



# A STUDY ON THE JOB SATISFACTION AND JOB BURN OUT OF INDIAN MARINE ENGINEERS

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## ABSTRACT

*The study attempts to explore the Job satisfaction and Job burnout of marine engineers of Indian Origin who sail on the Foreign and Indian going vessels. The study further examines the factors that are influencing the seafarers' Job satisfaction and its impact on the Job burnout while accomplishing the allocated tasks on board the ships. The factors of Job satisfaction such as job nature, job benefits, managerial factors, social factors and facilities at work place factors, are explored in detail and its impact on the Job burnout of the seafarers are studied. The Job burnout has been documented as one of the most important workplace health hazards for employees in developed and developing countries. The Job satisfaction and Job burnout are considered as the predominant attributes with regard to the seafaring profession. Job burnout refers to any environmental, social, or internal demand which requires the individual to readjust his/her usual behavior patterns. Job Satisfaction rarely has a single source point, rather Job burnout has been found to have many different sources. Job satisfaction may be caused by acute or chronic physical factors, or by psychological factors or by social stressors and also based on the combination of the factors. The preponderance of factors tends to be those associated with psychological and social issues that are related to both personal and work lives. The study has analysed the work related job satisfaction and job burn out of seafarers by testing the research hypotheses.*

**Key words:** Vessel, Ship, Job Satisfaction, Job Burn Out, Stressors, Reward, Employee Engagement.

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## 1. INTRODUCTION

Job Satisfaction of employees plays a crucial factor in determining job performance. Highly performing individuals will be able to assist organization to achieve its strategic aims thus sustaining the organization competitive advantage (Dessler, 2010). Therefore, human resource managers in the apparel sector attempt to hire and retain satisfied employees. The managers are aware of the role of job satisfaction for the improvement of job performance of the organization. Previous studies (Hamdan 2011; Organ, 1977; Petty, et al.1984) had revealed strong linkage between job satisfaction and job performance. Further, these studies have been established that satisfied employees show higher performance than others. Consequently, employees' satisfaction leads to delivering better products for their customers which contributes to achieving customers' loyalty, and having a loyal base of satisfied customers within such a competitive environment, increases revenues, decreases costs and builds market share.

Seafaring is a particular profession, in which workers are usually exposed to several factors which affect job satisfaction and causing job burnout that are related to the different duties on board ship. Ship is not only the work places but also it is home for them. So it is very important for the safety of the ship, safety of the cargo, safety of the environment and most important is safety of the staff on board the ship. Seafarer must keep the ship always in seaworthy condition. This paper has reviewed the factors that affecting Indian seafarers' job satisfaction and job burnout, with the purpose of identifying specific job satisfactory factors related to a particular duty on board.

Seafaring is associated with mental, psychosocial, and physical burn out. The most important factors are separation from family, not reachable home immediately even for any emergency situation at home, loneliness on board, fatigue, multi-nationality, Working environment, lack of co-operations and support from management, increased maritime rules and regulation, reduced man power on board ship, limited benefits, limited recreation activity, do not have proper/ clear communication facilities to communicate with family like which is available in shore & very expenses and sleep deprivation. The AMSA report gave a more detailed analysis on lifestyle and relevant factors inducing psychological distress. Job burnout affecting seafarers working in the engine room are different from those involving the deck crew. Sleep quality and duration are reported to be poor mainly approaching to port, depart from port, river passages, cargo loading & discharging and during bad weather conditions. Seafarer profession is such that they have to get the job done even during cyclone, bad weather and heavy sea with only those limited people available onboard. In some ships like VLCC and ULCC tanker ship staffs rarely get chance to go shore because most of the time it's operation are carried out at SBM (outside the port), In Some time the seafarers are not possible to reach home even for their parents/family members' death because of delay in ship arrival to Port, due to Port location and rules of those particular Ports. Which is also causes for job burnout. After marriage of the ship's staff while joining back to the ship they go through a heavy pain every time due to separation from family. At all the time they cannot carry their family on board the ship due to various reasons which may be due to management procedures and family situation.

