



SEA MENTORS SEAfarers Experiential Knowledge Based MENTORS

Project number: KA220-VET-93A876D8

SURVEY ANALYSIS

Professionals' Perception regarding the Mentorship Programs in Maritime Industry











2023





Abstract

According to the STCW standards, STW 44/3/2 Leadership and Teamwork, HTW 5/3/2 Leadership and Managerial Skills, correlated with HTW 5.3.5 Crisis management and human behaviour training, as promoted by the Sub-Committee on Human Element, Training and Watchkeeping, the role of mentoring persists as a significant matter of assuring effective and smooth insertion of seafaring professionals onboard ships, in balance with educational, training and coaching operational dimensions.

In this regard, the authors, as a research team of SEAMENTORS, project no. 2021-1-RO01-KA220-VET-000029622, "SEAfarers Experiential Knowledge Based MENTORS" (<u>www.seamentors.eu</u>), implemented under Erasmus+KA220 Vocational Education and Training, together with other 5 research institutions (Lithuanian Maritime Academy, Bulgarian Naval Academy, Polish Naval Academy, Spinaker Co and Maritime Innovators), depicted, under a complex study, the cadets' and professionals' perception regarding the importance and relevancy of the mentorship during the cadetship programs onboard ships for their career development. Then, during the project implementation, the authors conceived a KAP Survey Model (Knowledge, Attitudes, and Practices questionnaire), based on which, the team pursued the analysis of related opinions and of the impact of mentorship practices on the applied training programs onboard ships.

Keywords: STCW, professional life, training





1. Introductory remarks. Study methodology

The survey has been developed under SeaMentors project "SEAfarers Experiential Knowledge Based MENTORS", project number: KA220-VET-93A876D8, implemented by Lithuanian Maritime Academy, Polish Naval Academy, Bulgarian Naval Academy, Maritime Innovators, Spinaker, under Romanian Naval Academy coordination. The survey has been applied by the SeaMentors's project partners through various social media applications, including the website (<u>www.seamentors.eu</u>), LinkedIn, facebook, adl platform (https://marplat.eu/course/view.php?id=50) and also, by personal direct emails. The survey had been submitted by applicants throughout a period of 6 months, during March 2023 – October 2023.

The selected participants to this survey were professionals from maritime industry. To be considered as valid, there was a pre-requirement inquire for experience, consisting in a minimum of 24 months onboard ships, serving as officer and a minimum of 12 months expertise as manager in a company from maritime sector. The officers' responses to the addressed questions were both collected, from Navy and merchant fleet professional field.

As structure, the survey consisted in 15 items and therefore, 200 questionnaires were distributed, while 173 valid responses were collected with a response rate of 86 percent.

Variables	Categories	Frequency
Designation	Master	31
	Chief Officer	52
	Chief Engineer	10
	1st Engineer	4
	2nd Officer	18
	2nd Engineer	7
	Electro -Technical Officer (ETO)	2
	Manager	16
	Navy Officer	33
Education	High School	10
	College	32
	University Graduate	62
	Post-graduate (Master)	50
	Post-graduate (PhD)	19
Total respondents	1	173

Table 1. Profile of respondents





The survey was a KAP type of questionnaire (knowledge, attitudes, and practices), the questions being centered on the general framework of mentoring programs development in companies, referring to the program boundaries, to identify the factors that may stimulate of hamper the mentorship onboard the ships, revealing the best practice or the obstacles, both at sea and on shore. The data from table 1 shows the respondents' profile as collected from the survey analysis.

There was a total of 173 responses collected, out of which 90.75% were Officers respondents and 9.25% were manager respondents. From a total of 157 responding officers, 21% were Navy officers and 79% were merchant fleet officers.

In the Table 2 below is described the nationality pools for the survey participants. With a representation of 16 different nationalities, most of the applicants were Turkish, Polish and Romanian nationalities.

