# The Added-Values and Motivations of Embarking on Postgraduate Maritime Studies

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## Abstract

Recently, there has been massive growth of postgraduate professional studies in higher education, where academic institutions increasingly provide programmes on subjects which traditionally emphasize on non-academic/practical learning approach. The reasons behind such growth, however, remain under-researched. Focusing on the maritime industry, this paper focuses attempts to understand the added-values of such programmes. Is it mainly serving industrial growth – increased productivity and better equipped the practitioners, or a means for occupational groups to obtain their professional status? This paper use students-responded data to answer the above questions through analysis of their motivations enrolling on such programmes and their evaluation of the effectiveness of postgraduate education.

*Keywords: Maritime education; Postgraduate professional programmes; Student motivations*

## 1. Introduction

Since the 1980s, there had been a massive growth in the postgraduate sector in higher education. Substantial research on postgraduate programs and its development has been held in Western Societies. In the UK, for example, over the last decade, there has been 21% growth in new entrants (Sastry, 2004). New universities there have been skilled at exploiting the growth of student, particularly those from overseas. This development is partially explained by the universal trend of setting up postgraduate level education for professional studies (Burgess, 1997; Bourner *et al.*, 1999 & 2001). The best example is the introduction of 'practice-based' and 'professional' doctorates in both Old and New Universities in England (Bourner *et al.*, 2001). Professional education, which aims to bridge scientific acknowledge and practical performance, attracts considerable practitioners to become potential students of these courses, and it becomes a rather common view that professional competence was gained primarily, if not exclusively, through the application of scientific knowledge to practical problems (Tobias, 2003). As a result, apart from some well-established programs which successfully integrate professional practice and academic studies such as Law and Medicine, a new trend seems to be developing. Now academic institutions are increasingly providing professional education on subjects which traditionally emphasized on non-academic, apprentice-style learning approach.

Among these subjects, maritime education serves as a typical example. Since containerization and the increasingly emphasis on multimodal supply chain, the maritime sector has gradually transformed from a labour-intensive to a capital-intensive industry (Martin and Thomas, 2001), using state-of-the-art technology and modern ships and port equipment to transport goods. The major ancillary sectors that support this sector are usually made up of specialized and skilled, intelligent and trained people. Correspondingly, there has been significant emphasis on professional, dedicated knowledge and research (Moreby, 2004). In view of such requirements, employees of the highest caliber are needed as they need to respond effectively to the ongoing changes within the industry's business processes. The provision of postgraduate programs in maritime education is called to meet the requirement of 'more-than-monolithic' types of skills/knowledge from different stakeholders within the industry, as

