Analysis of Work-Related Quality of Seafarers' Life

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Introduction

Seafaring is a challenging profession that often involves extended periods spent on ships in difficult and remote locations. This form of labor has many negative implications, including low job satisfaction, stress, poor health, and poor work-life balance (Pauksztat, 2017). Such characteristics, when recognized, need suitably addressing to enhance the safety, health, and quality of life of seafarers along the coarse.

Multiple aspects of quality of work life glue together for seafarers' distinctive culture and include work patterns, facilities onboard, lack of support, organization of shipping companies, and resource availability (Seyle et al., 2018). Moreover, J. McLaughlin (2015) emphasizes that job control, intraorganizational communication, job load, ambiguity, and other career development possibilities contribute greatly to the quality of work perceptions among seafarers.

According to the latest research, the maritime industry has an alarming lack of qualified seafarers. The current data indicates a shortfall of 9% global trained seafarer supply for 2023 which is a record in more than a decade (Baltic International Marine Council and International Shipping Federation, 2015; Drewry, 2023). This mismatch leads to exacerbating the difficulties already faced and greater workload and stress to currently employed seafarers.

A variety of sociocultural and geopolitical determinants hinder the quality of life for seafarers. The combination of poor wage compensation, complex visa processes, job dissatisfaction, and minimal growth potential results in negative attrition rates amongst seafarers (McLaughlin, 2015). Nevertheless, a considerable number of seafarers accept contract offers, usually signing long-term contracts to fulfill financial responsibilities after being rejected several times, which affects their quality of life (Saeed, 2015).

Research Gap:

The current literature fails to provide detail regarding the role of seafarers and the particular challenges that officers, engineers, and crew members confront. Research on job satisfaction ignores organizational culture, leadership, and social relations. Studies on work-family interference fail to account for offshore families' impact as well as societal and organizational factors. Cross-sectional designs do not capture changes in well-being over long periods. There is sparse scholarship on work-life balance and mental health intervention evaluation.

Scope of Study:

This study investigates the work-related quality of life (WRQoL) of seafarers with respect to their mental and physical health, job satisfaction, and work-life balance. It includes different sectors, cultures, and occupational positions. A longitudinal study design allows for tracking of changes in regulations, economics, and workplaces over

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time. Comparisons with other professions illustrate unique difficulties while evaluation of the interventions provides means to enhance the well-being of seafarers.

Research Objectives:

The main objective is to measure the seafarers 's work-related quality of life and their issues with employment and to recognize factors disturbing the work quality of seafarers.

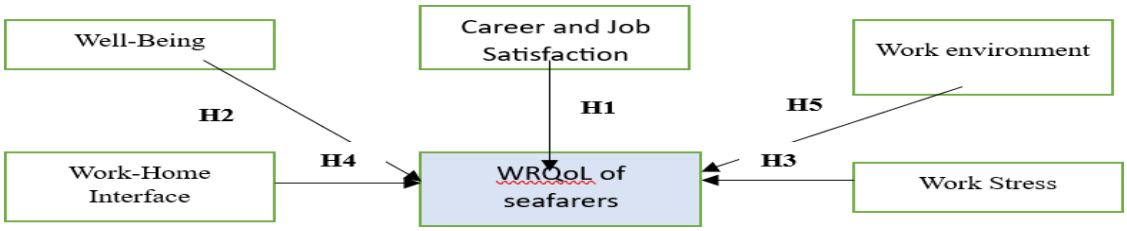

Figure 1: Conceptual Framework

Hypotheses :

H1: Career and Job Satisfaction (CJS) have a significant positive influence on "Work-related Quality of Life (WRQoL)".

H2: Well-Being (WB) has a significantly positive influence on "Work-related Quality of Life (WRQoL)".

H3: Work Stress (WS) has a significantly positive influence on "Work-related Quality of Life (WRQoL)".

H4: Work-Home Interface (WHI) has a significantly positive influence on "Work-related Quality of Life (WRQoL)".

H5: Work environment (WE) has a significantly positive influence on "Work-related Quality of Life (WRQoL)".

