JOURNAL OF MARITIME RESEARCH

Vol XIV. No. I (2017) pp 16–24

ISSN: 1697-4040, www.jmr.unican.es

Factors related to the maritime pre-apprenticeship phase: A proposed maritime pre-apprenticeship program

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ARTICLE INFO

Article history:
Received 14 October 2016;
in revised form 22 November 2016;
accepted 4 February 2017.

Keywords:
Apprenticemates, Maritime educational institution, Shipboard training officers.

ABSTRACT

The study aimed to identify the factors related to the maritime pre-apprenticeship phase. Among these factors were paper documents, medical requirements, training requirements and maritime skills and competencies. The problems encountered by the respondents were also identified. The significance of the differences in perceptions of the respondents was determined. Finally, based on the findings of the study a maritime pre-apprenticeship program is proposed.

The research used the descriptive method using surveys and interviews with key informants and was conducted in selected maritime educational institutions and shipping companies operating in Cebu City. The respondents of the study were the ten maritime superintendents and shipboard training officers (sto) from seven maritime educational institutions, fifteen crewing managers from seven shipping companies in Cebu City and 264 alumni and mates.

The findings revealed that Transcript of Records and birth certificate were the paper documents needed for apprenticeship; X ray was top on the medical requirements; Personal survival techniques was the training requirement. Human relation skill was a highly needed skill while maintaining a safe engineering watch was a highly needed competency.

The problems encountered by the alumni and apprenticemates included the following: the waiting period after the submission of requirements; cadet?s inability to meet deadlines for the submission of required documents was the top problem encountered by the shipboard training officers; and limited slots for apprentice mates in the company ranked first for the crewing managers. There was no significant difference in the perceptions of the key informants on the skills and competencies and training requirements for apprenticeship but there was a significant difference in the perceptions of the key informants on the paper documents, medical requirements and other training requirements for apprenticeship.

The research concluded that the apprentice mates, shipboard training officers and crewing managers considered certain factors related to their qualifying for apprenticeship and that they encountered problems along the way. Furthermore, the apprentice mates need the help of the maritime institutions and shipping companies, through the shipboard training officers and crewing managers, in the form of a maritime pre-apprenticeship program.

Recommendations of the study included the maritime education institutions' strict compliance to the Commission on Higher Education Memorandum Orders, and implementation of the maritime pre-apprenticeship program (a four-phase, thirty-three day program that prepares the cadet for apprenticeship); the shipping companies, through the crewing managers, having communication lines open with the maritime schools; the alumni's donation of a dormitory with affordable monthly budget to provide shelter for cadets before boarding apprenticeship vessels among others.

1. Introduction.

The Maritime industry, both here and abroad, relies on qualified deck and engine officers. Cruise ships carrying 2,000 to

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2,500 passengers require as many as 1,000 crew members to maintain safe operations and provide customers with many of the same services they would expect to receive in fine hotels. Cruise ship hospitality jobs are expected to grow as additional port-to-port cruise lines, ferry boats and "gaming" river boats increase.

According to the Baltic and International Maritime Council (BIMCO), the maritime industry will experience a worldwide shortage of 27,000 ships' officers by the year 2015. As per information from the Commission on Higher Education (CHED) 30% of the seafarers abroad are Filipinos.

From the observations and experiences of Maritime colleagues and friends, it was learned that a good number of those who finished the 3-year academic program find difficulty in looking for a 1-year (12-month) shipboard apprenticeship (OJT) on both local and foreign shipping companies. Rumors have it that many young Filipinos have become regular Luneta residents waiting for the much awaited moment to board a foreign vessel.

Only the scholars of the foreign shipping companies like the Norwegian Shipowners' Association (NSA) have no difficulty in getting into the apprenticeship program since they are assured of boarding a foreign ship as included in their program of study. However, it is sad to say that only around ten of the Philippine Maritime Higher Education Institutions (HEIs) nationwide, are tapped for scholarships by the foreign shipping companies, where apprenticeship is made easy.

