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*Research Article*

## CAREER PREFERENCES OF THE TURKISH OFFICERS AFTER SEA SERVICE

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### *ABSTRACT*

*In this study, the post-maritime careers of Turkish officers who have STCW A-II/1 and A-III/1 qualifications at the undergraduate level were investigated, and their new career preferences were examined. The high salary profession has been identified as one of the main reasons why Turkish officers prefer the maritime profession. Turkish seafarers' working periods on the ship were examined, and the shortness of these durations was observed to be noteworthy. This situation shows that due to not properly career planning, it is seen that they do less sea service because of factors such as family etc. than Filipinos. Therefore, properly planned career management serves both the goals of the institutions and the expectations of the employees. Studies also have shown that a significant majority of the sector's employees aim to have a second career after sea service in the same sector. It is a very remarkable result for the maritime industry that Turkish officers want to work on shore base of the sector. The survey method was used to obtain the data. The regression model in SPSS 22 program was used in the analysis of the obtained data. As a result of this study, it has been observed that most of the Turkish seafarers generally work in the maritime sector after sea services.*

**Keywords:** *Seafarer, Turkish Officer, Career Preference, Maritime, STCW.*

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## TÜRK ZABİTLERİN DENİZ HİZMETİNDEN SONRAKİ KARİYER TERCİHLERİ

### ÖZ

*Bu çalışmada, lisans düzeyinde STCW A-II/1 ve A-III/1 yeterliliğine sahip Türk zabıtlarının denizcilik sonrası kariyerleri araştırılmış ve yeni kariyer tercihleri incelenmiştir. Yüksek maaşlı bir meslek olması, Türk zabıtlarının denizcilik mesleğini tercih etmelerindeki başlıca nedenlerden biri olarak tespit edilmiştir. Türk denizcilerinin gemide çalışma süreleri incelenmiş ve bu sürelerin kısalığının dikkat çekici olduğu görülmüştür. Bu durum, aile gibi etkenler sebebiyle kariyer planlamasının düzgün yapılmadığını ve Filipinlilere oranla daha az deniz hizmeti yaptıklarını ortaya koymaktadır. Bu nedenle doğru planlanmış kariyer yönetimi hem kurumların amaçlarına hem de çalışanların beklentilerine hizmet etmektedir. Araştırmalar ayrıca sektör çalışanlarının önemli bir çoğunluğunun aynı sektörde deniz hizmetinden sonra ikinci bir kariyere sahip olmayı hedeflediğini göstermektedir. Türk zabıtlarının sektörün kara tarafında çalışmak istemesi denizcilik sektörü için oldukça dikkat çekici bir sonuçtur. Verilerin elde edilmesinde anket yöntemi kullanılmıştır. Elde edilen verilerin analizinde SPSS 22 programında yer alan regresyon modeli kullanılmıştır. Bu çalışma sonucunda Türk denizcilerinin büyük çoğunluğunun deniz hizmetlerinden sonra genel olarak denizcilik sektöründe çalıştığı gözlemlenmiştir.*

**Anahtar Kelimeler:** Gemiadamı, Türk Zabiti, Kariyer Tercihi, Denizcilik, STCW.

### 1. INTRODUCTION

Under the leadership of cargo and passenger transportation, the maritime sector has continued to develop in parallel with technology, including sectors such as the shipbuilding industry, port services and marine tourism. Technological developments have enabled maritime transport to gain a more effective and robust position by integrating it with other transport types (Fageda, 2000).

According to the data of the United Nations Conference on Trade and Development (UNCTAD) 2020, the world merchant fleet has grown every year for the last ten years. As of 2020, its volume consists of 2.051 billion deadweight tons (DWT) and 52,961 ships. When the world merchant fleet is considered in terms of DWT, it is seen that the largest fleet belongs to Greece with 17.7%, followed by Japan with 11.4% and China with 11.2%, respectively. Turkey is the 12th country with 1,528 ships, and the 16th with 28.1 million DWT volume (UNCTAD, 2020).

Besides, the data obtained from the sector has led to the observation that there is an increasingly noticeable dynamism in the maritime sector throughout the world and within the Turkish merchant fleet. The observed increase is directly related to the number of crews (officers and ratings) in the maritime sector. According to the 2015-dated Manpower Report of the Baltic and International Maritime Council (BIMCO) and the International Chamber of Shipping (ICS), the increase in the supply of officers is higher than the rating class. Moreover, as stated in the same report, there is an increase in the global demand for officers. Also, future predictions have revealed that the supply in the officer class cannot meet the demand (ICS, 2015).

It is known that the maritime industry seriously monitors the supply-demand imbalance in these reports. Career management is one of the important policies for institutions that want to be least affected by such negativities in the sector. Because career management serves both the goals of the institutions and the expectations of the employees. In addition, the use of human resources, which is one of the main problems of institutions, will also become more efficient (Bursalı and Kök, 2018). It is seen that the efficient use of human resources is directly related to a proper career planning.