Seafarer working area particularly the engine staffs has to carry out their jobs/duty in where heavy noise, heat, lot of machineries and various oil tanks are located. Since ship is trading different zone of the world the atmospheric temperature also changes and they should be prepared accordingly to survival on board. The seafarer rest hours keep varying due to ships schedule like Arrival to Port, Departure from the Port, Loading, Unloading/discharge, River passage and during pilotages. The seafarers should keep the ship ready to comply with

various rules and regulation like PSC, USCG, Flag State, Vetting inspections, internal & external auditing, various surveys etc.

According to Arnold et al. (1998) the concept of job satisfaction has gained importance for two reasons. Firstly, job satisfaction can be an indicator for someone's general mental well-being. If a person is unhappy at work, it does not seem likely that this person will be happy in general. Secondly, job satisfaction will improve happiness at work and consequently, will improve work motivation and job performance. Achieving a high level of employee performance is considered the common goal for many organizations. Employee's satisfaction could enhance to the success of an organization since employees who exhibit a higher level of satisfaction tend to put more effort in their jobs that may then lead to better job performance.

Hence, for an organization to achieve a higher level of performance, a satisfying working condition and environment is a must. Job satisfaction can be considered as the attitude and feeling employees have towards their job. The feelings and attitudes are divided into two categories which are the positive and negative attitudes (Armstrong, 2006). Pleasant feelings and positive attitudes tend to show that employees are satisfied while negative and unpleasant feelings exhibit dissatisfaction of employees. Briefly, job satisfaction refers to how employees feel about the job and to which extent the value of the job is consistent to the employees' needs.

Based on availability of existing literature, emphasis is given to relationship between job satisfaction, job performance and burnout among the people in the Indian seafarers.

The purpose of the present paper is to reexamine the state of the literature concerning the relationship between job satisfaction, job performance and job burnout among Indian seafarers while working on board the ship.

## **2. LITERATURE REVIEW**

Job satisfaction is described as the feelings of employees resulting from the assessment of their job. It can be negative, positive, or moderate. Edwards, et al. (2008, p 442) refers to job satisfaction as "an evaluative judgment about the degree of pleasure an employee derives from his or her job that consists of both the affective and cognitive components". Aamodt, (2009) defines job satisfaction as "the attitude an employee has toward his job." Moser and Galais (2007) highlighted that employee's ability and opportunities aid to improve their satisfaction of the job level.

Herzberg, et al. (1959) formulated the two-factor theory of job satisfaction and postulated that satisfaction and dissatisfaction were two separate, and sometimes even unrelated phenomena. Intrinsic factors named 'motivators'(that is, factors intrinsic to the nature and experience of doing work) were found to be job 'satisfiers' and included achievement, recognition, work itself and responsibility. Extrinsic factors which they named 'hygiene' factors were found to be job 'dissatisfiers' and included company policy, administration, supervision, salary, interpersonal relations and working conditions. Herzberg and Mausner's Motivation-Hygiene theory has dominated the study of the nature of job satisfaction, and formed a basis for the development of job satisfaction assessment.

Job satisfaction indicates how much an employee loves his work and the level of his anxiety with work. Job satisfaction is a sense of comfort and encouraging experience that an employee has related to his job. Job satisfaction and job burnout can affect work out put, and that will also affect the organizational goal. For a long time job satisfaction has been viewed

as a unique concept, but today it is seen as a very complex cluster of attitudes towards different aspects of the work (Rollinson et al., 1998).

In explaining job satisfaction, there are three different approaches have been developed. The first approach turns its attention to the characteristics of the job and it is called the "information processing model" (Hackman and Oldham, 1976). According to this model employees gather information about the job, the workplace and the organization and cognitively assess these elements in order to determine the level of satisfaction (Jex, 2002). The second approach suggests that the measurement of the level of job satisfaction is founded on social information which is based on past behaviour and what others at work think. It shifts its attention to the effects of the context and the consequences of past behaviour, rather than to individual pre-dispositions and rational decision-making processes (Pennings, 1986). Therefore job satisfaction is depends on how others at work evaluate the workplace. This approach is called the social information processing model (Salancik and Pfeffer, 1978). The third approach indicates that job satisfaction relies on the characteristics or the dispositions of the employee. These dispositions can be based on experience or genetic heritage or on both (Jex 2002). In summary, job satisfaction can be seen as a function of the features of the job, the view of others and the employees' personality.