The University of Cebu-Maritime Education and Training Center (UC-METC) is one of the prestigious maritime institutions in the Philippines as evidenced by the number of foreign shipping companies giving scholarships to its students. In spite of this it still finds difficulty in having students board shipping vessels as apprentices. Based on the registrar's records of the PlaceTypeplaceUniversity of PlaceNameCebu, statistics show that roughly 30% come back after the apprenticeship program to qualify for the Professional Regulation Commission (PRC) Board Examination.

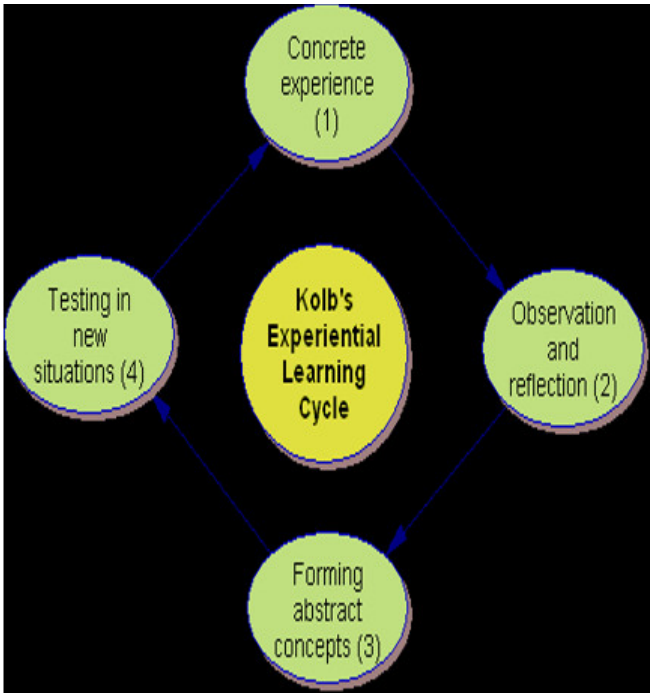
Apprenticeship is very crucial to the life of a cadet because without complying with the 12-month apprenticeship, the cadet will never become a licensed seaman. It is a requirement of PRC before one is allowed to take the dreaded government maritime board examination.

These prompted the researchers to undertake the study and identify the factors related to the maritime pre-apprenticeship phase of a cadet in order to propose a maritime pre-apprenticeship program.

This research anchors on the Experiential Learning Theory (ELT) by David Kolb (1984) which defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience".

The ELT model portrays two dialectically related modes of grasping experience – Concrete Experience (CE) and Abstract Conceptualization (AC) – and two dialectically related modes of transforming experience – Reflective Observation (RO) and Active Experimentation (AE). The four-stage learning cycle depicted in Figure 1, immediate or concrete experiences are the bases for observations and reflections assimilated and distilled into abstract concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences. (Kolb, 1999)

Figure 1: Experiential Learning Cycle by Kolb.



Source: Author.

Odd Magne Skei (2007), director for the Norwegian Training Center (NTC), the operational arm of the Norwegian Maritime Foundation of the Philippines Inc. (NMFPI), motivates this research stating, "We give high priority to Filipino seafarers on board Norwegian-owned, controlled, managed, or operated vessels. Filipinos are known in the industry to be highly skilled professionals and for their loyalty. That's why we need them." (Sunstar, 2007)

A number of studies on apprenticeship programs have been conducted here and abroad. The Hull Lifesaving Museum's Maritime Apprenticeship Program (MAP) is a Career Exploration program offering intensive, year-round training for young men and women in the custody of the Department of Youth Services. MAP operates out of the Museum's Seaport Boatship downtown CityBoston's PlaceNameplaceMarine PlaceTypeIndustrial Park. MAP creates viable, entry-level employees for the vibrant Marine Trades industry in the PlaceTypeplacePort of PlaceNameBoston.

