

# An Empirical Analysis on Relationship between Job Satisfaction and Oppressiveness of Crew Onboard Coastal Marine Vessels

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## ABSTRACT

In the vast expanse of maritime exploration, there exists a fascinating and significant topic that captivates the minds of many: the relationship between job satisfaction and the oppressive nature of crew environments on coastal marine vessels. In a quest to understand the complex connection between two crucial elements, this empirical analysis embarks on a journey to explore the intricate experiences of seafarers as they navigate the vast open seas. In a quest for knowledge, this study embarks on a journey of meticulous data collection and rigorous statistical scrutiny. In order to delve into the depths of the matter, the researchers explore the significant impact that the onboard environment has on the levels of job satisfaction experienced by maritime professionals. The research project has a specific focus on coastal marine vessels. Its aim is to shed light on the distinct challenges faced in these settings and how they might impact the job satisfaction of the crew. As the empirical findings unfold, a captivating tapestry of insights begins to take shape. It is through these findings that the researchers are able to gain a deeper understanding of the multifaceted nature of oppressiveness. Whether it stems from the burdens of work stress, the ache of homesickness, the discomfort of sea sickness, the challenges of health problems, or the concerns surrounding safety at sea, each dimension is illuminated by the empirical evidence. The study embarked on a journey to unravel the intricate relationship between various factors and job satisfaction. Its goal was to gain a deep and thorough understanding of how these elements intertwine, creating a tapestry of workplace contentment. By delving into this exploration, the study sought to offer valuable insights and implications not only to those involved in the maritime industry but also to the wider conversation surrounding satisfaction in the workplace. As the researchers embark on this journey across the vast seas, our narrative aims to delve into the depths of the human experience. It is not merely an academic endeavor, but a quest to connect with the lived realities of those who courageously navigate the waves in their pursuit of maritime greatness.

**Keywords:** Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness, Seafarers.

## 1. INTRODUCTION

Seafarers are employees who operate the ships in the environment that poses the greatest threat of stress, which may lead to mental and physical oppressiveness. The ship serves not just as a place of employment for the crew members, but also as their primary residence. One of the most serious health risks that is often acknowledged by employees all over the globe is the possibility of suffering from mental and physical oppressiveness, as is the case with sailors. According to (Fan et al. 2017), a person's level of communication skills is correlated with their employment in the global marine business. According to (Cahoon and Haugstetter 2008), both older and younger generations have high expectations about the maritime business. This is especially true of younger generations. Other variables that contribute to the difficulty of keeping young mariners include stress and exhaustion. A happy sailor is one who is very productive while out in nature. When they are happy in their work, they have a strong tendency to perform well. Therefore, when crew members are able to do their jobs in an effective and efficient manner, they feel a feeling of organizational dedication. The good mental and emotional condition known as job satisfaction is a direct effect of the working environment. A high level of work satisfaction is often associated with higher rates of employee retention and improved the opportunities for recruiting. The level of job satisfaction may have an impact on the overall performance and safety of marine operations. The likelihood of crew members being more attentive, engaged, and focused is increased when they are satisfied and pleased. This has a favourable impact on the overall safety and efficiency of operations that take place in coastal maritime environments. Job satisfaction might be significantly raised by providing mariners with a workplace that is kind and encouraging to them as individuals. The characteristics that lead to job satisfaction may also contribute to the manage the stress, which in turn may enhance job performance. It is possible to improve the general health and well-being of crew members by gaining an understanding of the link between work satisfaction and oppressiveness. This understanding may be used to influence to design the

policies and hence if the current worldwide trend in seafaring were reflected more accurately, it would be beneficial for the sailors' actual job conditions.

The purpose of this research process is to investigate the relationship between job satisfaction and oppressiveness among crew members working on coastal marine vessels. This research process includes quantitative and, if relevant, qualitative approaches. The purpose of this study is to provide insights that may be put into action and contribute to the improvement of working conditions and general well-being in the marine sector. The major objective of this research is to determine the elements that contribute to Job Satisfaction and how those factors are related to job oppressiveness among the crew onboard coastal marine vessels. The research considers the mental and physical oppressiveness that sailors experience due to the nature of their work environment and hence an approach to study both methodical and data-driven is used in the empirical investigation of connection between job satisfaction and oppressiveness among the crew members working aboard coastal marine vessels. The results may enhance organizational policies, industry practices, and regulatory frameworks, which will ultimately be beneficial to the health and efficiency of the workforce in the marine sector.

## **2. LITERATURE REVIEW**

### **2.1. JOB Satisfaction**

(Sampson and Ellis 2021) proposed that the well-being of sailors be prioritized in the effort to improve maritime safety by cultivating an encouraging atmosphere. Job satisfaction may also be influenced by factors such as advancement, compensation, perks, and overall contentment with the organization. There is a substantial inverse correlation between having the intention to leave one's work and experiencing high levels of job satisfaction. According to (Ozdemir et al. 2022), the sailors' work satisfaction was affected by their perceptions of the organization. The word "happy ship" suggests that job happiness is significant in marine companies, (Bekru et al. 2017). Sailors with better job satisfaction and salaries had reduced turnover intentions, (Kim and Lee 2011). Job and employer happiness, career progression, and decent working conditions were key retention drivers (Caesar et al. 2015). As the global marine sector struggles to find officers, job satisfaction may be a pressing issue (Nguyen et al. 2014). As sailing is a safety-critical activity, this work satisfaction-safety relationship may be essential for the marine, ( Smedley et al. 2013; ) ( Smedley et al., 2013; Liston et al., 2017). The maritime sector stresses "rationalization" and "optimization" of budgets and work procedures, which may violate seafarers' dignity, performance, safety, and well-being, (McVeigh et al. 2019). Job happiness affects organizational performance, not vice versa, (Bakotic and Babic 2013). Generational gap affects ship officers' landside career mobility. Younger and older seafarers have different expectations, (Cahoon and Haugstetter 2008). Maritime companies should prioritize retaining in-service seafarers, (Fei and Lu 2015). Seafarer performance may enhance ship turnaround time, shipowner efficiency, and ship safety (Fenstad et al. 2016).

According to (Smedley et al. 2013) and Liston et al. (2017), a high level of risk led to a poor level of job satisfaction, and a low safety atmosphere led to a negative level of job satisfaction. According to (Li et al. 2014), job satisfaction among merchant seafarers is correlated with their financial stability, time spent on leisure with family, and the nature of the employment. According to (Morten Birkeland Nielsen et al. 2013), job satisfaction has a significant influence on safety in the marine business. According to (Nguyen et al. 2014) there are a variety of obstacles to overcome in the recruiting and retention considerations of seafarers. According to research by (Silva et al. 2011), it has become more challenging to keep seamen employed on board ships owing to the character of the working environment. According to (Bhattacharya 2015), when there is a lack of people in the global shipping business, job satisfaction may turn out to be an extremely important worry. According to (Yuen et al. 2020), employment rotation among sailors requires a culture of support from those working on the water. It has been suggested by (Cornelius Edwin T et al. 1979) that activities such as evaluating the performance of people on the job may benefit greatly from the classification or clustering of occupations into larger job families. (Baker et al. 1994) found that a rise in compensation is a good indicator of the value of a promotion. According to (Iussier et al. 2022), the feeling of support from supervisors inside an organization may help workers develop a sense of reciprocity with relation to beneficial work habits. The list of job characteristics that can act as predictor variables for job satisfaction was expanded by (Warr 2002) to include, among other things, the need for physical security, supportive supervision and effective leadership, the opportunity for interpersonal contact, environmental clarity, and the wider social position of the job. According to (Johnson and Lederer 2010), the effectiveness of the medium for the communication channel has an effect on the amount of information that is transmitted between them, their capacity to provide feedback to one another, and also increases the likelihood that they will achieve mutual understanding or a state of convergence.