Career planning is a process that must be completed before making a career preference with respect to Parsons (1909), and this process both improves the career of the individual and makes him/her responsible (Yean and Yahya, 2013; Veronica et al. 2020). According to Zikic and Klehe (2006), career planning is firstly determining goals and strategies and then creating a plan to achieve the intended goals within a certain time period. Determining these goals not only provides direction and stability to the person but also gives a commitment, perseverance and resilience in the face of changing conditions (Seibert et al. 2013). In effective career planning, goals should be clearly defined, and strategies should be developed accordingly (Gould, 1979; Jackson, 2017). Today's employees must adapt to the changing needs and develop themselves in order to evaluate their career opportunities (Lent, 2013). In addition, the harmony between the manager and the employee is important in correct career planning (Lartey, 2021).

In terms of the maritime sector, it is essential to eliminate the shortage of officers that may be faced in the future and to train qualified officers. Therefore, maritime education, with many variables, includes an intensive process. In addition to the fact that each country has its own curriculum, international rules and regulations are also strictly

implemented. In Turkey, faculties and vocational schools providing maritime education are affiliated with the Council of Higher Education and are supervised by the Ministry of Transportation and Infrastructure. These audits are carried out under A-1/8 of the STCW 78 (2010 amendments) Regulations (USCG, 2021). Today, when the institutions authorized by the Ministry of Higher Education and the Council of Higher Education are examined, it is seen that there are 14 education institutions at the undergraduate level and 13 education institutions at the associate degree level (GBS, 2021).

The seafarer, who passed the specified training period, can be defined as the first truly international workforce consisting of individuals who have been trained in different regions of the world in geographical and cultural terms. Seafaring, on the other hand, as more than a profession, is a lifestyle that integrates land and sea life with constant transitions from land-based life to ship life (Thomas et al. 2003). Knudsen (2009) defines seafaring as a profession with work for months in restricted physical and social environments, surrounded by certain conditions and traditions. The International Labor Organization (ILO) describes it as a dangerous profession that can cause work accidents, injuries, and diseases (ILO, 2006). Due to the difficulty of this profession, well-trained and qualified seafarers are always needed in the sector. The difficult conditions of the maritime profession cause seafarers to move away from sea life (McLaughlin, 2015).

In addition to the above, the importance of efficient use of human resources in the maritime sector was emphasized due to the expensiveness of maritime education and training (Muirhead, 2004; Cicek and Er, 2008) and the foreseeable shortage of officers in the future (ICS, 2015). Therefore, in our study, the next career preferences of Turkish officers who end their sea service are examined. The remainder of the study is organized as follows. While Section 2 includes the literature review, Section 3 explains the structure of the study and the methods used under the title of materials and methods. the preferences of the participants in response to the survey questions are given in Section 4. Section 5 contains discussion, and Section 6 concludes the study.

## **2. LITERATURE REVIEW**

The maritime sector aims for qualified seafarers to work within the sector for a long time; nevertheless, seafarers wear out early due to the lack of social life on the ship, the lonely working environment, lack of family time, emotional and work-related stress (Thai and Latta, 2010; Singh,

2019). When the seafarers' working periods on the ship are examined, it is seen that these periods are noteworthy short (Ruggunan and Kanengoni, 2017). Nowadays, seafarers prefer shore-based jobs because of more freedom, which has been negatively affecting the maritime industry (Sulpice, 2011; Kantharia, 2019; Yuen et al. 2018). Ruggunan and Kanengoni (2017) found that 55% of the maritime industry employees do not want to pursue a career at sea for more than ten years. Zhao and Amante (2005) examined the professional attitudes of cadets from the Philippines and China, found that the reasons for not wanting to work at sea were bad behavior, exploitation, and lack of motivation. Pauksztat (2017) investigated short-term sea voyages and the effects of these voyages on work and life on board. In the current study, not only the workload but also the difficulty of the job, the ability to plan for the future and the unauthorized entry of third parties were investigated; as a result, it was revealed that a good working environment is crucial in countering negative emotions and supporting motivation and cooperation. Barnett et al. (2006) have argued that the reason for shore-based career preference lies in the desire to take advantage of the sudden opportunities due to the pressure from the family. With regard to seafarers, Knudsen (2009) studied the workload and impact of paperwork on seafarers. Bergheim et al. (2015) examined the state of psychological capital (PsyCap) in relation to the perceptions of safety climate and job satisfaction. Thomas et al. (2003) found that separation from wife and family is one of the most important "stress" factors influencing the decision to reduce the planned sea service duration. In a study on pilots, Avis et al. (2019) stated that the stress level of the pilots was affected by the quality of their family life and relationships. Zaar and Hammarstedt (2012) have shown that stress and fatigue are the most compelling reasons for young seafarers to decide to leave the sea service. Tezcan et al. (2020) conducted a study on Turkish seafarers' working and living conditions and revealed to what extent the working conditions of Turkish seafarers working on merchant ships comply with the requirements of the Maritime Labor Convention. Oldenburg et al. (2013) investigated the effects of working and resting hours on fatigue, Allen et al. (2008) examined the effects of fatigue and stress on ship and crew safety. In the meantime, Fei and Lu (2015) studied the importance of keeping seafarers in the industry. Similarly, Caesar et al. (2015) examined the reasons for seafarers leave the sea in their study and made recommendations for seafarers to continue their work at sea. In the studies carried out, it is seen that a significant majority of the sector employees aim to have a second career after sea life (Barnett et al. 2006; Mitroussi, 2008).

