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## Determinants of Job Satisfaction and Job Performance: Bases for Management Model on Seafarers

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### Abstract

**Aim:** This study aimed at determining the level of job satisfaction and job performance of seafarers, as well as the factors that could predict job satisfaction and job performance.

**Methodology:** The subjects of the study were the active seafarers randomly chosen from different manning companies in Metro Manila. The data-gathering instrument was an adapted questionnaire on job satisfaction and job performance with given indicators and subjected to reliability analysis and factor loading. Frequency count, mean, standard deviation, and multiple regression analysis set at .05 level of significance were used as descriptive and inferential statistics.

**Results:** Results of the study showed that the seafarers were "highly satisfied" and had "very satisfactory" performance. No significant predictors came out for seafarer's job performance while job stress, rewards, dispositional affect, and job characteristics came out significant predictors of job satisfaction.

**Conclusion:** The level of the seafarers' job performance was "very satisfactory". This seems to show that seafarers must be given emphasis by the management by way of more trainings in their assigned jobs for it is apparent that chances are open for them to have "outstanding" performance. The seafarer's level of satisfaction in all areas: rewards, stress, dispositional affect, and job characteristics seems to be given more emphasis since seafarers were only "highly satisfied". Further, there is still room for improvement for them to achieve a "very high" job satisfaction. The significant relationship between job satisfaction and job performance seems to indicate that these constructs influence or associate with each other, such that when satisfaction goes higher, performance is also enhanced or vice versa. Not one of job stress, working environment, work load, and salary could significantly predict job performance. This seems to indicate that stress, working environment, work load, and salary do not greatly influence job performance. Reward, dispositional affect, stress, and job characteristics came out as significant predictions of job satisfaction. This seems to show that these indicators are associated with or greatly influence job satisfaction.

**Keywords:** Determinants, Job Satisfaction, Job Performance

### INTRODUCTION

The shortage of skilled seafarers, in particular officers and engineers, has been a growing concern for the shipping industry (McLaughlin, 2015). With more than 90% of world trade volumes transported by sea (International Chamber of Shipping, 2015), this problem is a global challenge to overcome. According to scenario estimates by Baltic International Maritime Council and International Shipping Federation (2015), a global shortfall of approximately 92,000 seafaring officers is expected by the year 2020. This alarming finding has initiated a series of international campaigns such as "Go to Sea" and "Day of the Seafarer" which encourage governments to promote seafaring and address issues related to the work and living conditions on-board ships (International Maritime Organization, 2008, 2017). In line with these campaigns, recent literature has proposed strategies for firms to attract seafarers. For instance, Thai, et al. (2013) proposed several branding strategies to position a shipping firm as the employer of choice in the seafaring market.

Some of the proposed strategies include improving the image of the shipping industry, and the use of attractive rewards in the form of high salaries and more employment benefits. These strategies have also been



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tested and proposed in studies related to other industries or professions (Muñoz & Sanchez, 2023; Regala, 2023; Salendab, 2021; Sanchez, 2022). In addition to attracting seafarers, Fei and Lu (2015) argued that it is more important for shipping firms to retain their in-service seafarers. It was estimated that the annual turn-over rate is between 25% and 35% in some shipping sectors such as cruise shipping (Bhattacharya, 2015). In general, attrition of seafarers is high, by virtue of reasons such as boredom at sea, single-task work environment, emotional and work-related stresses, and lack of family time (Singh, 2017; Thai & Latta, 2010). This is exacerbated by changes in the socio-economic landscape where the younger generation favors shore-based jobs due to greater freedom and increasingly comparable salaries (Kantharia, 2017; Sulpice, 2011). According to a survey conducted by Ruggunan and Kanengoni (2017), approximately 55% of junior cadets do not intend to pursue a career at sea for more than 10 years, which further emphasizes the importance of retaining in-service seafarers. From the shipping firms' perspective, the ability to retain seafarers offers numerous organizational benefits.

