

## **Turkish Women Seafarers and A Questionnaire Study on Employment Situation**

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**ABSTRACT:** Throughout history, women have struggled to gain a place and establish their presence in social life. Mostly, they have continued their life in the position of carrying out family responsibilities. When women want to get involved in the business world, they are facing some problems arising from dogmatic thinking and prejudices, especially among the professions with "male-dominated" judiciary. Maritime profession, one of the oldest professions in the world, was also regarded as a single-gender area until the 20th century. However, in recent years, economical and political changes in the world, equal opportunity in education and incentive works of the International Maritime Organization have led women to work as seafarers. Although female seafarers constitute 2% of the world seafarers, this ratio is higher in developed countries than that of undeveloped or developing countries (URL-1). There is very little information regarding women seafarers in general, including the actual population size. Most of studies focus on passenger ships or cruise ships, not cargo ships (Sohyun, 2010). It is difficult to find relevant studies regarding women seafarers in the world, including in Turkey.

In Turkey, women have played an active role and gained an apparent identity in the maritime sector since the 2000s. According to 2015 data, Turkey is ranks the 14th in the world maritime trade with more than 27,6 million deadweight tonnage and manages 1530 vessels (UNCTAD, 2015). In Turkey, many studies related to the employment of seafarers are carried out as in the whole world. However, studies on the employment of women seafarers should be paid more attention. In this study, a questionnaire was carried out with the personnel department managers in Turkish shipping companies. Employment, career, educational status of female seafarers and the general difficulties they face were revealed.

### **1 INTRODUCTION**

It is known that millions of women and men are pushed to certain job groups and worked with low wages because of their gender, skin colour, ethnic reasons or religion, without taking into account their abilities or qualifications, all over the world. Protection against discrimination is part of the fundamental human rights and equalizing the conditions of the employees in the workplace brings significant economic benefits. For the employers,

this means more work force, higher quality and for the workers it means easier access to training and higher salaries. The benefits of a globalised economy are better allocated in an equalitarian society and they generate a higher social stability and a wider support from people in the favour of economic development .

The regulations of the International Labour Organization (ILO) about equality secure discrimination elimination from all fields of work and society. Since 1919, ILO has developed an

international regulation work system focused on increasing men and women chances in obtaining a good and productive job in freedom, equity, security and dignity conditions regardless of the working domain. In the today worldwide economy, the international work regulations are an essential component of the international framework and they have as main purpose to ensure that everybody (men and women) profits from the world economy growth (Popescu and Varsami, 2010).

According to United Nations 2010 globally statistics, women's participation in the labour market remained steady in the two decades from 1990 to 2010, hovering around 52 per cent. In contrast, global labour force participation rates for men declined steadily over the same period, from 81 to 77 per cent. In 2010, women's labour force participation rates remain below 30 per cent in Northern Africa and Western Asia; below 40 per cent in Southern Asia; and below 50 per cent in the Caribbean and Central America. The gap between participation rates of women and men has narrowed slightly in the last 20 years but remains considerable (UN, 2010). According to World Bank 2012 data, women represent 40% of the world's labor force but hold just 1% of the world's wealth (World Bank, 2012). For other researchers, women represent at least 1/3 of the world of labor. More than 50% of women are economically active in more than 90 countries. Despite the importance of women in the national economy and their income to the family, social protection is insufficient neither for them nor for their families. Due to the special operating conditions, marine transportation industry is one of the sectors which needs to be analyzed in protecting benefits of women. Female seafarers constitute 2% of the world seafarers (ILO, 2007; ILO, 2010; Popescu and Varsami, 2010; URL-1; WHO, 2003).

In Turkey, women have begun to show themselves in various branches of the maritime sector since the 1980s and their existence in the sector has showed a rapid increase especially after 2000. Women's employment in commercial vessels and the acceptance of female students to maritime schools have been realized after 1991 (Aşkın, 2016).

According to data from the year 2015, Turkey ranked the fourteenth in the world maritime trade with more than 27 million deadweight tonnage management and management of 1530 ships is performed in Turkey. They are registered in both international and national record (100 GT and over) and have total capacity of more than 27,6 million DWT (UNCTAD, 2015). Although the last information shown us that 3500 women seafarers registered in Turkey (Aşkın, 2016), 2245 women seafarers' details are announced in this study. When these questionnaire study carried, the total number of seafarers registered in Turkish Seafarers' Registry is 178134 and 2246 of them are female seafarers. 45677 of them are the officers and 132457 of them are ratings. However, the number of active employees are 36254 as officers and 83316 as ratings (e-Maritime Database, 2013).