Şakiroğlu (2007) and Köseoğlu (2010) conducted a survey on the Career Planning of the Oceangoing Deck Officers and revealed the reasons why these seafarers ended their sea life. Some of the survey questions they developed were used in this study.

The literature review shows that many studies have been carried out on seafarers and their work processes. However, as per literature review has realized about how Turkish officers make their career preferences after sea service, a significant gap has been observed. Therefore, this study aims to shed light on the gap in the literature on this subject. In this study, the preferences of Turkish officers after their sea careers were examined, who were trained at the undergraduate level.

### **3. MATERIALS AND METHODS**

The population size of this study is not known, since there is no statistical data in the literature regarding the part of the Turkish officers who have an undergraduate education in marine transportation engineering and marine engineering departments and continue their careers on shore. In this study, 296 participants were reached in order to collect data from January 2018 to March 2018 and they were asked to answer 12 questions created by the online survey method. Since some of the participants did not answer all of the questions, not all questions have the same number of answers. The survey consists of two parts. The first section lists eight variables. This section has been prepared by updating the “Career Planning Questionnaire for Oceangoing Deck Officers” developed by Şakiroğlu (2007) and Köseoğlu (2010). Participants were asked to rate each variable with the given item scale. The second part consists of demographic questions about the participants ‘competence, location, position and duration of sea service. In this section, mainly categorical or time scales were used. Using the Shapiro-Wilk test, it was checked if the variables have distributions close to the normal distribution (Shapiro and Wilk, 1965). Correlation between variables was checked to eliminate variables that might affect the disturbance or disruption of the analysis (Navarra and Simoncini, 2010). The purpose of building and analyzing the regression model is to examine the existence of relationships between variables and the effect of  $X_i$  variables (in this case, “duration of sea service”) on the  $Y$  variable (in this case, “position of participant”).

$$\gamma_i = \beta_i X_i + \beta_0$$

With the data obtained, SPSS 22 – regression modelling was performed, analyzed using the MS-EXCEL program, then tables and

graphics were drawn. Percentage analysis techniques were used to analyze the data. The open-ended questions in the survey were grouped according to the topics, which were then evaluated.

The participants who were graduates of marine transportation engineering and marine engineering provided answers to the survey questions. The answers were investigated to determine Turkish officers' progress in the fields that they headed after sea life, and their new career preferences were examined.

#### 4. FINDINGS

In this study, the preferences of the participants in response to the survey questions, who have graduated from the departments of marine transportation engineering and marine engineering, were separately examined, and analyzed. Two hundred ninety-six seafarers participated in the survey study and the demographic structures of all participants are given in Table 1.

**Table 1: Demographic Characteristics of the Participants**

<b>Demographic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Competence</b>		
Oceangoing Master	126	43%
Oceangoing Chief Off.	48	16%
Oceangoing Watchkeeping Off.	50	17%
Oceangoing Chief Eng.	30	10%
Oceangoing First Asst. Eng.	19	6%
Oceangoing Watchkeeping Eng.	23	8%
<b>Duration</b>		
Up to 2 Years	56	19%
From 2 Years to 5 Years	68	23%
From 5 Years to 10 Years	92	31%
10 Years and More	79	27%
<b>Position</b>		
Employee	185	64%
Executive	75	27%
Owner	21	7%
Partner	9	3%
<b>Residence</b>		
Turkey	277	95%
Indonesia	3	1%
United States	3	1%
<b>Residence (cont.)</b>		
Netherlands	2	0.6%

Demographic	Frequency	Percent
South Korea	1	0.3%
France	1	0.3%
England	1	0.3%
Ireland	1	0.3%
Luxembourg	1	0.3%
Australia	1	0.3%
Belgium	1	0.3%
Turkish Republic of Northern Cyprus	1	0.3%

It is seen that participants' highest rate of proficiency is the oceangoing master rank with 43%. This answer is followed by the oceangoing watchkeeping officer rank with 17% and the oceangoing chief officer rank with 16%, respectively (Figure 1).