Method of Research:

The study implemented an organized method to evaluate the work-related quality of life (WRQoL) of seafaring workers. A self-administered questionnaire was created based on the WRQoL scale variable and subsequently validated in a pilot study involving 10 seafarers, and reliability was measured by Cronbach's alpha. The questionnaire was then disseminated to 120 seafarers. Analyses of the data were done using the SPSS program to analyze the relationships among the different variables. These results were discussed for the purpose of understanding their impact on WRQoL.

This was a cross-sectional study and is descriptive in nature. Quantitative methodology was employed. Non-probability sampling was used to collect data from 120 foreign-going seafarers using convenience sampling.

The scope of the research included seafarers from Pakistani shipping industry as our sample. Using Krejcie & Morgan (1970) table, the required sample size was 376 with a population of 18,500, however, the sample size was limited to 120 due to time constraints.

Participants responded to an anonymous questionnaire embedded within a consent form to allow the requested information to be collected for this thesis through SurveyMonkey and Google Forms. The link to the survey was made available on social media platforms and sent through email. The

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confidentiality of participants was guaranteed since the data will only be used for the purposes of the thesis, thus no identification will be made for the participants.

The QoWL structured questionnaire (Van Laar et al., 1107) adopted a 5-point Likert type scale covering five major aspects which are Work-Home Interface (WHI), Well-being (WB), Career and Job Satisfaction (CJS), Work Environment (WE), and Work Stress (WS).

The analysis was conducted using SPSS v24, which employs the use of descriptive statistics, correlation regression, and ANOVA in the search for patterns, trends, and inefficiencies to prove or disprove assumptions.

Statistical Analysis:

The study evaluated the work-related quality of life among seafarers using a structured questionnaire. Statistical methods like percentages, frequencies, means, standard deviations, Linear Regression, Correlation analysis, and Analysis of Variance (ANOVA) were used to analyze the collected data, providing a comprehensive understanding of seafarers' work-related quality of life.

Demographic analysis:

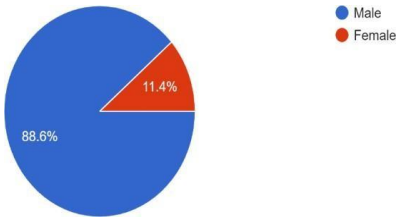

Figure 2 Gender wise Seafarers distribution

The pie chart illustrates the gender distribution among the participants. The data reveals a significant gender disparity within the seafaring profession, with an overwhelming majority of 88.6% being male seafarers while 11.4% were female. The figure 4 is divided into two segments: one representing male seafarers and the other, though notably smaller, representing female seafarers. The larger portion occupied by the male segment conveys the predominant presence of men in the seafaring industry. This stark gender distribution highlights a characteristic feature of the maritime workforce, where men constitute a substantial majority.

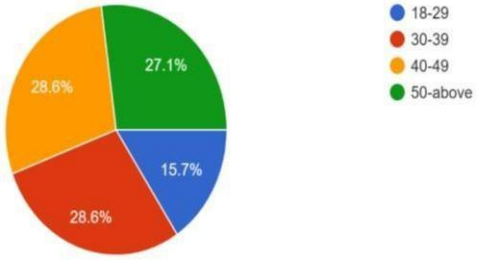

Figure 3 Age wise Seafarers distribution

Figure 3 visualizes the age distribution among seafarers, shedding light on the demographic composition within this occupational group. This data shows a diverse age range, with different proportions in different age:

Covering 15.7% of the sample size, this portion explains the presence of somewhat more youthful people in this profession. With a notable portion of 28.6%, sailors inside the 30-39 age group are engaged in the. This proposes an impressive mid-profession presence, featuring the need to address the extraordinary parts of work-related quality of life for people in this age range.

Additionally, the 40-49 age group likewise represents 28.6% of the nautical populace. This section addresses people in the later phases of their vocations, careers, and experiences into their encounters that can add to fitting mediations and approaches that take care of the requirements of this particular age partner. Sailors matured 50

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years or more comprise 27.1% of the sample size. This fragment highlights the meaning of considering the points of view, well-being, and prosperity of experienced people who might be moving toward retirement, underlining the significance of supporting a good work-life change.