According to (Thakor and Joshi 2005), the two types of motivators—namely, the extrinsic motivator, which is pay satisfaction, and the intrinsic motivation, which is sensed meaningfulness—are mutually supportive of one another. (T. Alderton et al. 2004) also identifies the need for companies to develop welfare support structures, such as providing access to free confidential counselling services, in order to assist seafarers in coping with traumatic experiences. These experiences include violent or fatal injuries, the suicides of colleagues, and potentially life-threatening events related to their safety or security. These events are experienced by seafarers more frequently than may be assumed. Coworkers are the most frequent people who engage in bullying and harassment, according to (Forsell et al. 2017). Bullying and harassment are often committed by supervisors, working their way down from senior to lower crew members. In light of the fact that the maritime sector is expected to have a scarcity of competent individuals in the near future, it is imperative that steps be taken to enhance the recruitment and retention of seafarers. This includes ensuring that seafarers are protected from being bullied or harassed, as well as ensuring that everyone at sea is healthy and happy, regardless of age, gender, ethnicity, sexual orientation, or any other social or personal qualities (Österman and Boström 2022). It is necessary to understand organizational culture from the point of view of both organizational and individual health, as well as those of organizational policy. Organizational policy refers to the specific collection of values and beliefs that determines the behavioral objectives of an organization and the methods that are utilized to manage employees (Peterson and Wilson 2002). The unusual nature of working in the shipping business is one of the primary reasons why it is difficult to keep sailors to work aboard ships (Silva et al. 2011). This is one of the reasons why employees are difficult to keep.

## **2.2. MENTAL OPPRESSIVENESS**

Healthcare workers should be protected from violence by regulations, (Lu et al. 2016). Since shore-based employment provide competitive compensation and benefits, sailing is less appealing, (Sulpice 2011). Long-term parental or spouse absences harm seafarers and their families' mental health, (Ulven et al. 2007), Most mariners' mental problems to intercultural social differences, (Jensen and Oldenburg 2021). Internet connectivity and contact with loved ones is lacking, (Baştuğ et al. 2021). Mental health difficulties including depression, anxiety, suicide, and alcohol or drug abuse are common in the marine industry, (MacLachlan et al., 2013). Mild mental health issues are the most frequent onboard non-passenger ships, (Carter 2011). Seafarers' social isolation is linked to mental illness, (T. Alderton et al. 2004). Mariners had more short-term psychiatric problems, (Helen Sampson, Neil Ellis, Iris Acejo, Nelson Turgo 2017). General predisposing characteristics for seafarers include isolation and loneliness, (Mellbye and Carter 2017). According to (Carotenuto et al. 2012)), being away from one's family is linked to feelings of loneliness. It should come as no surprise that those who work onboard ships are exposed to a high level of occupational stress (Lipowski et al. 2014). They are also subject to a great deal of danger to their own health (Jezewska et al. 2006). According to (Friborg et al. 2006; Hjemdal et al. 2006) Ong et al. (2006), resilience seems to be a protective factor against the negative effects of stress. According to (Diamantidis and Chatzoglou 2019), firms have come to the realization that, in order to improve their competitive advantage by concentrating on their Human Resources, they need to foster the growth of a distinctive quality in their workforce. According to (Walters and Bailey 2013), this has caused a significant increase in the level of psychological stress experienced by sailors. Teamwork, on the other hand, does not ensure success. This is because the efficacy and performance of a team are dependent on the team's ability to operate properly. Furthermore, if the team's procedures are not working well, it may result in the failure of the team, which can have negative and far-reaching consequences for the organization (Salas et al. 2005). Several research have been conducted to investigate the relationship between social isolation and contract duration, and all of these studies have reached the same conclusion: a shorter contract duration is best for the mental health and welfare of seafarers ( (Tang and Zhang 2021; Caesar et al. 2015; McVeigh et al. 2019). "Work stress" refers to a form of stress that is related with the workplace and may be either temporary or persistent, although the majority of instances fall under the second category described (Cavanaugh et al. 2000).

## **2.3. PHYSICAL OPPRESSIVENES**

Due to a dearth of seafarers and a low staffing level on commercial ships, sailors work longer and harder, (Thai and Latta 2010). The health environment includes healthy food and nutrition, (Sampson and Ellis 2021). Many on-board stresses occur concurrently, causing physical and psychological strain, (Comperatore et al. 2005). Occupational demands affect sailors' physical and mental health, compromising the vessel and their families' social benefits, (Borovnik 2011). According to (Zhang and Zhao 2017), one of the most common issues that affects sailors is the absence of quality entertainment and lodging options. Seafarers have been reported to have high levels of stress. According to (Oldenburg et

al. 2010), the challenges that mariners face include isolation, working in a cross-cultural context, difficulties in communication, weariness, inability to sleep, absence of leisure, and variations in climate. They run a significant danger of being mentally and physically worn out (Gander et al. 2008). The modifications that were made to the infrastructure of the port together with the tight international security laws and procedures have led to a decrease in the amount of shore leave that is given to sailors. (Baştuğ et al. 2021) defines "safety of seafarers" as "ensuring the safety and protecting the human life of seafarers onboard." According to (Wu et al. 2021), the traditions and practices that are practiced in sailing influence both the organization and the seafarer. The social environment has a greater impact on the occupational safety of sailors than the physical environment does. According to (Pantouvakis et al. 2024) research from 2023, team collaboration has a greater impact on employee retention. Due to the fact that ships are susceptible to strong seas and natural disasters, the experience of seafarers may have a significant impact on their performance in their normal activities. This is because sailors are likely to be exposed to severe and hazardous working circumstances (Yuen et al. 2018). Nevertheless, in order to enhance the significance of marine welfare facilities, it is essential to have a comprehensive understanding of the requirements of shipboard sailors and the expectations they have toward these organizations, (Borovnik 2007).

#### 2.4. OPERATIONAL DEFINITIONS

The term "**Marital Status**" refers to the state of crew being married or not married; "**Job Description**" refers to different category of positions ranging from Master, Engineers, Officers, Seaman, Crew etc; "**Ethnicity**" refers to a group of people living in a specific geographic area who share a common language, as well as cultural beliefs and practices: "**Years of Seafaring Experience**" refers to the sailing experience of the crew onboard which needs to be considered for investigating the relationship between job satisfaction and oppressiveness among crew members working on coastal marine vessels.

#### 2. RESEARCH GAP

Seafarers are away from land for extended periods of time. since of this, individuals are forced to contend with loneliness since they are cut off from their family. Problems with mental health, such as stress and weariness, are exacerbated by long hours spent at work. Additionally, they struggle with sleep difficulties. Seafarers, like other workers, are subject to a variety of working conditions and contractual problems. They have relatively few options available to them in terms of job progression and the development of their skills. Because of the high levels of stress that are inherent in sailing, the shipping industry is facing a big challenge when it comes to retaining its seafarers, which has become one of the sector's most pressing concerns. These concerns have an effect on their overall well-being as well as their family life.

#### OBJECTIVES OF THE STUDY

- To find out the Job Satisfaction level that exist among crew onboard coastal marine vessels.
- To find out the Physical and Mental Oppressiveness faced by the crew onboard coastal marine vessels and analyse its relationship with Job Satisfaction.

#### 3. HYPOTHESES OF THE STUDY

The below mentioned hypotheses were framed and tested in the study based on the objectives.

