

the International Journal
on Marine Navigation
and Safety of Sea Transportation

Volume 13 Number 3 September 2019

DOI: 10.12716/1001.13.03.21

Ship as a Social Space for Adaptation: Perception of the Phenomenon by Young Seafarers

G. Kalvaitienė & V. Senčila Lithuanian Maritime Academy, Klaipeda, Lithuania

ABSTRACT: Training of seafarers is traditionally focusing merely on the 'occupational' aspect. Competent seafarers have always been defined as people who have good professional, navigational or engineering skills. However, practice shows that these skills alone are often not enough to solve complex situations at sea. This article attempts to look at life and work at sea as a multidimensional phenomenon. The personal reaction to the social field challenges is unique for every person because of his ideas, feelings, behaviour, needs, moral values and physical attributes. The aim of the presented article is to describe a theoretical research model, which reflects the interaction of young seafarers and a social space on board a ship, and to determine the adaptation and well-being support measures used by young seafarers on board.

1 INTRODUCTION

Training of seafarers has, in the opinion of Johan Smith (Smith, 2016), traditionally been one-dimensional, focusing merely on the 'occupational' aspect of who seafarers are. Competent seafarers have always been defined as people who have good navigational or engineering skills. However, these skills are often lacking dealing with the realities and complexities of life at sea.

It is worth noting that higher education institutions should also follow general statements about the ordinary outcomes that are achieved by students after completing a curriculum of studies and obtaining a qualification. Those outcomes named the Dublin Descriptors (Shared..., 2004) consist of the following elements: knowledge, applying knowledge (skills), making judgements, communication skills and learning skills. If the first two for students of technical professions could be referred to as

exclusively technical skills, then the last three are related to social skills as well.

The quality of life and work at sea is influenced by such factors as loneliness, homesickness, monotony, psycho-emotional stress, fear of piracy or pure nutrition, hydration and sleep difficulties. The identification and understanding of these factors could help young seafarers to adapt on board and to apply the principles of well-being at sea.

For young seafarers' generation, it is vitally important to know about well-being at sea and how to keep it.

Maritime education and training (MET) institution prepares young people for maritime career at sea, forming their technical competences and providing them basic social abilities, necessary for adaptation at sea and career management.

To assist in the development of a marine safety culture by addressing the issue of wellness on board and especially fatigue, the International Maritime Organization has developed practical guidance to assist interested parties to better understand and manage the issue of "fatigue" (Guidance..., 2001). Seafarers are responsible for monitoring and seeking appropriate treatments for any health concerns that may impact their fitness for duty (Guidelines..., 2019).

Effectively dealing with fatigue in the maritime environment requires a comprehensive and holistic approach that recognizes ship design, and the roles and responsibilities of all stakeholders in the mitigation and management of fatigue (Guidance..., 2001; 2019).

Shipping companies should focus on the creating and improving the conditions for well-being of seafarers at sea.

The Maritime Labour Convention (2019) binds the parties (Members) to ensure that ships that fly their flags provide and maintain decent accommodations and recreational facilities for seafarers working or living on board, or both, consistent with promoting the seafarers' health and well-being.

The aim of presented article is to describe a theoretical research model, which reflects the interaction of young seafarers and a social space on board ship, and to determine and evaluate adaptation and well-being support measures used by them on board.

2 THEORETICAL RESEARCH

2.1 The sea as a social space phenomenon

More than 70 years ago, Vilhelm Aubert and Oddvar Arner analysed the social structure of the ship comparing she with the ones of other working organizations. The research highlighted the following main differences between the ship and other places of work (Aubert & Arner, 1959):

- 1 The most obvious difference between the ship and the industrial plant is that a seaman lives at his place of work, among the colleagues and superiors and spends most of his leisure at the same place. The ship is a total institution.
- 2 The place of work is physically isolated from the family, and from the nation and the local community, which the ship represents.
- 3 The degree of turnover among seamen is much larger than in most industries on land.
- 4 The position on board a ship are more graded and specialized than in most industrial plants.
- 5 The line of promotion within the community of the ship begins in the ranks of the crew and follows a somewhat formalized scheme of promotion, based on seniority and qualifying school.

In recent years, many technological and organizational changes have taken place in the maritime industry, so the some problems faced in seafaring are not as such, as they were in the past.

The global shipping industry of the 21st century is confronting seafarers with unique challenges such as multi-national crews, the Internet, quick turnaround times and the world as a small global village (Smith, 2016). As a part of the material culture, technology always carries a socially established meaning. Current

technology makes similar the life features of seafarers with land routine (Russo at al., 2014).