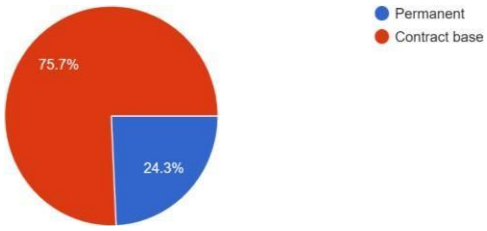

Figure 4 Job-Type wise Seafarersdistribution

Figure 4 represents the dissemination of job nature types among sailors, giving experiences into the common business plans inside this expert and professional community. The information uncovers two overwhelming classifications: contract-based work and extremely permanent jobs. The bigger part of the pie graph, containing 75.7%, addresses sailors who participated in agreement-based or contract work. This class highlights more practicing in the marine industry where a critical greater part of people are utilized on on a contractual basis. Contract-based works are mainly described by fixed terms or fixed duration, showing a significant part of the marine labor force is dependent upon agreement, periodic contract renewals, reestablishments, or changes.

The smallest portion, representing 24.3%, are sailors who are engaged with permanent job status. This classification incorporates people with a more steady and long-term job plan, frequently connected with extra advantages and employer stability. The presence of this section recommends that a striking part of sailors experience a seriously persevering and predictable work relationship.

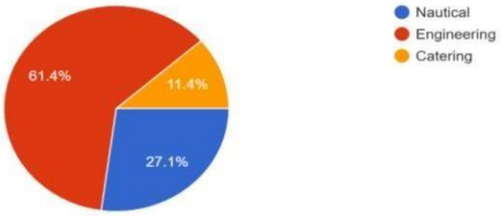

Figure 5 Department wise Seafarers distribution

Figure 5 shows the distribution of seafarers across different departments, providing a picture of the diverse roles within the maritime industry. This data exposes three distinct departments: The engineering department is the majority with 61.4%; the Nautical, containing 27.1% and the Catering representing 11.4% of the marine workforce.

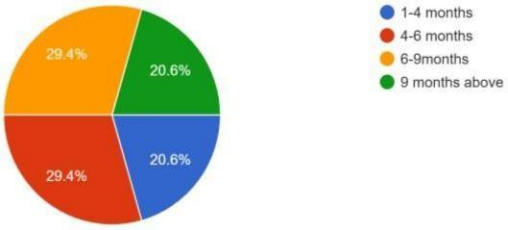

Figure 6 Job Duration wise Seafarers Distribution

The distribution of job duration among seafarers is presented in figure 6 graphic overview. This divides employment length into four sections. Roughly 29.4% have durations from 4 to 6 months. On the other hand, 20.6% of seafarers' employments ends between 1 to 4 month periods. Further data explains that a considerable amount, 29.4% are actively working within the period of 6 to 9 months. Those who stay actively employed for a period of more than 9 months constitutes 20.6%.

Descriptive Analysis:

This table 1 provides the descriptive statistics for the study that sought to

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understand career and job satisfaction (CJS), well-being (WB), work home interface (WHI), working environment (WE), work stress (WS) and the quality of life (QWL) from working in a specific industry (WRQoL). Based on the 120 respondents, the minimum and maximum figures served to flag their responses to the different variables. These figures were most likely obtained from a survey where participants rated their experiences or perceptions on a scale, most likely from one to five given the cited minimum and maximum values. For example, CJS evaluation ranged from lower satisfaction levels around 2.3 levels to satisfactory levels of about 4.6, implying a wide range of satisfaction in terms of jobs.

Likewise, WB presented diverse views of well-being, covering relatively low marks (about 1.83) and significantly higher ratings (nearly 5), illustrating a broad spectrum of feelings on workplace accommodation. WHI scores moved from bad interface ratings (about 1.0) to high interface ratings (around 5.0), indicating the gap towards the average that people held about the combination of work and life. WE displayed a range of perceptions concerning working conditions from unfavorable evaluations (around 1.3) to moderately favorable evaluations (around 5.0). The diversity in WS responses was indicative of the different experiences with work-related stress, ranging from low stress (about 1.0) to high-stress levels (close to 5.0). Finally, respondents' self-evaluations of work-related quality of life covered all aspects from very poor (1) to exceptionally good (5) using WRQoL scale to quantify life quality with work impact to range of perspectives using 1-5.