Foreign shipping companies prefer Filipinos as seafarers yet there is still a great number of applicants for apprenticeship who find it difficult to get into apprenticeship. An article in Sunstar Cebu (2007) stated: "International shipping companies remain confident about the quality of Cebuano maritime students and professionals". This, after the Norwegian Maritime Foundation of the Philippines Inc. (NMFPI) and the University of Cebu-Lapulapu and Mandaue (UC-LM) campus inked a deal

Figure 2: Conceptual Framework of the Study.

Source: Author.

for an exclusive partnership to train local cadets for high quality ship officers. To answer the high demand for world-class seafarers, UC-LM is determined to supply the high manpower requirement of its partner, the Norwegian Shipowners' Association (NSA), by providing full scholarship grants to 300 nautical or marine engineering students.

A number of studies and researches have also been conducted locally. One such study was done by Templa (2005). He looked into the characteristics and features of the Norwegian International Ship-Register (NIS) apprenticeship program at the University of Cebu, Cebu City. He found out that there was a significant difference between the perceptions of the deck and engine cadets of their basic and special training.

Remolino (2002) identified among 165 Marine engineering graduates of shipping lines in Cebu City factors related to job search as: no job opportunities, job too far from home, no information, no opportunity for advancement, work condition not satisfactory, salary too low. Replicating the study of Remolino was Doyungan (2002) who conducted a study on 285 applicants and 11 ship owners in Zamboanga City. Salary, working conditions and career advancement opportunity were the top three factors that influenced job search. Factors that helped graduates in finding jobs were: recommendations, personal character, placement agency, media agency.

It is in the light of these theories and related studies that the researchers have been inspired to conduct the investigation. Figure 2 illustrates the conceptual framework of the study.

This research aimed to identify the factors related to the maritime pre-apprenticeship phase as bases for proposing a program.

Specifically, it aimed to:

1. identify the factors related to the pre-apprenticeship phase as perceived by the key informants;
2. identify the skills and competencies of apprentices needed by recommending maritime institutions and shipping companies;
3. identify problems encountered by the key informants;
4. determine whether there is a significant difference among the perceptions of the key informants; and
5. propose a maritime pre-apprenticeship program.

The following null hypothesis was tested at 0.05 level of significance:*There is no significant difference among the perceptions of the key informants.*

The research will benefit the following: the Commission on Higher Education (CHED) can utilize the findings of this research to issue guidelines on the implementation of maritime pre-apprenticeship. Shipping companies will be able to get more qualified apprentices. Schools can implement an appropriate screening process in order to determine qualified maritime students. Shipboard Training Officers will be able to better assist cadets who are searching for ships to board for apprenticeship. Parents will be able to save time, money for the long wait to board a foreign vessel. Last, but not the least the students will be the ones to benefit the most. They will be admitted to the apprenticeship without much difficulty to save on time, money and effort.

2. Methodology.

The research used the descriptive method using surveys and interviews with key informants. A survey instrument was constructed based on the apprenticeship program guidelines, suggestions and opinions provided by the institutions? superintendents and STOs and the apprenticeship crewing managers of selected shipping companies. These were then validated and then distributed to the respondents of the study. Field researchers were selected and briefed on the process of the distribution and the retrieval of the questionnaires. Personal interviews with key informants were also conducted to supplement the data gathered from the surveys.

The research was conducted in selected maritime educational institutions and shipping companies operating in Cebu City, the capital city of Cebu Province in the Philippines. It is the second most significant metropolitan center in the Philippine Islands. The city is located on the eastern shore of Cebu, and is the first Spanish settlement in the Philippines. Cebu is the Philippines' main domestic shipping port, and is home to more than 80% of the country's domestic shipping companies. It is a significant center of commerce, trade, and industry in the Visayas and Mindanao region. According to the 2007 Philippine census, the city has a population of 798,809 people. The respondents of the study were the key informants namely, the Maritime superintendents and shipboard training officers (STO) from seven Maritime educational institutions (population) in Cebu City, the crewing managers from seven shipping companies (population) in Cebu City and approximately 30 alumni (purposively sampled) and 316 apprentices on board distributed as given in Table 1.

