسماء. (2024). حماية صحة البحارة. *المجلة الجزائرية للقانون البحري والنقل*، (5)، 1-10.

- رئيس الجمهورية الجزائرية*. (2012). المرسوم التنفيذي رقم 12-247 المحدد لشروط وتنظيم العمل البحري*. *الجريدة الرسمية العدد 28*.
- غربي، عبد القادر. (2022). *سوسيولوجيا المنظمات: مقاربات نظرية وتطبيقات ميدانية*. منشورات جامعة الجزائر.
- وزير النقل الجزائري*. (2008). القرار رقم 08-135 المتعلق بالصحة البحرية*. *الجريدة الرسمية العدد 42*.
- المرسوم التنفيذي رقم 05-102 المؤرخ في 15 صفر عام 1426 الموافق 26 مارس سنة 2005، الذي يحدد النظام النوعي لعلاقات عمل المستخدمين الملاحين لسفن النقل البحري أو التجاري أو الصيد البحري.
- المرسوم الرئاسي رقم 15-260 المؤرخ في 7 أكتوبر 2015، المتضمن التصديق على اتفاقية العمل البحري (2006)، والذي أدرج أحكامها ضمن المنظومة القانونية الجزائرية.

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). Academic Press.

- Baygi, F., Khonsari, N. M., Agoushi, A., Gelsefid, S. H., Gorabi, A. M., & Qorbani, M. (2021). Prevalence and associated factors of psychosocial distress among seafarers during COVID-19 pandemic. *BMC Psychiatry*, 21(1), 222. <https://doi.org/10.1186/s12888-021-03197-z>.

- Baygi, F., Mohammadi-Nasrabadi, F., & Birkland, S. (2021). *Mental health problems and associated factors among seafarers during the COVID-19 pandemic*. *International Journal of Occupational Safety and Ergonomics*, 27(4), 1041–1047.

- BIMCO. (2021). BIMCO demurrage and detention clause for container vessels. <https://www.bimco.org/contracts-and-clauses/bimco-clauses/current/demurrage-and-detention-clause-for-container-vessels>

- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.

- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/qrj0902027>.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <http://eprints.uwe.ac.uk/11735>
- Brooks, S. K., & Greenberg, N. (2022). Mental health and psychological wellbeing of maritime personnel: A systematic review. *BMC Psychology*, 10, 139.
- Cech, E. A., & Hiltner, S. (2022). Unsettled employment, reshuffled priorities? Career prioritization among college-educated workers facing employment instability during COVID-19. *Socius: Sociological Research for a Dynamic World*, 8.
- CNAN NORD SPA. (2018). *Collective agreement between the management of CNAN NORD SPA company and the workers represented by the trade union office of the General Union of Algerian Workers (UGTA)*. Algiers: CNAN NORD SPA.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publication Ltd.
- Devereux, H., & Wadsworth, E. (2022). Forgotten keyworkers: The experiences of British seafarers during the COVID-19 pandemic. *The Economic and Labour Relations Review*, 33(2), 272–289.
- Devereux, S., & Wadsworth, E. (2021). *The psychological impact of extended contracts and separation from family on seafarers' wellbeing*. *Maritime Policy & Management*, 48(7), 964–978.
- Dunwoodie, K., Macaulay, L., & Newman, A. (2022). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. *Applied Psychology*, 72(2), 863–889. Portico. <https://doi.org/10.1111/apps.12414>
- Durkheim, É. (2014). *The division of labor in society*. (S. Lukes, Ed.). Free Press. (Original work published 1893)
- Foucault, M. (1995) *Discipline and Punish: The Birth of the Prison*. Vintage Books, New York, 215.
- Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Prentice-Hall.
- Gould, R.V. and Fernandez, R.M. (1989) *Structures of Mediation: A Formal Approach to Brokerage in Transaction Networks*. *Sociological Methodology*, 19, 89-126. <http://dx.doi.org/10.2307/270949>.
- Hebbar, A. A., & Mukesh, N. (2020). COVID-19 and seafarers' rights to shore leave, repatriation and medical assistance: A pilot study. *International Maritime Health*, 71(4), 217–228. [doi:10.5603/IMH.2020.0040](https://doi.org/10.5603/IMH.2020.0040).
- International Labour Organization. (2006). *Maritime Labour Convention (MLC)*, 2006.
- International Maritime Organization. (1974). *International Convention for the Safety of Life at Sea (SOLAS)*.
- International Seafarers' Welfare and Assistance Network (ISWAN). (2021, March). *Concerns of rise in number of seafarers impacted by crew change due to new COVID-variants*. <https://www.seafarerswelfare.org/news/2021/concerns-of-rise-in-number-of-seafarers-impacted-by-crew-change-due-to-new-covid-variants>
- International Transport Workers' Federation (ITF) & Yale University. (2019). *Mental health of seafarers: A global survey report*. ITF Publications.
- Lloyd's. (2022). *Safety and shipping review 2022: An annual review of trends and developments in shipping losses and safety*. Allianz Global Corporate & Specialty Lloyd's List Intelligence. <https://abrbuzz.co.za/publications/press-and-customers/allianz/Allianz%20Global%20Corporate%20Safety%20%20Shipping%20Review%202022%20DRAFT.pdf>.
- Merton, R. K. (1968). *Social theory and social structure* (enlarged ed.). Free Press.
- Mtisi, S. (2022). *The Qualitative Case Study Research Strategy as Applied on a Rural Enterprise Development Doctoral Research Project*. *International Journal of Qualitative*