- **HYPOTHESIS I:**  
There is no significant difference in relation between "Marital Status" and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness
- **HYPOTHESIS II:**  
There is no significant difference in relation between "Job Description" and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness
- **HYPOTHESIS III:**  
There is no significant difference in relation between "Years of Seafaring Experience" and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness
- **HYPOTHESIS IV:**  
There is no significant difference in relation between "Ethnicity" and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness

#### 4. RESEARCH METHODOLOGY

##### 8.1 DATA COLLECTION

Within the framework of the research design, the procedures and approaches that will be used in order to get the required information are described in depth. The fundamental operational pattern or framework should specify what data should be gathered, from what sources, and how it should be acquired. Both primary and secondary sources were used in this research project in order to provide support for the results. In the questionnaire, a Likert scale with five points was used, and the response selections ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). This article offers the findings of a substantial amount of research that the authors have conducted on the subject of the marine industry in the Indian state of Tamil Nadu. The writer has compiled these findings and presented them here. In the course of this investigation, the port of Chennai is the area that is being sampled. It is common knowledge across the whole state of Tamil Nadu that the port of Chennai is famous for the long history and traditions that are linked with the marine sector. In order to accomplish the objectives of the study, a questionnaire will be used to conduct interviews and surveys with a random sample of five hundred sailors hailing from the aforementioned location. Out of the 500 questionnaires that were sent, only 424 were complete questionnaires, 47 (9.4%) of the questions were incomplete, and 29 (5.8%) of the questionnaires were not returned. Consequently, the total number of samples that were collected was 424. This research is an inquiry based on empirical evidence. It is possible to obtain secondary data from a broad variety of trustworthy sources, such as books, newspapers, journals, and websites, amongst other places. The procedure that is used for the purpose of gathering primary data is referred to as the simple random sampling method. The kind of research that was carried out for this particular study is referred to as descriptive research.

**Table-2 Demographic Background of Seafarers**

Demographic Characteristics		n <sub>1</sub> (Total=424)	% of n <sub>1</sub>
AGE	Less than 30 years	83	19.6
	30 years - 40 years	207	48.8
	40 years and above	134	31.6
MARITAL STATUS	Married	316	74.5
	Unmarried	108	25.5
JOB DESCRIPTION	Tug Masters	126	29.7
	Deck Officers	117	27.6
	Engineers	103	24.3
	Crew	78	18.4
YEARS OF SEAFARING EXPERIENCE	Less than 5 years	62	14.6
	5 years – 10 years	139	32.8
	10 years – 15 years	113	26.7
	15 years – 20 years	74	17.5
	20 years and above	36	8.5
ETHNICITY	Asian	214	50.5
	European	122	28.8
	African	52	12.3
	Others	36	8.5

**Source:** Primary data

n<sub>1</sub> - Number of seafarers

In terms of age, it was discovered from table-2 that the majority of the sailors who participated in the research belonged to the age range of between 30 and 40 years old (48.8%), while only 19.6 of them were younger than 30 years old. Additionally, 31.6% of the people who work onboard ships are above the age of 40. In terms of marital status, 74.5 percent of the sailors are married while 25.5 percent of them are single. According to the findings of the survey, 29.7% of seafarers work as engineers, followed by 27.6% of officers, 24.3% of crew members, and 18.4% of catering personnel.

The percentage of seafarers with between 5 and 10 years of experience, which is 32.8%, is considered to be a high representation. Only 8.5% of those who participated in the survey had more than 20 years of experience in seafaring, while 26.7% of them have between 10 and 15 years of experience, 14.6% of the seafarers have fewer than 5 years of experience, and 17.5% of those who participated in the study have between 15 and 20 years of experience. In terms of ethnicity, people of Asian descent make up the largest percentage of the population (50.5%), followed by those of European descent (28.8%), African descent (12.3%), and 8.5% from other countries.

## 8.2. TOOLS & TECHNIQUES

For this research, statistical methods such as the t-test, analysis of variance (ANOVA), regression analysis, and factor analysis were used. The dependability of the data may be determined by the use of the Cronbach's Alpha formula. The elements in the questionnaire pertaining to Job Satisfaction, Physical Oppressiveness, and Mental Oppressiveness of Crew onboard Coastal Marine Vessels are subjected to confirmatory factor analysis in order to validate the responses.

## 5. ANALYSIS & DISCUSSION

### 9.1. HYPOTHESIS I

**Null Hypothesis:** There is no significant difference in relation between Marital Status and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness

With the assistance of the t Test, an investigation into the connection between the marital status of seafarers and their levels of job satisfaction, mental oppression, and physical oppression is carried out.

**Table-3 t-test for Marital Status and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness**

		t-test for Equality of Means		
		t <sup>a</sup>	df <sup>b</sup>	Sig. <sup>c</sup> (2-tailed)
<b>JS</b>	Equal variances assumed	0.132	422	0.005**
<b>MO</b>	Equal variances assumed	0.380	422	0.004**
<b>PO</b>	Equal variances assumed	0.070	422	0.044*

**Source:** Statistically analysed data

**Note:** <sup>a</sup> t-Statistic, <sup>b</sup> Degrees of Freedom, <sup>c</sup> Significance

JS refers to Job Satisfaction

MO refers to Mental Oppressiveness

PO refers to Physical Oppressiveness

The length of time spent on board, in addition to the seafarer's isolation from their family and society, may both contribute to feelings of stress. The majority of them suffer from being separated from their families, which results in psychological strain. Slikovic and Penezi'c' (2016). Slikovic and Penezi'c' (2016). The results of the table-3 show that there is a statistically significant difference between the crew members in terms of their marital status and their levels of job satisfaction, mental oppression, and physical oppression. This difference is significant at the 0.001 level. As a result of finding that several of the dimensions, including Job Satisfaction and Mental Oppressiveness, are significant at the 0.001 level, the hypothesis is **not supported**. The hypothesis is not supported since the significance threshold set at 0.005 for physical oppressiveness was reached.

9.2. HYPOTHESIS II

**Null Hypothesis:** There is no significant difference in relation between Job Description and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness

With assistance on behalf of One-Way Analysis, the link between the Job Description of seafarers and their Job Satisfaction, Mental Oppressiveness, and Physical Oppressiveness for seafarers is evaluated.

**Table-4 One-way analysis for Job Description and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness**

		Sum of Squares	df <sup>a</sup>	Mean Square	F <sup>b</sup>	Sig. <sup>c</sup>
<b>JS</b>	Between Groups	1.593	3	0.531	0.009	0.009**
	Within Groups	24199.756	420	57.618		
	Total	24201.349	423			
<b>MO</b>	Between Groups	5.409	3	1.803	0.083	0.000**
	Within Groups	9113.739	420	21.699		
	Total	9119.149	423			
<b>PO</b>	Between Groups	0.113	3	0.038	0.005	0.001**
	Within Groups	3093.696	420	7.366		
	Total	3093.809	423			

**Source:** Statistically analyzed data

**Note:** JS refers to Job Satisfaction

MO refers to Mental Oppressiveness

PO refers to Physical Oppressiveness

<sup>a</sup>Degrees of Freedom, <sup>b</sup>F-Statistic, <sup>c</sup>Significance

When there is a change in the schedules in ports, fewer staff, and social isolation, there is a major shift in the working and living conditions of seafarers on board (Allen et al., 2007; Dimitrova and Blanpain, 2010). These factors contribute to a worsening of the on board working and living conditions. Table-4 demonstrates that there is a statistically significant difference between the seafarers onboard with regard to their marital status in relation to job satisfaction, mental oppressiveness, and physical oppressiveness. This difference is significant at the 0.001 level. As a result of finding that several of the dimensions, including Job Satisfaction and Mental Oppressiveness, are significant at the 0.001 level, the hypothesis is **not supported**. The hypothesis is not supported since the significance threshold set at 0.005 for physical oppressiveness was reached. According to Borovnik (2011), occupational pressure has an effect on both the physical and mental health of sailors while they are at work.

9.3. HYPOTHESIS III

**Null Hypothesis:** There is no significant difference in relation between Years of Seafaring Experience and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness

It is determined, with the use of One-Way Analysis, whether or not there is a connection between the number of years of seafaring experience that seafarers have and both their job satisfaction and their mental and physical oppression.