		Table 2. Respondents nationalities
Nationality	Categories	Frequency
Romania	Master	12
	Chief Officer	2
	Chief Engineer	6
	1st Engineer	2
	2nd Officer	2
	2nd Engineer	2
	ETO	1
	Manager	3
	Navy Officer	2
Poland	Master	5
	Chief Officer	5
	1st Engineer	1
	2nd Officer	7
	2nd Engineer	3
	Manager	1
	Navy Officer	26
Bulgaria	Master	3
	Chief Officer	2
	Chief Engineer	2
	Navy Officer	5
Turkiye	Master	9
	Chief Officer	38
	Chief Engineer	1
	1st Engineer	1
	2nd Officer	5
	2nd Engineer	1
	Manager	4

Table 2. Respondents' nationalities





Lithuania	Master	1	
	Chief Officer	1	
	Manager	5	
Latvia	ETO	1	
	Manager	1	
Netherland	Master	1	
	Manager	1	
Norway	2nd Officer	1	
Greece	Manager	1	
USA	2nd Officer	1	
India	2nd Officer	1	
Brasil	Chief Officer	1	
Germany	2nd Officer	1	
Ireland	Chief Officer	1	
Kuwait	Chief Officer	1	
Russia	Chief Officer	1	
	Chief Engineer	1	

In detail, from the 173 validated respondents, 34% were Turkish, 28% Polish, 18% Romanians, 7% Bulgarian and 4% Lithuanians, the pool of respondents being focused on the partners' origin countries involved in the SeaMentors project implementation.

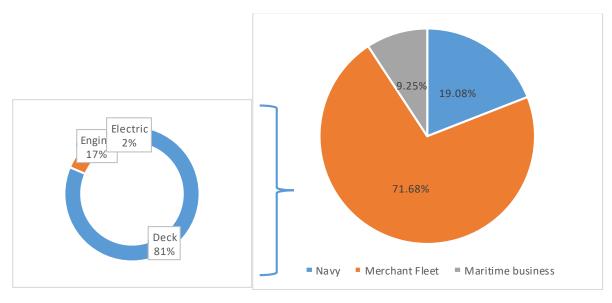


Figure 1. The respondents' distribution

For concluding on distinctive categories, the respondents were grouped in Navy, merchant fleet and maritime business representatives, as described in Figure 1. The data from the figure 1, shows that 71.68% from respondents represents merchant fleet,





19.08% were from Navy and 9.25% were respondents from maritime business. The distribution of officers on departments/specialty is dominated by deck professionals (81%), but the engine (17%) and electric (2%) departments are represented, too.

2. Survey concluding remarks

Item 1: Does your company provide mentoring program for cadets?

About 59% of respondents confirmed that their employing companies are providing a mentoring program, at least on a formal level. A mentoring program in the company will help seafarers to overcome all settling difficulties. It quickens the onboard professional adjustment process since the employees would run their duties faster.

The distribution of participants responses showed that the mentoring program (formal or/and informal) is used in majority of cases, merchant fleet, Navy or maritime business. Just 20% of Navy respondents are having knowledge of a mentoring program for cadets or young officers. For onshore maritime business, all respondents except one mentioned that their new employees are involved in mentoring program.

For merchant fleet, over 66% of respondents are acknowledged about mentorship implementation within navigation companies, a program that is in accordance with STCW Chapter II, Section B-II/1 where it states that personnel in this training stage should be *"closely supervised and monitored by qualified officers"*.

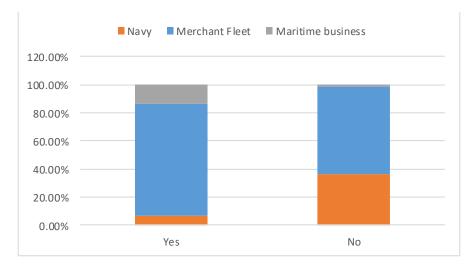


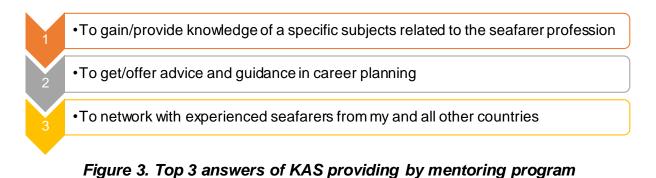
Figure 2. Distribution mentoring program implementation in different sectors



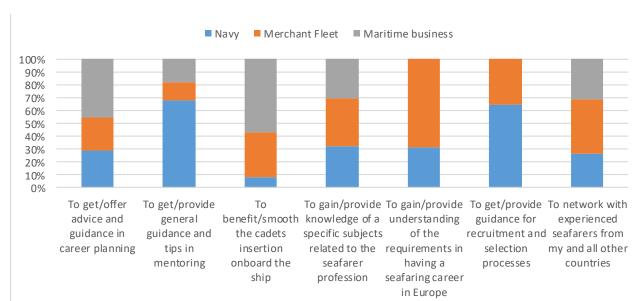


<u>Item 2: What do you aim to provide to the cadets under mentorship program in</u> <u>your company?</u>

Officers and managers were asked what KAS (knowledge, abilities, skills) are preferable to be provided to the cadets under mentorship program, following their experience or their opinion and suggestions. They had to choose from 8 available answer options. As result, the top 3 of their choices is presented in the Figure 3.



