

## Factors that Determine/Influence students' choice of maritime education with special reference to seafarers' profession

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### Abstract

Maritime education and training (MET) are presently faced with many challenges thus sustaining a pool of qualified and competent marine officers and engineers is a serious issue. Given the very complicated nature of the industry certain grades of seafarers are waiting to be deployed while some categories are highly short staffed. MET institutes compete with other higher education institutes while improving the overall quality standards of global MET. Also, the demand for seafaring by younger generation is seen declined while the quality of potential applicants also deteriorated. Leading MET institutes are pressurised to be flexible in selection criteria. Accordingly, the objective of this study is to identify the factors that determine or influence students' choice of maritime education. The study has been conducted by obtaining empirical data and the finding maybe quite helpful for MET institutes. It explored key factors pertaining to the seafarers' profession such as the professional identity and perception; social impact; the family concerns; and gender issues. MET institutes may implement new enrolment strategies to create a balance between supply and demand.

**Keywords:** maritime, education, seafarers, profession, training, shipping

### 1. INTRODUCTION

The seafarer profession is one of the most lucrative employment from the economic perspectives and this job is coupled with much of adventure too. However, it has become a serious problem in today's context that certain categories of seafaring cannot join ships after completion of primary training at college. This situation has deteriorated the demand for MET by the younger generation on one hand while the quality s of applicants also declined. In other words, the MET institute are compelled to be very flexible in selection criteria. As a result, MET institutes are keen to understand the factors that determine the students' choice of MET institute with special reference to seafaring officers.

The seafarer is a person engaged in sailing or working on a ship. Although called in different identities such as sailor, seaman, mariner, the seafarer is a person who navigates waterborne vessels or assists as a crewmember in their operation and maintenance of ships. Kim and Kim (2015) suggest the most academically motivating factors are intrinsic factors associated with self-actualisation, suggesting that instant gratification is crucial to the learning process [1]. Seafarers perform an admirable service to the society by helping move a variety of cargo from one port to the other irrespective whether, it is day or night; dry or rain; wind or calm. Recognizing the significance of highly competent human resources at sea, MET should be enhanced in terms of facilities and equipment, curriculum design, learning methodologies, quality of instruction and in all aspects of ensuring a pool of high qualified and competent marine officers and engineers to man the world fleet. [2]

It is said that more than 90% percent of cargo in the world is transported by sea. Shipping is, in economic terms, a derived demand of international trade. Therefore, sailors are committed to serve the world irrespective of country, religion, or the nationality forever. In this responsible endeavour, the sailor serves in different types of ships and complying with a number of regulations and facing dangerous risks such as maritime terrorism and rough weather. Due to globalization every industry started facing new and unexpected challenges that the shipping industry is not excluded. These recurring issues faced by the industry have made seafarers' lives at sea even difficult. Unfortunately, how those issues are being handled by the maritime authorities is quite debatable. The seafarers' life is so distinctive that it is usually impossible for non-seafarers take justifiable decisions on behalf of them. However, such administrative approaches, inter alia, other reasons have led to aggravation of problems which needs to be solved as soon as possible.

Singh, (2016) proposes 5 points out some of the main problems faced by the seafarers namely, Lenient Registries; Mindless Security Measures at Ports; Difficulty to Join Ship; Not Enough Time for Maintenance Work at Ports; and Lack of Proper Training. According to him one of the main issues faced by the shipping industry today is the emergency of registries such as Belize and Marshal Islands. Secondly, with mindless security the freedom of a seafarer to go ashore has been substantially curtailed. The other emerging and growing issue is that the fast loading and discharging rates of the cargo at ports. It has become increasingly difficult for a seafarer to fly out and join a ship in a distant port. This is because by the time the visa is processed, the ship is already loaded and ready to sail. The fourth problem he raises is that the very less time to the seafarers to carry out important maintenance work before the ship starts

sailing again loading and discharging of the cargo. Nowadays port authorities insist ships to finish and move out of the ports as soon as possible. Last but not least, the matter of seafarer training appears to be the most crucial one out of all these facts. Education motivation can be misunderstood as the desire to gain a job and wealth or approval from authority figures in the form of impressive grades. [1]

Therefore, this paper focuses its attention to discuss whether the education and training in the maritime sector is faced with certain impediments due its distinctive nature. The education and training of seafarers is an important issue, in order to maintain and develop the level of knowledge and skills in the maritime sector as well as in the interest of maritime safety. Students are driven by social and esteem needs to achieve academically – when an individual has a sense of belonging their self-esteem rises and they become more motivated to perform well (Petty 2014 as cited in Neto, 2015).