Job satisfaction is central to the work lives of employees and to the effective use of personnel within organisations (Foster 2000, Koeske et al 1994). When satisfied at work, employees are likely to be more stable, productive and accomplished towards organisational goals. On the contrary, literature conclude that dissatisfaction and negative interactions between individuals and their environments may contribute to lower job performance, more turnover or intention to quit (Koeske and Koeske 2000).

Job burnout is inevitable in today's complex life since right from the time of birth till death an individual is invariably exposed to various stressful situations. The threat of political and economic imbalances and uncertainties, unemployment, poverty, urbanisation and increased socio-economic complexities and innumerable other factors contribute to Stress (Aziz, 2004). Job burnout is an important psychological concept that can affect health, well-being and job performance in negative dimensions, (Mojoyinola, 1984; and Olaleye, 2002). Job burnout according to Arnold et al (1995), is a word derived from Latin word "Stingere" meaning to draw tight. It is regarded as a force that pushes a physical or psychological factor beyond its range of stability, producing a strain within the individual. Job burnout is the process by which environmental events (stressors or challenges) threaten us, how these threats are interpreted, and how they make us feel (Baum et al, 1997).

Lazarus (1966), conceived stress to be a threat of anticipation of future harm, either physical or psychological events that lower an individual self-esteem. It is an affective behaviour and physical response to aversive stimuli in the environment. Stress may be acute or chronic in nature. It exists in different forms. It may be psychological, emotional, social, and occupational or job related. Stress experienced by workers at work is called job stress. It may be due to a number of factors such as poor working condition, excessive work load, shift work, long hours of work, role ambiguity, role conflicts, poor relationships, with the boss, colleagues or subordinate officers, risk and danger, to mention a few. Certain responses indicate the presence of job stress in an individual, or group. It may manifest by the presence of headache, sleep disturbances, difficulty in concentration, short temper, upset stomach, job dissatisfaction and low morale.

### 3. RESEARCH OBJECTIVES

The objectives of the study are as follows:

- To study the factors influencing the job satisfaction of seafarers who work on the ships of Indian and Foreign Going ships.
- To investigate the job burnout factors of Indian seafarers and the influence of Job dissatisfaction on Job burnout.

### 4. HYPOTHESES

In order to achieve the objectives, this article is organized around the following working hypotheses:

- H<sub>1</sub>: There is a significant difference in the mean values of Job satisfaction factors of seafarers.
- H<sub>2</sub>: There is a significant difference in the mean values of the factors of seafarer's Job burnout.

### 5. METHODOLOGY

The target population was considered as seafarers of Indian origin who are working at various levels/job categories on the engine side of foreign going and Indian going merchant vessels. The total sample size considered for the study was 150.

The study consists of two parts. In the first part of the study, the Job satisfaction factors of the seafarers are measured on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaire designed for the evaluation of subjective perception of work and the individual feeling of job satisfaction.

In the second part of the study, the survey elicited the Job burnout details of crew members on board. To assess the job burnout due to long continuous working days, the occurrence of extremely long working times was registered. To assess the job burnout factors, the seafarers are asked to mark based on a scale from 1 (strongly disagree) to 5 (strongly agree), the individual relevance of each factor was factorized by using factor analysis.

The questionnaire which included both the parts of the study was administered to 300 seafarer respondents and the completed responses were obtained from 175 respondents, of which 150 respondents were considered for further study after scrutiny.