On the first place of their responses with 31.79% of expressed options, the most relevant issue to address in the mentorship was to "gain/provide knowledge of a specific subjects related to the seafarer profession", followed by "to get/offer advice and guidance in career planning" with 17.34% and, on third place, the professional selecting to "network with experienced seafarers" with 16.76%.



A detailed distribution of respondents' responses is showed in Figure 4.

Figure 4. Distribution of responses, by categories





Figure no. 4 shows that providing knowledge of a specific subjects related to the seafarer profession and offering advice and guidance during the career planning are the most important aspects that can be delivered by a mentoring program from maritime business point of view. Motivation to carry out the career in the seafaring, provides a fair understanding of the requirements in developing a seafaring career in Europe or providing guidance for recruitment and selection processes are less important in accomplish a mentoring program onshore.

The respondents from Navy and merchant fleet choose motivation to carry out the career in the company to be the last choice in a mentoring program on board ships.

<u>Item 3: What topics are likely to be approached by your company/ or like in a</u> <u>status of a mentor during a potential mentorship program to be part in/of?</u>

Another questions addressed to the survey participants was about the preferred topics that would be likely to be approached by the company during a potential mentorship program implementation. The top 3 of received responses can be found in the Figure 5.



Figure 5. Top 3 topics likely to be approached in a mentoring program

From all responses has resulted that the carrier path and the potential appointments are the first choices in the topics that have to be approached in a mentoring program. Officers and managers considered topics like soft skills development and leadership or coaching important to be approached in a mentorship program, too.

The survey results showed that mentoring in the areas of training and support, personal growth and development and career development was important as shown in Table 3.





		Frequency	
Topics	Navy Officers	Maritime Officers	Maritime Business
Carrier path and potential appointments	3	32	3
Career Counselling	2	6	1
Coaching	6	29	3
Soft Skills Development and Leadership	9	23	4
Cadetship promotion	2	20	5
Advancing the professional network opportunities	4	8	-
Cultural Aspects	-	1	-
Interview in job market	1	2	-
Publications and presentations	6	1	-

Table 3. Topics likely to be approached in a mentoring program, by category

The Navy' professionals respondents mentioned that topics like soft skills development and leadership, publications and presentations or coaching are more suitable for a mentoring program.

For merchant fleet, the seafarers considered that a mentorship program should include topics like carrier path and potential appointments, coaching or soft skills development and leadership, in this order while cultural aspects or publications and presentations are topics with low interest.

The professionals from maritime business considered that cadetship promotion is the most valuable topic in a mentoring program in opposition with Navy's opinion.

<u>Item 4: From which positions your company were selected for mentorship</u> <u>positions?</u>

The range of rank positions used by companies for mentoring program is shown in the Figure 6.



Figure 6. Mentors' positions in the shipping companies





As from past practices, more than 72% of mentors came from a managerial position which is quite normal taking in consideration the experience and the knowledge acquired by a person in that position. Even though, it is interesting to observe the higher percentage of the mentors selected from operational position that is up to 27%, or even more for some companies. This significant value underline the idea that the mentees, in some situation, need someone younger and closer to them, for a better understanding of the theoretical concepts applied in practice.

	Frequency		
Topics	Navy	Maritime	Maritime
	Officers	Officers	Business
Master	3	40	6
Chief Officer	11	37	5
Chief Engineer	6	12	1
2nd Officer	2	5	-
2nd Engineer	-	4	-
3rd Engineer	1	1	-
3rd Officer	2	3	2
Maritime business professionals	8	15	-

Table 3. Range of rank position of mentors in a mentoring program

Like it can be observed in table 3, master and chief officer/engineer are most used positions for mentoring and learning on board ship. It's very important for mentees to take information and to have an easily access to different experiences and study cases drawn by professionals with experience.