First, due to the shortage and rarity of qualified seafarers in the market, retaining seafarers can contribute to the competitive advantage of shipping firms. By possessing a competent and motivated pool of seafarers, the cost advantage of a shipping firm can be strengthened from improved productivity, and reduced absenteeism and attrition (Nguyen, et al., 2014). Next, the ability to retain seafarers shall also render the accumulation of valuable knowledge and experience within the organization as also applied in other organizations or institutions (Salendab & Dapitan, 2021; Sanchez, et al., 2022). This valuable knowledge pool which is acquired through learning can be subsequently transferred to new seafarers and to the management of shipping activities ashore. In recent years, much research has been conducted with the focus of formulating strategies to retain seafarers (Caesar, et al., 2015; Papachristou, et al., 2015; Pauksztat, 2017). The general conclusion from these researches highlights the importance of job satisfaction (or motivation), which plays a key role in retaining seafarers. However, very little is known with regards to the factors influencing job satisfaction (Salendab, 2021). There is presently a dearth of studies that adopt a theoretical lens to analyzing the determinants of job satisfaction or dissatisfaction of seafarers. Furthermore, very few studies have investigated the relationship between job satisfaction and performance of seafarers. The performance of seafarers is measured by productivity and quality (i.e. making fewer mistakes). Performance improvements in seafarers have the potential of enhancing ships' turn-around time, meeting the efficiency demands of shipowners, and safety performance of ship operations (Fenstad, et al., 2016). This could potentially translate to sizeable cost-savings and service improvements for a shipping company.

This study is anchored on Equity theory. According to Adams and Freedman (1976), equity theory refers to balancing or calibrating the inputs and outputs of an employee. The inputs are a composite of time, effort, ability, and loyalty which an employee commits to his work (Regala, 2022; Sanchez, 2023). In exchange, the employee receives intrinsic and extrinsic rewards in many forms such as pay, bonuses, benefits, security, and enjoyment, the obvious attractions and benefits such as high wages and opportunities to sail all over the world (Fei & Lu, 2015).

This study is also supported by Herzberg's two-factor theory which comprises hygiene factors and motivational factors. Hygiene factors include salary, interpersonal relations with superior subordinates and peers, organizational policy and administrations, supervision, status, job security, working conditions and personal life; motivation factors include achievement, recognition for achievement advancement, responsibility in the work itself, and possibility of growth (Herzberg, 1968; Dizon & Sanchez, 2020). This theory suggests that the presence of motivation factors can potentially create great motivation and greater job satisfaction while in the absence of motivators, dissatisfaction often occurs; also, the absence of hygiene factors will create great dissatisfaction but the presence of hygiene factors does not provoke high levels of job satisfaction.

This research aimed at finding out how a group of Filipino seafarers experienced their work on international vessels and what effect this work could have on their lives. It is centered on the influence of the indicators of job satisfaction and the indicators of job performance.

An interest in the global and constantly changing labor market is what made the researcher choose the topic since the seafaring profession differs from other types of employment.

It is of interest to the researcher to determine that job stress, rewards, job characteristics, and dispositional affect could predict job satisfaction. Likewise, stress, working environment, work load, and salary would also predict job performance. The researcher believes that it would be interesting; hence, this study.

### Objective

This descriptive-correlational study aimed at determining the seafarers' level of job satisfaction and job performance. It would also find out how job satisfaction is associated with job performance. Further, it would determine which indicators could predict job satisfaction and job performance.



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Specifically, this study sought answers to the following questions:

1. What is the level of the seafarers' job satisfaction?
2. What is the level of the seafarers' job performance?
3. Which of the following indicators: reward, stress, job characteristics, and dispositional affect, could predict job satisfaction?
4. Which of the following indicators: stress, working environment, work load, and salary could predict job performance?
5. What management model can be drawn based on the result of the study?

### Hypothesis

1. Not one among stress, working environment, workload, and salary could predict job performance.
2. Not one among reward, stress, job characteristics, and dispositional affect could predict job satisfaction.

### METHODS

#### Research Design

In this study, the descriptive-correlational method of research was employed since data were collected to answer questions concerning the status of the seafarers' job performance and job satisfaction predictors.

#### Participants

The participants in this research were active seafarers chosen through simple random sampling. They were active seafarers in different shipping companies in Metro Manila. A total of 182 respondents were randomly chosen by the researcher from different manning companies.

#### Procedure

The questionnaire was personally administered by the researcher among the participating respondents. Oral instructions were given to make sure that the respondents understood well what they should do so that the questionnaires should be accomplished properly, and no items would be left unanswered.