The requirements for quality seafarers keep updating, because of the advancement of navigational technology, development of maritime administration systems and higher standards in maritime safety, security and marine environment protection [3]. Therefore, the approach of the paper has three key facets. Primarily is evaluate the sea fearer profession because any individual first considers what level she or he will end up in the carrier progression unless the aim is clearly to become an entrepreneur. Secondly, it considers the social recognition she or he gets after successful completion of the academic path and become a true practitioner. Lastly it briefly discusses the practical scenario the seafarer may face as far as the family life is concerned.

The objective of this paper is to evaluate fundamental aspects of the profession of a seagoing person who contribute immensely to national and international economy. Unfortunately, this indispensable profession has not received its due recognition. The eminent profession of sea fearers was in existence many thousands of years before all other professions that exists today evolved because of development of science, technology, manufacturing, trade, education, living conditions, social values, etc., Art of Maritime Navigation, trade and exploration dates to thousands of years, elaborating its significance.

## **2. METHODOLOGY**

This research administered primary data collection through interviews using convenient sampling method. The study was done in Sri Lanka though interviews with seafarers that includes those who retired after long years' service, those currently at sea, those who graduated

and waiting to be employed and those who are engaged in maritime education. Total thirty-two seafarers had been interviewed and discussions were unstructured as to obtain more refined data from their own experience. Senior officers in the regulatory body for seafarers in Sri Lanka namely the Merchant Shipping Secretariat which is the shipping administration arm of Sri Lanka that has the overall responsibility for overseeing maritime concerns. In this qualitative research secondary data were gathered from the publications of International Maritime Organization, Central Bank of Sri Lanka, Department of Examination, Board of Investment of Sri Lanka, and Sri Lanka Customs. The authors focus on critical factors pertaining to this profession such as the professional identity and perception; social impact; the family concerns; and gender issues in the article. The paper consists of four chapters that explains each component based on the comments obtained by thirty-five respondents.

### 3. DISCUSSIONS AND ANALYSIS

#### 3.1 Seafarer profession

Seafarer profession is noble like any other profession but stands out as a challenging, rewarding and a profession essential to national and global interests, safety and security of mankind. Seafarers coming from multi nationalities but there are few countries leading in the list. It is important to note the diversified participation of the profession worldwide as illustrated in the table 1.

Table 1: Nationality of non-UK officers holding Certificates of Competency, 2015

2014 Rank	Country	Numbers <sup>1</sup>	Percentage	Cumulative Percentage
1	India	9,600	69.2	69.2
2	Pakistan	1,050	7.6	76.8
3	Bangladesh	790	5.7	82.5
4	Sri Lanka	570	4.1	86.6

5	Nigeria	390	2.8	89.4
6	Republic of Ireland	120	0.9	90.3
7	Republic of China	110	0.8	91.1
8	Brunei Darussalam	100	0.7	91.8
9	Ghana	90	0.7	92.5
10	Australia	90	0.6	93.1
	Rest of World	960	6.9	100.0
Total		13,870	100.0	100.0

*Notes:*

*1. Numbers have been rounded to the nearest 10.*

*Source: Maritime & Coastguard Agency data*

*Last updated: 27 January 2016*

According to above statistics the country ranks at no 4 thus may give a good reflection about the profession. In view of the critical importance of this valuable profession, countries that have reached developed status today did recognize sea fearers to be in their national interest development mechanism and curriculum especially after the world wars. This early recognition has paid rich dividends today to all developed nations identified as maritime, industrialized and economic leaders of the world. Even land locked countries like Switzerland had the vision to develop a large merchant marine fleet which is helping in their sustainability today. Therefore, sea fearer profession and the related industry which is globally common must be absorbed to the National priorities in order to raise the standards to meet the global challenges within and outside the profession. Deep feelings of empathy and positive affiliation with human beings are important components of self-actualisation (McNeill, 2015), where Maslow (1970) suggests individuals who have self-actualised have a greater capacity to identify with others and form stronger friendships [1].