### 6. DEMOGRAPHIC DATA ANALYSIS

The study pertains to the management of seafarer's Job satisfaction and Job burnout 39% of the respondents fall under the age category of 30-40 years. 32% of the respondents have acquired the educational qualifications equivalent to graduation and 41% of them have the seagoing experience of 5-10 years. Equal percentages of seafarers who work on the engine side are considered as the respondents of the present study about the job satisfaction and job burnout. 55% of the seafarers have received training on mitigating the fatigue at work as specified in Table-1.

**Table 1** Demographic Factors (n=150)

Demographic Factors	Frequency	Percentage
<u>Age</u>		
Below 30	28	19
30-40	59	39
40-50	38	25
50-60	18	12
Above 60	7	5
<u>Education</u>		
Schooling	35	23
Diploma	48	32
Graduation	44	29
Post-graduation	11	7
Others	12	8
<u>Sea experience</u>		
Below 5 yrs	19	13
5-10 yrs	62	41
10-15 yrs	39	26
15-20 yrs	21	14
Above 20 yrs	9	6
<u>Rank held by Seafarers</u>		
Chief engineer	32	21
2nd engineer	35	23
3rd engineer	32	21
4th engineer	30	20
Other ranks	21	14
<u>Training of Seafarers in Fatigue</u>		
<u>Management</u>		
Yes	82	55
No	68	45

## 7. MEASURE OF SEAFARERS' JOB SATISFACTION & JOB BURNOUT

In the first part of the study, it is evident from Table-1 that the cronbach's alpha values are reasonably high and hence it can be concluded that the scales are consistent and reliable.

**Table 1** Cronbach's Alpha Values

Factors	Cronbach's Alpha
Job Nature	0.72
Job Benefits	0.71
Managerial Factors	0.78
Social Factors	0.71
Facilities	0.73
Work Environment	0.82
Conflict	0.81
Mental strain of accomplishing the set-task	0.77
Lack of rewards for accomplishment	0.81
Lack of self-confidence to work	0.68
Feeling of threat	0.78
Physical oppressiveness	0.71
Unpleasant work conditions	0.73
Lack of support	0.72
Sense of responsibility	0.88

The result of the Questionnaire survey regarding the job satisfaction and job burnout of the seafarers shows that the p-values of the factors are less than 0.05 (Refer Table-2). This clearly indicates that the engine-side seafarers have a sort of mental strain while accomplishing their tasks and they are also incurred to the high levels of physical oppressiveness. In addition, the seafarers have strong feeling towards the factors such as lack of rewards for accomplishment, lack of self-confidence to work, feeling of threat, unpleasant working conditions and the lack of support from their peers or superiors. The job burnout level on ships travelling worldwide was considered higher due to the separation from their family. This is probably caused by the long distance from home as well as by missing social contacts due to the fact that these ships only stop a few times in ports.

In spite of the levels of Job burnout incurred by the seafarers on-board, the seafarers with long period of service at sea subjectively estimated their work as less burdening and stressing as compared to the new entrants. The seafarers were aware of their own abilities of meeting job requirements, the seafarers work experience at sea reduced uncertainty while solving problems, the seafarers were aware of the safety and health related rules of work on vessels, the seafarers had gained and consolidated theoretical and practical knowledge and skills of coping with difficult situations.

<b>Table 2</b> Significance of mean values of job satisfaction and job burnout factors examined by Student's t-test (significance level = 0.05)		
<b>Job satisfaction &amp; job burnout factors</b>	<b>t</b>	<b>P</b>
Job Nature	2.04	0.015
Job Benefits	2.05	0.012
Managerial Factors	2.02	0.019
Social Factors	1.94	0.009
Facilities	1.98	0.019
Work Environment	2.02	0.022
Conflict	2.04	0.016
Mental strain of accomplishing the set-task	2.06	0.014
Lack of rewards for accomplishment	2.02	0.023
Lack of self-confidence to work	1.91	0.009
Feeling of threat	1.95	0.003
Physical oppressiveness	2.00	0.012
Unpleasant work conditions	2.01	0.036
Lack of support	2.03	0.024
Sense of responsibility	2.06	0.013

## 8. FACTOR ANALYSIS

Table-3 shows the factor loadings of principle component analysis through varimax rotation. The factors are grouped as Job Nature, Job Benefits, Social Factors, Managerial Factors, Job Burnout Factors.

