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# THE INFLUENCE OF MARITIME ENGINEERING AND TRAINING ON MARINE ENGINEERS: EVIDENCE FROM INDIAN MARITIME INDUSTRY

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## ABSTRACT

*Indian marine engineers are famous for work universally because of their insight, aptitude and dependability. This laudable status has been accomplished essentially because of the deliberate preparing bestowed to marine building cadets. Be that as it may, during a period of propelling innovation, marine designing, preparing needs to stay dynamic to guzzle most recent innovation and in addition to meet the requests of the delivery industry. New subjects of studies must be incorporated into the educational modules in an opportune way mulling over the industry requirements and best practices in transportation. Specialized capability of marine engineers likewise must be subjected to changes contingent on the requirements of the consistently developing and over controlled transporting industry. Additionally, certain delicate aptitudes are to be created and enhanced among the marine engineers keeping in mind the end goal to change or revise the identity attributes prompting their profession, achievement Indian marine engineers can be in still more noteworthy interest for work in the worldwide sea field in India. To upgrade the employability of our marine engineers by enhancing their quality in India, the accompanying paper will give direction.*

**Keywords:** Maritime, Engineering, Training, Marine, competences, Technology

**Cite this Article:** Dr.D. Rajasekar and Prof. Bhoopathy Bhaskaran, The Influence of Maritime Engineering and Training on Marine Engineers: Evidence from Indian Maritime Industry, International Journal of Mechanical Engineering and Technology, 9(8), 2018, pp. 167–171.

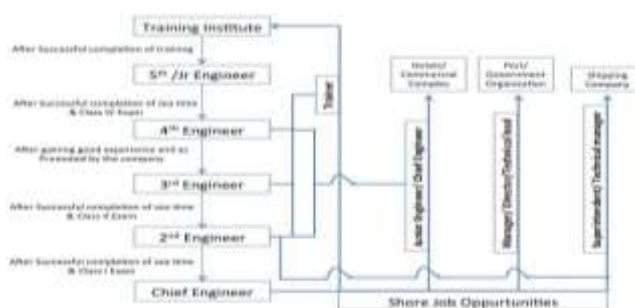
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## 1. INTRODUCTION

Marine Engineering is the branch of concentrate that arrangements with the plan, advancement, creation and maintenance of the equipment utilized adrift and on board ocean vessels like water crafts, ships and so forth A marine specialist is an expert who is in charge of the operation, maintenance and repair of all major mechanical and designed equipment on board a ship. There are numerous mechanical frameworks that assistance in the operations of any vessel like the drive mechanics, power and power age framework, grease, fuel frameworks, water refining, lighting and ventilating framework and so on. These are altogether incorporated into the specialized obligations of a marine architect. Standards and controls of the training and ability of marine engineers have been depicted in this part. An unequivocal requirement for expressing the criteria or basic characteristics of a marine specialist has been felt and has been given under the accompanying sub headings.

The increase in the employment opportunities in this field has added to the lure of a job as a marine engineer.



(Source: Mohit (2016) Marine Career)

## 2. OBJECTIVES OF THE STUDY

The main objective of this paper is to study about the training of maritime engineers, the impact of enhance the quality standards of Indian Marine Engineers. Further to study the impact of training and engineering at management level.

## 3. REVIEW OF LITERATURE

Salas et.al's (2012) motivation behind the proposition is to see if training and appraisal in the sea industry influence security execution at the sharp end. The strategy will be a writing survey on the viability of group training. Billions of dollars are spent on training and appraisal every year Most research on group training, assessment have been led in the military and in flight .

Fonne, Fredriksen et.al (2011) substantiates that there is a lack of research on the adequacy of training on wellbeing in the sea industry. In any case, there are numerous examinations on the adequacy of CRM training in flying and social insurance. They specify that "the research on training obviously indicates two things: (a) training works, and b) the way training is outlined, conveyed, and executed, matters".

## 4. HYPOTHESIS

**H<sub>01</sub>:** There is no significant difference between ages with respect to perception about innovative training.

**H<sub>02</sub>:** There is no significant difference between ages with respect to perception about time management.

**H<sub>03</sub>:** There is no significant difference between ages with respect to perception about leadership trait

**H<sub>04</sub>:** There is no significant difference between ages with respect to perception about professional competences.