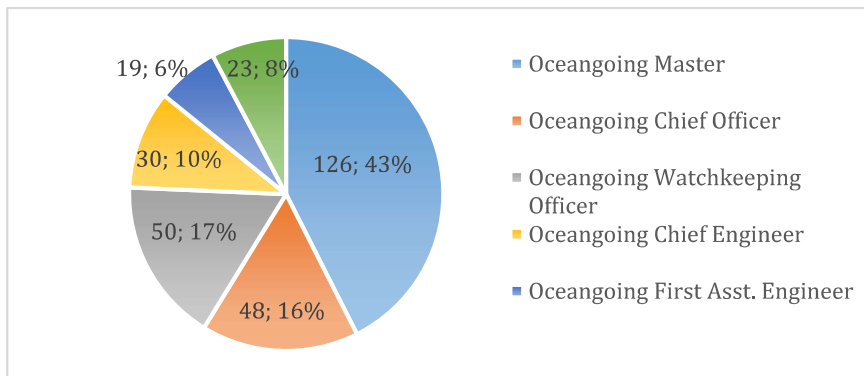


Figure 1: Distribution of the Proficiencies Owned

It has been determined that the majority of the participants (31%) have a total working duration at sea from 5 years to 10 years (Figure 2).

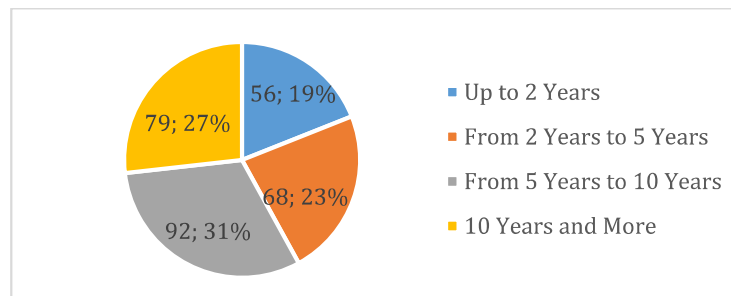
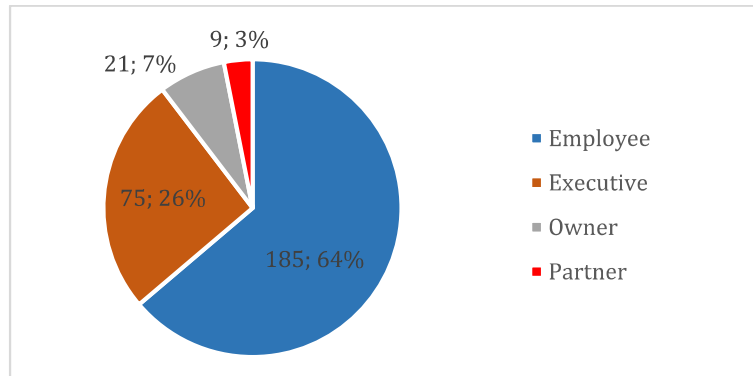


Figure 2: Distribution of the Total Working Duration at Sea



It was determined that the majority of the participants (64%) were paid employees, and 26% of the participants held administrative positions (Figure 3).



**Figure 3:** Distribution of the Positions at the Enterprise

When the relation between the duration employees spent at sea service and their positions are analyzed, it is determined that the relationship is positive (Table 2). The duration of sea service and the position level at the enterprise are parallel with each other. Therefore, as the duration of sea service increases, the position at the enterprise rises in direct proportion. The relationship between these two variables is statistically significant compared to 5% since the probe value is less than 0.05.

**Table 2:** Position at the Enterprise – Total Duration of the Sea Service Test Results

Independent Variable	Coefficient	Standard Error	t-Statistics	Probe-Value
Duration of Sea Service	0.502	0.0217	23.0239	0.000

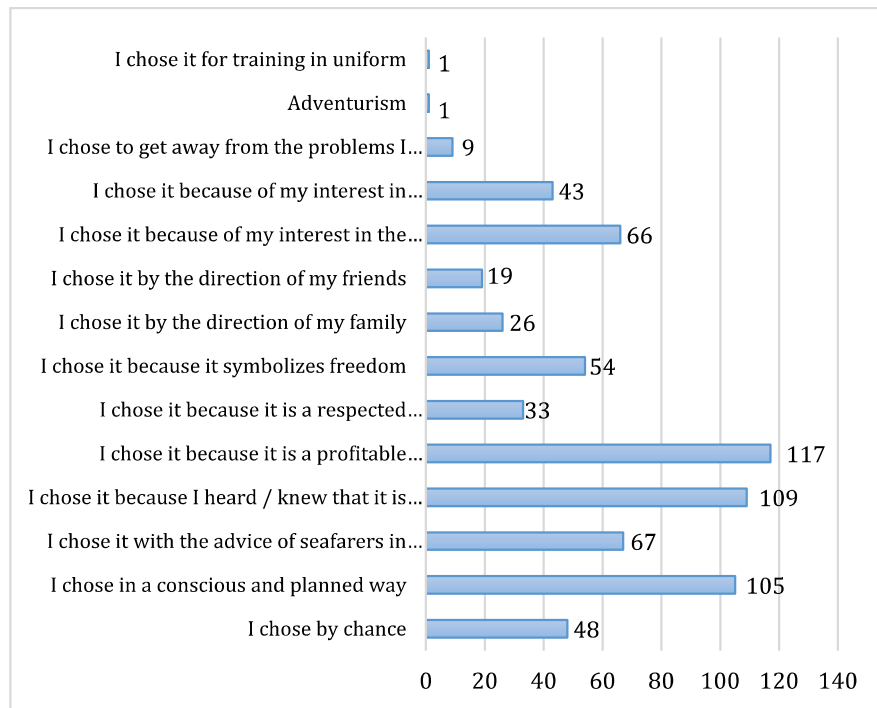
The relationship between positions at the enterprise and the duration of sea service is found by equation 1.