- Methods*, 21.
<https://doi.org/10.1177/16094069221145849>
- Nguyen, H. O., & Notteboom, T. (2022). Financial barriers to port state control compliance. *Marine Policy*, 135, 104876.
 - Noble, C., Ajjawi, R., Billett, S., & Goldszmidt, M. (2025). How to Approach Qualitative Observational Research in Workplace Learning. *The Clinical Teacher*, 22(1). Portico. <https://doi.org/10.1111/tct.70005>
 - Oldenburg, M., Harth, V., & Jensen, H. (2010). *Stress and strain among seafarers related to the occupational environment*. *International Archives of Occupational and Environmental Health*, 83(7), 735–745. <https://doi.org/10.1007/s00420-010-0554-1>
 - Organ, D.W. and Ryan, K. (1995) A Meta-Analytic Review of Attitudinal and Dispositional Predictors of Organizational Citizenship Behavior. *Personnel Psychology*, 48, 775-802. <https://doi.org/10.1111/j.1744-6570.1995.tb01781.x>
 - Pauksztat, B., Andrei, D. M., & Grech, M. R. (2022). Effects of the COVID-19 pandemic on the mental health of seafarers: A comparison using matched samples. *Safety Science*, 146, 105542.
 - Pauksztat, B., Andrei, D. M., & Grech, M. R. (2022a). *Effects of the COVID-19 pandemic on seafarers' mental health*. *Applied Psychology: An International Review*, 71(3), 879–904. doi: 10.1016/j.ssci.2021.105542, indexed in Pubmed: 34744311.
 - Qin, W. Z., Li, L., Zhu, D. S., Ju, C. F., Bi, P. F., & Li, S. X. (2021). Prevalence and risk factors of depression symptoms among Chinese seafarers during the COVID-19 pandemic: A cross-sectional study. *BMJ Open*, 11(6), e048660.
 - Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714. <https://doi.org/10.1037/0021-9010.87.4.698>.
 - Roulston, K., & Halpin, S. N. (2022). Designing Qualitative Research Using Interview Data. *The SAGE Handbook of Qualitative Research Design*, 667–683. <https://doi.org/10.4135/9781529770278.n41>
 - Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. SAGE Publications.
 - Sampson, H., & Ellis, N. (2019). *Seafarers' mental health and wellbeing*. Seafarers International Research Centre (SIRC), Cardiff University Report, 1–42.
 - Şenbursa, N. (2024). *Seafarer's Wellbeing on Board: a Scoping Review*. University of Ordu, Fatsa Marine Sciences Faculty, Fatsa, Ordu, Türkiye. <https://orcid.org/0000-0001-5144-4240>. DOI: <https://doi.org/10.7225/toms.v13.n01.w04>
 - Seyle, C., McKenzie, K., & Neill, J. (2018). *Psychological consequences of piracy at sea*. *International Maritime Health*, 69(2), 84–90.
 - Seyle, D. C., Fernandez, K. G., Dimitrevich, A., & Bahri, C. (2018). The long-term impact of maritime piracy on seafarers' behavioral health and work decisions. *Marine Policy*, 87, 23–28.
 - Shan, D. (2021). Occupational health and safety challenges for maritime key workers in the global COVID-19 pandemic. *International Labour Review*.
 - Sliskovic, A. (2020). Seafarers' well-being in the context of the COVID-19 pandemic: A qualitative study. *Work*, 67(4), 799–809. doi: 10.3233/WOR-203333.
 - Stopford, M. (2009). *Maritime economics* (3rd ed.). Routledge.
 - Svetina, M., Perkovic, K., & Roncevic, A. (2024). *Occupational stressors and mental health risks among seafarers across 12 countries*. *Journal of Occupational and Environmental Medicine*, 66(1), 45–58.
 - Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Monterey, CA: Brooks/Cole.
 - Ullrich, C., Ziegler, S., Armbruster, A., Wensing, M., & Klafke, N. (2024). Participant observation for inquiry-based learning: a document analysis of exam papers from an internship-course for master's students in health services research in Germany. *BMC Medical*

Education, 24(1).

<https://doi.org/10.1186/s12909-024-05740-4>

– UNCTAD. (2022). Review of maritime transport 2022. United Nations Publications.

– United Nations. (1982). United Nations Convention on the Law of the Sea (UNCLOS).

– Weber, M. (1978). *Economy and society: An outline of interpretive sociology*. University of California Press.

– Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job insecurity and financial concern during the COVID-19 pandemic are associated with worse mental health. *Journal of Occupational and Environmental Medicine*, 62(9), 686–691.

<https://pubmed.ncbi.nlm.nih.gov/32890205/>.