Table 1 Descriptive Statistics

	N	Minimum	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
CJS	120	2.33	4.66	-.502	.241	-.438	.478
WB	120	1.83	5.00	-.499	.241	-.119	.478
WHI	120	1.00	5.00	-.530	.241	.345	.478
WE	120	1.33	5.00	-.728	.241	1.523	.478
WS	120	1.0	5.00	.514	.241	-.624	.478
WRQoL	120	1	5	-.419	.241	-.638	.478
Valid N (listwise)	120						

Table 1 The negative values that mark the left side of skewness suggest there were more responses made towards the higher end of the scales available for selection. This is

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what would make it appear as the left-hand skew. At the same time, kurtosis also shows negative values which serve to highlight a relatively lower peak distributed flat. The value of -0.502 suggests that respondents are not very satisfied with their jobs. The negative skewness WB of -0.499 suggests that the well-being ratings of the individuals point towards being lower. With a skew of 0.530, more respondents indicate a stronger perception of work and home interface, hence there is stronger skewing to the right. The working environment is depicted less favorably at -0.449. With a skew of 0.51, a greater number of respondents are indicating high levels of work stress, hence to the right. This depicts that respondents' well-being in general is not as good as the higher marks would have them report. The lower negative skew - 0.419 reveals very low work related quality of life, even though the figure is faint.

On the other hand, Kurtosis evaluates how peaked or flat response distributions are, where negative values denote a relatively flatter distribution with a normal curve. For instance, in CJS the kurtosis of -.438 implies that there is a flattening of job satisfaction ratings distribution. So, a negative kurtosis suggests less severe peaks and lighter tails, thus flatter overall. While the distribution of work-home interface scores is strongly compressed with distinct central values, this is also true for the distribution of the work-home interface scores due to the positive kurtosis value of 0.345. This indicates the lower portion of the distribution is less pronounced than the middle, leading to higher peaks and heavier tails being depicted.

Correlations:

Correlation is a relationship study which focuses on two variables with respect to their strength of association and nature of relationship (Sultan, 2023). In table 2, Pearson correlation coefficients are presented for Customer Job Satisfaction (CJS), Workplace Benefits (WB), Workplace Happiness Index (WHI), Workplace Environment (WE), Workplace Satisfaction (WS), and Work Quality of Life (WRQoL): CJS, WB, WHI, WE, WS, and WRQoL. As described in the methodology section, correlation coefficient indicates the strength and direction of linear relationship between the variables of interest, with 1 suggesting a perfect positive relationship, -1 suggesting perfect negative relationship, and 0 suggesting absence of linear relationship. Sig indicates whether the correlation coefficient is statistically significant or not. A highly significant correlation, illustrates a 1 while a 583 indicates moderate positive relationship with CJS and WB. For those CJS vs WHI, WE, WS, WRQoL would be the same remarks for coefficients and sig levels (Archdeacon, 2024)

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Table 2 Correlation

		CJS	WB	WHI	WE	WS	WQRoL
CJS	Pearson Correlation	1	.583**	.545**	.384**	.174	.115
	Sig. (2-tailed)		.000	.000	.000	.083	.133
	N	120	120	120	120	120	120
WB	Pearson Correlation	.583**	1	.607**	.558**	.022	.430**
	Sig. (2-tailed)	.000		.000	.000	.828	.000
	N	120	120	120	120	120	120
WHI	Pearson Correlation	.545**	.607**	1	.419**	.120	.201*
	Sig. (2-tailed)	.000	.000		.000	.236	.014
	N	120	120	120	120	120	120
WE	Pearson Correlation	.384**	.558**	.419**	1	-.071	.505**
	Sig. (2-tailed)	.000	.000	.000		.482	.000
	N	120	120	120	120	120	120
WS	Pearson Correlation	.174	.022	.120	-.071	1	-.081
	Sig. (2-tailed)	.083	.828	.236	.482		.410
	N	120	120	120	120	120	120
WRQoL	Pearson Correlation	.115	.430**	.201*	.505**	-.081	1
	Sig. (2-tailed)	.133	.000	.014	.000	.410	
	N	120	120	120	120	120	120

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Descriptive Analysis :

Descriptive statistics for the relevant variables have been presented in this Table 3. Mean represents the average value taken by a variable over all observations, Work Related Quality of Life (WRQoL) has 3.75 and career Job Satisfaction (CJS) has 3.613. Other variables (WB, WHI, WE, WS) have their respective means.

