

Occupational Issues and Expectations of Turkish Deck Cadets

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ABSTRACT: Seafaring is one of the world's most difficult professions. Seafarers have to face with many negative factors while they are at sea. These negative factors, makes the seafaring profession difficult to be preferred. Fatigue, stress, heavy weather conditions and lack of communication are some of these factors that affect seafarer's occupational continuity and also make contribution to occurrence of marine accidents. Cadet is one of the seafarers who will be a navigation officer and captain in the near future. That's why cadets have a significant role in maritime industry. Theoretical and practical training of cadets is very important. Purpose of this study was to examine deck cadets' training conditions and difficulties they have to face with during their training period. In order to identify these difficulties, render their lives during trainings easier, and establish their expectations, questionnaire conducted with 618 deck cadets. Interviews were carried out with 3 trainers and 10 maritime companies that have substantial shares in Turkey's maritime trade. As a result of this study identified factors that increase fatigue mostly, reduction measures have been exposed and have tried to offer solutions. This study is an advisory to improve the occupational continuity of cadets in the profession.

1 INTRODUCTION

Living and working onboard is quite difficult, due to the nature of maritime business. Seafarers are one of the most important aspects of the maritime industry, which has a large share in world trade (IMO, 2011; UNCTAD, 2015). New regulations and management strategies, which were focused on maximizing profits, naturally emerge problems for seafarers. Each seaman must fulfil his or her duties effectively, safely and as quickly as possible. Watchkeeping officers are responsible for ensuring safety of the navigation, crew and cargo operations, efficiency of shipboard operations (to keep the vessel ready to sail, maneuver etc.) and port operations (loading /unloading, bunkering, supply operations etc.). Like the other seafarers onboard, watchkeeping officers have to face up with inconvenient situations such as heavy

weather conditions, inconvenient working environment, inappropriate work/rest hours, dense traffic, lack of crew, life-threatening situations etc. (Arslan & Er, 2008; Bloor et al., 2004; Jones et al., 2005; McNamara, Collins, & Mathews, 2000; Uğurlu et al., 2012). These adverse conditions shorten the occupational continuity of seafarers. Qualified seafarer concept will be possible by ensuring occupational continuity (Gekara, 2009).

Seafarers' occupational continuity is highly important for shipping companies in terms of hiring qualified seafarers. The concept of manpower in maritime transportation is a sensitive and crucial matter which should be emphasized (Uğurlu, 2015). Inappropriate working conditions of seafarers are one of the most important issues affecting professional continuity negatively (McLaughlin, 2015; Tang,

Llangco, & Zhao, 2016; Uğurlu, 2015). It is necessary to ensure proper and safe working conditions for all seafarers, thereby continuity can be increased. Also, the concept of qualified seafarer can be possible by providing occupational continuity of seafarers (Uğurlu, 2015).

Professional life requiring competition and it has a compelling structure. This structure, constitute a continuous pressure on the managers and employees to meet targets. Constantly, striving to produce better products and services, causes stress on employees. When this stress increases too much, it leads to termination of professional life (Koç, Arslan, & Topaloglu, 2009).

Occupational education and training is about developing special skills and talents regarding the sector (Gekara, Bloor, & Sampson, 2011). In the twenty first century, vocational education and training has a significant role in preparing the individuals for life and business (Rauner, Maclean, & Boreham, 2008; Saunders, 2012). Vocational education and training is highly important for the maritime industry.

IMO (International Maritime Organization) is also aware of this issue. STCW 2010 Manila Conference's 12th decision has been referred to the subject of occupational continuity and made recommendations such as; providing reasonable working conditions, stable working hours and improved social opportunities in order to increase continuity (IMO, 2011). However, previous studies confirmed that watchkeeping officers are subject to unreasonable work hours and conditions (Cole-Davies, 2001; Jones et al., 2005; McNamara et al., 2000; Reyner & Baulk, 1998; Uğurlu et al., 2012). Improving such conditions and offering alternative that will encourage officer candidates to work permanently on sea are necessary for ensuring permanency of watchkeeping officers onboard.