Figure 3: Location Map of the Study.

Source: Author.

Table 1: Distribution of Respondents.

Respondent	frequency	%
STOs and Superintendents	10	3.46
Crewing Managers	15	5.19
Alumni/Apprentices	264	91.35
Total	289	100.00

Source: Author.

Three sets of questionnaires for each of the key informants (superintendents, STOs and crewing managers), the alumni and apprentices were constructed, validated and distributed. The questionnaire consists of three parts namely, demographic profile, skills and competencies needed, and problems encountered. Interview guides for the key informants were constructed and administered. Gathered data were subjected to appropriate statistical treatment: frequencies, percentages, weighted means, and standard deviations were computed. An Analysis of Variance and Spearman's Rank Order Coefficient (Rho) were used to test the difference among the perceptions of the institutions? superintendents and STOs, the shipping companies? crewing managers, the alumni and apprentices on the factors related to the maritime pre-apprenticeship phase.

Based on the findings of the study, valid conclusions are drawn and appropriate recommendations given. A maritime pre-apprenticeship program is designed and proposed.

3. Results and discussion.

Factors have been operationally defined as pertaining to the following requirements for boarding a ship as apprentice: documents, physical, medical, training, skills and competencies. Other factors identified as related to the maritime pre-apprenticeship phase are the waiting time, persons who helped in get the apprenticeship and amount needed in applying for apprenticeship.

The STOs and the crewing managers were made to identify the paper documents needed for apprenticeship of which the results are shown in Table 2. It can be seen that among the paper documents, transcript of records got the highest percentage (96.00%). This shows that the shipping companies give importance to the quality of applicants as reflected in the grades in their transcript of records. Next on the list is the birth certificate of the applicants; certificate of good moral character; the NBI clearance. These documents assure the shipping companies that they are boarding apprentice mates who will behave properly on board the ship.

Table 2: Paper Documents Required for Apprenticeship.

Paper Documents	STO	CREW	Total	%
birth certificate	10	13	23	92.00
transcript of records	10	14	24	96.00
certificate of good moral character	9	13	22	88.00
NBI clearance	8	13	21	84.00
marriage contract	3	7	10	40.00
police clearance	8	12	20	80.00
others, - seaman's book	2	0	2	8.00
training certificates	0	3	3	12.00

Source: Authors.

Table 3: Medical Requirements for Apprenticeship.

Medical Requirements	STO	CREW	Total	%
CBC	9	13	22	88.00
urinalysis	9	13	22	88.00
stool exam	9	13	22	88.00
ECG	9	11	20	80.00
X-ray	10	14	24	96.00
Others - psycho test	2	2	4	16.00
hepatitis B	2	3	5	20.00
drug test	1	2	3	12.00
Ishihara test	1	1	2	8.00
HIV	0	1	1	4.00
alcohol	0	1	1	4.00

Source: Authors.

The medical requirements needed for apprenticeship identi-

Table 5: Skills Needed for Apprenticeship (Overall).

Skills Needed	As perceived by the Key Informants		
	Overall Weighted Mean	Interpretation	Overall Rank
human relation skills (ability to relate to colleagues peacefully)	4.47	Highly Needed	1
critical thinking skills (ability to recognize/analyze problems)	4.34	Highly Needed	2
problem-solving skills (ability to settle problems)	4.25	Highly Needed	3
commercial skills (knowledge on commercial aspects of shipping lines)	4.02	Moderately Needed	4
fluency in the use of English or other languages required	3.94	Moderately Needed	5
IT skills (computer literate)	3.46	Moderately Needed	6

Source: Authors.

fied by the STOs and the crewing managers are presented in Table 3. It is surprising to note that X-ray topped the list with 96% of the respondents checking it. This is followed by CBC, urinalysis and stool exam with a tie at 88%. These exams are the usual routine procedures for medical check-up. Specific to the maritime field is the Ishihara test. Other medical tests needed were Hepatitis B, psychological test, and drug test.