#### Ethical Consideration

The ethical considerations of the research are based on the provision set in the Research and Extension Manual of the University.

#### Treatment of Data

The data gathered from the respondents were tallied, classified, tabulated, and subjected to appropriate statistical analysis through the Statistical Package for the Social Sciences (SPSS) software.

### RESULTS and DISCUSSION

The results of this study determined the relationship between job performance and job satisfaction among seafarers as bases for a management model.

#### *Level of Job Satisfaction of the Seafarers*

Generally, the job performance of the seafarers ( $M=3.60$ ,  $SD=.733$ ) was "very satisfactory", while their job satisfaction, was "highly satisfied" ( $M=4.35$ ,  $SD=.57$ ) with their job.

Table 1 shows the data.



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Table 1

*Means of the Level of Job Satisfaction and Performance of the Seafarers*

Variable	Mean	Description	SD
Job Satisfaction	4.35	Highly Satisfied	.57
Job Performance	3.60	Very Satisfactory	.733

(A) Job Satisfaction

Scale	Description
4.20 - 5.00	Very Highly Satisfied
3.40 - 4.19	Highly Satisfied
2.60 - 3.39	Satisfied
1.80 - 2.59	Fairly Satisfied
1.00 - 1.79	Not Satisfied

(B) Job Performance

Scale	Description
4.20 - 5.00	Outstanding
3.40 - 4.19	Very Satisfactory
2.60 - 3.39	Satisfactory
1.80 - 2.59	Moderately Satisfactory
1.00 - 1.79	Not Satisfactory

*Predictors of the Seafarers' Job Performance*

The result showed that not one among job stress, work environment, work load, and salary came out as significant predictors of seafarers' over-all job performance.

*Predictors of the Seafarers' Job Satisfaction*

The result showed that of the five indicators of job satisfaction, reward and dispositional affect came out significant predictors of job satisfaction. Dispositional affect as a predictor has an  $R = .194$  and an  $R^2$  change of .194 which indicated that 19.4% of the variation in the seafarers' job satisfaction could be attributed to dispositional affect. Rewards as a predictor obtained an  $R = .247$ ,  $R^2$  change of .053, which means that 5.3% of the variance on job satisfaction is attributed to rewards.

This result is consistent with Yuen, et al., (2018) that the amount of benefits or rewards is highly correlated with job satisfaction.

Stress as a predictor obtained an  $R^2 = .266$ , an  $R^2$  change of 0.19%, which means that 1.9% of the variance in job satisfaction is attributed to stress. And job characteristics as a predictor obtained an  $R^2 = .284$ ,  $R^2$  change of .018, which showed that 1.8% of the variance in job satisfaction is accounted for job characteristics alone.

Table 2 shows the data.

Table 2

Summary of Simple Regression Analysis for Predictors of Job Satisfaction

Variable	Model 1					Model 2					Model 3					Model 4				
	B	SE B	$\beta$	t	sig	B	SE B	$\beta$	t	sig	B	SE B	$\beta$	t	sig	B	SE B	$\beta$	t	sig
Dispositional Affect	.507	.077	.441	6.59	.000**	.438	.077	.381	5.67	.000	.480	.079	.417	6.09	.000	.445	.080	.387	5.57	.000
Reward						.234	.066	.237	3.53	.001**	.268	.067	.272	3.98	.000	.216	.071	.219	3.05	.003



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Stress											
Job Character											
R <sup>2</sup>	.194	.247			.266			.284			
Change in R <sup>2</sup>	.194	.053			.019			.018			

**Based on the results, a model was proposed:**

*Management Model*

One of the most significant duties of ship management companies is to frame a model to develop and recommend priorities concerning policies, strategies, and techniques on how to care for and give financial, and moral support to their seafarers in order to inspire them to perform better and be satisfied with their work so that the goals and objectives of the organization could easily be attained when all the employees are competent enough and skilled in the job.