**H<sub>05</sub>:** There is no significant difference between Qualifications with respect to perception about innovative training.

**H<sub>06</sub>:** There is no significant difference between Qualifications with respect to perception about time management.

**H<sub>07</sub>:** There is no significant difference between Qualifications with respect to perception about leadership trait.

**H<sub>08</sub>:** There is no significant difference between Qualifications with respect to perception about professional competences.

## 5. METHODOLOGY

The study is descriptive in nature. The factors on Innovative training, Time Management, Leadership Traits, and Professional competencies were used for the study .Pilot study was performed by collecting data from 50 marine engineers from engineering institutes, India. The reliability ranged between 0.78 and 0.92.

### 5.1. Population

The population of the study is the marine engineers working in the various departments of the organization in India; hence the population of this study is 200.

### 5.2. Sample Size

The Sample populace of the investigation is oceanic engineering understudies. Test estimate is 117.The design chosen for this study is descriptive and 117 samples were collected by using a convenient sampling technique, data was collected from marine engineers working in leading marine companies. The statistical tools used for this study is ANOVA

## 6. DATA ANALYSIS

### 6.1. ONE- WAY ANOVA (AGE)

Table 1

Variance		Sum square	Df	Mean square	Frequency	Significance
Innovative Training	Between groups	17.437	3	5.812	.393	.759
	Within groups	1673.042	113	14.806		
	Total	1690.479	116			
Time Management	Between groups	18.771	3	6.257	.400	.753
	Within groups	1768.460	113	15.650		
	Total	1787.231	116			
Leadership Traits	Between groups	53.795	3	17.932	1.494	.220
	Within groups	1356.734	113	12.006		
	Total	1410.530	116			
Professional Competences	Between groups	10.395	3	3.465	.324	.808
	Within groups	1208.494	113	10.695		
	Total	1218.889	116			

\*\* Significant at 1% level

\* Significant at 5% level

### 6.1.1. Analysis

It can be seen from that table 1 that the p value is no significant at the 0.5 % level of innovative training, time management, leadership traits and professional competencies. Therefore, the null hypothesis is rejected in such cases.

**Table 2**

Variance		Sum square	Df	Mean square	Frequency	Significance
Innovative Training	Between groups	144.920	3	48.307	3.532	.017
	Within groups	1545.558	113	13.678		
	Total	1690.479	116			
Time Management	Between groups	151.041	3	50.347	3.477	.018
	Within groups	1636.190	113	14.480		
	Total	1787.231	116			
Leadership Traits	Between groups	149.052	3	49.684	4.451	.005
	Within groups	1261.478	113	11.164		
	Total	1410.530	116			
Professional Competences	Between groups	66.579	3	22.193	2.176	.095
	Within groups	1152.310	113	10.197		
	Total	1218.889	116			

\* Significant at 1% level

\* Significant at 5% level

### 6.1.2. Analysis

It can be seen from that table 2 that the p value is significant at the 0.5 % level of innovative training, time management and leadership traits. Therefore null hypothesis is accepted in such cases. The p value is no significant at the 0.5 % level of professional competencies, here null hypothesis is rejected.

## 7. DISCUSSION AND CONCLUSION

There is no significant difference between ages with respect to perception about innovative training. There is no significant difference between ages with respect to perception about time management. There is no significant difference between ages with respect to perception about leadership traits. There is no significant difference between ages with respect to perception about professional competencies. There is a significant difference between qualifications with respect to perception about Innovative training. There is a significant difference between qualifications with respect to perception about Time Management. There is a significant difference between qualifications with respect to perception about Leadership Traits. There is no significant difference between qualifications with respect to perception about Professional Competencies.

Lately, marine engineering has been appearing to be a dynamic industry and has a wide range of research. Likewise, the human component has a part to play in enhancing training in Maritime Engineering. Specialized skill of marine engineers likewise must be subjected to changes contingent on the requirements of the consistently developing and over controlled transporting industry. The rising territories of innovation and practices in delivery add esteems to the quality of marine Engineers. The examination is to survey and assess the current arrangement of marine engineering training in the nation and to recognize the change in specific territories.

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