$$Position = \beta_1 Sea Service + \varepsilon_1 \quad (1)$$

The position is determined by substituting  $\beta_1$  in equation 1,

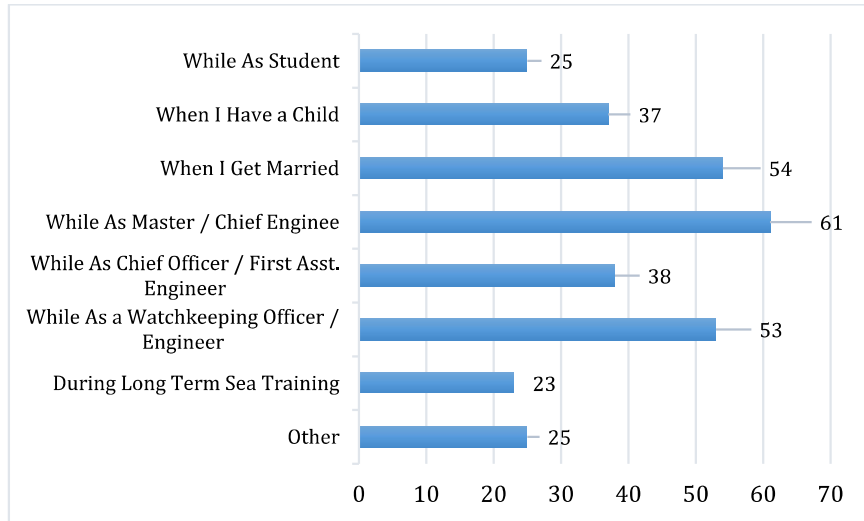
$$Position = 0.502 Sea Service + \varepsilon_1$$

Three preferences of reasons for choosing the maritime profession were offered to the participants. The option “because it is a high salary profession” was picked by 39.5 percent of the participants, which is the highest rate among the options. This was followed by (36.8%) “because heard/knew that it is a profession with permanent job guarantee” and (35.5%) “in a conscious and planned way” (Figure 4).



**Figure 4:** Distribution of the Reasons for Choosing the Maritime Profession

It has been determined that 20.6% of the participants decided to stop working at sea “when they were master/chief engineer” (Figure 5).



**Figure 5:** Distribution of the Decision to Stop Working at Sea

“Lack of communication opportunities with the family and friends” was identified as the most important reason for the 161 participants to want to work on shore (Figure 6).