<u>Item 5: Have the mentors experienced any difficulties or challenges in relation</u> with the cadets during their stages at sea under mentorship program?

Becoming a mentor should always be on voluntarily basis for getting an effective and sustainable sense. Companies should identify those professionals in their organization who would be willing to be mentors and who have the right aptitude for this work.

In fact, every work relation may face difficulties or challenges, therefore, it seems normal to record often tensions in the mentor - mentees relation as well, as depicted in Figure no. 7 graph bars.





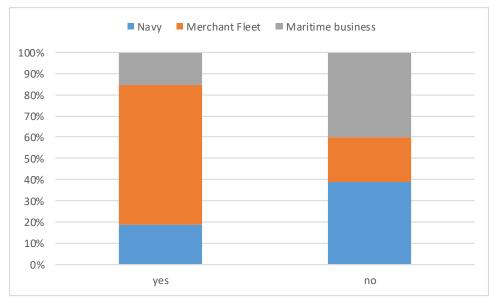


Figure 7. Have you experienced any difficulties being mentor at your company?

Approximately 42% of respondents declared that had faced challenges in their relation with embarked cadets or with young officers onboard the ships, during the mentorship program. Most of the mentors (53%) declaring that had met issues in dealing with the onboard cadets were from the merchant fleet. Alternatively, the good perspective shows that 58% of mentors hadn't met any issue with the mentees. This percentage is optimistic taking in consideration the similar range of 59% of responses suggeting that their company have implemented a formal mentoring program onboard the ships.

<u>Item 6: Which factors would effectively stimulate the mentorship understanding</u> or the mentoring program implementation?

Respondents were asked to list the factors that would effectively stimulate the understanding of a mentoring program implementation. In the Figure no. 8 have been illustrated the top 3 of their choices.

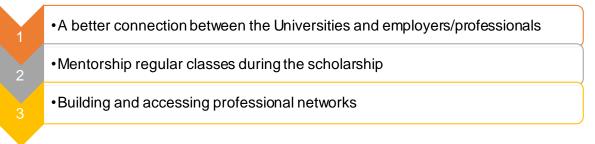


Figure 8. Top 3 factors likely to enable a mentoring program implementation





Almost 29% responding companies' considered through of the their Universities representatives that а better connection between the and employers/professionals would be a factor that would provide a superior effect in mentoring program implementation. Other factors like mentorship regular classes during the scholarship or building and accessing professional networks are posted in top 3 factors likely to enable an effective implementation of mentoring program.

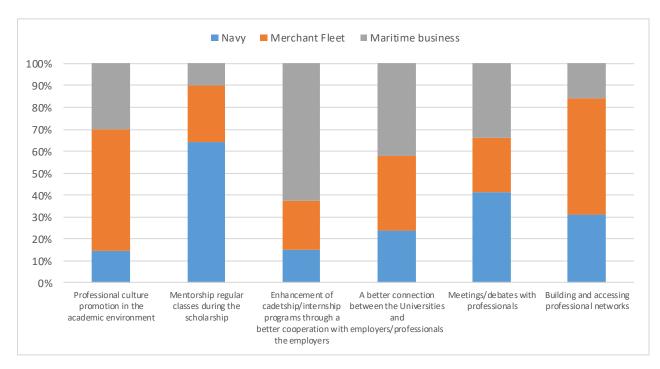


Figure 9. The distribution of factors that would stimulate a mentoring program implementation, by category

Over 65% from the responding professionals had chosen first three options as shown in the Figure no. 8, that should be interpreted only in the correlation with the distribution of the other 35%, by category like is described in Figure 9.

Then, the Navy respondents considered that factors like meetings/debates with professionals or professional culture promotion in the academic environment would have an influence, while the maritime business respondents identified other factors like invited professionals to the academic activities or enhancement of cadetship/internship programs through a better cooperation with the employers.

Maritime officers' opinion is that those factors related to the company and academic environment connection before or during the cadetship period or organizing job fairs would consistently provide support for mentorship understanding.





<u>Item 7: Which are the most positive outcomes that you would experience valuing</u> <u>the relationship with the mentor</u>

Professionals were asked to identify the most positive outcomes of a mentoring program. Top 3 identified outcomes, that represents over 72% of all responses, include the improvement of soft skills (as communication, leadership, team work, stress management), the ongoing professional model guidance or the effective performance by harmonizing the theory with practice as presented in Figure 10.