Technology is sometimes seen as a way to improve the efficiency of work systems. However, technology changes the nature of work and alters workload, therefore it is important to evaluate the impact of technological changes on crew workload and consequently fatigue (Guidelines..., 2019).

More automation on board means smaller crews. Technological development of ship contributes to reducing the crew to excessive measures, while seafarers work more than required (Russo at al., 2014).

Former functional structure, determined by unilateral decisions taken by the shipping company, where the captain and officers represented mainly executive factors, has begun to change under the matrix structure, where decisions are based on more equal communication among the offices on the coast and the crew, under complementary appreciation of benefits. Likewise, crewmembers (especially officers) are being encouraged to participate in the decision-making process (Russo at al., 2014).

Mixed cultural living is possible ashore where there are a lot of people with whom to socialise. This is not the situation on board with say fifteen crewmembers and where the majority are on watch or sleeping. Owners are crewing in accordance with safety regulations but the group is simply too small on board. Thirty years ago a crew numbered 35-40 persons and the chances were a lot greater that you could find somebody to talk to and be friends with (Horck, 2005).

Nevertheless, if loneliness is very long, then it usually promotes personality's degradation and mental disorders because the human is social being - homo socialis - naturally. Psycho-emotional stress rises not only because of individual isolation but also of permanent stare of other members of the isolated group that promotes the human to feel, that he / she is permanently observed. So, human becomes an actor in a great scene of life performing social roles. (Lileikis, 2018)

While serving on board the vessel, there may not be a clear separation between work and recreation, which can influence their mental and emotional wellbeing (Guidelines..., 2019).

As such, during their contractual period, the seafarers' social interactions are limited to a small circle of colleagues. The acculturation (socialization, *auth. remark*) process includes formation of temporary bonds of friendship among seafarers that are interrupted and new bonds formed with new seafarers as is the occupational culture of seafaring profession (Simons, 2013).

In recent years, because of the increasing retirement age, sometimes three or four generations of seafarers are cooperating and working together on board (Sencila & Kalvaitiene, 2017).

Good communication is characterized by altruism and empathy that determine reciprocal understanding and partial acceptance of other human's position, and help remain a dignified human. Seafarers stated that their work requires people that are characterized by humanistic and technological competencies (Lileikis, 2014).

Communication is the most important human tool for understanding, cooperation and action. If the social environment on board is poor, with no rules without exemptions, then with this condition, only dregs and people with no formal education will muster. This, of course, would be insane and not defensible on a high-tech ship (Horck, 2005).

The seafarer-specific factors are related to lifestyle behaviour, personal habits and individual attributes. Fatigue varies from one person to another and its effects are often dependent on the particular activity being performed (Guidelines..., 2019).

It was stated, that people of a poor personality with the main concern focused to the outside, endure loneliness particularly hard. People with self-respect, with a deep and rich spirit endure loneliness more easily. So, the seafarer who is not sad with himself / herself, who always has something to do, and who does not require the attention of others, is able to work in extreme loneliness conditions (Lileikis, 2018).

Seafarers' well-being can be affected by a variety of factors including health conditions, genetic predispositions, nutrition, hydration and sleep difficulties (Guidelines..., 2019).

The multi-dimensional nature of holistic wellness suggests that there are different aspects that all need to be in balance to, ultimately, ensure positive health, quality of life and wellness. Training, taking the holistic person into consideration, will thus include the physical, social, intellectual, emotional (mental) and spiritual and not just the occupational aspects as is presently the case (Smith, 2016).

It is worth noting, that *well-being* and *wellness* definitions are very close and some researchers use this terms interchangeably. However, these definitions differ, revealing the subtleties of the phenomenon.

The Oxford and the Cambridge dictionaries (2019) define well-being as the state of being comfortable, healthy, or happy, as a general health and happiness. While the dictionaries define wellness as the state of being healthy, of being in good health, especially as an actively pursued goal.

We can see that well-being defined as more general term, than wellness. Besides, physical wellness supposed to be an essential aspect or part of well-being.

From a social scientific perspective, the field of health and well-being is differentiated with contributions of a wide range of topics, methodological approaches, and interdisciplinary research (Nyman & Nilsén, 2016).

2.2 Theoretical research model

On the base of the scientific literature analysis, the authors (Figure 1) identified three categories of a ship as a social space for adaptation phenomenon content analysis:

Difficulties faced on board the ship;

- The impact of communication with the ship's crew;
- Measures facilitating adaptation (well-being support) on board the ship.

According to some authors (Smith, 2016) a framework in which the occupational, emotional, physical, social, intellectual and spiritual aspects should be acknowledged and championed as an integral and equal part of being a seafarer and subsequently incorporated in training.