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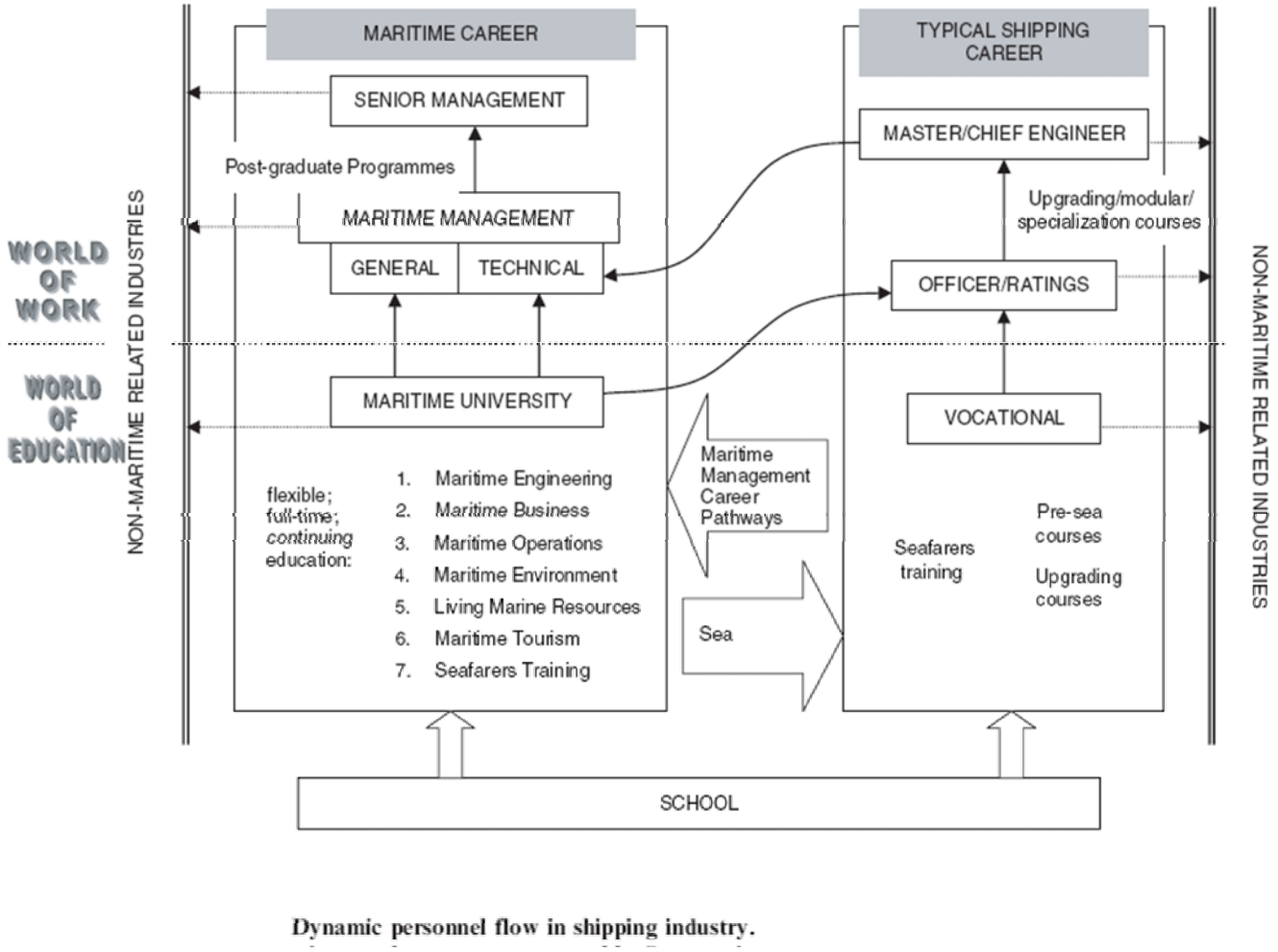
illustrated in Figure 1.



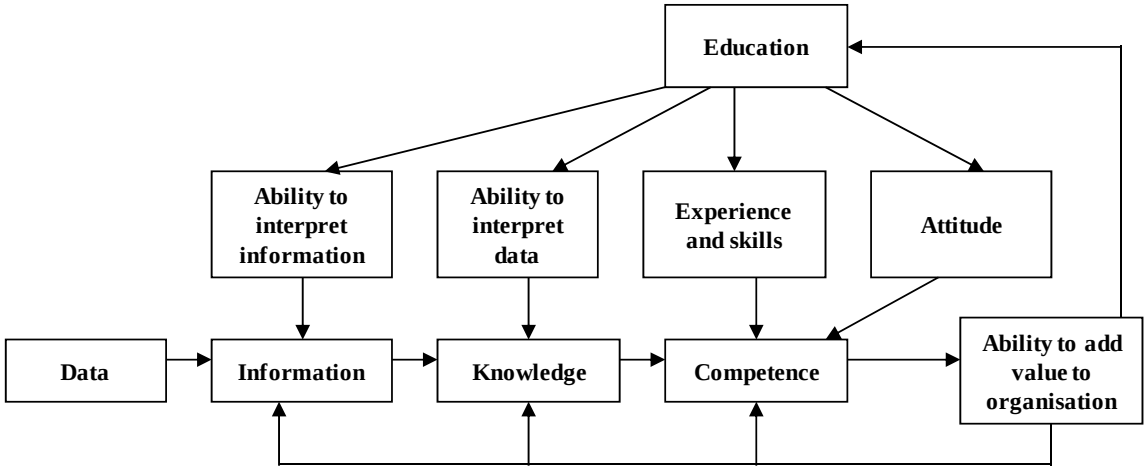

**Dynamic personnel flow in shipping industry.**

*Source*: Grewal (2005)