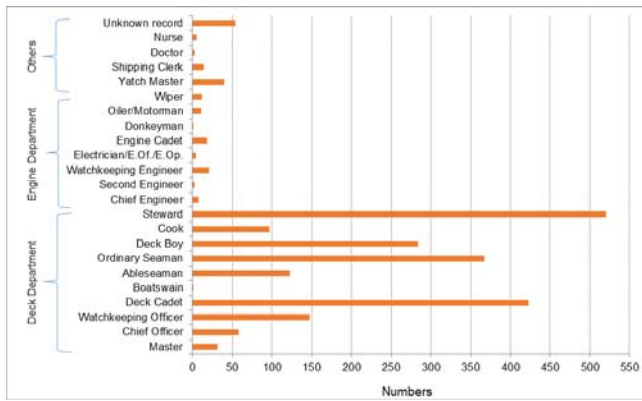
## 2 FEMALE SEAFARERS REGISTERED IN TURKISH SEAFARERS REGISTRY

According to the 2013 year-end data, there are 2246 women seafarers registered in Turkish Seafarers' Registry. Turkish female seafarers' mean ages and distribution of competences are shown in Table 1. As detailed in Table 1, female seafarer statistics are classified under the segments of deck engine and others in Fig1. The competences shown under deck and engine departments are considered according to crew manning regulations and the standards of cargo ships in today's Turkish merchant fleet. Thus, yacht captain, doctor, nurse, ship clerk competencies and the competencies that have been recorded in the registry without specifying the nature are classified as "others".

Table 1. Female seafarers recorded in Turkish Seafarers' Registry

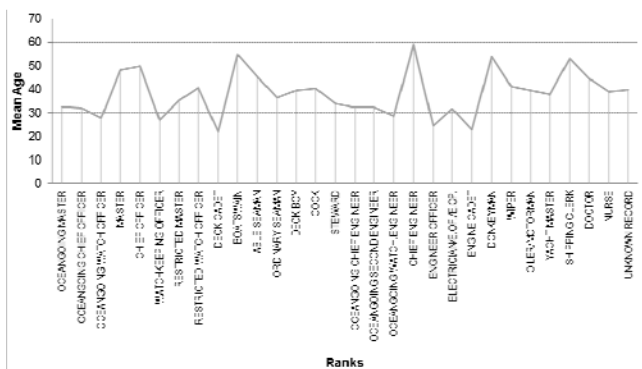
Rank	Age Period	Mean Number	Age
Oceangoing Master	30-40	32,5	22
Oceangoing Chief Officer	26-39	32	55
Oceangoing Watchkeeping Officer	22-47	27,76	124
Master	41-57	48,17	6
Chief Officer	36-73	50	3
Watchkeeping Officer	24-36	26,92	13
Restricted Master	32-41	35,5	4
Restricted Watchkeeping Officer	27-61	40,6	10
Deck Cadet	17-54	22,16	423
Shipping Clerk	35-68	53,29	14
Boatswain	55	55	1
Able seaman	20-68	45,35	123
Ordinary Seaman	17-67	36,46	367
Deck Boy	22-73	39,68	284
Cook	22-67	40,46	97
Steward	20-69	33,88	520
Doctor	37-55	44,67	3
Nurse	29-53	39	5
Oceangoing Chief Engineer	31-34	32,33	6
Oceangoing Second Engineer	30-34	32,33	3
Oceangoing Watchkeeping Engineer	27-34	28,79	19
Chief Engineer	41-71	59	2
Engine Officer	24-25	24,5	2
Engine Cadet	18-30	22,78	18
Electrician/ Electronic Officer/ Electronic Operator	22-41	31,75	4
Donkeyman	54	54	1
Wiper	27-65	41,17	12
Oiler/ Motorman	29-54	39,55	11
Yacht Master	21-69	37,85	40
Unknown record	21-60	39,87	54
Total			2246

Resource: e-Maritime Database of Transport, Maritime Affairs and Communications Ministry of Turkish Republic