**Table-5 One-way analysis for Years of Seafaring Experience and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness**

		Sum of Squares	df <sup>a</sup>	Mean Square	F <sup>b</sup>	Sig. <sup>c</sup>
<b>JS</b>	Between Groups	23.564	4	5.891	0.102	0.002**
	Within Groups	24177.785	419	57.704		
	Total	24201.349	423			
<b>MO</b>	Between Groups	14.239	4	3.560	0.164	0.007**
	Within Groups	9104.910	419	21.730		
	Total	9119.149	423			
<b>PO</b>	Between Groups	1.918	4	0.480	0.065	0.002**
	Within Groups	3091.891	419	7.379		
	Total	3093.809	423			

**Source:** Statistically analyzed data

**Note:** JS refers to Job Satisfaction

MO refers to Mental Oppressiveness

PO refers to Physical Oppressiveness

<sup>a</sup>Degrees of Freedom, <sup>b</sup>F-Statistic, <sup>c</sup>Significance

According to (Hystad and Eid 2016), crewmembers at sea are exposed to a number of persistent sources of stress due to the lengthy periods of time they spend working and relaxing on board. According to the data shown in table 5, there is a statistically significant difference between the crew members on board with regard to their Years of Seafaring Experience in terms of Job Satisfaction, Mental Oppressiveness, and Physical Oppressiveness. This difference is significant at the 0.001 level. It may be concluded that the hypothesis is **not correct** since several of the variables, including Job Satisfaction, Mental Oppressiveness, and Physical Oppressiveness, are significant at the 0.001 level. There is a correlation between job satisfaction and employee turnover based on empirical research. A lower degree of desire to leave one's current position is associated with a greater level of job satisfaction among maritime workers, according to (Kim and Lee 2011).

#### 9.4. HYPOTHESIS IV

**Null Hypothesis:** There is no significant difference in relation between Ethnicity and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness

One-Way Analysis is providing help in order to assess the relationship between the ethnicity of seafarers and their job satisfaction, mental oppression, and physical oppression. This evaluation is being carried out for seafarers.

**Table-6 One-way analysis for Ethnicity and Job Satisfaction, Mental Oppressiveness, Physical Oppressiveness**

		Sum of Squares	df <sup>a</sup>	Mean Square	F <sup>b</sup>	Sig. <sup>c</sup>
<b>JS</b>	Between Groups	12.743	3	4.248	0.074	0.004**
	Within Groups	24188.606	420	57.592		

	Total	24201.349	423			
<b>MO</b>	Between Groups	19.741	3	6.580	0.304	0.023*
	Within Groups	9099.408	420	21.665		
	Total	9119.149	423			
<b>PO</b>	Between Groups	2.439	3	0.813	0.110	0.004**
	Within Groups	3091.370	420	7.360		
	Total	3093.809	423			

Source: Statistically analyzed data

Note: JS refers to Job Satisfaction

MO refers to Mental Oppressiveness

PO refers to Physical Oppressiveness

<sup>a</sup>Degrees of Freedom, <sup>b</sup>F-Statistic, <sup>c</sup>Significance

According to (Miller and Travers 2005) and (Hesli and Lee 2013), there is a correlation between racial and ethnic background and job satisfaction. Table 6 demonstrates that there is a statistically significant difference between the seafarers onboard with regard to their ethnicity in terms of job satisfaction, mental oppressiveness, and physical oppressiveness. This difference is significant at the 0.001 level. The hypothesis is not supported due to the fact that several of the variables, including Job Satisfaction and Physical Oppressiveness, are significant at the 0.001 level. The hypothesis is **not supported** since the significance threshold set at 0.005 for mental oppressiveness was reached.

### 9.5. COMPREHENSIVE ANALYSIS

9.5.1. The researchers make an effort to comprehend the connection that exists between a dependent variable, which in this instance is Job Satisfaction, and one or more independent variables, which are either predictors or factors that have the potential to impact Job Satisfaction.

Table-7 Regression Analysis- R Square - Job Satisfaction

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.947 <sup>a</sup>	0.820	0.814	7.12027

Source: Statistically analysed data

Table-7 The square root of the correlation coefficient, often known as R-squared, is a statistical metric that indicates the percentage of the variation in the dependent variable (Job Satisfaction) that can be attributed to the independent variables in the model. The multiple correlation coefficient for the independent variables is 0.947, with the **dependent variable** being referred to as Job Satisfaction. The overall amount of variation in the dependent variable is represented by the R square value. In addition, the R square value is 0.820, which indicates that the model is an **excellent match**. This corresponds to an accuracy of 82.0 percent.

9.5.2. The statistical method known as regression analysis is used to investigate the connection between a single dependent variable, which in this instance is Job Satisfaction, and one or more independent variables, which are different aspects that have the potential to affect Job Satisfaction.

**Table-8 Regression Analysis- Job Satisfaction**

	Sum of Squares	df <sup>a</sup>	Mean Square	F <sup>b</sup>	Sig. <sup>c</sup>
Regression	2908.083	3	969.361	19.120	0.000 <sup>b</sup> Significant
Residual	21293.266	420	50.698		
Total	24201.349	423			

Source: Statistically analyzed data

Note: <sup>a</sup>Degrees of Freedom, <sup>b</sup>F-Statistic, <sup>c</sup>Significance

At the level of significance equal to 0.01 percent, the F value of 19.120 that is shown in table 8 is deemed acceptable. Therefore, 82.0 percent of the variation in job satisfaction can be significantly explained by **independent variables** such as job motivation, job characteristics, authority, responsibility, nature of job, job category, availability of facilities, co-workers, supervision, rewards and recognition, salary and remuneration, job benefits, seafaring experience, wage and employee stability, promotion, organizational policy, grievance handling, ethnicity, conflict management, and mutual understanding. According to Caesar et al. (2015), job satisfaction is influenced by the employee as well as the employer, the potential for career advancement, and the efficiency of the working circumstances.

**9.5.3.** Statistical significance of the coefficients associated with the independent variables is often what is meant when the word "significance" is used in the context of regression analysis. Understanding which factors have a major influence on job satisfaction may be facilitated by identifying important variables. When attempting to enhance job satisfaction within a certain context, this knowledge is essential for decision-makers because it enables them to concentrate on the aspects that have the greatest overall impact.

**Table-9 Regression Analysis- Significance- Job Satisfaction**

Particulars	Unstandardized Coefficients		Standardized Coefficients	t <sup>a</sup>	Sig. <sup>b</sup>
	B	Std. Error	Beta		
(Constant)	53.527	8.552	-	6.259	0.000**
MO	0.525	0.077	0.322	6.820	0.000**
PO	0.160	0.139	0.057	1.148	0.002**

Source: Statistically analysed data

Note: <sup>a</sup>T-Statistic, <sup>b</sup>Significance

According to Table 9, the maximum positive value in beta for Job Satisfaction is 0.525, which is significant at the 0.001 level. **The factor known as "Mental Oppressiveness" has the greatest influence on "Job Satisfaction."**

The beta value of mental oppressiveness is 0.525, and the beta value of physical oppressiveness is 0.160. **Both of these have a positive influence**, and increasing the unit on job satisfaction would be the result. This effect is significant at the 0.001 level. In the maritime business, job satisfaction is seen as an important aspect in overall success. According to (Bergheim et al. 2015), a high amount of psychological capital is associated with increased job satisfaction.

**9.5.4.** The entire variability or dispersion that can be seen in the data for this specific variable is referred to as the total variance for Mental Oppressiveness. For the purpose of discussing Mental Oppressiveness, the term "total variance" refers to the total amount of variability that can be seen in the values of this variable over the whole dataset. It takes into account the degree to which each individual data point deviates from the Mean of Mental Oppressiveness as a whole.

**Table-10 Total Variance for Mental Oppressiveness**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.962	22.781	22.781
2	2.076	15.967	38.748
3	1.424	10.953	49.701
4	1.319	10.143	59.844
5	1.317	10.134	<b>69.978</b>
6			

**Extraction Method:** Principal Component Analysis

An examination using Principal Component Factor Analysis with Varimax rotation found a structure consisting of five factors. The analysis of the entire variance of mental oppressiveness (table 10) reveals that each of the components has an eigen value that is greater than 1, and the combination of components 1, 2, 3, 4, and 5 explains 69.978% of the total variation. That is a **reduction of thirty percent from the total of thirteen components** that are derived from the detailed Literature Review such as Job stress, Low conflict management, Job security, Lack of support, Insufficient work life balance, Sleep deprivation, Unscheduled work hours, Shift work, Isolation, Lack of self-confidence, Lack of team work, Length of contract and Lack of responsibility that make up the instrument.