The sea fearer profession is a physically; mentally and socially challenging profession that requires high standards of loyalty, self-discipline, moral courage, initiative, integrity,

character, conduct, commitment and accountability. Absence of above essentials at sea will risk lives, colossal wealth, material, money, environment, national economy and global trade.

Therefore, mitigating the social distractions and other challenges faced by sea fearers with sound training, awareness, education, compensatory incentives and most importantly recognition and acknowledgement at all levels of social fabric, education and national curriculum is of paramount importance.

Award of a suitable global and Nationally recognized non-sea fearer post graduate professional qualification as an exit qualification for sea fearers could dispel all misgiving “as sea fearer” after many years of service at sea. This unique experience would make a sea fearer a much superior all-round individual who has been exposed to many challenges in an exclusive global environment. This is a stark contrast to other professions where exposure and knowledge is very limited. Sea fearers are indispensable. Hence this profession must be hailed, nourished, improved and popularized.

### **.3.2 The social belonging**

This phenomenon refers to the living or preferring to live as part of a community or colony rather than alone or in other words, relating to the way in which people in groups behaves and interacts. Unfortunately, the seafarer must sacrifice this factor in order to sustain in the job. A cadet on a maritime school aspires to become a good seafarer someday. Some people who chose the sea may like the challenge and the adventure behind the work. It is totally different from any kind of job on the land. It provides even greater remuneration anyway that in most of the cases could very well compensate for what they sacrifice for. However, they do their job in a more difficult environment as they seldom see the land but see the same person every day that tend to develop a psychological agony after some time. They are compelled to work with different types of people in different countries, and usually under pressure. Therefore, in most cases the need of money for own interest or for the wellbeing of the family act as the driving force of being in the sea. Usually, working onboard the ship for more than 6 months or even up to 1 year after obtaining the cadet training at college gives him a chance to upgrade his profession and for possible promotion as an officer. However, after a few years of working onboard the ship some cadets suddenly decide to stop and start to work on land. Unless, they find a satisfactory alternative that their knowledge and experience pay enough compensation, such individuals regret the hard-earned education and training. Unfortunately, is too late for

them to reverse their lives. Humanism rests on the principles of human relatedness, the inherent goodnature of humans, and the pursuit of self-actualisation[1].

Homesickness is worst than seasickness. Many seafarers have quitted from the sea due to various social and work-related reasons that lead them to leave the off-shore job. They were either homesick or their family members do not want them to work onboard anymore. Some people mentioned that they quitted the seafarers' job because they didn't want their children to grow up without the proper upbringing of their father. Deep feelings of empathy and positive affiliation with human beings are important components of self-actualisation, where Maslow (1970) suggests individuals who have self-actualised have a greater capacity to identify with others and form stronger friendships [1].

Some of the seafarers that were interviewed think that the work routine onboard is not so difficult but the main reason for the conflict is something pertained to the psychological conditions that possibly affecttheir work and socializing with the persons onboard. Some of them had very bad experiences onboard their previous ship. From the positive side, some of them were managed to find an alternative job in land with almost the same salary of his job on the ship or find jobs related to shipping and maritime industry. The common factor that keeps many people away from the seafaring is the fatherhood. According to many seafarers the need for being with children may supersede the money factor. They simply didnt want to miss the experience of childhood because it cannot be brought back once they are grownups. One sailor said that he quitted as he wanted to be with them when they had their first teeth, when they began to lose their baby teeth, to bring them to school every day, when they began graduating from Elementary, High School and then College. Intrinsic and extrinsic factors are most effective when accompanied by a collective goal, as opposed to being individually focused [1].