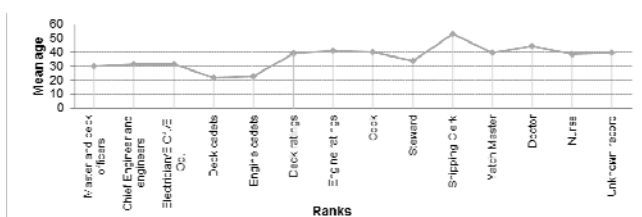


E.Of.: Electric Officer, E.Op.: Electric Operator  
Figure 1. Female seafarers recorded in Turkish Seafarers' Registry

Competencies of female seafarers and the mean age data are shown in Fig2 separately for each proficiency level. In Fig3, the mean age data of the registered female seafarers are classified by departments. The number of people in each proficiency level are shown in Fig4.



WATCH.: Watchkeeping, E.OF.: Electric Officer, E.OP.: Electric Operator  
Figure 2. Registered female seafarers' mean age by all competencies



*E.OF.: Electric Officer, E.OP.: Electric Operator*  
Figure 3. Registered female seafarers' mean age in categories

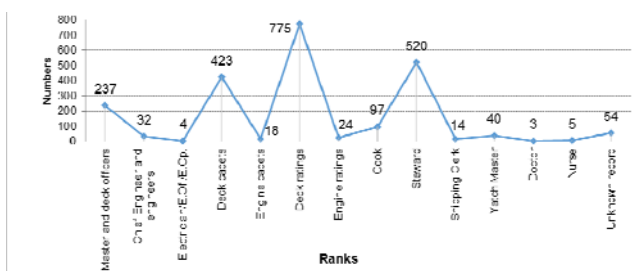


Figure 4. Registered female seafarers' numbers in categories

### 3 METHODS

In this study, a questionnaire was carried out with the personnel department managers in Turkish shipping companies. Employment, career, educational status and the general difficulties of female seafarers were revealed. 40 corporate firms were interviewed. In 19 of these cases, it was determined that there was no female seafarer employment. It was reported that female personnel were currently working on board in the remaining 21 firms at the time of the survey. Study assessments have been performed with the data of 16 companies who participated in the survey.

In the survey, 24 multiple choice questions were directed to the participants. The personnel department managers' opinions were also mentioned. A part of the survey questions aimed to determine the service years of companies, types, tonnages and numbers of vessels, engine powers, number of maritime-related employees, competence and education level of seafarers in the fleets. In the other section, it was intended to identify the number and competencies of female seafarers, education levels, types of ships they are employed, age and marital status, employment and wage policies. The survey also tried to reveal the conditions that complicate the work of female seafarers.

## 4 FINDINGS AND CONCLUSIONS

#### 4.1 Company and Fleet Profiles

The graphics in Fig 5 and Fig 6 show the profiles of the companies and fleets of the surveyed firms. All of the surveyed firms are experienced corporate companies with large tonnage vessels in the transportation sector.

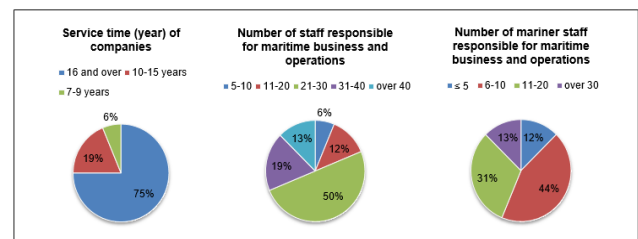


Figure 5. Company profiles of surveyed firms

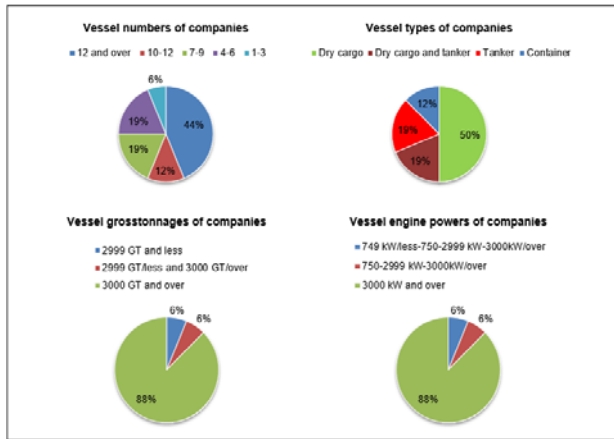


Figure 6. Fleet profiles of surveyed firms

#### 4.2 Findings Related to Fleet Personnel

The total number of fleet personnel (5648) and the distribution of competences for 16 surveyed firms are shown in Fig7. In Fig 7, "others" group means seafarers working as fitter and pumpers (117) and crew's family members with ordinary seafarer and steward competencies (14).