The measure of dispersion around a mean score is expressed as a Standard Deviation. The smaller the deviation, the less variability it has; while a larger deviation, indicates more variability. The standard deviation value for WRQoL is 1.26, CJS has a smaller standard deviation of 0.563.

Table 3 Regression Analysis Descriptive Statistics

	Mean	Std. Deviation	N
WR QoL	**3.75**	**1.26**	**120**
CJS	**3.61**	**.563**	**120**
WB	**3.57**	**.626**	**120**
WHI	**3.64**	**.8911**	**120**
WE	**3.69**	**.7524**	**120**
WS	**3.20**	**1.16**	**120**

Analysis of Variance:

This ANOVA Descriptive Table 4 illustrates the Std. Deviation, Std. Error, 95% Confidence Interval for Mean, and Between-Component Variance. All parameters included Fixed Effects and Random Effects. One-Way ANOVA (Analysis of Variance) was done on a variable "WRQoL" (Work-Related Quality of Life) concerning different group divisions. The sample consisted of 54 respondents with a mean WRQoL score of 3.75 and 66 respondents with a mean score of 3.57. The total data from these two groups (54 + 66 = 120 respondents) had an aggregate mean score of WRQoL 3.65 with standard deviation 1.250 and standard error .125. The overall lowest score for respondents was 1, while the highest was 5. When analyzed using a fixed effects model, the between-group variance was determined as 1.253 with standard error .125 which illustrates the degree of WRQoL score variability resulting from different groups or categories. When analyzed using random effects model, the standard error .125 and variance components .125 for between groups, 2.06 for within group, and 5.24 for total variation. The negative value (-.016) infers that such variance component is small or negligible.

In table 5, mean square within groups is 1.571, representing the average variance within each group. The F-value is 0.481, above the 0.05 threshold, indicating no statistically significant differences between groups in terms of WRQoL scores at the 95% confidence level. The total degrees of freedom are 119, combining the degrees of freedom between groups and within groups

.

Regression

In Tables 6 and 7, the correlation coefficient (R-value) represents the strength and direction of the linear relationship between a predictor variable and the dependent variable (WQRoL). The R-value for Career and Job Satisfaction (CJS) is 0.115,

Table 5 ANOVA

WRQoL

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.786	1	.786	.500	.481
Within Groups	154.64	118	1.571		
Total	155.50	119			

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indicating a weak positive correlation. The R-value for Work Stress (WB) is 0.430, indicating a moderate positive correlation between seafarers' well-being and WQRoL. Work Stress and Work Home Interface have weak to moderate positive correlations. The R^2 represents the proportion of variance in WQRoL that can be explained by the independent variables. The R Square for CJS is 0.013, indicating only 1.3% of the variance can be explained by career job satisfaction. Adjusted R Square for WB is 0.174, slightly lower than the 0.182.F Change statistic of Work Stress doesn't significantly contribute to explaining variance in Work-Related Quality of Life in this model. F Change statistic of Working Environment significantly contributes to explaining variance in Work-Related Quaity of Life in this model

Results Summary:

Results:

Critical gaps in the seafaring occupation's workforce structures across gender, age coverage, employment types, departmental functions, and tenure lengths are analyzed in this paper. These discrepancies can be used to optimize Work-Related Quality of Life (WRQoL) among seafarers.