**Figure 1: Different types of skills and knowledge required in pursuing a contemporary maritime career as well as different respective ways to achieve it**

Setting against this canvass, the onus of responsibility for acquiring suitable qualifications has been shifted increasingly towards the individual, both in relation to training provision and university education (Dinwoodie, 2000). *Under such perception, the maritime industry had witnessed a growing number of academic institutions around the world offering postgraduate programs in maritime studies, notably in developed maritime economies. In Western Europe, various master programs with emphasis on the maritime management had been established since the turn of the century, e.g. Erasmus University Rotterdam (The Netherlands), University of Antwerp (Belgium), Cardiff University (UK), etc. In East Asia, a number of maritime-related master programs had also been introduced, e.g., The Hong Kong Polytechnic University, National University of Singapore, Korean Maritime University, etc. Although the details of these programs differ, all of them are stated to serve a common purpose: to allow graduates to become more competent, so as to enhance their ability in adding value to the organizations and/or society of which they are serving*[2]. As per Figure 2, it is believed that education can enhance the ability to interpret information and data, agglomerate experience and skills and create a good attitude, thus ultimately adding value to the institutions and/or society of which individuals are serving.

[2] This statement was concluded based on the listed programme objectives of their respective academic institutions, which can be found in respective official websites.




*Source: Grewal and Haugstetter (2007)*

**Figure 2: The Role of Education**

Despite such massive growth, however, the reasons behind such growth in professional education remain under-researched, especially on student's motivations pursuing such programmes and the effectiveness of postgraduate education, remain under-researched, and it is the endeavor of this paper to address such deficiency. Focusing on the maritime industry, this paper focuses attempts to understand the added-values of such programmes, investigating whether it is mainly serving industrial growth – increased productivity and better equipped the practitioners, or simply a means for occupational groups to obtain their professional status.

After this introductory section, Section 2 will provide the theoretical background for maritime education, with reference to traditional social science theories on education. In Section 3, the methodology and the empirical results will be provided, finally followed by discussions and conclusions in Sections 4 and 5 respectively.

## 2. Theoretical Background

The growth in postgraduate level of professional studies has not been confined to a few subjects but has encompassed a wide and growing range of subjects and fields (Bourner *et al*., 1999). This clearly demonstrates that there is an increased demand for postgraduate professional studies from various types of occupational groups. The phenomenon could be explained by at least two major reasons. First of all, increasing number of employers (ranging from business firms to the government) demand postgraduate educational credentials in hiring workers who take up higher ranking positions. They also want to secure workers who are more skilled and better motivated by sponsoring them to attend postgraduate professional education. Human capital theory posits that education directly increases productivity (Becker, 1993). Though its assumption is currently under hot debate (for example, see Marginson, 1997), the theory continues to underpin many investment decisions by governments and business firms. Many employers encourage or support their employees to prove higher level of professional education on human capital grounds (Carter and Lindsay, 1996).

Second, many occupations try to be professionalized. They raise their educational requirements as a means to increase their pay and prestige in society. According to Collins (1979) and Larson (1977), some occupational elites have increased educational requirements as a way of enhancing the prestige of their occupation. The more educated the members of an occupation, the more willing employers and the public are to accede to their demands for greater prestige, higher pay, and more control over their conditions of work. The introduction of the professional studies at postgraduate level that are related to their occupations becomes a crucial way to attain their professional status. Under this process of professionalization, the development of postgraduate education of these occupational groups takes up another very important role. It demonstrates that the industry and the occupational groups themselves

are willing to become more selective and self-motivated, that they are willing to raise the quality and quantity of their work, and of course continue their work-related learning. In this sense, the development reflects the strong need to satisfy the expectations of professional associations. This is especially true for occupational groups which traditionally emphasize skills and apprenticeship rather than academic attainment (Tobias, 2003). In modern society, the professionalization journey of these occupations is generally seen as necessary and desirable. This leads to an upturn in demand for postgraduate professional education. However, the factors that motivate practitioners to enroll in postgraduate professional education and their evaluation on the effects of education are still unclear. There are few insights concerning student expectations when they enroll on such courses (except Gould *et al*., 1999).