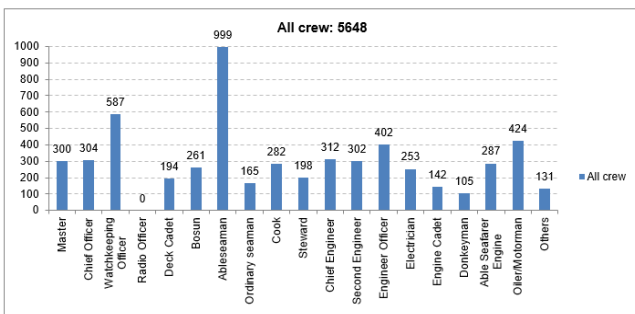


Figure 7. Number of all crew employed on vessels of surveyed firms

122 of all detected crew is consist of female seafarers. The distribution of female seafarers' competencies is shown in Fig8. "Others" group of women seafarers have been reported as relatives of the crew on board with the competencies of ordinary seafarer and steward. They are not active seafarers.

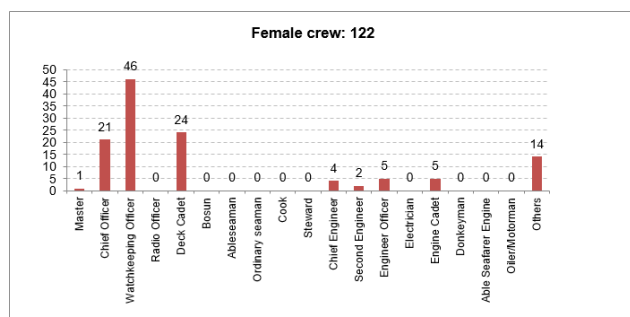


Figure 8. Number of female crew employed on vessels of surveyed firms

Figure 9 shows the number of male and female employees for each competency. When Fig 9 is analyzed, it is observed that women are working in tasks that require many operational capabilities like captain, officers and engineers. Also, the presence of

female cadets on deck and engine departments shows that the number of female seafarers have increased in competencies that require technical and operational skills. In spite of the fact that the belief "Women can do better" is accepted by society for public service jobs such as food preparation and cleaning, female employment is not seen as cook and steward. However, there are 97 female cooks and 520 female stewards already registered in Turkish Seafarers' Registry (e-Maritime Database, 2013). Similarly, although a large number of other rating proficiencies registered, no female seafarers are seen as rating.

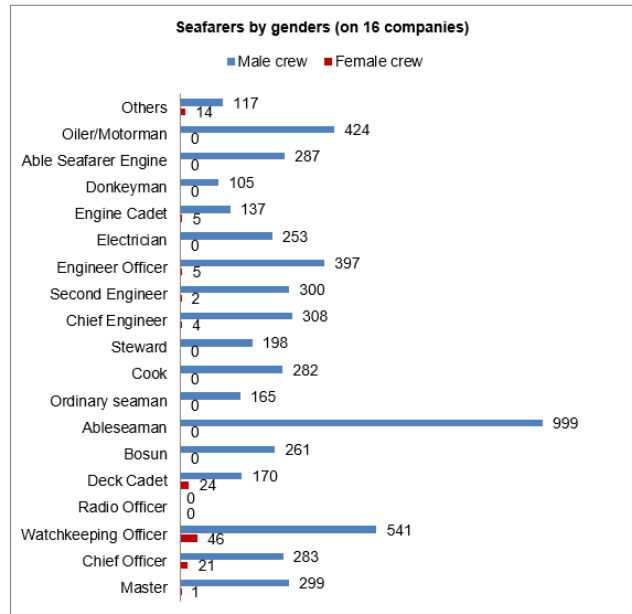


Figure 9. Seafarers by genders on surveyed firms

The officer seafarers are subjected to classification as management level and operational level, and are shown in Fig10 for deck department and in Fig11 for engine department. For deck department, master and chief officers are evaluated at management level and watchkeeping officers are evaluated at operation level. For engine department, chief engineer and second engineers are evaluated at management level and watchkeeping engineers and electricians are evaluated at operation level.