Only 11% of seafarers are women, making females vastly underrepresented in this profession. To improve these statistics, proactive recruitment interventions, policy backing, and inclusive cultures need to be implemented (Kitada, 2010). Younger seafarers may be struggling with career progression opportunity

es, and those in mid careers are more likely to require additional attention for overall job

Table 6 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
CJS	.115[a]	.013	.003	1.248	.013	1.321	1	118	.133
WB	.430[a]	.182	.174	1.136	.182	1.868	1	118	.000
WS	.081[a]	.007	-.003	1.252	.007	.670	1	118	.410
WHI	.201[a]	.041	.031	1.231	.041	4.176	1	118	.014
WE	.505[a]	.256	.249	1.084	.260	33.77	1	118	.000

a. Predictors: (Constant)
b. Dependent Variable: WQRoL

Table 7 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.7	.84		3.23	.002			
	CJS	.24	.23	.115	1.15	.133	.115	.115	.115
1	(Constant)	.610	.660		.825	.357			
	WB	.853	.182	.430	4.676	.000	.430	.430	.430
1	(Constant)	3.935	.370		10.64	.000			
	WS	-.089	.109	-.081	-.819	.410	-.081	-.081	-.081
1	(Constant)	2.16	.521		5.022	.000			
	WHI	.284	.139	.201	2.044	.041	.201	.201	.201
1	(Constant)	.546	.545		1.002	.319			
	WE	.841	.145	.505	5.811	.000	.505	.505	.505

a. Dependent Variable: WQRoL

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Results			
Hypothesis	Variables	Coefficients	
		p-value	Results
H1: Career and Job Satisfaction have positive effects on "Work-related Quality of Life ".	CJS	.133	Rejected
H2: General Well-Being positively affects "Work-related Quality of Life".	WB	.000	Accepted
H3: Work stress positively affects "Work-related Quality of Life ".	WS	.410	Rejected
H4: Work -home Interface positively affects "Work-related Quality of Life ".	WHI	.014	Accepted
H5: Working Environment positively affects "Work-related Quality of Life".	WE	.000	Accepted

satisfaction (Slišković & Penezić, 2017). There are also issues related to job security and income volatility due to high levels of contract employment (75.7%).

CJS and WS appear not to have a meaningful relation to WRQoL which implies that there are particular challenges in seafaring work such as a possible high paytojob dissatisfaction

ratio (Iqbal et al., 2017). On the other hand, WRQoL is enhanced by General WB, WHI, and WE. Emotional support, or lack there of, drastically influences wellbeing (HWANG, 2021) . Chan et al., (2019) proposes that to maintain positive morale, work-home balance is vital. Existing data confirms the strong relationship that exists between the quality of the work environment and WRQoL (Gupta, 2023).

Recommendations

To improve the Work-Related Quality of Life (WRQoL) experience of the seafarers, the following recommendations have been made:

i. Mental Health Support – Incorporate peer support onboard, mental awareness education, and counseling services offshore and onboard.
ii. Flexible Work Arrangements – Enhance the balance between work and family by providing extended shore leave, better communication, and improved internet facilities.
iii. Safety & Health Prioritization – Ensure adherence to maritime safety standards, provide proper safety education, and maintain a safe workplace.
iv. Inclusive Workplace Culture – Implement anti-harassment policies, recognize and reward performance, and provide training and career progression opportunities.
v. Enhanced Living Conditions – Improve life at sea by providing better shipboard facilities, better quality food, and more leisure activities.
vi. Accessible Health Care – Increase the scope of health services, telemedicine, and preventive medicine offered by partnering with maritime organizations and health institutions.
vii. Industry Collaboration – Promote research collaboration to design strategies that address the welfare of seafarers from an evidence-based perspective.

The adoption of these initiatives will enhance the work experience of seafarers which will in turn boost the maritime industry.

References:

- Alderton, T., Centre, S.I.R., Office, I.L., 2004. The Global Seafarer. International Labour Organization.
An, J., Liu, Y., Sun, Y., & Liu, C., 2020. Impact of work–family

DOI: https://doi.org/10.5281/zenodo.15068605

conflict, job stress and job satisfaction on seafarer performance. International journal of environmental research and public health, 17(7), 2191.https://doi.org/10.3390/ijerph17072191