The STOs and crewing managers were asked on the training requirements for apprenticeship. Top on the list of training requirements, in Table 4, is the personal survival techniques. Fire Prevention and Fire Fighting, Elementary First Aid, Personal Safety and Social Responsibilities were tie with 92% share of the responses.

Table 4: Training Requirements for Apprenticeship.

Training Requirements	STO	CREW	Total	%
Personal Survival Techniques	9	15	24	96.00
Fire Prevention and Fire Fighting	9	14	23	92.00
Elementary First Aid	9	14	23	92.00
Personal Safety and Social Responsibilities	9	14	23	92.00
Crowd and Crisis Management	5	14	19	76.00
Engine/Deck Watchkeeping	9	12	21	84.00

Source: Authors.

A number of skills were identified by the key informants as vital to the success in qualifying for apprenticeship. As seen in Table 5, the alumni and apprentice mates, the STOs and the crewing managers considered human relation skills as Highly Needed. Critical thinking skills came in second with and problem-solving skills came next. The use of computer skills alongside with commercial skills was the least needed.

The alumni and apprentice mates, the STOs and the crewing managers were also made to identify the competencies needed for apprenticeship. According to the crewing managers, the STO's, alumni and the apprentice mates, for deck, maintain a safe navigational watch; responding to a distress signal at sea; maintaining seaworthiness of the ship; and operating life-saving devices were the top competencies needed (Table 5).

Table 6 shows the overall results of the competencies needed for apprenticeship of Deck cadets. Maintaining a safe navigational watch was identified as the top competency Highly Needed. Meanwhile, the least needed competency was transmitting and receiving information by visual signaling.

Table 6: Competencies Needed for Apprenticeship (Overall-Deck).

Competencies Needed	Weighted Mean	Interpretation	Rank
maintain a safe navigational watch	4.65	Highly Needed	1
respond to emergencies	4.58	Highly Needed	2.5
maintain seaworthiness of the ship	4.58	Highly Needed	2.5
respond to distress signal at sea	4.55	Highly Needed	4.5
operate life-saving appliances	4.55	Highly Needed	4.5
prevent, control and fight fires	4.54	Highly Needed	6
use of radar and ARPA to maintain safety of navigation	4.53	Highly Needed	7
monitor loading of cargoes	4.51	Highly Needed	8
monitor the loading, stowage, securing and unloading of cargoes and their care during the voyage	4.49	Highly Needed	9
steer the ship	4.48	Highly Needed	10
monitor discharging of cargoes	4.47	Highly Needed	11.5
ensure compliance with pollution prevention requirements	4.47	Highly Needed	11.5
apply medical first-aid	4.45	Highly Needed	13
plan and conduct a passage and determine position	4.41	Highly Needed	14
monitor compliance with legislative requirement	4.39	Highly Needed	15
use IMO standard Maritime communication phrases and write and speak English	4.33	Highly Needed	16
maintain and overhaul cargo systems and associated equipment	4.29	Highly Needed	17
maneuver the ship	4.25	Highly Needed	18
transmit and receive information by visual signaling	4.20	Highly Needed	19

Source: Authors.

There were other factors related to the maritime pre-apprenticeship phase such as: waiting time to get apprenticeship, persons who helped get apprenticeship, and the amount needed in applying for apprenticeship. The results are given in the tables that follows.

Table 8: Waiting Time to Get Apprenticeship.

Waiting Time	Total	%
6 months	107	40.53
1 year	92	34.85
1 year and 6 months	29	10.98
others	9	3.41
No Response	27	10.23
Total	264	100.00

Source: Authors.

Table 8, the waiting time to get an apprenticeship was 6 months with the highest percentage of 40.53%. The longest waiting time is one year and six months.

Table 7: Competencies Needed for Apprenticeship (Overall-Engine).