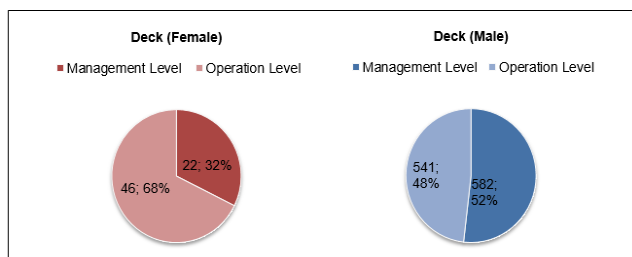


Figure 10. The officers at deck department by genders and levels

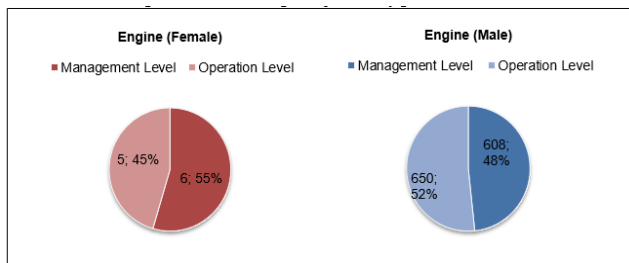


Figure 11. The officers at engine department by genders and levels

In Figure 11., the crew employed on vessels of surveyed firms are categorized in four classes. Deck class is composed of bosun, ableseaman and ordinary seaman ranks. Engine class is composed of donkeyman, ableseafarer engine and oiler/motorman ranks. "Ableseafarer engine" term means the experienced oiler/motorman. Hotel class is composed of cooks and stewards. No female seafarers are employed at deck, engine and hotel departments. "Others" class is composed of pumpers and fitters of males. Although 14 female seafarers in "others" class have ordinary seafarer and steward ranks, they are family members of the crew and they are on board like passengers.

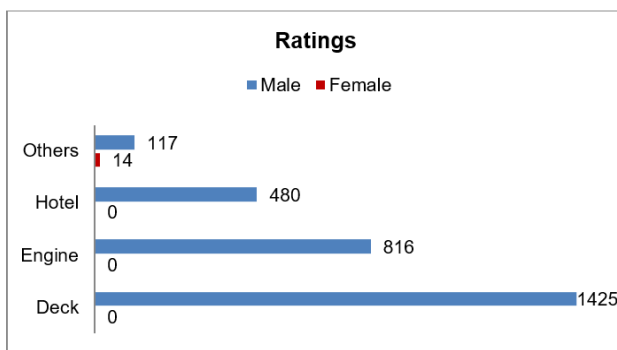


Figure 11. Ratings employed on vessels of surveyed firms by genders and departments

In Fig12., cadets employed on vessels of surveyed firms are shown by genders and departments. According to academic calendar of maritime schools in Turkey, the trainee is getting more on ships in the summer term. The numbers of trainee (cadets) in Fig12 were identified in the fall term during which the survey was conducted.

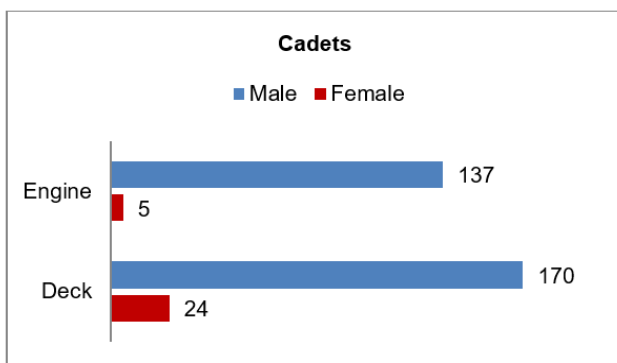


Figure 12. Cadets by genders and departments

Fleet personnel of surveyed firms were also examined in terms of educational status. Educational status of 2186 of 2381 men in the officer class has been determined (1033 of 1123 men in the deck officer, 1153 of 1258 men in the engine officer). The total number of female seafarers in the officer class is 79 and educational status of all female seafarers have been reported. Educational status of the officer class are given separately in Fig13 by genders.