**Figure-1 Scree Plot for Mental Oppressiveness**

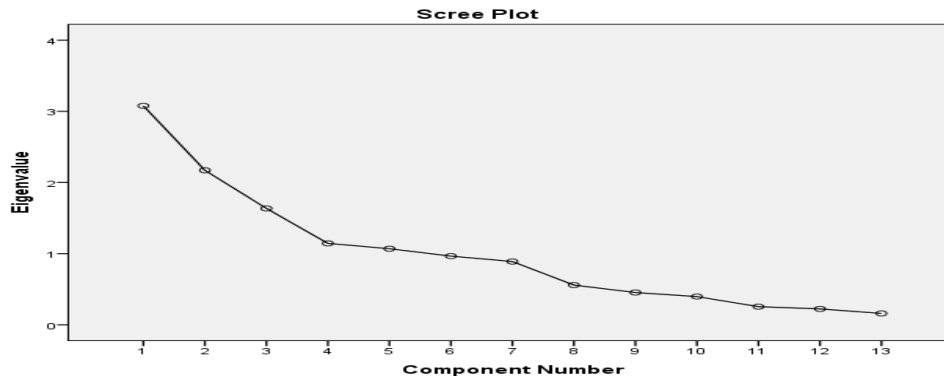


Figure 1 depicts the scree plot for the Mental Oppressiveness scale. It is most probable that the part that is located above the original break will be excised. A more modest split can now be seen, which will facilitate the separation of components 5 and 6.

Principal Component Analysis (PCA) in table:11 is a statistical method used to get rid of unnecessary dimensions and pull-out important features. It is often used to find trends, connections, or deeper structures in large amounts of data. PCA is a strong tool for analyzing and reducing large datasets. Using it on Mental Oppressiveness data could help us understand the main factors that affect mental health.

**Table:11. Principal Component Analysis of Mental Oppressiveness**

	Component				
	1	2	3	4	5
Job stress	0.799				

Low conflict management	0.771				
Job security	0.769				
Lack of support	0.696				
Insufficient work life balance	0.563				
Sleep deprivation		0.912			
Unscheduled work hours		0.846			
Shift work		0.642			
Isolation			0.830		
Lack of self-confidence			0.544		
Lack of team work				0.823	
Length of contract				0.506	
Lack of responsibility					0.900

**Extraction Method:** Principal Component Analysis

a. Rotation converged in 7 iterations.

The elimination of cross loadings and weak loadings may be observed in Table 11, which is supplied with the **five-factor solution**. The thirteen things that are proposed for the various components are broken out in the table 11. Five items are proposed for component 1, three items are proposed for component 2, two items are proposed for component 3, and one item is proposed for component 4. The loadings that are placed on the things that make up the various components are robust and suitable.

The first factor is a conglomeration of a number of factors, including "Job stress, Low conflict management, Job security, Lack of support, and Insufficient work life balance." The combination of "Sleep deprivation, Unscheduled work hours, and Shift work" makes up factor two of the problem. Isolation and a general lack of self-confidence combine to form the third contributing factor. The combination of "Lack of team work" and "Length of contract" makes up factor number four. The fifth factor is referred to as a "Lack of responsibility." **There is a positive factor loading associated with the variables in all five components that contribute to mental oppression.**

**9.5.5.** The total variation for Physical Oppressiveness is the variety or spread that can be seen in the statistics for this particular measure. For the purposes of talking about Physical Oppressiveness, "total variance" means the range of values for this variable that can be seen across the whole sample. The amount that each data point differs from the Mean of Physical Oppressiveness is taken into account.

**Table-12 Total Variance for Physical Oppressiveness**

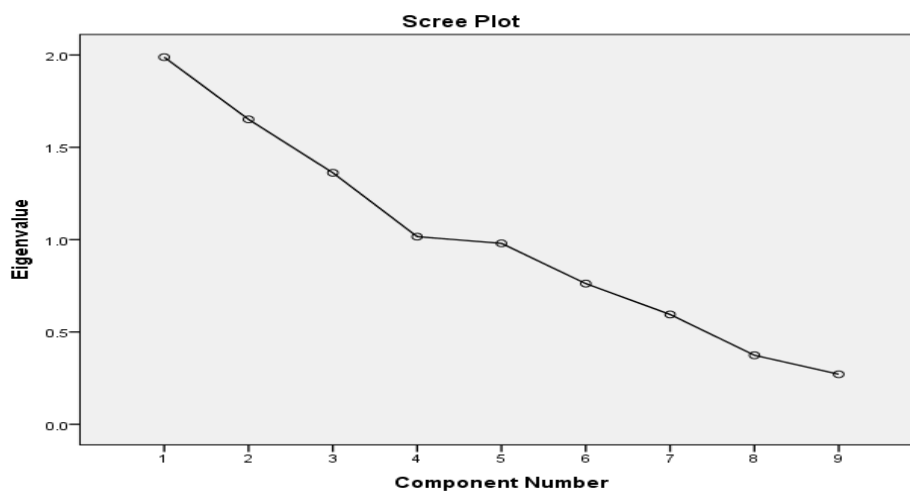
Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	1.703	18.919	18.919
2	1.547	17.192	36.111
3	1.486	16.512	52.623
4	1.282	14.243	<b>66.866</b>

5			
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**Extraction Method:** Principal Component Analysis

An examination using principal component factor analysis with varimax rotation found a structure consisting of four factors. The Total variation of Physical Oppressiveness (table 12) demonstrates that all of the components have an eigen value that is greater than 1, and the combination of components 1,2, 3, and 4 explains a total of 66.866% of the variation in the data. That amounts to a reduction of 33 percent across the instrument's total of nine components that are derived from the detailed Literature Review such as Ventilation and accommodation, Vibration and noise from ship, Weather conditions / Rough Sea, Unpleasant working condition, Lack of amenities, Scarcity of Sleep, Stress and fatigue, Occupational hazards and Quality of food that make up the instrument.

**Figure-2 Scree Plot for Physical Oppressiveness**



The scree plot for Physical Oppressiveness is shown here by figure:2. It is most probable that the part that is located above the original break will be excised. The component 4 and 5 may be extracted via a minor break that just appeared.

In table:13, Principal Component Analysis (PCA) is a statistical method used to get rid of dimensions that aren't needed and pull out traits that are important. It is often used to look through a lot of data for patterns, links, or deeper structures. Large records can be analyzed and sped up with PCA. It could help us figure out the main things that affect physical health if we use it on Physical Oppressiveness data.

**Table-13 Principal Component Analysis of Physical Oppressiveness**

	Component			
	1	2	3	4
Ventilation and accommodation	0.823			
Vibration and noise from ship	0.755			
Weather conditions / Rough Sea		0.729		
Unpleasant working condition		0.721		
Lack of amenities		0.545		
Scarcity of Sleep			0.804	
Stress and fatigue			0.585	

Occupational hazards				0.895
Quality of food				0.651

**Extraction Method:** Principal Component Analysis

a. Rotation converged in 7 iterations

The removal of cross loadings and weak loadings may be observed in Table 13, which is supplied along with the four factor solution. Two things are proposed for component 1, three items are proposed for component 2, two items are proposed for component 3, and two items are proposed for component 4. This brings the total number of items proposed for the various components to nine. The loadings that are placed on the things that make up the various components are robust and suitable. The first consideration is a balancing act between "Ventilation and accommodation, as well as Vibration and noise from the ship." The second factor is a mix of weather conditions, rough sea conditions, unpleasant working circumstances, and a lack of facilities. The combination of "Scarcity of Sleep, and Stress and fatigue" makes up factor number three. Occupational risks and food quality make up the fourth factor, which is a mixture of the two. There is a positive factor loading associated with the variables in each of the four categories that contribute to physical oppressiveness.