STCW is an international code published to improve the quality of seaman as well as produce a standard system. STCW Code regulates the necessary qualification standards about training and education of all seafarers, their experience and skill requirements as well as performance of duties in a manner ensuring protection of security and safety of life and property on sea and protection of sea environment (IMO, 2011; Kostylev & Loginovsky, 2007). Training, education certifications and principles of watchkeeping onboard of cadets are according to this code. As per this code, cadets should complete training meeting STCW Code A-II/1 requirements in order to achieve certificate of competency. A year of this training is called training onboard (IMO, 2011). Training onboard is an important part of training process. Students could practice their knowledge, which they have learned during their education. Thus, this study covers the training periods of cadets. Accordingly, this study discusses working conditions and working hours of deck cadets during onboard training.

2 METHOD

Questionnaire have been conducted with 618 deck cadets who received undergraduate level maritime education in Turkey and completed training onboard, as required by STCW Convention. The age range of deck cadets are varies from 18 to 24. This study has 4 sections. The first section covers the details of ship, voyage where deck cadets completed their training and attitudes, behaviors of the crew whereas the second section is about training conditions and social opportunities, third section is about their expectations in order to work permanently onboard and the last section is about 10 major shipping companies questionnaire results concerning their training and management policies about deck cadets.

In this study SPSS 22.00.00 analysis program was used to evaluate the answers and to check the reliability of the questionnaire's scale. The goal of this study is to determine deck cadets' training conditions, their workload and their perspective about occupation. Moreover, in light of this information to make recommendations in order to increase occupational continuity.

3 SURVEY DATA

3.1 Step I

According to the STCW code A II/2 deck cadets have to carry out training period on vessels over 500 grt for 12 month. So training period, type of ship trained on, navigation zone and attitudes, behaviors of the crew were examined at this step (IMO, 2011). The review of ship types chosen for training confirmed that deck cadets generally preferred dry cargo and tanker type vessels as a training ship and most of ships preferred have a gross tonnage (grt) of 0 to 30000. As for the training periods of deck cadet, 79% of the trainings onboard are 0 to 3 months whereas remaining 21 % is over 3 months (Table 1).

A criteria was recommend to achieve this, there should be a kind approach to trainees (IMO, 2011). Survey data showed 73% of masters, chief officers and other crew members have "Good" attitudes to deck cadets. Seventeen percent of masters, chief officers and other crew members have "Moderate" attitudes and 10% of superiors have "bad or very bad" attitudes to cadets.

Table 1. Features of the vessels and training periods preferred by deck cadets (n=618)

Training Periods	n	Ship Type	n	Ship Gross Tonnage	n
0-1 Month	20	Tanker	147	0-3000	173
1-2 Months	161	Dry Cargo	294	3000-10000	248
2-3 Months	309	RoRo	108	10000-30000	127
4-6 Months	18	Passanger	17	30000-50000	37
> 6 Months	110	Container	49	>50000	33
		Other ship 3 types			

n= number of deck cadets

The review on attitudes and behaviors of masters, chief officers and crews towards the deck cadet onboard confirmed that the level of satisfaction is good. The other issue was training area because when those cadets graduated they have an unlimited license and they were capable to navigate all around the world. According to survey data, deck cadets completed their training period navigated in the Black Sea (29%), Mediterranean Sea (25%), coastal navigation 22% and the remaining preferred other regions.

3.2 Step II

The second section is about training conditions and social opportunities. According to MLC and STCW Conventions seafarers' working and resting periods arranged in two different systems, one of them was maximum working hours and other one minimum resting hour. In Turkey, in general minimum resting hours system applying, which means provided with a rest period not less than minimum 10 hours in any 24 hours period and 77 hours in any 7 days period. Also daily 10 hours of rest can divided into 2 parts maximum and one of these two parts must be at least 6 hours (ILO, 2006; IMO, 2011). According to survey results, 68% (n=419) of deck cadets stated that they worked 0 to 13 hours during their training onboard whereas 32% (n=199) worked over 13 hours (Figure 1).

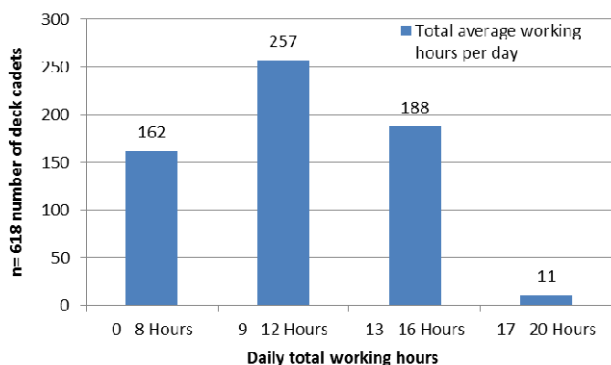


Figure 1. Daily average working hours of deck cadets

According to the 2010 STCW Manila Conference decision 13, suitable living conditions must provided for trainees' adequate training (IMO, 2011). Twenty eight percent of the deck cadets did not have their own cabins at the ships where they were trained; they stayed at other cabins and had toilet, refrigerator, TV and internet problems at such cabins (Table 2). Seventy two percent of them stay their own cabin, 23% stay 2 persons in one cabin, %1 stay 3 persons, %4 stay 4 persons and %1 stay 5 persons in one cabin.