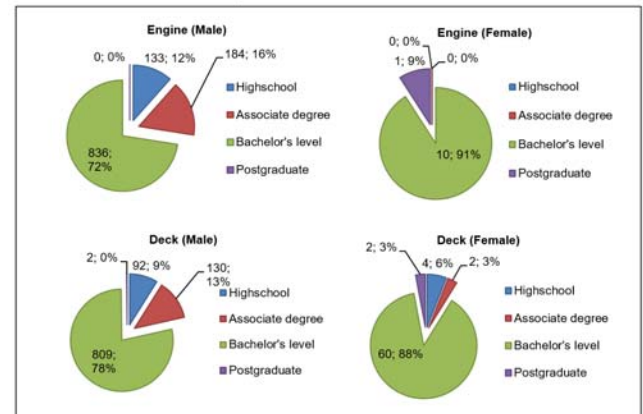


Figure 13. Educational status of the officer

When the educational status of ratings of surveyed firms were analyzed, it was seen that the educational status of 2551 ratings out of 2838 ratings were reported. 1730 of them are deck ratings and 821 of them are engine ratings. All of them are male seafarers. There are no female seafarers as rating in the surveyed fleets. Detected 14 female ratings are family members on board with seafarer documents. Educational status of ratings is shown in Fig14. The qualifications of cook, steward, fitter and pumper have been included in the deck and engine class.

Deck and engine cadets' educational status is shown in Fig15. The numbers belong to the fall term and they increase in the summer term.

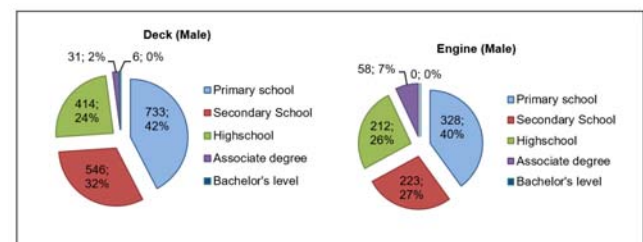


Figure 14. Educational status of ratings

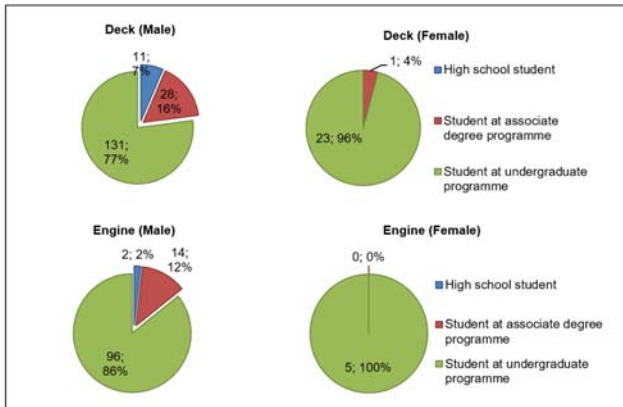


Figure 15. Deck and engine cadets' educational status

Ship types were also investigated in terms of female employment in surveyed fleets. Percentage of 16 firms is given in Fig16 according to the type of vessel in which female personnel are employed. In three companies from these, operating both types of tanker and dry cargo vessels and female seafarers are employed on tankers. One of the three companies is also operating oil and fuel barges, but there is not female employment in these barges.

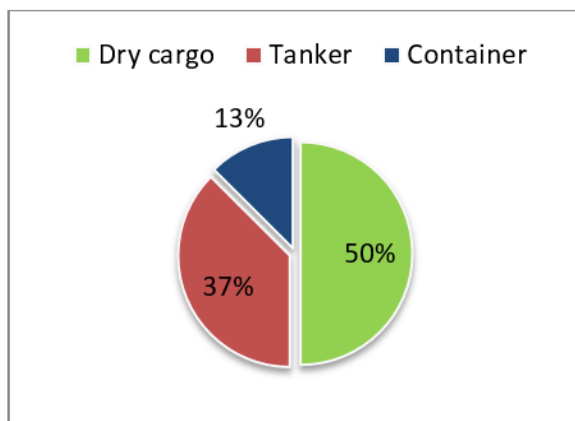


Figure 16. Vessel types in which female personnel are employed

In addition, it is determined that there is not a restriction on women's employment in the Turkish-flagged and foreign-flagged vessels of surveyed firms. Female seafarers were found to be employed in both classes.