**9.5.6.** A measure of job satisfaction's total range shows how different or spread out the numbers are for this measure. When we talk about Job Satisfaction, "total variance" refers to the range of values that can be seen across the whole group for this measure. The difference between each data point and the Mean of Job Satisfaction is taken into account.

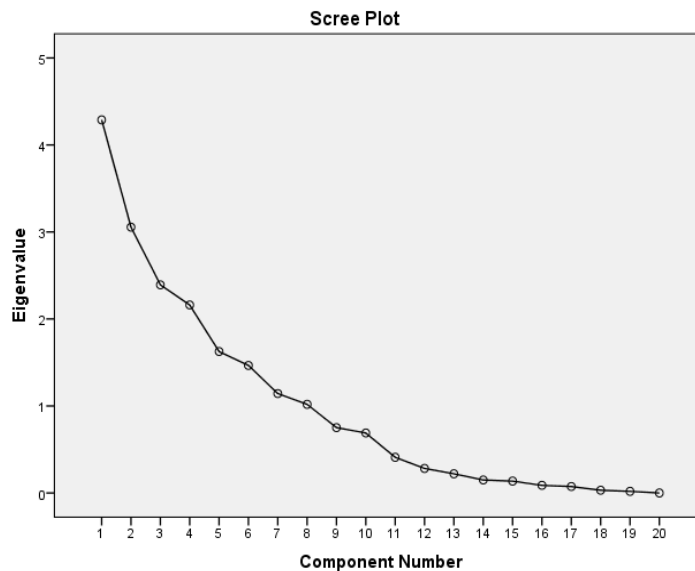
**Table:14 Total Variance for Job Satisfaction**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.554	12.770	12.770
2	2.424	12.118	24.888
3	2.269	11.345	36.233
4	2.245	11.224	47.457
5	2.168	10.838	58.295
6	1.995	9.974	68.269
7	1.793	8.965	77.234
8	1.703	8.516	<b>85.750</b>
9			

**Extraction Method:** Principal Component Analysis

An eight-factor structure was discovered by Principal Component Factor Analysis with Varimax rotation. All of the components have an eigen value that is more than one, as shown by the Total Variance of Job Satisfaction (table 14), and components 1,2, 3, 4,5,6,7, and 8 together explain the total of 85.750% of the variance. That amounts to a 14% reduction from the total of twenty components that are derived from the detailed Literature Review such as Ethnicity, Job category, Promotion, Nature of job, Grievance handling, Salary and remuneration, Supervision, Wage and employee stability, Job characteristics, Co-workers, Mutual understanding, Availability of facilities, Conflict management, Job motivation, Rewards and recognition, Authority, Job benefits, Seafaring experience, Responsibility and Organizational policy that make up the instrument.

Figure-3 Scree Plot for Job Satisfaction



The scatter plot for Job Satisfaction may be seen in figure 3, which is shown here. It is most probable that the part that is located above the original break will be excised. The component 8 and 9 may be extracted via a minor break that just appeared.

PCA is a statistical method used to get rid of dimensions that aren't needed and pull out traits that are important in table:15. Many times, it's used to search through a lot of data for trends, links, or greater ones. PCA can quickly and easily look through large records. If we use it on data about Job Satisfaction, it might help us figure out the main things that hurt health.

Table-15 Principal Component Analysis of Job Satisfaction

	Component							
	1	2	3	4	5	6	7	8
Ethnicity	0.920							
Job category	0.916							
Promotion	0.774							
Nature of job		0.912						
Grievance handling		0.879						
Salary and remuneration			0.779					
Supervision			0.760					
Wage and employee stability			0.646					
Job characteristics			0.603					
Co-workers				0.962				
Mutual understanding				0.962				
Availability of facilities					0.941			

Conflict management					0.930			
Job motivation						0.924		
Rewards and recognition						0.742		
Authority							0.922	
Job benefits							0.713	
Seafaring experience								0.849
Responsibility								0.666
Organizational policy								0.601

**Extraction Method:** Principal Component Analysis

a. Rotation converged in 10 iterations.

The elimination of cross loadings and weak loadings may be observed in Table 15, which is supplied along with the four-factor solution. A total of twenty alternative things on the various components are suggested in the table 15. Three things were placed on component 1, two items were placed on component 2, four items were placed on component 3, two items were placed on component 4, two items were placed on component 5, two items were placed on component 6, two items were placed on component 7, and three items were placed on component 8. The loadings that are placed on the things that make up the various components are robust and suitable. The first factor is a three-way interaction between "Ethnicity, Job category, and Promotion." The second component, titled "Nature of job and Grievance handling," is a mixture of the first two factors. The third component, "Salary and remuneration, Supervision, Wage and Employee Stability, and Job Characteristics," is a mixture of the previous four factors. The fourth factor is referred to as "Co-workers and Mutual Understanding," and it combines the previous two factors. The combination of "Availability of facilities" and "Conflict management" makes up factor number five. The combination of 'Job motivation and Rewards and recognition' makes up factor number six. The seventh component is referred to as "Authority and Job Benefits," and it consists of both of these aspects. "Seafaring experience, Responsibility, and Organizational policy" are the three components that make up factor number eight. All eight of the variables have positive factor loadings, and those loadings are behind the variables of Job Satisfaction. A measurement model, a kind of statistical model is used here to provide a representation of the connections that exist between observable variables and the latent constructs or factors that lie behind them. Measurement models are used in the context of mental oppression with the purpose of capturing and quantifying the latent concept of mental oppression via the use of observable indicators or variables. Through the use of the AMOS Measurement Model, the variables that are framed in the questionnaire are examined to determine their reliability and validity.

**Table-16 Measurement Model of Mental Oppressiveness**

Item(s) of MO	Factor Item	CFA Loading	Cronbach $\alpha$ (Item wise)	Cumulative Cronbach	Composite Reliability (CR)	Average Variance Extracted (AVE)
<b>Work Stress Onboard Vessels</b>						
Lack of support	<b>MO WS1</b>	0.930	0.943	0.935	<b>0.969</b>	<b>0.796</b>
Lack of teamwork	<b>MO WS2</b>	0.850	0.937			
Lack of responsibility	<b>MO WS3</b>	0.900	0.999			
Low conflict management	<b>MO WS4</b>	0.870	0.905			
Job stress	<b>MO</b>	0.810	0.962			

	<b>WS5</b>					
Job security	<b>MO WS6</b>	0.900	0.953			
Unscheduled work hours	<b>MO WS7</b>	0.930	0.856			
Shift work	<b>MO WS8</b>	0.940	0.924			
<b>Home Sickness of Crew Onboard</b>						
Lack of self-confidence	<b>MO HS1</b>	0.980	0.894	0.927	<b>0.966</b>	<b>0.852</b>
Sleep deprivation	<b>MO HS2</b>	0.930	0.874			
Isolation	<b>MO HS3</b>	0.870	0.972			
Insufficient work life balance	<b>MO HS4</b>	0.890	0.956			
Length of contract	<b>MO HS5</b>	0.940	0.938			

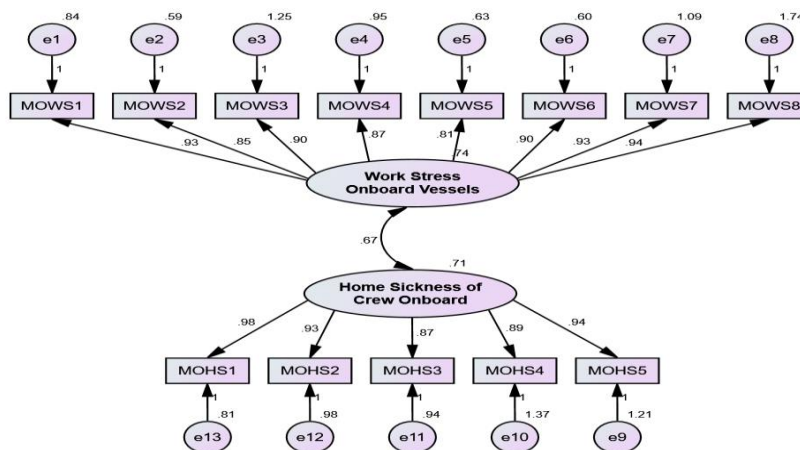
Source: Statistically analysed Data,

Fig.4. (Measurement Model of Mental Oppressiveness)

The values of reliability and validity evaluation of the Mental Oppressiveness questionnaire are enumerated item by item in table 16. Following the completion of the study, the reliability values of Work Stress Onboard Vessels (0.935) and Home Sickness of Crew Onboard (0.927) have been obtained. Within the scope of the investigation, the Confirmatory Factor Analysis loadings are computed. It was shown by using the ALPHA technique in SPSS that there is an internal consistency between the components of the 13-item questionnaire that is connected to mental oppressiveness. As a method for determining the accuracy of measuring instruments, the coefficient alpha serves as the basis for an examination and cleaning procedure that is applied to the instrument.