With the case of maritime industry, two questions about the development of postgraduate professional education can be asked. The first question is: how important is the role of 'formal' tertiary education (vs. practical, apprentice-style of knowledge transfer) in helping learners to enhance their competence? While the role of academic education in pursuing traditional professional occupations, such as medical practitioner, lawyer, civil engineer, is beyond debate, the significance of academic education in traditionally practical subjects like maritime industry is open to discussions. Indeed, there have been diversified viewpoints regarding the importance of a postgraduate qualification in maritime education. On the one hand, the anecdotal information from the industry, it seemed that experience, rather than education, was still important.

On the other hand, Celik and Deha (2006), based on their research on ship managers, argue that technological development in the maritime sector has triggered the importance for managers to acquire office-based skills (i.e. financial and economic appraisal, human resource management, etc.) than just offshore skills like physical operation. *Indeed, maritime studies does not typically include only nautical studies, it encompasses other generic maritime disciplines such as, marine engineering; naval architecture; shipping finance, m*aritime economics and logistics; maritime business; marine policy, international shipping and transport; coastal management; maritime affairs and maritime law, etc. Thus, a planned and systematic management development program was pivotal as such programs were able to provide important management competencies like decision making skills, interpersonal skills, leadership skills and organizational knowledge. Their opinion is echoed by Melbrin (1997) and Grewal and Haugstetter (2007) who have noted that formal education would provide an opportunity for students to gain 'general' knowledge and understanding about the industrial environment, rather than narrow, specialized knowledge which was closely linked to their job responsibilities. Formal education also gives them significant 'fringe competency', such as networking and team works, which cannot be easily acquired otherwise. Indeed, in terms of networking, relationship is an important asset found in the international services, such as the maritime transport industry, due to the volume of human interactions and communications involved (Grewal and Haugstetter, 2007). More conventional avenues for networking include attending seminars, conferences, local events and training courses organised by relevant professional and sector-specific industry bodies which allows interaction between the students and industry players. One unique feature of the added value and benefit of networking is the strong link between the course structure and the global players in the shipping industry. Furthermore, every chance meeting can lead to work opportunities, which is why networking skills are a prerequisite for career development (Buggy, 2006), through encouraging the development of self-assertiveness and leadership qualities, which was a form of investment by itself. Finally, Dinwoodie (2000) examined the issue at a corporate level, and argued that rapid changes in globalization presented organizations with a pressing need to hire, advance and retain staff capable of working within a range of cultures and business environments. From the perspective of human resource management, such individuals must not only be empowered to achieve organizational objectives, but as the bitter experience of organizational learning has indicated, their personal development needs must also be met if they are to be retained. A specialized postgraduate education could be one feasible way of meeting such development needs. As a result, an interesting, but under-studied, hypothesis ($H_1$) has been developed:

$H_1$: *Postgraduate program in maritime studies, with well-managed program structure, relevant contents and qualified teaching staff, will enhance students'/ practitioners' ability to meet the needs of*

*the latest development in maritime industry*

The second question is about the motivations of students in pursuing postgraduate maritime education. The general perception is that economic incentives provide the motivation for students to pursue postgraduate education. According to Becker (1993), individuals' demand for further education is an investment decision, the mechanism of which should be understood in terms of the costs and benefits involved. Given the fact that postgraduate maritime-related programs are often self-financed, the costs of students in enrolling in such programs are usually quite substantial, both as time and financial burden. See Table 1.