1	 Improvement of soft skills: communication, leadership, team work, stress management
2	Professional model guidance
3	•Effective performance by harmonizing the theory with practice

Figure 10. Top 3 most positive outcomes provided by a mentoring program

The distribution of all professionals' responses is depicted in the Table no. 4. The positive results selected by category wasn't so different compared to those data presented in figure from above.

Outcome like confidence is in top 3 choices for the professionals coming from merchant fleet and maritime business.

	Frequency		
Topics	Navy	Merchant	Maritime
		Fleet	Business
Professional model guidance	6	27	1
Improvement of soft skills: communication, leadership,			
team work, stress management etc.	12	42	7
Effective performance, harmonizing the theory with			
practice	9	16	5
Enhancement of confidence	2	24	-
More efficient insertion in the first job	4	9	2
Phisicaly and mantality addaption to the seamens life	-	1	-
Stimulation of job resilience	-	3	1





Companies agreed that mentoring program outcomes like efficient insertion in the first job or stimulation of job resilience could lead to loyalty, satisfaction and engagement from the young employees.

Item 8: Which factors do you consider that are actively hampering the mentorship successful implementation during the cadetship/internship programs?

Respondents have been asked to mention the most significant factors that could disrupt or affect the mentoring program, their responses being concluded in the top 3 factors, as described in Figure no. 11.



Figure 11. Top 3 factors that could actively hamper the mentorship successful implementation

Professionals have mentioned factors like the low interest of cadets/trainees or apprentices to follow the mentorship advices and guidance, or the low interest of the professionals in becoming and performing the mentorship tasks, or even the shipping companies lack of interest of implementing such programs onboard the ships, all three counting more than 70% of the collected responses. Moreover, the last factor could hold back the companies in terms of recruiting of employees. There is plenty of room for improvements in this area and for the shipping companies to ensure that the onboard staff and cadets are supported adequately according to the STCW requirements.

An interesting aspect is the distribution of responses between professionals from Navy and merchant fleet, as presented in Figure no. 12. For example, the most cited impact factor for merchant fleet professional was the low interest of cadets/trainees in knowledge achievements from mentorship (31.79%), while no similar opinion had been recorded coming from the Navy professionals.





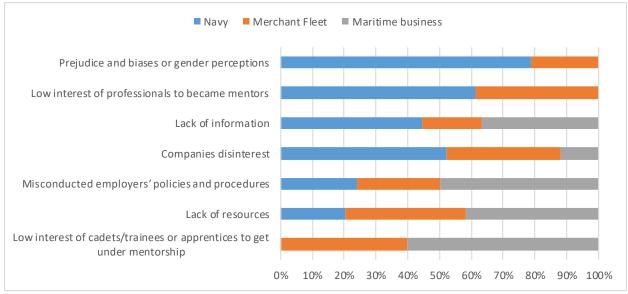


Figure 12. Factors hampering the mentorship successful implementation, by category

Another important factor identified by the interviewed personnel is the low interest of professionals to become mentors, but it is valid just for Navy and for merchant fleet officers, while in the maritime business this factor is weighed with zero percent.

Lack of information about the mentorship is an identified factor that represents over 17% of responses and it was indicated in different ratios by all professionals. This factor can be diminished by an internal and external effective communication, using the right channels and the right technology for the company. In this regard, the SeaMentors project came to overcome this issue, offering to all interested cadets and professionals, few significant tools for dealing with the mentorship on the developed platform www.seamentors.eu.

<u>Item 9: Which professional dimensions, could better served by the mentorship as</u> <u>contribution to the professional development of the next generation?</u>

Professional dimensions that mentorship could better serve have been showed in Figure no. 13, in order to help the shipping companies to adjust their training programs.

Responses collected from professionals have positioned the technical skills improvement as being one of the most important asset, followed by the organizational team work culture. Taking a brief look by categories, the leadership culture or the quality culture or the appetite for excellence, are following up as one of the most relevant professional dimensions to be achieved by the cadets.