Competencies Needed	Overall Weighted Mean	Interpretation	Rank
Maintain a safe engineering watch	4.74	Highly Needed	1
Maintain engineering system, including control system	4.66	Highly Needed	2
Operate life-saving appliances	4.63	Highly Needed	3
Prevent control and fight fires	4.62	Highly Needed	4
Ensure compliance with pollution prevention requirements	4.58	Highly Needed	5
Use hand tools, electrical and electronic measuring and test equipment for fault finding, maintenance and repair operations	4.53	Highly Needed	6
Operate main and auxiliary machinery, and associated control systems	4.50	Highly Needed	7
Use hand tools and measuring equipment for dismantling, maintenance , repair and re-assembly of shipboard plant and equipment	4.47	Highly Needed	8.5
Operate pumping systems and associated control systems	4.47	Highly Needed	8.5
Apply medical first aid	4.46	Highly Needed	10
Use English in written and oral form	4.43	Highly Needed	11.5
Monitor compliance with legislative requirements	4.43	Highly Needed	11.5
Use appropriate tools for fabrication and repair operations typically performed on ships	4.41	Highly Needed	13
Maintain seaworthiness of the ship	4.32	Highly Needed	14

Source: Authors.

The respondents were also asked as to who helped them in getting the apprenticeship. Top three answers surfaced and these were: relatives, the shipboard training officer and their friends. These can be seen in Table 9.

Another important factor in getting an apprenticeship was the amount the respondents spent in the application process. In Table 10, 40.53% of the respondents spent below five thousand pesos (Php5000). 32.20% answered that they spent above eight thousand pesos. The biggest amount needed is more than P8,000. This proves that no one can avail of apprenticeship without spending a certain amount.

Table 10: Amount Needed in Applying for Apprenticeship.

Amount	Total	%
below 5000	107	40.53
5000-8000	62	23.48
above 8000	85	32.20
No response	10	3.79
Total	264	100.00

Source: Authors.

4. Problems encountered by the key informants.

The problems encountered by the key informants in getting an apprenticeship were also gathered. Table 11 gives a summary of the problems encountered by both alumni and apprentice mates. The top problem identified was the waiting period after the submission of the application requirements. On the other hand, they identified inadequate maritime skills as the least problem. The alumni and apprentice mates believe that the schools have equipped them with enough maritime skills to qualify as an apprentice mate.

Table 9: Persons Who Helped Get Apprenticeship.

Persons	Total	%
STO	66	25.00
friends	57	21.59
councilor	1	0.38
college dean	9	3.41
governor	1	0.38
other politicians	1	0.38
college instructor	8	3.03
congressman	2	0.76
priest	0	0.00
relatives	107	40.53
mayor	2	0.76
pastor	0	0.00
no one	1	0.38
No response	9	3.41
Total	264	100.00

Source: Authors.

Data on the problems encountered by the key informants in getting an apprenticeship were also gathered. As can be seen in Table 12, nine out of the ten STOs considered the cadets? inability to meet deadlines for the submission of required documents as the number one problem they encountered. Another problem encountered was the cadet's fluency in both oral and written English with seven out of the ten STOs choosing this.

Table 12: Problems Encountered by the STOs.

Problems Encountered	f	%	Rank
Cadets' inability to meet deadlines for the submission of required documents	9	90.00	1
Cadets' fluency in both oral and written English	7	70.00	3
Cadets' inadequacy to meet financial requirements for training	7	70.00	3
Cadets' preference to board international vessels	7	70.00	3
Indecisiveness of cadets	6	60.00	5
Shipping company academic requirements (grades)	4	40.00	6.5
Cadets' inability to meet health requirements	4	40.00	6.5
STO/ school's relationship with shipping companies/linkages	2	20.00	8

Source: Authors.

The crewing managers were also asked on the problems

Table 11: Problems Encountered by the Alumni and Apprentice mates (Overall).

Problems Encountered	Frequency	Rank
waiting period after submission of application requirements	166	1
lack of financial support from family	161	2
distance of residence from desired workplace	108	3
lack of influential people to recommend them	82	4
lack of school support	57	5
inadequate knowledge on preparation of required documents	49	6
health (sickness)	17	7
impatience	16	8
inadequate maritime skills	9	9

Source: Authors.