**Table 1: Tuition fees for undertaking selected maritime business-related Master of Science (MSc) programs (self-financed) at selected institutions for academic year 2008-09**

| University | Centre/Department/School | Duration | Annual Fees (US$)* |
|---|---|---|---|
| Erasmus University (The Netherlands) | Maritime Economics and Logistics | 1 year FT | 31,000 |
| University of Antwerp (Belgium) | Transport and Maritime Management | 1 year | 17,800 |
| World Maritime University (Sweden) | ---- | 1.5 year FT | 35,300 |
| London Metropolitan University (UK) | Economics, Finance and International Business | 1 year FT | 18,300 |
| Hong Kong Polytechnic University (Hong Kong) | Logistics | 2.5 years PT | 11,200 |
| Nanyang Technological University (Singapore) | Civil and Environmental Engineering | 1 year FT | 11,100 |

* It is assumed that a two-year PT programme is equivalent to a 1-year FT programme. *Sources*: Official websites of various universities/centres/departments/schools (2008).

Then, what are the possible benefits of gaining the credentials? Individuals probably hold out more open possibilities of occupational mobility. Research documented that *additional education and training was often perceived by students as a stepping stone in securing better promotion opportunities (Hesketh and Knight, 1999). Dinwoodie (2001) studied the motivations of logistics managers in pursuing a logistics master program in British universities and found that broadening knowledge, thus improving career opportunities and long-term career plans are core motivating factors. This seems to prove the economic argument.* Moreover, students would treat the earned credential as a way to divert them to the managerial ladder in their professional group. For students who enroll in maritime education, a postgraduate degree is often a necessity for a change of work nature. A good example involves seafarers who are seeking a change from a sea-going to onshore career, for whom such transition often intertwines with first obtaining a postgraduate qualification (Ketchum and Pourzanjani, 2005). Another possible motivation to enroll the postgraduate program is to secure more knowledge and skills to meet the increasing needs in the profession. Students might have a strong perception that the courses would help them to meet specific needs of their industries and client groups, in addition to their own requirements for professional and personal development. The recent development of the maritime industry has made composition of the industry becomes complicated. Nowadays, managing a maritime institution, e.g., a shipping company, requires not only technical knowledge and experience, but perhaps more importantly, professional knowledge in subjects like economics, finance and legal studies, which are traditionally more academic-related. Refer to figure 1 again.

However, we cannot ignore the fact that, for some students, *social aspiration could be the core motivational factor. Hesketh and Knight (1999) point out:*

*'[Postgraduate] education in all its form serves the needs of individuals, it stimulates their minds, and enables them to learn new skills and acquire new knowledge, and to develop intellectual and cultural appreciation – and by all these means to enhance their chances of a rewarding and personally satisfying life'.*

Indeed, some students who enroll to postgraduate professional education might look for their personal development. The motivation of students in pursuing postgraduate maritime education may not be purely economically inspired. Other social inspirations may also play equally, if not more, important role in their decisions to pursue postgraduate maritime education. Based on the above discussions, we can derive further hypotheses ($H_{2a}$ to $H_{2c}$) for this project, as follows:

$H_{2a}$: The motivation of students in pursuing postgraduate maritime education is driven by the needs of professional group

$H_{2b}$: The motivation of students in pursuing postgraduate maritime education is purely economically inspired, in terms of forecasted increase in income and better prospect in the profession

$H_{2c}$: The motivation of students in pursuing postgraduate maritime education is for their own personal development

There exist various anecdotal evidence and ideas on the motivations and inspirations of students in pursuing postgraduate education in traditionally non-academic disciplines. However, the question remains whether such postgraduate courses could satisfy student's aspirations in enrolling and undertaking such programs (in some cases, as well as students' sponsors), are still very much under-studied and a systematic scientific investigation of such a question is still wanting. The current project is not denying the contribution of various research (e.g., Hara (2000), Lewarn (2002), Ruan (2002), Carp (2004), Cooper *et al.* (2004), Wu (2004), Bamett *et al.* (2006), Paine-Clemes (2006), etc., on maritime education. However, almost all these studies shared common shortcomings. Their contents are overwhelmingly factual and descriptive and do not have fundamental scientific methodologies, e.g., experimental, statistical, etc. (Lijphart, 1971), in addressing different empirical propositions within the topic. There is also a general lack of real linkages between empirical cases and general social science theories. We believe this project will provide a valuable contribution by bringing the issue of maritime education back to mainstream educational and social studies.