If the Cronbach alpha and the Composite reliability value of the latent factor are both higher than 0.7, this implies that the reliability is excellent. Cronbach alpha for each construct ranged from 0.856 to 0.999, which is much higher than the value of each construct, which was set at 0.7 as suggested by Hair et al. As a result, this demonstrates the absolute dependability. The AVE measurements make it abundantly clear that the factor loadings for each item are higher than the 0.60 threshold that serves as the cut-off level. The AVE for each of the constructions falls between the range of 0.796 and 0.852, which is more than the threshold value.

Figure-4 Measurement Model of Mental Oppressiveness



9.6. According to statistics, a measurement model shows the links between visible variables and the hidden factors or constructs that cause them. When it comes to physical oppression, measurement models are used to capture and define the vague idea of physical oppression by using factors or signs that can be seen. It uses the AMOS Measurement Model to check the factors in the questionnaire for their reliability and validity.

9.7.

Table-17 Measurement Model of Physical Oppressiveness

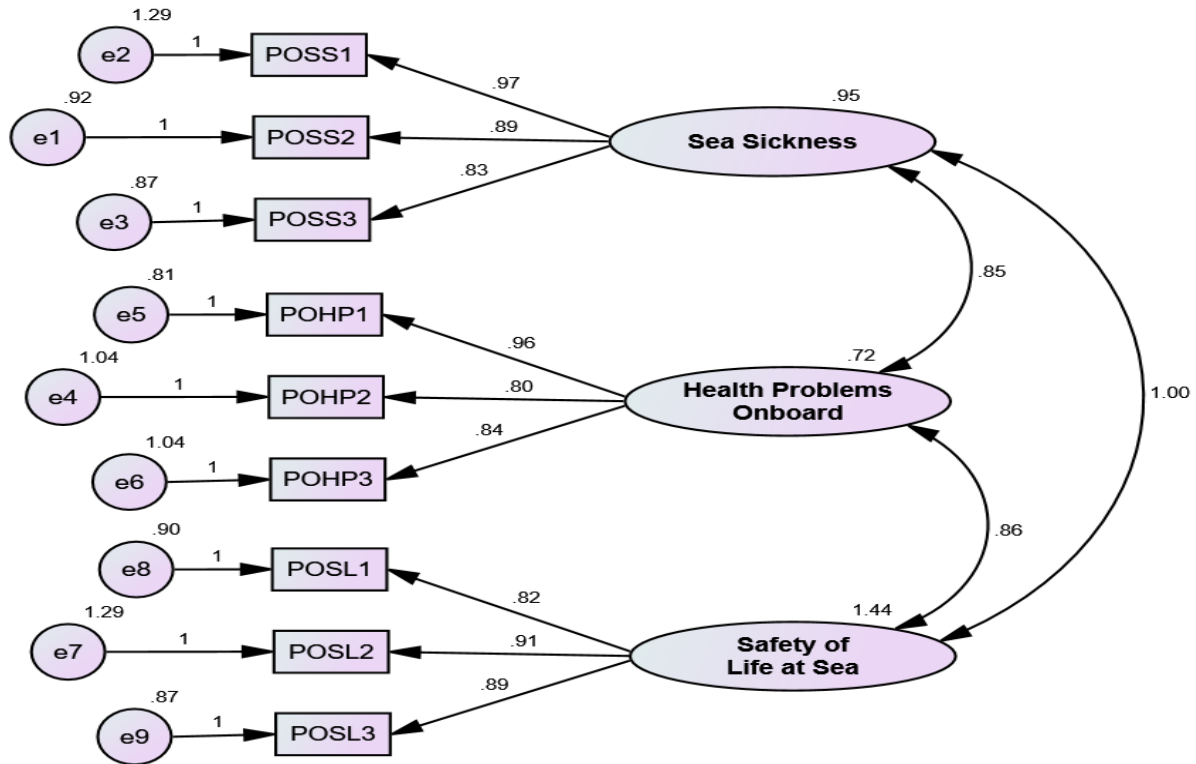
Item(s) of PO	Factor Item	CFA Loading	Cronbach $\alpha$ (Item wise)	Cumulative Cronbach	Composite Reliability (CR)	Average Variance Extracted (AVE)
<b>Sea Sickness</b>						
Lack of amenities	PO SS1	0.970	0.816	0.875	<b>0.926</b>	<b>0.807</b>
Occupational hazards	PO SS2	0.890	0.934			
Ventilation and accommodation	PO SS3	0.830	0.866			
<b>Health Problems Onboard</b>						
Stress and fatigue	PO HP1	0.960	0.867	0.927	<b>0.902</b>	<b>0.756</b>
Quality of food	PO HP2	0.800	0.917			
Scarcity of Sleep	PO HP3	0.840	0.998			
<b>Safety of Life at Sea</b>						
Unpleasant working condition	PO SL1	0.820	0.986	0.923	<b>0.907</b>	<b>0.764</b>
Vibration and noise from ship	PO SL2	0.910	0.841			
Weather conditions / Rough Sea	PO SL3	0.890	0.943			

Source: Statistically Analysed Data

Fig.5. (Measurement Model of Physical Oppressiveness)

The results of an analysis of the reliability and validity of the items on the Physical Oppressiveness questionnaire are shown in table 17. Following the completion of the study, the following reliability values were obtained: Sea Sickness (0.875), Health Problems Onboard (0.927), and Safety of Life at Sea (0.923). Calculations are made on the loadings for the confirmatory factor analysis. Through the use of the ALPHA technique in SPSS, it was shown that there is an internal consistency between the nine questions that make up the questionnaire about the Physical Oppressiveness. As a method for determining the accuracy of measuring instruments, the coefficient alpha serves as the basis for an examination and cleaning procedure that is applied to the instrument. If both the Cronbach alpha and the composite reliability value of the latent factor are more than 0.7, then the reliability is excellent. Cronbach alpha for each construct should be higher than the value of each construct (which should be 0.7) and range from 0.816 to 0.998, as proposed by Hair et al. As a result, this demonstrates the absolute dependability. The AVE measurements of the factor loadings for each item are more than the threshold value of 0.60, which is the cut-off limit. The AVE for each of the constructions falls between the range of 0.756 and 0.807, which is more than the threshold value.

Figure-5 Measurement Model of Physical Oppressiveness



9.8. A measurement model, as defined by statistics, is a model that illustrates the connections between variables that are observable and the factors or constructions that are not apparent but that cause them. Regarding the concept of job satisfaction, measuring models are used in order to capture and define the nebulous concept of job satisfaction via the utilization of characteristics or signals that may be seen. Specifically, it employs the AMOS Measurement Model in order to evaluate the reliability and validity of the elements included inside the questionnaire.