Table 2. Deck cadet cabin conditions (n= 618)

	Cadet Cabin (n)	WC (n)(n)	Refrigerator (n)	TV (n)	Internet (n)
Yes	316	344	80	134	32
No	302	274	583	484	586

n= number of deck cadets

The review made on attitudes adopted towards trainees by the companies, which hired deck cadets, confirmed that 62% of those do not have a trainee policy and 38% of the ones having a policy tried to implement trainee policy onboard. One of the trainings that should be received by the seamen before going onboard training is orientation training offered by the companies. Unfortunately, some companies consider spending to cadets as non-return investments and unnecessary costs.

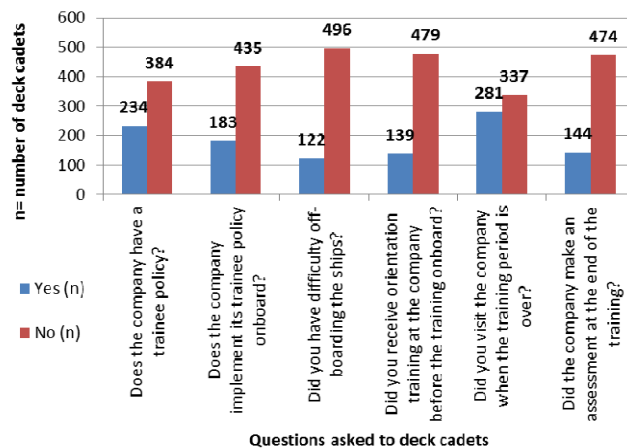


Figure 2. Assessment of Companies hired deck cadets for training (n=618)

It was confirmed that 78% (n=479) of the deck cadets going onboard training did not receive such training and training assessment of 77% (n=474) of the deck cadets were not performed by the company after the training. Besides 20% (n=122) of the deck cadets had difficulties while disembarking from ship after their training period (Figure 2).

3.3 Step III

The third section covers alternatives to be offered for continuing the sea life, period of working onboard, job preferences after the life at sea and overall review of traineeship and live as an officer. 327 of the total number of candidates participating to the survey plans to work 5 to 10 years at sea whereas 183 of them plan to work over 10 years and 108 of them plan to work between 0 to 5 years. Considering the difficulties of life at sea, the alternatives that should be presented for improving the duration of working at sea should be satisfactory salaries, shorter contract periods, improved social opportunities, easy internet access and qualified crew etc. Following Table 3 shows demands of deck cadets to improve their occupational continuity when they are watchkeeping officers.

Another issue examined here was difficulty of being a trainee and a watchkeeping officer. During their yearly sea training period, cadets were to have prior knowledge about the profession and to recognize the difficulties of the profession.

Table 3. Alternatives offered to improve continuity at sea

Measures to Increase Occupational Continuity	Number of deck cadets
Easy communication and internet access	22%
Improved social opportunities (TV, gym, sauna, etc.)	19%
Satisfactory salary	18%
Shorter contract periods	13%
Better working hours and conditions	6%
Good provision	6%
Working with qualified crew	6%
Working with family	4%
Working on close navigation zone	3%
Working with professional company	2%
Sign on and sign off as planned	1%
Total number of deck cadets= 618	

According to data obtained from questionnaire; being unqualified, unreasonable working hours and working conditions could be listed as the common difficulties of being a trainee, whereas homesickness, being isolated from social life and unreasonable working hours were the difficulties of the profession (Table 4).

Table 4. Difficulties of the profession and traineeship

	Difficulties of traineeship (n)	Difficulties of the profession (n)
Being unqualified (there is no task definition, insufficient training and experience)	238	-
Unreasonable working hours and conditions	233	136
Homesickness	-	196
Being isolated from social life	6	147
Crew management and responsibility	12	48
Uneducated and insufficient crew, bad company	22	51
Dangerous and difficult profession	14	25
Insufficient communication with the land	2	76
Long contract periods	-	9
Bad attitudes of superiors	83	8
Being female	4	11
Difficulty of finding trainee vacancies	10	-
Being unauthorized	40	-
No answer	24	30

n= number of deck cadets. One cadet may choose more than one difficulty.