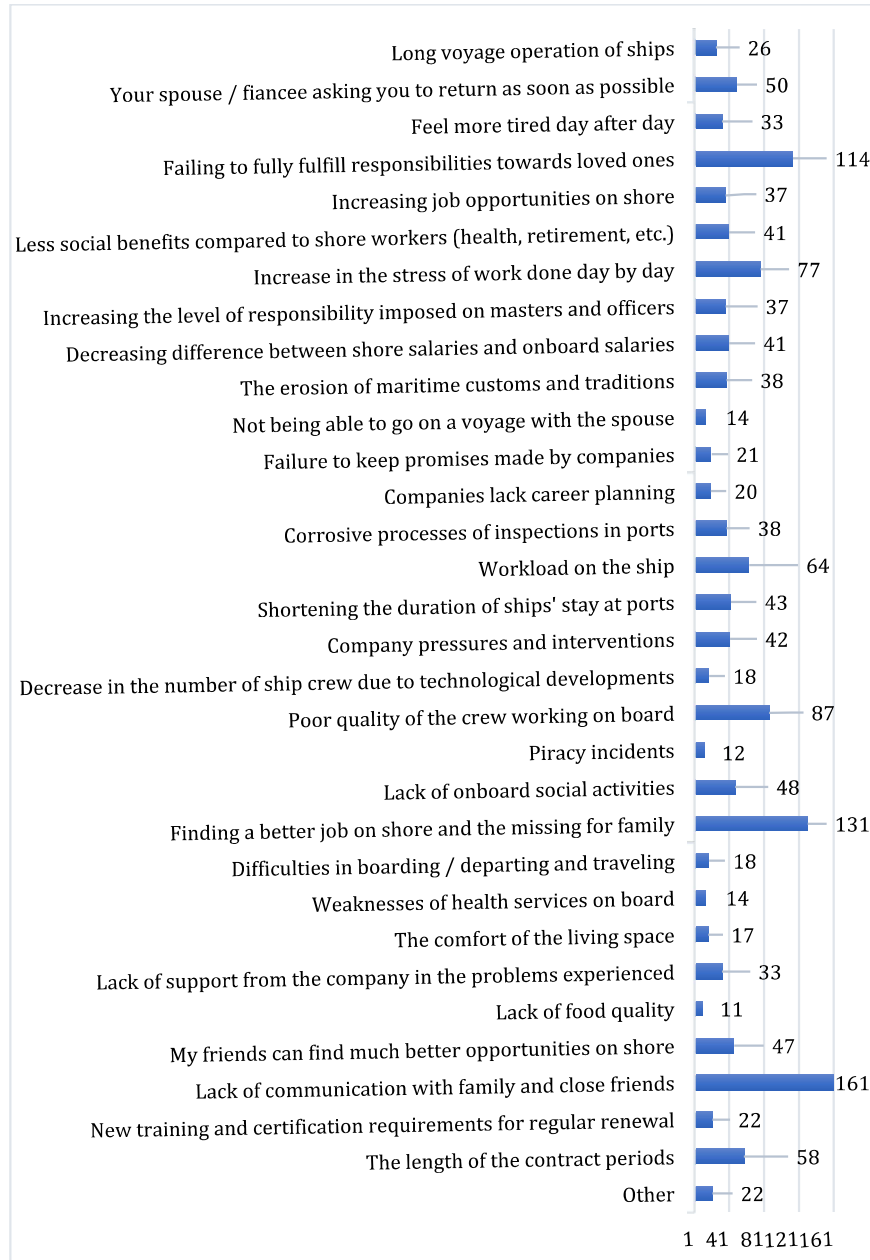
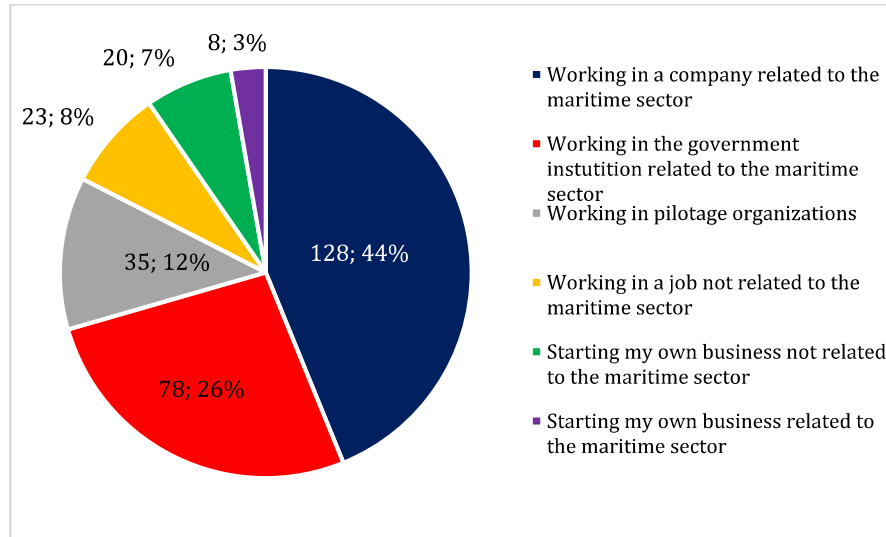


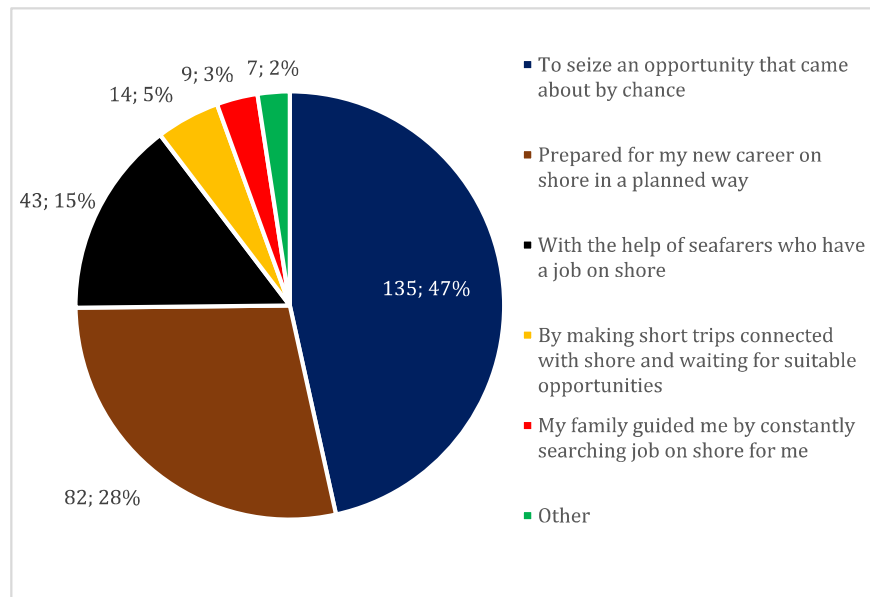
Figure 6: Reasons to Want to Work on Shore

It has been determined that 44% of the participants consider “continuing to work in a company related to the maritime sector” as their first business goal (Figure 7).