Seafarers hold a variety of professions and ranks. A ship's crew can generally be divided into four main categories: the deck department, the engineering department, the steward's department, and other. Maritime Safety Administration of the People's Republic of China (China MSA) Chapter 2 Certificate of Competency Article 8 Capacities of seafarers: 1. masters; 2. deck department: chief mate, second officer, third officer, able seafarer deck, rating forming part of a navigational watch; The chief officer, second officer and third officer are

called deck officers; and 3.engine department: chief engineer officer, second engineer officer, third engineer officer, fourth engineer officer, electro-technical officer, able seafarer engine, rating forming part of an engineering watch, electro-technical rating, of which the second engineer officer, third engineer officer and fourth engineer officer are called engineer officers; [5]

Neto, (2015) suggests a correlation between educational motivation and self-actualization. Kim and Kim (2015) suggest the most academically motivating factors are intrinsic factors associated with self-actualisation, suggesting that instant gratification is crucial to the learning process. A close view of the progression path of a student reaching the level of captain is intrinsic and crystal clear. In many other managements or technical employments, the progression path usually tends to face variations and limitations, this factor is very much evident in many Asian countries in particular. However, given the limited number of employees and well established highly disciplined nature that is inculcated in the standard progression path of seafaring officers the students can visualize the attainment of goal. Given the cognitive mental predisposition of prospective students about the social recognition and incomparable financial rewards this carrier may provide the authors suggest an overlap of the carrier progression and Maslow’s hierarchy of needs. This combination is illustrated figure 1.

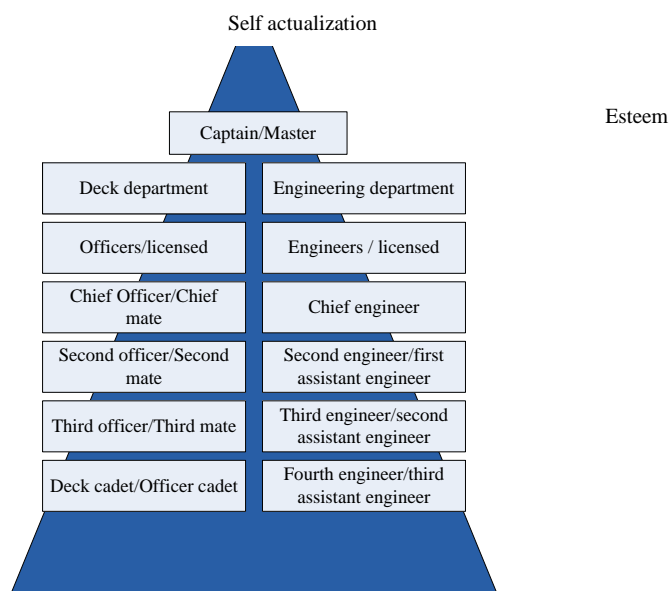


Figure1: The overlap of the seafarers’ carrier progression and Maslow’s hierarchy of needs (Source: Authors ©)



According to Maslow, (1943) there are 5 sets of goals (basic needs) which are related to each other and are arranged in a hierarchy of pre-potency. When the most pre-potent goal is realized, the next higher need emerges. Maslow (1970) deliberates on the notion of the intertwining relationship between intrinsic factors and self-actualisation, as he suggests self-actualisation complements processes that have been internalised. Learning motivation inherently has a component of curiosity surrounding the purpose of learning; this means if an individual is engaged in academic activities they are engaged in higher needs of self-actualisation (Melnic & Botez, 2014). Esteem needs centre around achieving goals and establishing a career. Therefore, the argument here is that whether the MET candidate would like to sacrifice the “belonging” stage in order to reach the “esteem” stage because the age between 20-35 years is more attracted towards love, affection and being part of the “group”. This “group” may be hardly found at sea. Therefore, reaching the esteem at the expense of belonging is a critical decision that necessarily to be taken at the age of early twenties.