Last but not least, if postgraduate education is a 'real' need for the recent change and development of occupational groups, it should be demonstrated in practitioners' 'increase in productivity' or 'better performance' after obtaining the credentials. Otherwise, if postgraduate education is merely a 'means' for obtaining professional status, it should be reflected in students' aspiration or motivation in enrolling in related programs, even if effective results were found wanting.

## 3. Methodology and Empirical Results

Given the nature of the topic which requires data and information on opinions and experience-sharing, a questionnaire survey had been conducted from a service-user perspective, i.e., students who are enrolled in postgraduate professional courses (final year). The choice of service users as the targeted survey respondents is obvious as they are those who can immediately provide first-hand information in helping investigators to fulfill the project's objectives, i.e. the motivations of pursuing a postgraduate maritime program, as well as whether postgraduate maritime programs can significantly help them in their maritime career development. The academic institutions were chosen carefully and only those that are all widely acknowledged within the maritime industry as the leaders in providing postgraduate (taught master) maritime programs had been chosen. Surveys were conducted during the second half of 2007, collected from two universities in The Netherlands and Sweden which had been repetitive in providing postgraduate maritime education for at least a decade. The purpose of the research was targeted to segment students according to their motivations and added-values for pursuing higher degree in maritime studies. Survey participants were drawn from maritime programmes which were embedded within the education framework of maritime master's degree, with a scope from specialist emphases, including international shipping and logistics, through modally specific emphases to port, maritime economics and education. The details of the sample can be found in Table 2.

**Table 2: The survey sample**

| Category | Figures |
|---|---|
| Sample size | 32 |
| Gender (in %) | |
| - Male | 85 |
| - Female | 15 |
| Age (in %) | |
| - 20 - 29 | 25 |
| - 30 - 39 | 56 |
| - 40 or above | 19 |
| Regional division (in %) | |
| - Europe | 16 |
| - Asia (incl. East, SE and Indian Subcontinent) | 59 |
| - Middle East | 22 |
| - Latin America | 3 |

Even though the relevance of the targeted survey respondents are made up of postgraduate students at their final year of studies, 80% of the surveyed students are on sabbatical from their company to further their education with the prospect of gaining greater career advancement upon their graduation. More than 80% of the surveyed students claimed to have work experiences ranging from a minimum of 2 years up to 17 years working experiences in the maritime sector. Their maritime professions include former seafarers, maritime administrator, port managers, marine engineers and naval architects, human resources managers, as well as chartering and operation managers.

To realize the objectives of the study, the author acknowledge a similar questionnaire design in which survey questions with reference from Cerit *et al.* (2006) and Dinwoodie (2000) about teamwork, cooperative learning as well as management careers and education in shipping and logistics. A likert-style questionnaire was developed, and survey respondents were required to answer six questions[3], with the following scale: 5 = 'strongly agree'; 4 = 'agree'; 3 = 'neither agree nor disagree', 2 = 'disagree' and 1 = 'strongly disagree'. The questions asked in the questionnaire, and the descriptive summaries of the mean scores[4], can be found in Table 3.

**Table 3: Questions asked from the survey questionnaires and the descriptive summaries**

| Question | Mean Score |
|---|---|
| *1. In your opinion, what are the added value and benefits to pursue maritime/shipping/logistics studies at postgraduate level?* | |
| a) to broaden my horizon / knowledge | 4.69 |
| b) a change in career path | 3.72 |
| c) a potential career advancement in the management level | 4.22 |
| d) to specialize in the maritime industry as I want to find employment in this sector | 3.87 |
| e) to meet people/networking | 3.97 |
| f) to polish my human capital (communicative) and management skills | 3.75 |
| *2. How important are the following reasons in making studying maritime business at postgraduate level at your university attractive? How important was each reason? I was attracted to study in this area because of* | |
| a) my previous work experience | 4.38 |
| b) my interest in this area | 4.63 |
| c) more promising career prospects in the shipping industry | 4.35 |
| d) course reputation | 3.38 |
| e) peer/parental pressure | 1.81 |

[3] The questions were decided by the authors based on detailed discussions with 10 various relevant personnel, e.g., academic scholars, industrial practitioners, maritime journalists, etc. Thus, it was believed that these questions were highly relevant in addressing this paper's topic.