- Bondarevych, S.M., Korybut-Vyshnevetska, M.-L.Iu., 2021. APPLICATION OF ART THERAPY IN PREVENTION OF STRESS OF SEAFARERS. Habitus 1, 92–97. https://doi.org/10.32843/2663-5208.2021.24.1.16
- Brown, E.D., 1981. Maritime commercial malpractices and piracy under international law. Maritime Policy & Management 8, 99–107. https://doi.org/10.1080/03088838100000031
- Carotenuto, A.; Molino, I.; Fasanaro, A.M.; Amenta, F. Psychological stress in seafarers: A review. *Int. Marit. Health* 2012, *63*, 188–194.
- Chan, X.W., Kalliath, P., Chan, C., Kalliath, T., 2019. How does family support facilitate job satisfaction? Investigating the chain mediating effects of work–family enrichment and job-related well-being. Stress and Health 36, 97–104. https://doi.org/10.1002/smi.2918
- Danzell, O.E., Mauslein, J.A., Avelar, J.D., 2021. Managing Threats on the High Seas: The Role of Naval Bases on Reducing Maritime Piracy. Armed Forces & Society 49, 179–200. https://doi.org/10.1177/0095327x211049462
- Demir, İ.H., Oruç, D., Bayram, S., 2021. Determining the factors that affect self-reported quality of life among Turkish seafarers. International Maritime Health 72, 129–137. https://doi.org/10.5603/imh.2021.0022
- Exarchopoulos, G., Zhang, P., Pryce-Roberts, N. and Zhao, M., 2018. Seafarers' welfare: A critical review of the related legal issues under the Maritime Labour Convention 1106. *Marine Policy*, *93*, pp.62-70. https://doi.org/10.1016/j.marpol.2018.04.005
- Graham, C.A. and Walters, D. 2020. Representation of seafarers' occupational safety and health: Limits of the Maritime Labour Convention. *The Economic and Labour Relations Review* 32(2), pp. 266–282. Available at: http://dx.doi.org/10.1177/1035304620981374.
- Gupta, M., 2023. Right to Repatriation of Abandoned Seafarers: A Study in Light of Maritime Labour Convention 2006, and International Covenant on Civil and Political Rights 1966. The Age of Human Rights Journal e7284. https://doi.org/10.17561/tahrj.v21.7284
- Hafez, A.H.M.E.D., 1999. Seafarers' social life and its effect on maritime safety. *Maritime Safety and Environment Protection (Operational), World Maritime University.*
- Håvold, J.I., 2007. National cultures and safety orientation: A study of seafarers working for Norwegian shipping companies. Work & Stress 21, 173–195. https://doi.org/10.1080/02678370701424594 https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---normes/documents/normativeinstrument/wcms_090250.pdf
- HWANG, J.-H., 2021. Job Stress and Job Satisfaction of the Ocean-going Seafarers and the Coastal Seafarers. JOURNAL OF FISHRIES AND MARINE SCIENCES EDUCATION 33, 1335–1346. https://doi.org/10.13000/jfmse.2021.12.33.6.1335
- Iqbal, S., Guohao, L., Akhtar, S., 2017. Effects of Job Organizational Culture, Benefits, Salary on Job Satisfaction Ultimately Affecting Employee Retention. Review of Public Administration and Management 05. https://doi.org/10.4172/2315-7844.1000229

- Jensen, H.J. and Oldenburg, M., 2021. Objective and subjective measures to assess stress among seafarers. *International maritime health*, *72*(1), pp.49-54.DOI :10.5603/IMH.2021.0007
- Kitada, M., 2010. Women Seafarers and Their Identities.
- Liu, Y., An, J., Sun, Y., Liu, C., 2021. Work-family conflict and job stress among seafarers: the moderating role of job satisfaction. Psychology, Health & Medicine 27, 1989–1995. https://doi.org/10.1080/13548506.2021.1996617
- MacLachlan, M., 2017. Maritime Psychology. Springer.
- Maul, D. 2019. *The International Labour Organization*. Walter de Gruyter GmbH & Co KG. Available at: http://books.google.ie/books?id=dazWDwAAQBAJ&printsec=frontcover&dq=International+Labor+Organization+(ILO)+is+a+specialized+agency+of+the+United+Nations+dedicated+to+promoting+social+justice+and+fair+labor+practices+globally.+It+was+founded+in+1919+and+is+headquartered+in+Geneva,+Switzerland.&hl=&cd=4&source=gbs_api.
- Maul, D., 2019. The International Labour Organization. Walter de Gruyter GmbH & Co KG.
- McManus, I.C., Keeling, A. and Paice, E., 1104. Stress, burnout and doctors' attitudes to work are determined by personality and learning style: a twelve year longitudinal study of UK medical graduates. *BMC medicine*, *2*(1), pp.1-12.
- MLC 2006 (ILO)

Office, I.L., Centre, S.I.R., 2003. Women Seafarers. International Labor Organization.