When the age range of female seafarers is investigated, Table 2 has come to light.

Besides, it was seen that there was not a wage gap between male and female seafarers doing the same task (Fig17).

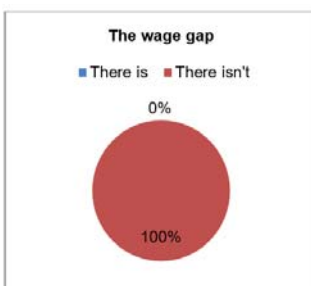


Figure 17. The wage gap between male and female seafarers

Table 2. Female seafarers' age ranges on surveyed fleets

Company	Age period of female seafarers				
	18 and less	19-25	26-30	31-35	36&over
1			X		
2			X		
3		X	X	X	
4		X			
5		X			
6		X			
7			X		
8		X	X		
9		X	X		
10		X	X		
11		X			
12		X			
13			X		
14		X	X		
15		X			
16			X	X	

The companies asked about "married female seafarers"; "female seafarers who have children"; "female seafarers who married with a seafarer" and "the opportunity of working together for seafarers couples". It was determined as "there is" or "there isn't" in Fig18.

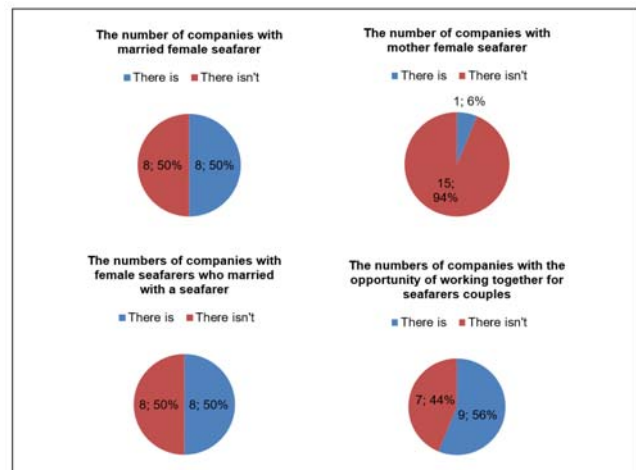


Figure 18. The number of companies with married and mother female seafarers

The companies also asked about what reasons female seafarers who left the job had for quitting work. In 3 companies, there were no female seafarers who left job. In other companies, the reasons of female seafarers who left job was found to be as follows;

- Workplace dissatisfaction
- Marriage
- Contract end
- Internships end
- Leave work at sea
- Prefer to work on ocean going voyage
- Excessive alcohol consumption
- Study abroad
- Tempo on tanker and transportation of chemical cargo
- Her own request

When the existence of a written policy regarding female seafarers was investigated, in two of the 16 companies it was found that there were written employment policies. 14 companies did not have a written policy regarding the female seafarers.

The past of companies with female seafarers is shown in Fig19.

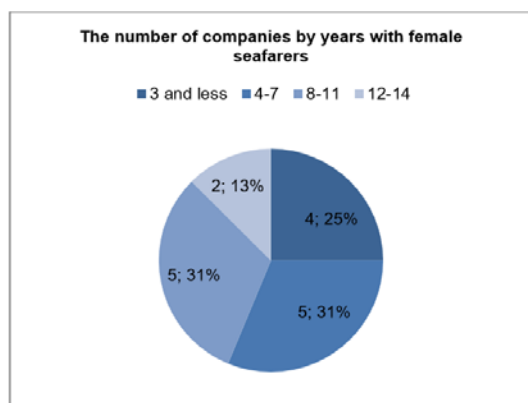


Figure 19. The number of companies by years with female seafarers

The companies asked about the situations that complicate the work of female seafarers. According to the personnel department managers' answers, the results are categorized as follows:

- Conditions of accommodation
- Physical differences
- Superior-subordinate relationship
- Difficulties in destination ports (personnel changes, etc.)
- Ship's personnel not to accept female staff
- Family life and marriage in later years
- Emotionality