One of the factors affecting sustainability was the occupational perspective of deck cadets. Many cadets are considering the maritime profession as a job to be held for a short period. They are using maritime profession as a stepping stone to another career dream. Twenty five percent of the deck cadets are planning to work for a shipping company after the life at sea whereas 25% of them are planning to work for trading sector, 21% are intending to work for government offices and 14% are planning to work for private sector.

3.4 Step IV

Examined companies have a great, professional background in Turkish and World Maritime Trade. Companies have different types of vessels such as dry

cargo vessels, container vessels, tanker vessels etc. which working in international countries and ports. They have totally 114 pieces of vessels with different sizes and different nationality flags, total shipping capacity of these vessels 4372655 deadweight (DWT).

Ten major shipping companies' questionnaire answers were examined and presented at this step. First of all 50% (5/10) companies define deck cadets as a candidate officer "In addition to learning they must take responsibility about their job." 30% (3/10) of companies define deck cadets as a student "They are only being there for training." and 20% (2/10) of companies define deck cadets as an officer "He/she always be a step forward."

Second important implication is companies training strategy about deck cadets, 9 companies apply occupational training program before embarkation. Eight companies apply planned on board training program under control of chief officer. Also 2 companies guaranteed to provide a personal cabin for their cadets; others may stay with another cadet(s) in one cabin. All examined companies give salary to cadets. Expectations of shipping companies from deck cadets are the other important inference. Deck cadets, should be aware of these expectations, and must work in order to meet them.

Expectations can be listed as follows;

- 1 Cadets should be eager to learn, ambitious and hardworking.
- 2 Cadets should be able to work as an officer and take responsibility about their job.
- 3 Cadets should aim persistence in the company and occupation.
- 4 Cadets should have sufficient English

Statistical test carried out to determine reliability of the question scales. First reliability test applied between 4 questions "Master's attitudes to cadets, chief mate's attitudes to deck cadets, crew's attitudes to deck cadets and how it feels to be a deck cadet". These questions have same systematic scale which was called Likert-type scale "Very good, good, moderate, bad and very bad". Cronbach's alpha test applied to these questions because that is one of a common test in Likert-type scale. Alpha value should be between 0-1; 1 means highest reliability (100%) and 0 means lowest reliability (0%). The alpha value was 0,782 (78%). That means the questionnaire scale is reliable. Another alpha test applied between "Trainee policy existence question and trainee policy implementation question". The alpha value was 0,921 (92%) which mean high reliability.

4 RESULTS AND DISCUSSION

Maritime is a difficult and tedious profession by definition. Seafarers suffer from heavy weather conditions, hard working conditions, unreasonable working hours (Bloor et al., 2004), being isolated from family and social life which could have negative impact on continuity of working in this profession. The first job practice of a deck cadet starts with training onboard. Thus such training is an important (Kaida et al., 2006; Uğurlu et al., 2012) part of a deck cadet's professional life. Their occupational

perspective taking shape according to their working and living conditions on board. If the conditions are close to their expectations, their occupational continuity is getting higher.

The survey confirmed that majority of deck cadets prefer dry cargo and tanker vessels for training onboard. This might be due to the fact that dry cargo and tanker type ships make up majority of the Turkish ship market. According to 2013 official statistics, 53% of Turkish merchant marine is dry cargo vessels whereas 15% is tanker vessels and 8% is container vessels (Shipping, 2014). In terms of navigation zones and ship tonnages, this could be seen deck cadets generally prefer completing their training on short sea carriers (ships navigating on the Mediterranean sea, Black Sea and within the coastal navigation). Although navigation period is short and work load is heavy on short sea carrier ships, the review of survey results confirmed that generally the shipmaster, first officer and crew have positive attitudes and behaviors towards deck cadets and we might say that this will not have negative impact on deck cadets' professional continuity.