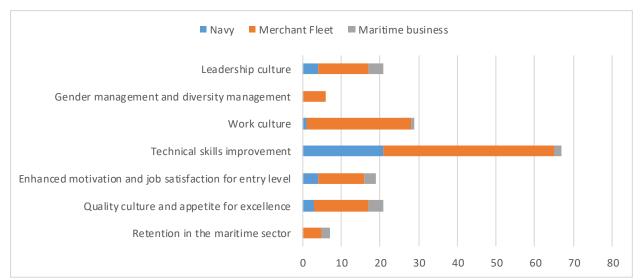


Figure 13. Distribution of the impacted professional dimensions, by category

If technical skills improvement is the most important for seafaring domain, on both Navy or merchant ship, the enhancement of the managerial dimensions, like leadership or quality management prevail in onshore maritime businesses.

Item 10: Would you consider to maintain the contact with the mentored cadets apart from the time spent at sea?

Professionals expressed their option in maintaining the contact with the mentees, after the end of the mentoring program as presented in Figure 14. The colored bars shows that almost a third of respondents wouldn't maintain the contact with their mentees most probably considering it as being a formal process of training and not a personal relationship.

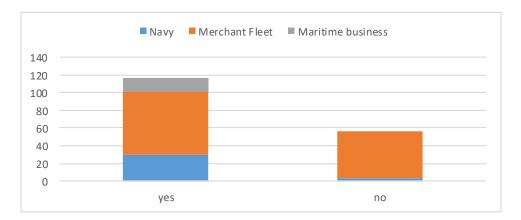


Figure 14. The option for maintaining the contact with the mentees after the mentorship program ends, by category





Therefore, at the moment of mentorship program concluding, the mentors from Navy (9%) and from merchant fleet (42%) wouldn't consider to keep in touch with the mentored cadets, mostly preferring the formal aspects of professional guidance. Although, one of the reasons for such a reluctant attitude comes from the lack of time available for such connections, taking in consideration the busy schedule and intensive workload of the managerial positions. Alternatively, looking for an optimistic perspective, over 67% of respondents are willing to maintain the contact with their mentees, believing that mentoring can be rewarding for both parties on sustainable basis.

Item 11: What services and facilities are most suitable for the SEAMENTORS platform to offer?

One of the objectives of SeaMentors project has been, from the beginning, to develop an online training platform (www.seamentors.eu), where mentors and mentees can meet and have direct connection based on the mentorship tools.

In Figure no. 15 have been listed top 5 services and options considered as most suitable for the SeaMentors platform by the interviewed professionals.

- •Direct meeting with mentors
- •Carrier guidance and vocational orientation
- Networking with the professionals
- •Job descriptions on different positionsand all other countries
- •Dissemination/informing materials from sector

Figure 15. Top 5 of suitable services identified by the professionals as being the most suitable for SeaMentors project platform design (<u>www.seamentors.eu</u>)

Almost a third of responses had indicated the direct meetings with the mentors as being the most impactive mentoring tool, this option being covered by physical meetings organized by the project partners, residentially or online via SeaMentors platform, as already posted as result on the mentoring platform. Also, a collection of video interviews have been posted, to offer an informal image about the professional realities onboard the ships.

Another third of responses indicated as most appropriate tools the carrier guidance and the vocational orientation resources, together with the development of a professionals network, both of them being already present at the moment as distinctive facilities on the SeaMentors platform. Even more, for carrier guidance and vocational





orientation tools the project team has designed an automatic evaluation system for professional profile, leadership skills, time management, team spirit and stress resilience (<u>https://marplat.eu/seamentors.php</u>).

There is a slight difference between services choose by professionals' categories. Respondents from onshore maritime business considered that dissemination/informing materials from sector, interview or video testimonials should be facilitated through the mentorship platform, while professionals from navy and merchant fleet considered that a forum for open discussion and chat could be a helpful decision.

<u>Item 12: Do you have additional comments or supporting suggestions regarding</u> <u>the mentorship program improvement?</u>

The last survey question was about some suggestions or comments regarding the mentorship program implementation and effectiveness. The received comments and suggestions are depicted in Figure no. 16.