**Figure 7:** Distribution of the First Business Goals on Shore

It was observed that most of the participants (47%) chose the option “taking advantage of an opportunity that came about by chance” while moving to shore-based jobs (Figure 8).



**Figure 8:** Distribution of the Methods Used While Moving to Shore Based Job

292 participants replied our question is who are satisfied with their positions on shore-based jobs. 257 of them indicated that they are satisfied with their positions on shore-based jobs. The percentage of participants who are satisfied with their positions on shore-based jobs is 88%. According to these data, the difference between those who are satisfied and those who are not is statistically significant ( $\chi^2 = 168.8$ ,  $sd = 1$ ,  $P < 0.05$ ).

288 participants responded us for the question that “Is your shore-based job in the maritime sector or in the other sectors?” and 238 of them defined that they are in the maritime sector. The others 50 participants defined that they are in the other sectors. It has been determined that a great majority of the participants (83%) are on the shore leg of the “maritime sector”. The data analysis showed that this is a statistically significant difference ( $\chi^2 = 122.7$ ,  $sd = 1$ ,  $P < 0.05$ ).

It was also determined that the highest rate of participants (20%) was in the field of “Ship management / Crew management” (Figure 9).

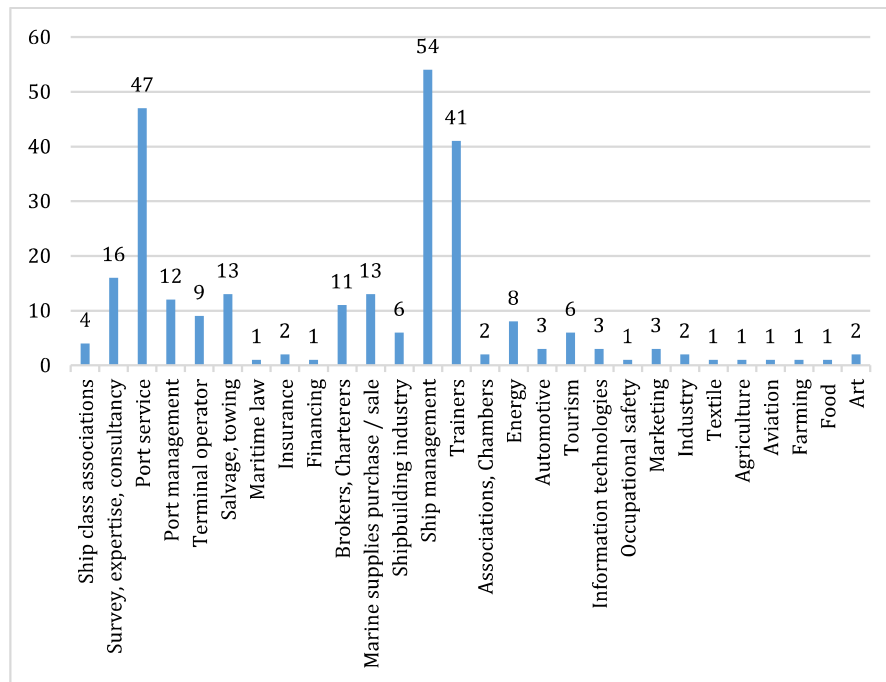


Figure 9: Related Sector Rates of the Shore Based Jobs

## 5. DISCUSSION

In this study, the reasons for Turkish officers who have STCW A-II/1 and A-III/1 qualifications at the undergraduate level to choose the maritime profession, their subsequent career planning and career preferences were investigated. In addition, the reasons why Turkish officers were left from their sea service were examined. Also, which sectors are preferred by Turkish officers after the sea service lacking in the literature has been searched, and this research is expected to enlighten on the maritime industry, where an increase in the officer shortage is expected in the coming years.

The main reasons for choosing the maritime profession are “being a high salary profession”, “being a profession with a permanent job guarantee”, and “consciously and planned chosen” options. When these preferences are taken into consideration, it is revealed that the participants make their choice of profession consciously, taking into account the materiality and job guarantee. While Şakiroğlu (2007) stated in his study that participants’ interest in the sea is the reason for their preference, Köseoğlu (2010) revealed that it is material-based, which is in parallel with the findings of this study. Wang and Shu (2021) in their study on maritime students in China, they stated that high salary is the most important criterion in career preference for these students, however, they reported that increasing salary levels in different sectors such as computer technology and artificial intelligence caused the maritime profession to lose its attractiveness.

According to the results of the research, the duration of sea service in Turkey lasted “from 5 years to 10 years” with 31% of the participants. On the other hand, while Şakiroğlu (2007) stated that the total service life at sea is 10.13 years, Köseoğlu (2010) has stated that it is 3.22 years. Amante (2003) calculated the sea service of senior Filipino officers (Master, 1<sup>st</sup> Officer, Chief Engineer, 2<sup>nd</sup> Engineer) as 17 years, and the other officer/engineer as 15 years in her study in the Philippines. Considering the above-mentioned studies, it is determined that Filipino officers stay at sea for a considerably longer period than Turkish officers. The long-term work of the Filipino seafarers in the sector also increases their experiences. When these two factors are evaluated, it can be said that Filipino seafarers are preferred in the world maritime industry. Especially in tanker fleets, foreign seamen who have worked at sea for a long time are preferred in order to achieve matrix values (Fışkın and Zorba, 2015). Regarding the duration of stay at sea, which is one of the most important criteria in the global sector, there is an urgent need to develop solutions to

extend Turkish seafarers' working period at sea. Thus, in the field of education, which is the starting point of the process, the right students should be found and guided correctly, and they should be trained not only as watchkeeping officers/engineers but also as seafarer.