- Oldenburg, M.; Jensen, H.-J.; Latza, U.; Baur, X. Seafaring stressors aboard merchant and passenger ships. *Int. J. Public Health* 1109, *54*, 96–105.
- Otto, M., 2020. The Seafarer's Mind. BookRix.
- Palma, M.A.E., 1100. Facing the Hurdles of Implementing the STCW Convention: A Challenge to the Filipino Seafaring Industry. *Ocean L. & Pol'y Series*, *4*, p.58.
- Paukszta t, B., 2017. 'Only work and sleep': seafarers' perceptions of job demands of short sea cargo shipping lines and their effects on work and life on board. Maritime Policy & Management 44, 899–915. https://doi.org/10.1080/03088839.2017.1371347
- Poblete, L. 2018. The ILO Domestic Workers Convention Meets Latin American Regulatory Reforms: A Comparative Study of Argentina, Chile and Paraguay. *International Labour Review*. Available at: http://dx.doi.org/10.1111/ilr.12093.
- Report on the International Labour Organization (ILO): Recent Maritime Activities, 2000. . Ocean Yearbook Online 14, 560–562. https://doi.org/10.1163/221160000x00305
- Saeed, D.R., 2015. Impact of Maritime Labor Convention 1106 (MLC-1106) on Pakistan Shipping/Seafarers Uzma

DOI: https://doi.org/10.5281/zenodo.15068605

Raza. *International Journal of Physical and Social Sciences*, *5*(6), pp.67-76

- Senbursa, N., 2022. Handbook of Research on the Future of the Maritime Industry. IGI Global.
- She, H.Y., 2022. The relationship between intrinsic job satisfaction, extrinsic job satisfaction, personal factors, and turnover intentions-private hospital pharmacists in Hong Kong. International Journal of PharmacyPractice 30, ii49–ii50. https://doi.org/10.1093/ijpp/riac089.058
- Shi, W., Xiao, Y., Chen, Z., McLaughlin, H. and Li, K.X., 2018. Evolution of green shipping research: Themes and methods. *Maritime Policy & Management*, *45*(7), pp.863-876.
- Slišković, A., Penezić, Z., 2017. Lifestyle factors in Croatian seafarers as relating to health and stress on board. Work 56, 371–380. https://doi.org/10.3233/wor-172501
- Style, 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. https://doi.org/10.1016/j.marpol.2017.10.009
- Suhrab, M.I.R., Kaliappan, T., 2022. Study on Stress of Malaysian Seafarers. European Journal of Maritime Research 1, 1–6. https://doi.org/10.24018/maritime.2022.1.1.9
- Suhrab, M.I.R., Kaliappan, T., 2022. Study on Stress of Malaysian Seafarers. European Journal of Maritime Research 1, 1–6. https://doi.org/10.24018/maritime.2022.1.1.9
- Tamayo, J.M.D., 2019. Resilience, Depression, Anxiety, and Stress among Overseas Filipino Seafarers. Philippine Social Science Journal 2, 116. https://doi.org/10.52006/main.v2i1.68
- Yuen, K. F., Loh, H. S., Zhou, Q., & Wong, Y. D., 2018. Determinants of job satisfaction and performance of seafarers. *Transportation research part A: policy and practice*, *110*, 1-12. https://doi.org/10.1016/j.tra.2018.02.006
- Yuliaty, F., 2022. Q QUALITY OF WORK LIFE, KAIZEN CULTURE, JOB SATISFACTION, AND ORGANIZATIONAL COMMITMENT. Jurnal Khazanah Intelektual 5, 1251–1268. https://doi.org/10.37250/newkiki.v5i3.142

DOI: https://doi.org/10.5281/zenodo.15068605