<b>Job Design and Feedback</b>	
* Enable/Give authority for seafarers to perform task simultaneously without compromising safety	
* Set goals which are objective, realistic, and achievable	
* Invite constructive feedback on job performance	

<b>Training and Recruitment</b>	
* Provide training to enhance proper physical and emotional condition	
* Under-performing seafarers must be given top priority and attention	
* Compatibility of seafarers and the job or tasks that they perform at work	

<b>Salaries, Work Performance Evaluation, and Professional/Career Development</b>	
* Compensate performance through certificates and rewards	
* Share/Exchange information career development and promotion plan	

<b>Supportive Environment</b>	
* Enhance and develop supportive culture	
* Team building exercises, camaraderie must be cultivated and organize	
* Working and living conditions must be given attention and improved	

Improving working and living conditions will help seafarers reduce and cope with stress. Since seafarers are away from home, separated from families, friends, and loved ones whom they support during difficult times in life for long periods, the company should develop responsive organizational culture for seafarers to boost their morale and to improve their working spirit both ashore and on board ships.

To develop mutual trust and friendship among seafarers who spend a lot of time together, organizing a mentoring program led by an experienced fellow member to guide, supervise, and evaluate the concerns and needs of a younger or junior seafarers should be brought to the attention of the management ashore for immediate action. Since seafarers are away from home, support must also be given to their family members. Communication services such as internet access should be provided to improve their communications.

Since seafarers are of different nationalities, camaraderie should be developed by minimizing personal changes and organizing team building exercises and training. This would enhance seafarers' human relations. Since ships today are managed by different nationalities, stress created by cultural differences cannot be avoided. Stress management can, however, be improved by training and education particularly in conflict management skills and cultural tolerance among the crew. Management should also be flexible in tailoring fair and reasonable benefit packages for seafarers. Working and living conditions must be given due attention and importance by the



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management to ensure the physical and psychological health of seafarers. Flexibility schemes should be introduced to shorter working hours and lengthen the duration of short leaves to suit the seafarers' needs.

Companies should recognize the hidden costs involved in working on board a ship. These costs - emotional, communication, and opportunity - specifically of the spouse should be compensated. Moreover, there must be equity in the amount of compensation the seafarers receive. This can be given by tying rewards to their performance. An appraisal system done by superiors, subordinates, and co-workers can be utilized as an objective basis to evaluate the seafarers' performance at work. Furthermore, a career development and promotion plan should be explained and communicated to the seafarers to drive seafarers' engagement through increased job security. The plan should also incorporate the transition of their seafaring career to a related shore-based post within the same company since their skills, expertise, and experience at sea could be useful to the management of shipping activities ashore.

The company should likewise involve seafarers in trainings to help them develop self-awareness and self-evaluation.

It is true that in any company there are under-performing employees (Sanchez & Sarmiento, 2022). Support and attention can be given to existing seafarers who are not performing well or those who exhibit negative attitudes.

For future recruitment of seafarers, the Human Resource department should consider a person's job fit as part of selection criteria.

While many of the core activities on board ships are fixed by designations or controlled by regulations and safety management, systems managers may still give seafarers the authority to perform tasks that are carried out simultaneously and that will not harm or destroy the safety and operations of the ship. Managers or ship captains may also engage seafarers by setting personal achievable goals and providing regular feedback on the job performance of their employees.

## Conclusion

In view of the research findings, the following conclusions were drawn:

1. The level of the seafarers' job performance was "very satisfactory". This seems to show that seafarers must be given emphasis by the management by way of more trainings in their assigned jobs for it is apparent that chances are open for them to have "outstanding" performance.
2. Furthermore, the management would give more attention to their job by way of giving them higher salaries, better working conditions and environment, regular working loads, and less stress with their work.
3. The seafarer's level of satisfaction in all areas: rewards, stress, dispositional affect, and job characteristics seems to be given more emphasis since seafarers were only "highly satisfied". Further, there is still room for improvement for them to achieve a "very high" job satisfaction. Most probably, adjustments must be made on the different challenges they encounter in their job.
4. The significant relationship between job satisfaction and job performance seems to indicate that these constructs influence or associate with each other, such that when satisfaction goes higher, performance is also enhanced or vice versa.
5. Not one of job stress, working environment, work load, and salary could significantly predict job performance. This seems to indicate that stress, working environment, work load, and salary do not greatly influence job performance.
6. Reward, dispositional affect, stress, and job characteristics came out as significant predictions of job satisfaction. This seems to show that these indicators are associated with or greatly influence job satisfaction.

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