The review of working hours experienced by deck cadets during training confirmed that 68% worked approximately 13 hours and less whereas 32 % worked for 14 hours and more per day. According to STCW and Maritime Labour Convention 2006 (MLC); all persons who are assigned duty as officer in charge of a watch and those whose duties involve safety, prevention of pollution and security duties shall be provided with a rest period of not less than minimum of 10 hours of rest in any 24 hour period and 77 hours in any 7 day period (ILO, 2006; IMO, 2011). Thus 32 % of deck cadets work under conditions violating STCW convention during their training. The review of cabin and social opportunities on ships stayed during training revealed that more than half of deck cadets did not have their own cabins, the ones having a cabin had limited facilities such as bath, toilet, television and internet access as well as limited social life. These are basic human needs so cabin and social life restrictions can be considered as factors having negative impact on continuity to work on sea. The review of companies' approach towards deck cadets confirmed that most of the shipping companies do not have a certain trainee policy or deck cadets are not informed about such policies and they feels like not as valuable as an officer. The companies having a trainee policy have difficulty in implementing such policies and the relationship between the companies and deck cadets lack efficiency. For example, most of the deck cadets did not have orientation training before going onboard. This fact can be considered as one of elements threatening deck cadet's safety at sea. It is without doubt that cadets working under all these negative conditions will constitute a great risk in terms of safety of life and goods at sea.

The survey data at hand revealed that 435 cadets considered working at sea for a period shorter than 10 years. Thus, that can conclude, deck cadets do not consider continuing to work for this profession. Unsatisfactory salaries, being isolated from family and social life, long contract terms, unreasonable working hours and conditions, limited social life, difficulty of internet and phone access can be listed as the most important factors impairing continuity in the

profession. These issues should be improved in order to ensure continuity in this profession. Being unqualified is the most difficult aspect of a trainee's life. This stems from the attitude that a trainee would do any task onboard or is a joker crew who should adapt to do any task.

Maritime professions are vulnerable to accidents due to its inherent dangers. The accidents that might take place might result with loss of manpower by having negative impact on human health and sometimes can even cause deaths. The risk of accidents increases while the qualities of training of seafarers lower.

According to the companies' interviews 50% (5/10) of companies describe deck cadets as "Cadet is a candidate officer, in addition to learning he/she must take responsibility in some subjects.", 20% (2/10) of companies describe deck cadets as "Cadet have to work as an officer, he/she always be a step forward.". Therefore, companies expect some additional vocational skills from deck cadets. Trainees should be able to feel responsible, to meet those expectations. For this purpose, necessary to provide equivalence between authority and responsibility, it is one of the basic principles of management. Companies' training and personnel departments should prepare a trainee policy together and to provide implementation of this policy. Thus trainees working conditions, duties and responsibilities will be clearly certain, so they feel self-confident, responsible and they will gain professional stance.

5 CONCLUSION

The findings and results presented that seafarers' occupational continuity should not be considered as national issues only. Unfortunately, these issues are common problem of the entire maritime community. Improving the current conditions is a necessity for ensuring safe operations at sea and continuity. Training periods are the first step for deck officers to meet their profession. Improvement of social opportunities and working conditions are very important for encouraging deck officer candidates. Because, increasing the quality of professional seafarers will be able to ensure continuity.

As a result, recommendations to increase occupational continuity can be listed as follows.

- 1 To provide easy and cheap communication with land and internet access,
- 2 Social opportunities should be improved; TV, video game room, gym, sauna, pool etc.
- 3 Contract periods should be shortened, obey the STCW and International Labour Organization (ILO) regulations about working and resting hours. Also inspectors should examine working hours more carefully, in order to increase applicability of regulations.
- 4 Companies should have a standard trainee policy, these policies should be implemented on ships and practices should be monitored by official authorities,
- 5 Preparing a job description for cadets, specifying daily working hours of the trainee on deck and bridge and respecting such job description,

- 6 Implementing policies that will eliminate the views considering a trainee as manpower on the ship,
- 7 Cadets should be seen as a crew member, and to provide to use their occupational rights.
- 8 Consideration should be given to the team communication. Face-to-face communication environments should be created to establish good relationship between crew members. Carried on board; barbecue parties, birthday celebrations, table tennis tournaments etc.
- 9 Safe manning should have arranged for more trainees,
- 10 Training on occupational health and safety must be compulsory for each crew member on board, for shipping companies and for training institutions,
- 11 Living conditions on board should be organized in accordance with the MLC 2006 Convention. The ship and company audits conducted on this subject should be more frequent. Whereby the working conditions on board will become eligible.

It will be useful if this study is following by future studies offering new alternatives aimed at rendering the naval sector more attractive for new and current seamen and ensuring occupational continuity.

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