<b>Table 3</b> Factor Analysis of the Stressors (Varimax Rotation)	
<b>Factor-1: Job Nature</b>	
Job Security	0.91
Nature of Work	0.93
Work Load	0.82
Challenging Job	0.84
Peer Assistance	0.71
Job Rotation	0.73
<b>Factor-2: Job Benefits</b>	
Salary	0.88
Reward as per achievement	0.84
Promotion	0.79

Sense of achievement	0.75
Factor-3: Social Factors	
Separation from the family	0.81
Long stay on board	0.74
Conflicts between crew members	0.72
Isolation	0.78
Factor-4: Managerial Factors	
Time pressure, hectic activities	0.89
High volume of work	0.86
High responsibility for the own activities	0.78
Pressure due to decision-making	0.72
Monotony	0.79
Lack of independence	0.69
Factor-5: Job Burnout Factors	
Facilities	0.82
Work Environment	0.77
Conflict	0.71
Mental strain of accomplishing the set-task	0.75
Lack of rewards for accomplishment	0.76
Lack of self-confidence to work	0.61
Feeling of threat	0.72
Physical oppressiveness	0.73
Unpleasant work conditions	0.76
Lack of support	0.70
Sense of responsibility	0.75

The scales of the factors such as Job Nature, Job Benefits, Social Factors, Managerial Factors, and Job Burnout Factors have good internal consistency & reliability with the Cronbach's Alpha values of 0.91, 0.83, 0.79, 0.72 and 0.89 respectively.

Factors	F-ratio	p-value
Job Nature	3.021	0.018
Job Benefits	3.014	0.026
Social Factors	2.129	0.015
Managerial Factors	3.189	0.001
Job Burnout Factors	3.136	0.024

One way ANOVA was conducted on the factors of job satisfaction and job burnout. The comprehensive results of one way ANOVA are given in Table 4. It is evident that the p-values for all the factors are less than 0.05.

The Job nature such as Job Security, Nature of Work, Work Load, Challenging Job, Peer Assistance, Job Rotation during the voyage are considered as the most vital factors in influencing the seafarers job satisfaction when they are on-board.

The Job benefits such as Salary, Reward as per achievement, Promotion, Sense of achievement would actually put the seafarers in great job satisfaction.

The Social Factors such as Separation from the family, Long stay on board, Conflicts between crew members, Isolation will enable the seafarers to completely delink from the social life.

The Managerial factors such as Time pressure, hectic activities, High volume of work, High responsibility for the own activities, Pressure due to decision-making, Monotony, Lack of independence are considered as the most important factors of job dissatisfaction.

The Job Burnout factors such as Facilities, Work Environment, Conflict, Mental strain of accomplishing the set-task, Lack of rewards for accomplishment, Lack of self-confidence to work, Feeling of threat, Physical oppressiveness, Unpleasant work conditions, Lack of support, Sense of responsibility will affect the morale of the seafarers and will result in Job burnout.

## 9. CONCLUSIONS

This research study reveals that the long working days, heat in work places, separation from their family, time pressure, hectic activities and job burnout factors are the most important factors for the seafaring profession. The seafarers with higher job dissatisfaction and job burnout due to heat in shipboard operations had shorter job duration at sea. The job burnout factors show that the physical stressors on ships currently are still very important in spite of the increasing mechanization in seafaring. In the study, the separation from the family is regarded as a further important factor on ships. The shipboard job dissatisfaction factors will lead to job burnout especially the engine department personnel, permanently being close to the heat-producing & noise producing engine room, stated a higher burnout level due to heat in their workplaces. The engine side personnel stated a higher stress level due to time pressure and hectic activities on board. This can be attributed to their frequently extremely long working days due to unexpected situations. Extremely high number of working hours over a lengthier period of time combined with a lack of sleep can elicit chronic fatigue, health problems and safety risks on the vessels.

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