[4] The sensitivity of the mean scores has been tested statistically by applying ANOVA and *t*-tests.

| | |
|---|---|
| *3. What attracted you to choose your university as a centre to pursue your postgraduate studies? How important was each category below?* | |
| a) global reputation | 4.65 |
| b) the only institution that I know which offers an MSc / Masters in international shipping and logistics | 2.66 |
| c) The programme fee is affordable | 3.19 |
| d) A group of experience and well qualified instructors/lecturers | 4.03 |
| e) The programme offers an ideal platform for networking | 4.15 |
| *4. What are the best aspects of the postgraduate maritime studies you have undertaken at your university?* | |
| a) It has all the elements with technical, practical and management characteristics of the global shipping industry | 4.29 |
| b) The ability to network and build my contacts | 4.35 |
| c) The course promotes innovative, cooperative learning and teamwork effectiveness | 4.06 |
| d) The course places emphasis on problem based learning, a method based on the principle of using problems as a starting point for the acquisition and integration of new knowledge | 3.81 |
| e) The course provides the desired skills (human capital, interpersonal, analytical skills) in preparing me to work in the shipping industry | 4.03 |
| *5. Based on the selections you have made in Q4, in your opinion, do you think these factors are crucial to achieve the following?* | |
| a) Preparing yourself for future managerial career in the global shipping industry | 4.61 |
| b) The stepping stone to gain entry into the global shipping industry | 4.19 |
| c) Entice me to consider a career in the global shipping industry | 4.00 |
| d) Developing your people management and networking skills | 4.26 |
| e) Providing you with a broad overview on the global shipping industry | 4.68 |
| *6. At present, do you think your postgraduate courses which you will complete will prepare you well in the following career path in maritime business?* | |
| a) Ship Broking | 3.6 |
| b) Shipping/Logistics/Supply Chain Management | 4.13 |
| c) Port Management | 3.86 |
| d) Marine Insurance | 3.00 |
| e) Ship Finance | 3.21 |
| f) Maritime Lawyer | 2.67 |
| g) Freight Forwarding | 3.46 |
| h) Marine Consulting | 3.28 |

## 4. Discussion

Ratings in the above mentioned selected questions in the decision to undertake maritime studies at the Masters' level are being presented herein. All questions were related to students' motivations of taking the postgraduate maritime studies and their perceived added-values and managerial traits that a postgraduate maritime master's programme will provide.

### 4.1. Motivation (H2)

In students' answers of question 1 to 3, it is evident from that the demand for postgraduate maritime studies at the Master's level is not jaded. Makkar (2004) shared that the merchant navy is not for life but provides the platform for the ambitious who desire to gain experience and move on to other rewarding branches in the maritime industry. For certainty, ex-seafarers seeking an onshore career could choose the postgraduate pathway at the Master's level to acquire the necessary skills and qualifications for them, needed to step into the world of global shipping. For other aspiring graduates who either enrolled for a Master's course straight after their first degree or for personnel seeking to upgrade themselves after working for a couple of years in the maritime and related industries, a postgraduate maritime education offers a world of opportunity for them as well. These all shown in the overall high mean scores recorded in question 1. Moreover, from the respondents who were postulated, many display heightened motivations to broaden knowledge, gain networking opportunities, acquisition

of specialize academic and human capital skills and long-term career plans such as potential advancement to the managerial level as essential factors to pursue maritime studies at the Master's level. Responses of question 2 and 3 revealed student perceptions of the courses held at the two European universities and their motivation of taking up the postgraduate programmes there. Obviously, the maritime master courses incorporate a diverse group of individuals, motivated in varying degrees either by employment and academic concerns. However, our results point out a common idea shared by students: quality maritime education is an important perquisite in career path mapping and in preparing aspirants for future managerial careers.