Table 13: Problems Encountered by the Crewing Managers.

Problems encountered	f	%	Rank
Limited slots of apprentice mates in the company	9	60.00	1
Behavior/ characteristics and attitude of cadets towards work	8	53.33	2
Lack of qualified and adequately-trained applicants	5	33.33	3
Inadequately-trained cadets	4	26.67	4.5
Political and influential interventions in the selection of cadets	4	26.67	4.5
Relationship with schools/STOs	2	13.33	6

Source: Authors.

they have encountered in terms of cadet's application for apprenticeship in their shipping companies. In Table 13 that the top problem encountered by alumni/apprentice as perceived by the crewing managers was the limited slots of apprentice mates in the company. They can only accept 25 apprentices the most.

It cannot be denied that the alumni and apprentice mates, the STOs and the crewing managers did encountered different problems in the process of applying for apprenticeship.

The significance of the differences in the perceptions among the key informants on paper documents, medical requirements, training requirements, other training requirements, and skills and competencies were determined. Spearman Rank Order Coefficient (Rho) was used for the first four factors while Analysis of Variance (ANOVA) was used for the last two factors.

Table 14 shows the results of the tests of the significance of the differences in perceptions among the key informants. On the other hand there is no significant difference in the perceptions on training requirements with a computed Rho of 0.70 which is less than the Table Value of Rho which is 1.00.

Table 14: Statistical Tests of Significance of the Difference in Perceptions.

Factor	Computed Rho	n	Rho Table Value	Decision
Paper documents required for application	0.92	8	0.73	Significant
Medical requirements	0.94	11	0.71	Significant
Training requirements	0.70	4	1.00	Insignificant
Other Training requirements	0.95	7	0.89	Significant

Source: Authors.

The significance of the difference in the perceptions among the key informants on skills and competencies was also determined. Using Analysis of Variance, the results of the test of significance is shown in Table 15.

Table 15: Test of Significance of the Difference in Perceptions on Skills and Competencies.

Anova: Single Factor						
SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		
4.125	5	20.1369	4.027381	0.175624		
3.7	5	21.44444	4.288889	0.27784		
4.011673152	5	20.02656	4.005311	0.062375		
ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.248816	2	0.124408	0.72353	0.505037	3.885294
Within Groups	2.063351	12	0.171946			
Total	2.312167	14				

Source: Authors.

The F value of 0.72353 is less than the critical F value of 3.885294. This shows that the null hypothesis "there is no difference in the perceptions of the key informants on skills and competencies" is thus accepted. This means that the key informants have the same perceptions on the skills and competencies needed in order to qualify for an apprenticeship.

Conclusion.

Based on the findings of the study, the researchers conclude that the apprentice mates, shipboard training officers and crewing managers considered certain factors related to their qualifying for apprenticeship and that they encountered problems along the way. Furthermore, the apprentice mates need the help of the maritime institutions and shipping companies, through the shipboard training officers and crewing managers, in the form of a maritime pre-apprenticeship program.

Recommendations.

From the findings and conclusion the following recommendations are made: All maritime institutions should:have a shipboard training officer for the maritime students; follow-up and monitoring system of application for apprentice in shipping companies; see to it that each and every cadet must be able to board as apprentice; establish a board-now-pay-later plan for the students; see to it that the cadets are well-equipped with the needed

skills and competencies in applying for apprenticeship. The cadets should be exposed to filling up of forms, mock interviews and presentation skills. The alumni should help put up a dormitory with affordable monthly budget to provide shelter while waiting for boarding.The student affairs office should conduct an orientation on the advantages and disadvantages of boarding local and foreign vessels. The apprentice mate should have patience in waiting for the results of his application for apprenticeship and should find ways and means to support/meet the financial needs for getting an apprenticeship. Likewise, they should not be choosy in finding a vessel to board. The STOs should strengthen relationships with shipping companies in order to improve the processing of application for apprenticeship and also identify the needs of the shipping companies in terms of skills, competencies and other requirements. The shipping companies, through the crewing managers must have communication lines open with the maritime schools. This way, a harmonious relationship will exist and will redound to the betterment of the lives of the cadets.