The personnel department managers were also asked to indicate their own opinions about female seafarers. 13 managers clearly said that they were satisfied to work with female seafarers and that they wanted to work with female seafarers for many years. However, other managers made some other comments. One of them was also very interesting. Following are the comments made by them;

- Female seafarers tend to go ashore early with the prejudice of "I'm a woman. They do not give me the captain or chief engineer position."
- Usually, women married with sailors stay at sea longer. In each case, female seafarers' professional marine life is ending after birth. They can not go to sea because they can not leave children to their husbands.
- Female officers have no problems about documentation and in compliance with company procedures. However, it was observed that they are experiencing difficulties in the parts of the physical needs of the operational procedures and technical skills, according to their male counterparts.
- "The biggest problem of female employment is still female employee herself. Female staff's ego is fed unnecessarily due to the small number and being in the limelight. Over time, they are having a request to establish an unfounded superiority against other crew. Also, they're being selective among the crew and they're getting disproportionate force in directing the crew behaved well. This situation often leads to imbalance in the ship. For example; the crew member behaved well by female seafarer, feels himself in a privileged position than others. Other

people are taking sides against this situation and begins to hate. This hatred often explode in smaller events."

## 5 RESULTS

As a result of this study, for governmental record, following items were detected:

- The total number of seafarers registered on Turkish Seafarers' Registry (2013 year-end) is 178134 and 2246 of them are female seafarers. It means 1,26% of Turkish seafarers are female.
- 45677 of all seafarers are officers and 132457 of them are ratings. It means 25,6% of Turkish seafarers are officers and 74,3% of them are ratings.
- The number of active employees are 36254 for the officer and 83316 for ratings. It means 79,3% of the officer and 62,9% of ratings are active seafarers.
- The percentage of 2246 registered female seafarers is as follows; 14% the officer, 20% cadets, 64% ratings and 2% unknown.

The following items were detected as the results of our questionnaire study with 16 companies,;

- Total crew number is 5648, and 5526 of them are male, 122 of them are female seafarers. It means 97,8% of all fleet personnel of surveyed firms are male and 2,2% of them are female seafarers. However, the active female seafarers on surveyed firms are 108 people. In this case, the actual rate of seafarers is 98,1% for male and 1,9% for female. It also shows us that in these Turkish ships, the atmosphere is suitable for families and away from hostility.
- In surveyed firms, the percentage of women on board by ranks is as follows: master 1%, chief officer 21%, 46% watchkeeping officer, deck cadet 24%, chief engineer 3%, second engineer 2%, watchkeeping engineer 4%, engine cadet 4% and others (families) 11%.
- In surveyed firms, the percentage of men on board by ranks is as follows: master 5%, chief officer 5%, watchkeeping officer 10%, deck cadet 3%, chief engineer 6%, second engineer 5%, watchkeeping engineer 7%, electrician 5%, engine cadet 2%, bosun/boatswain 5%, able seaman 18%, ordinary seaman 3%, cook 5%, steward 4%, donkeyman 2%, able seafarer engine 5%, oiler/motorman 8% and others (fitter and pumper) 2%.
- The ratio of women on board for all these 16 companies is; for the deck officer 5,7%, for the engine officer 0,8%, for active ratings 0%, for deck cadet 12% and for engine cadet 3,5% at the time of the survey.
- The percentage of educational status for 2186 of 2381 men in the officer class is as follows; high school 10%, associate degree 14%, bachelor's level 75%, postgraduate 0,1%.
- The percentage of educational status for all women in the officer class is as follows; high school 5%, associate degree 2,5%, bachelor's level 88,5%, postgraduate 4%.
- The percentage of educational status for 2551 of 2838 men in the rating class is as follows; primary school 41,6%, secondary school 30,2%, high school 24,5%, associate degree 3,5%, bachelors level 0,2%.

- There is no restriction related with ship's flag for female seafarers' employment.
- In some companies, tankers are more available for female seafarers' employment and there are no women on barges in one company.
- For female seafarers employed in surveyed fleets, main age range is 19-25, max age range is 31-35.
- There is no wage gap between female and male seafarers.
- Married and/or mother female seafarers can be employees on vessels.
- Experience of surveyed firms with female seafarers reaches to 12-14 years.

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