### **3.3 The family man**

Being away from the family is one of the key determinants. One of the seafarers who have been with the family for 20 years since he stopped seafaring mentioned that he wanted to go back to seafaring and earn the money that he missed at the expense of being a family man. He was happy to look back to see that his family has matured and truly bonded together as one family as he managed to take the right decision at right time. According to him the children and wife has no objection of his revived career. This was possible as the person had his second mate's License. Therefore, the seafarer carrier does not mean that the employee has no family life. It is always possible to balance the job and the family with proper planning and good understanding with the family. However, many seafarers have declined to be at sea due to many other reasons. Some people were given a chance to work in a shipping company and after some negative feeling at sea the now opportunity would have encouraged them to work ashore. Some seafarers had a problem with their wife that leads to divorce and could not handle the problem, which leads to the decision of stopping his profession as a seafarer. There were some isolated cases that a member of their family died while they are still onboard the ship, and this became a very bad experience that they can never erase from their minds.

### **3.4 The gender issue**

Fundamental cultural bias in favour of males. The widespread operation of patriarchal systems of social organisation; of customary early marriage; of the incidence of early pregnancy (in and out of marriage); of heavier domestic and subsistence duties of females (especially in rural areas); a generally lower regard for the value of female life, all combine though differentially in each case, to adversely affect the participation of girls and women in formal education. [6]

Usually, it is common to note the MET is highly dominated by men. This is even worst in seafaring. Aggrey, (2000) stated that by looking at seafaring, it could be that perhaps some men traditionally have gone to sea to get away from women or expect women to stay at home and depend on men. Since the education is usually aimed at a professional as the destiny the women may obviously considering the practical problems in the home front after marriage. Together with the fundamental socio-cultural bias in favor of males, the economic factor, especially in terms of grinding poverty and hunger, is probably the most influential in adversely affecting female participation in education, especially in rural areas [6]. Many professional women are faced with the conflict of how to deal with the problem of profession and family [7]. Health condition and resilience on rough life at sea is yet another problem. Boys may get preferential feeding, while girls (who have a heavier domestic work load) are more likely to be undernourished. Even if they get to school, this adversely affects their performance and therefore retention rate. [6]

The other key problem that keeps women away from MET is the female perception about the seafarer life. Accordingly, one common problem facing women at sea is that of sexual harassment, which makes some women live in isolation on board and some drop out of their career. More than 80% of the questionnaires answered by women made mention of it in some form [7]. The own experience with many those who were contacted in the study was that many attempts by the MET institutes were miserably failed in Sri Lanka. It is not difficult to understand that the parents usually object even if their daughters are interested joining the sea given the general perception in the society.

## **4. CONCLUSIONS**

Maritime is the most economical transport mode for cargo transportation and shipping cannot be improved without efficient and effective sea farers. Sri Lanka has clearly identified the importance of maritime industry under diverse contexts. For example, the successive

governments have been focusing on the maritime hub concept given the geographic location advantages. The study revealed that the professional identity and perception is one of the most influential factors that shows a positive relationship to attract the candidates, however there are reasons due to social impact of being isolated. This finding is somewhat paradoxical as the society is highly connected through virtual means today. The demanding family concerns due to complexity in modern life style was another negative factor. The gender issue has continued to be playing a negative role despite females are becoming more independent in the modern world. MET institutes may implement new enrolment strategies to create a balance between supply and demand. Sri Lanka is not only strategically positioned proximity to the East-West main sea route, but it is very close to the economic giants, India. Given the ability to handle very large ships in the port of Colombo because of deeper draught. Sri Lanka is an island thus it is a sea friendly nation. All these external factors have a great influence in shipping and maritime sector thus seafaring. If the barriers caused by the factors pertaining to professional, social, family pressure and gender biasness could be systematically eased the seafarers' profession will receive its due recognition. It is admired that the Department of Education in Sri Lanka to incorporate twenty school periods of logistics in the school curriculum. This would help to provide social awareness about transport modes that the logistics is dependent on. The findings may be useful to design a comprehensive research about the same question using quantitative data analysis to obtain further insight.

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