The following maritime pre-apprenticeship program must be implemented in maritime education institutions.

Maritime Pre-Apprenticeship Program.

The Maritime Pre-Apprenticeship Program has been designed to address the problems encountered by the alumni, apprentice, shipboard training officers of the maritime education institutions and the crewing managers of the shipping companies. It is a four-phase, thirty-three day program that prepares the cadet for apprenticeship.

Phase 1 of the Maritime Pre-Apprenticeship Program is the ***Documents Preparation Phase.*** It is a week-long (7 days) program which aims to help cadets prepare and submit on time the required documents for apprenticeship, considering that the STOs encountered such problem as cadets' inability to meet deadlines for the submission of required documents as their number one problem. The cadet shall be exposed and trained on how to fill up forms, write resumes, prepare medical requirements and other pertinent documents. He may also have time to wait for other medical requirements, when necessary. At the end of this phase, the cadet shall have completed his portfolio, ready for submission.

Phase 2 is the ***Soft Skills Training Phase***. This phase covers 4 days of the whole program. It aims to train cadets the right attitude and how to behave properly on board a ship (3 days) and to orient the cadets on the advantages and disadvantages of boarding local as against foreign shipping vessels (1 day). The behavior/ characteristics and attitude of cadets towards work was considered a problem by the crewing managers. Meanwhile, the cadets' preference to board international vessels was a problem considered by the STOs.

Phase 3 of the Maritime Pre-apprenticeship Program is the ***Pre-board Training***. This phase is the longest of all the phases. It lasts for 18 days and covers training on Personal Survival Techniques, Fire Prevention and Fire Fighting, Elementary First Aid, Personal Safety and Social Responsibilities and Deck and Engine Watchkeeping. Lack of qualified and adequately-trained applicants was another problem encountered by the crewing managers.

Table 16: Matrix

PHASE		PROBLEM ADDRESSED	OBJECTIVE	ACTIVITIES	DAYS	OUTCOME
I	Documents Preparation	Cadets' inability to meet deadlines for the submission of required documents	to help cadets prepare and submit on time the required documents for apprenticeship	1. filling up forms	1	Cadet's portfolio
				2. writing resumes	1	
				3. preparing medical documents	3	
				4. preparing other pertinent documents	2	
II	Soft Skills Training	Behavior/ characteristics and attitude of cadets towards work	to train cadets the right attitude on board a ship	1. seminar on proper decorum on board	3	Disciplined cadets
		Cadets' preference to board international vessels	to orient the cadets on the advantages and disadvantages of boarding local vs foreign shipping vessels	2. Student Affairs Office Orientation	1	
III	Pre-board Training	Cadets' fluency in both oral and written English	to improve the communication skills of the cadets	1. Mock interviews	3	more qualified and adequately-trained cadets
		Lack of qualified and adequately-trained applicants	to enhance the maritime skills and competencies of the cadets	Personal Survival Techniques	15	
				Fire Prevention and Fire Fighting		
				Elementary First Aid		
				Personal Safety and Social Responsibilities		
IV	Deployment	Cadets' inadequacy to meet financial requirements for training	to help cadets secure financial assistance	board-now-pay-later plan	2	more cadets accepted as apprenticemates
		lack of financial support from family				
		distance of residence from desired workplace	to assist cadets in finding a place to stay while waiting for boarding	Alumni Residence Hall	2	
					33	

Source: Authors.

Finally, Phase 4 is the **Deployment Phase**. The phase lasts for four days. Here the cadet will receive financial assistance from the Maritime Education Institution through a Board-Now-Pay-Later Plan. Likewise, while waiting for final boarding, the cadet will be assisted in finding a place to stay near the shipping company where he has applied apprenticeship for. The role of the STO will be very crucial in the final deployment of the cadet.

Maritime Pre-Apprenticeship Program Matrix.

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