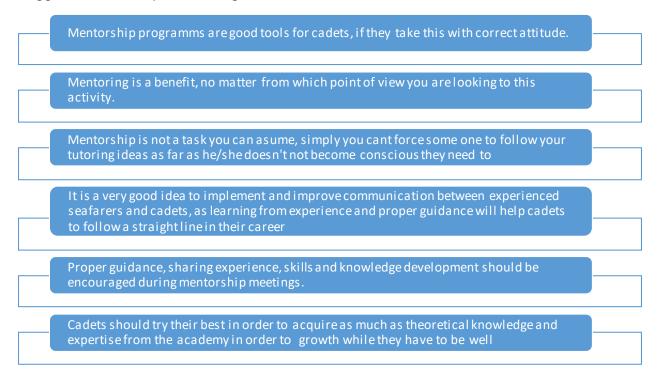


Figure 16. Suggestions regarding the mentorship program improvement

As seen in the list of collected suggestions or comments, the respondents have inclined to underline that the mentorship is a vocational job, that asks special skill, abilities and knowledge, as also personal assets, in order to offer a viable model to the cadets and young officers. Most of the desired qualities of the mentors were heading the professional knowledge and experience, the leadership skills, the communication abilities, the personal values, while some respondents kept the remind the active role that





the academic/training system can play in connection with the job market and with the maritime field, facilitating a smooth transition to the professional life of the graduates.

3. Survey concluding remarks

The survey respondents have confirmed the presence of some mentoring initiatives being undertaken at sea and on shore, taking place on different names like Cadet Training Program, Employee Development, Junior Officer Mentoring Scheme or Cadet Mentoring. The research has indicated that there are generally a low number of formal mentoring initiatives available at sea, onboard the ships, and even the shipping companies have invested some resources into mentoring, the actual status is still far from the real needs towards an effective insertion of the maritime graduates onboard the ships according to STCW requirements. In order to address this, an incentive support for mentoring should be encouraged and driven by the shipping companies, sponsors, crewing agencies, academic system, training institutions or by any other stake holder in maritime business to offer a solid support to the development of the new generation of professionals.

Successful mentoring initiatives have continuously sought to improve the professional adjustment, providing a better resilience and valuable outcomes for the organizations, in terms of knowledge transfer and onboard skills development, building valuable professional models in the seafaring domain. They would work the best in conjunction with a good training and a long-term outlook of personal development of the embarked personnel, especially in the first carrier stages.

The onboard culture is shaped by the established relations and onboard hierarchy considering the ongoing leadership directions coming from the onboard managerial positions. If the onboard culture doesn't aim to develop an effective environment where mentoring can be valued based on experiential exchanges, this will limit the effect mentoring may have in a positive perspective.

The survey has highlighted that mentors can be required to undertake very varied guidance roles depending on the mentees' training background and social skills. Otherwise, some officers did not want to accept a mentorship position due to the lack of time, as being one of the most important individual resource at sea in relation with the workload. Lack of time can act as a barrier for learning and further, for the establishment of mentoring relationships onboard the ship, the allocation of dedicated time for this purpose, formalizing the mentorship tasks, becoming a must.

Mentoring can have a positive impact for attracting new candidates into the industry and also for retaining the young officers on the maritime carrier path. Those who have experienced the benefits of mentoring, are more likely to become a mentor, the seafaring job becoming more predictable in the light of a tangible professional model. This





is why, developing mentoring culture is more than an organizational matter, but is also an imperative for the future of maritime professions.

Taking in consideration responses and suggestions collected from survey, regarding the services and options considered as being the most suitable for an online mentorship platform, the project team has designed and developed the web platform for SeaMentors project (<u>https://seamentors.eu</u>) in its structure and content, offering valuable resources for mentorship program initiation.

4. References

[1] Adair J, Strategic Leadership. Meteor Publishing House, Bucharest, 2015.

[2] American Psychological Association, Introduction to mentoring: A guide for mentors and mentees. Washington DC, 2006.

[3] Farr H, Mentoring in the training cycle of clinica land counseling psychology doctoral students: a critical review of the literature, Pepperdine University, Graduate School of Education and Psychology, 2021.

[4] Olivero O., Interdisciplinarity Mentoring in Science. Strategies for Success, Academic Press, Elsevier, USA, 2014.

[5] Palos R, Rolul procesului de mentoring în dezvoltarea carierei, Ed. Polirom, Bucharest, 2014.

[6] Avram E, Cooper C L (coord.), Organizational Psihology. Actual Trends, Publishing House, Iasi, Romania, 2008.

[7] Starr J, Mentorship Manual, Ed. ACT și Politon, Bucharest, 2022.