4.2. Needs (H1)

The collected data revealed limited information about the real needs of postgraduate education for the latest development in maritime industry. However, question 4 to 6 shed some lights on the expected increasing needs on practitioners' competence for the latest development in their work-related industry. It was shown in students' perception on the importance of education when they meet the challenge of the development of maritime industry. First of all, a strong need of creativity and innovation is revealed. The positive mean score of 3.81 on the provision of a problem-based learning (PBL) curriculum testifies that the structure and mode of delivery of the two university programmes is in tandem with industry needs; which is to harness the critical thinking skills of the students. Indeed, the expected benefits of postgraduate education go beyond the conventional classroom-teaching mode. Surveys results revealed that the ability to network to build social contacts coupled with the presence of cooperative learning and teamwork effectiveness, the acquisition of generic skills like interpersonal and analytical skills rank high in the surveyed outline. As reflected in Question 5, these are the crucial requirement for managerial roles in the global shipping industry.

Students' reposes also show that quality in maritime education was measured based on the course structure and mode of delivery. It is encouraging to note that relatively high mean ratings were recorded for cooperative learning and teamwork effectiveness as well as the emphasis on PBL. According to researchers, these learning techniques are touted by most academic institutions of higher learning as one revolutionary education paradigm used in a knowledge-based society and necessary for lifelong learning. These requirements are also fuelled by the recognition that the attainment of these skills is crucial in harnessing aspiring managers to succeed in the ever-changing maritime world. Acquiring such skills is part of the process of lifelong learning.

The modern maritime industry is global and dynamic. The surveyed results also brought to light that with regards to managerial competencies, mode of delivery and course structures which essentially include a combination of classroom lecture, field study and research group work, customary teaching tools taught in the postgraduate programme. The highly interactive nature of these modes of delivery is instrumental in allowing students to get the best out of many of the courses that are envisioned for their chosen postgraduate studies. Classroom lectures expose the students to contemporary issues and afford them the chance to draw on the experience and knowledge of not only the lecturer, but fellow students as well. Senior officers like Captains and Chief Engineers bring measurable amount of practical, technical expertise to the classroom as well. Field trips allow students to gain first hand knowledge and insight into various leaders in the industry. Research and problem-based learning affords the students the opportunity to demonstrate independent thought and understanding as well as serve as a basis for future analytical thinking that may be required during employment. These modes of delivery are particularly important for seafarers who are seeking employment ashore for possibly the first time. However, life at sea is an isolated one and officers may have had little opportunity to practice sound management, business and interpersonal skills on a corporate level. Henceforth, the route of graduate studies is regarded as the essential requirement for the way forward.

## 5. Conclusion

There are a growing number of universities and business schools that provides specialist maritime programmes at degree and post-experience level. On a personal note, we must not rule out the fact that

greater opportunities for partnership collaboration between the academic institutions and the corporate sector in delivering and developing knowledge and learning in these areas could be an area of focus. There can be no doubting that the achievement of such initiatives will be the crux in harnessing greater generic and specialist skills necessary for the graduates to have a strong footing in the maritime industry and for those seeking to find a top spot in the boardroom.

The preliminary analysis of our study shows that the pressing needs of maritime personnel to acquire specialise skills to update their career profile and knowledge. Global shipping companies like Maersk and NOL are exemplary as both companies recognized the need for a more pro-active approach to attract the best and brightest, through careful and stringent selections of recruits to enroll in their own Management Associate Graduate Programme and other in house learning capabilities. Life-long learning call for the need that professional bodies to promote personal development and Master's qualifications, whilst monitoring the resource effectiveness of communication materials and media employed with different groups, predicated by an understanding of what attracts different groups to study (Dinwoodie, 2001). In this sense, the increasing change in globalisation and the internal demand on competent practitioners explains the motivation of aspiring professional to pursue postgraduate study. The demand for postgraduate maritime studies play pivotal role in preparing, retraining and refocusing maritime professionals' careers to ensure sustainable development and ongoing excellence in global shipping provision through meeting the changing demands for human capital management.

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