While 20.6% of the participants were "captain/chief engineer", 18.2% of the participants stated that they ended their sea service when they got married. Fisek (1992) emphasized that the issues of unity, adherence, loyalty, and cooperation arise in the family values of Turkish society.

The fact that the most important reasons for preferring shore-based jobs are family-oriented, suggests that Turkish officers are fond of family and domestic values. Caesar et al. (2015) found in their study that seafarers, when they were Master / Chief engineers, could be in their late 20s or early 30s, which may, in this case, bring some external effects such as worries about getting married, starting a family or aging parents that may affect their decision to leave the sea. Thomas et al. (2003), in their study, provided similar results to this research. On the other hand, Ćorović (2013) revealed that the factor "being away from family and friends" is the most important reason to quit work at sea in his study on Croatian and Karabakh seafarers. Also, candidates of seafarers in China, want to be with their families on board or ensure them to visit on board (Wang and Shu, 2021). In the aviation sector, which is another part of the transportation industry, it has been determined that working away from family and unhappy families can increase the stress levels of pilots (Avis et al. 2019).

It is seen that most of the participants want to take part in shore-based jobs in the maritime industry. While the rate of those who want to leave the sector remains 15%, it can be said that most of those who want to stay in the sector prefer to serve the private sector. The studies of Şakiroğlu (2007) and Köseoğlu (2010) also showed consistent results with this study.

When the method used while crossing the shore is examined, it is seen that almost half of the Turkish seafarers have built their careers on coincidence. This situation reveals that most of the participants did not make their future career planning during their sea life. Similar to our results, Wang and Shu (2021), the study conducted in China also shows that career planning is very important. However, most of the maritime students there either have no or very simple career plans. Also, they stated that if there is no career planning, this situation can cause stress and confusion in job applications (Wang and Shu, 2021).



Examining the participants' positions at the companies they work for; remarkable results were obtained for seafarers planning a career onshore. The "owner" or "partner" status is determined to comprise only 10% of the companies' total positions. The result of this analysis shows that the majority of the seafarers working onshore are not employers. In addition, the responses from the participants suggest that Turkish officers do not need entrepreneurship to be "owner" or "partner" status due to their career onshore. While Şakiroğlu (2007) stated the rate of being "owner" or "partner" of a company as 48% in her study, this rate was reported as 15% in Köseoğlu (2010) study.

It has been determined that 88% of the participants are satisfied with their jobs on the shore, and this situation may be an answer for those who think to end their sea service career and work on shore.

It is seen that the majority of the participants in this study have aimed to stay within the sector. The sector also needs qualified seafarers from its own structure. 12% of the participants find employment opportunities outside the sector onshore after sea service life. This fact indicates that most Turkish seafarers do not leave the sector, even if they have shore-based jobs. Also, the results of the research show that the Turkish maritime industry has lost its officers working on board but has gained new candidates to work on shore.

## **6. CONCLUSION**

In this study, the careers of Turkish officers who have STCW A-II/1 and A-III/1 qualifications at the undergraduate level after their sea service were investigated and their career preferences were examined with 12 questions created by the survey method.

The high salary profession has been identified as one of the main reasons why Turkish officers prefer the maritime profession. However, due to not properly career planning, it is seen that they do less sea service because of factors such as family etc. than Filipinos. If the universities, the maritime industry, and the administration work together, the sea service period of Turkish officers can be increased, and sustainability can be achieved in line with the maritime industry's desire. This situation will also ensure Turkish officers to be as a higher position at the enterprises while working on shore. Therefore, universities should be more effective in making the proper career planning by organizing seminars etc. with officers in the maritime industry and thus ensure that the right students participate in the industry. Institutions can offer opportunities such as a

short contract period against family factors and ease of communication with the family by providing internet on board. In addition, it should ensure that the difference with other sectors in the salary level, which is the most important factor in choosing a profession, is preserved. On the other hand, the administration can support Turkish officers in terms of both pension insurance and health insurance.

Seafarers who have done sea service are seen as the most suitable option for the need for qualified personnel to work onshore department of the maritime sector. Therefore, the fact that Turkish officers stay in the sector after their sea service is a positive development for the maritime industry in terms of easy access to experienced personnel.

As a result, our study only covers Turkish officers and contributed to the literature. In future studies, it is possible to compare the results among the nations by conducting surveys with officers from different nationalities. In this way, the maritime industry has access to information about why, how and where the lost human resources go.

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