Table-18 Measurement Model of Job Satisfaction

Item(s) of JS	Factor Item	CFA Loading	Cronbach $\alpha$ (Item wise)	Cumulative Cronbach	Composite Reliability (CR)	Average Variance Extracted (AVE)
<b>Job Itself</b>						
Job motivation	J11	0.950	0.909	0.909	0.962	0.777
Job characteristics	J12	0.980	0.882			
Authority	J13	0.800	0.940			
Responsibility	J14	0.930	0.883			
Nature of job	J15	0.860	0.938			
Job category	J16	0.870	0.904			
<b>Job Environment</b>						
Availability of facilities	JE1	0.920	0.888	0.902	0.923	0.799
Co-workers	JE2	0.850	0.919			
Supervision	JE3	0.910	0.901			
<b>Organizational Characteristics</b>						

Rewards and recognition	<b>OC1</b>	0.920	0.900	0.908	<b>0.968</b>	<b>0.814</b>
Salary and remuneration	<b>OC2</b>	0.870	0.891			
Job benefits	<b>OC3</b>	0.940	0.949			
Seafaring experience	<b>OC4</b>	0.950	0.905			
Wage and employee stability	<b>OC5</b>	0.890	0.878			
Promotion	<b>OC6</b>	0.830	0.931			
Organizational policy	<b>OC7</b>	0.910	0.892			
<b>Social Dimension</b>						
Grievance handling	<b>SD1</b>	0.800	0.927	0.909	<b>0.935</b>	<b>0.784</b>
Ethnicity	<b>SD2</b>	0.940	0.905			
Conflict management	<b>SD3</b>	0.830	0.883			
Mutual understanding	<b>SD4</b>	0.960	0.919			

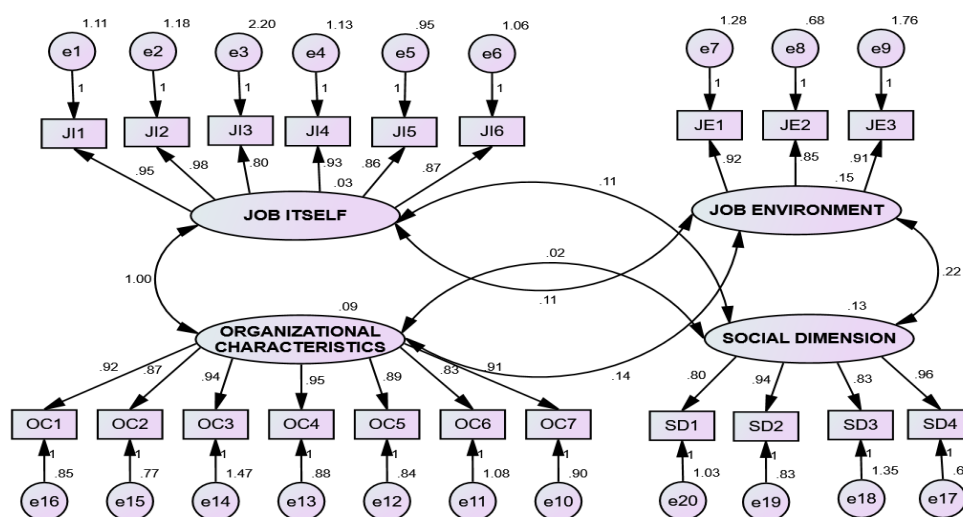
Source: Statistically Analyzed Data

Fig.6. (Measurement Model of Job Satisfaction)

The values of reliability and validity evaluation of the Job Satisfaction questionnaire are enumerated item by item in table 18. The study yields the following reliability value findings: Job Itself has a value of 0.909, Job Environment has a value of 0.902, Organizational Characteristics has a value of 0.908, and Social Dimension has a value of 0.909 for its dependability. Calculations are made on the loadings for the confirmatory factor analysis. It was shown via the use of the ALPHA technique in SPSS that there is an internal consistency between the 20 questions that were included in the questionnaire pertaining to Job Satisfaction. As a method for determining the accuracy of measuring instruments, the coefficient alpha serves as the basis for an examination and cleaning procedure that is performed on the instrument.

If both the Cronbach alpha and the composite reliability value of the latent factor are more than 0.7, then the reliability is excellent. Cronbach alpha for each construct should be higher than the value of each construct (which should be 0.7) and range from 0.878 to 0.949, as proposed by Hair et al. As a result, this demonstrates the absolute dependability. The AVE numbers make it abundantly evident that the factor loadings for each item are higher than the 0.60 threshold that serves as the cut-off level. The AVE for each of the constructions falls between the range of 0.777 and 0.814, which is more than the threshold value.

Figure-6 Measurement Model of Job Satisfaction



## 10. CONCLUSION

The empirical study shows that there is a complex link between job satisfaction and oppressiveness aboard coastal marine vessels. It also emphasizes the importance of creating supportive and compassionate working conditions to ensure the health and productivity of maritime professionals. We should further study specific characteristics that contribute to oppressiveness, examine the effectiveness of remedies, and understand the long-term impacts of improved working conditions on crew morale and performance. The overall efficiency, safety, and well-being of both employees and the whole maritime operation heavily depend on the work satisfaction level of crew members onboard coastal marine vessels. We can navigate hurdles, create a great work atmosphere, and contribute to the success of nautical initiatives more easily with a satisfied and motivated crew. Stakeholders must prioritize and engage in programs that increase work satisfaction. This is because it has far-reaching ramifications for crew mental health, operational performance, and the marine sector overall. The physical and emotional oppression aboard coastal marine boats greatly affects the work happiness of crew workers. Working at sea for lengthy periods of time and dealing with the physical demands of the job may take a toll on your health. I am experiencing a tangled network of stresses that include the physical toll of hard work and bad weather, as well as the mental strain of being alone and under intense pressure. Stakeholders must take efforts to reduce physical and mental oppression if you want coastal marine vessel personnel to report higher levels of job satisfaction. We can achieve this goal by investing in better housing, providing easier access to mental health services, and encouraging a positive work atmosphere. We need to acknowledge the significant influence of these oppressive variables on work satisfaction in order to enhance the welfare of the people on board and the safety, resilience, and efficiency of the maritime sector. We are aware of the many advantages that come with having happy workers. Organizational performance is not the factor that drives job satisfaction. Instead, job satisfaction is the factor that determines organizational performance. The level of job satisfaction that employees have is crucially relevant in the shipping industry. It is connected to the safety of the people who work on ships. When sailors have a high degree of satisfaction with their jobs, their performance improves. If employees aren't happy in their jobs, they are more likely to call out sick and produce less work. There are many aspects of your job that might impact your level of job satisfaction, in addition to the elements that contribute to stress. To determine job satisfaction, we need to consider well-being as one of the factors. The entire atmosphere of the workplace is a significant factor in determining our mental well-being as crew members on board. Implementing more flexible working arrangements might help minimize stress. We can increase the assurance on ship safety to improve the work performance of seafarers. The mental oppression experienced on the workplace has a significant impact on seafarers, followed by the physical oppression experienced there. Several segments of the maritime sector are confronted with a wide variety of difficult issues within the framework of the global economy. "The happiness of the seafarers in their work not only contributes to an increase in their overall productivity but also helps to ensure that they continue to get along well with one another," they said. The emotional and physical health of the crew members is a major factor in how satisfied we are with our jobs. The entire work environment in the shipping sector plays a role in determining and contributing to the level of contentment that employees feel in their jobs. The future implications of an empirical analysis on the relationship between job satisfaction and oppressiveness of crew onboard coastal marine vessels are significant. It can lead to positive transformation within the maritime industry. Maritime companies, armed with insights from the study, can embark on a journey to implement targeted well-being programs. We should consider crew comfort and well-being as integral to the planning and construction of coastal marine vessels. This could potentially revolutionize the standards for onboard living conditions. Governments and international maritime organizations should implement guidelines that prioritize the mental and physical health of seafarers. The analysis may prompt a shift in training and education programs for maritime professionals. We should integrate advanced technologies for real-time monitoring of crew well-being as a proactive measure.

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