Figure 1. Categories of a ship as a social space for adaptation phenomenon content analysis

It is worth bearing in mind that not only the environment has impact to the person, but and person manages himself and can affect the environment.

Self-leadership as a permanent vocational self-improvement and self-orientation is relevant for all professions, but especially for the seafaring. The human must apply self-analysis, self-reflection, and make decision about his / her ability to survive in extreme conditions of social isolation at the first maritime practice (Lileikis, 2018).

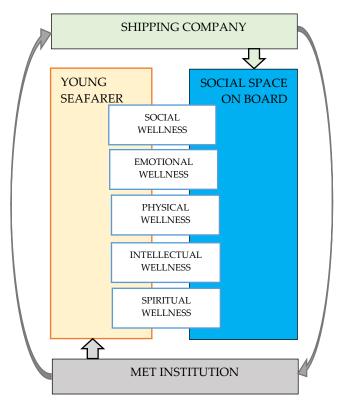


Figure 2. Theoretical model of the young seafarer and social space on board interaction, forming seafarer well-being

The theoretical model (Figure 2) reflects the interaction of young seafarer and a social space on board a ship, forming seafarer' well-being over wellness aspects: social, emotional, physical, intellectual and spiritual wellness.

Shipping company influences the social space on board creating and improving conditions for wellbeing. MET institution prepares young seafarers for adaptation at sea and keeping well-being on board.

3 THE RESEARCH METHODOLOGY

3.1 *The sample of the research*

The research was conducted by surveying full-time students (Bachelor degree) Marine Navigation, Marine Engineering and Electrical Engineering study programs students studying at Lithuanian Maritime Academy, having seagoing practice experience. The sampling was based on the principle of free will, i.e. all students were included into the sample and 45 students were surveyed during January-February of 2019.

3.2 Research instrument

In the presented study the data for the qualitative research was collected by using a written on line survey method. During presented research semi-structured questionnaire compilation method was applied, when determination of investigated phenomenon content categories was carried out at first (Figure 1) and then open-ended questions were formulated on this basis.

The questions were related to the subject of this article and aimed at the verification of theoretical model subcategories:

- What difficulties did you face on board the ship during seagoing practice?
- What impact has communication with the ship's crew members had on you?
- What measures have been taken by you to make it easier to adapt on board, overcome routine and other issues?

The data collected during the survey were processed using the content analysis technique, interpreting and coding the textual material. During the content analysis, responses with similar content were combined into the separate groups and then defined as subcategories, evaluating the number of responses in each subcategory.

4 RESULTS OF INVESTIGATION

4.1 Students' opinion about difficulties they faced during seagoing practice

Maritime students were asked an open-ended question about the difficulties they faced during seagoing practice.

During content analysis, responses with similar content were combined into the separate groups, then defined as the following difficulties subcategories: difficulties to adapt to work on board routine, monotony, fatigue; homesickness; sleep disturbances; psycho emotional stress; beginning of being on board; communication in a foreign language; lack of knowledge; long duration of contract; loneliness.

The subcategories of the difficulties faced by students on board with the original responses' content are set below in the descending order of number of responses in every subcategory:

- Difficulties to adapt to work on board routine, monotony, fatigue (N=33): Adapting to time changes (R8, R13, R17, R21); Rhythm on board (R9, R45); be in line with rules (R4, R7, R10, R26, R28, R34, R37); working after 12 hours a day (R12, R23); Spend most of the practice on the deck, not on the Bridge (R3, R8, R17); On board there are no holidays, so you need to work every day (R18, R21, R22, 24, R26, R35,R39, R43); The hardest thing is to realize that the time at sea is like in another planet, it runs whit another rhythm (R4); During practice it was hardest to get used to the routine (R7, R12, R19, R22, R37, R40).
- Homesickness (N=13): Thinking about home (R3, R11, R18, R24, R29, R33, R37, R42); It was hard the first few weeks without daily communication with family (R9, R32); Waiting for the end of contract (R7, R19, R23).
- Sleep disturbances (N=11): Endure constant sleep breaks (R5); Adapt to unusual conditions (R7); Work at night (R9, R15, R19, R29, R43); get up early (R10, R31, R34, R45).
- Psycho emotional stress (N=10): Endure the emotional pressure of the Chief Officer (R5); Interact with people with difficult character (R9); Do not lose patience (R1, R14, R25, R33, R39, R43); Create working relationships with crew because they have been constantly changing (R6).
- Beginning of being on board (N=7): The first week on board was the most difficult one! Because you have to have to know the ship, you need to know where, who and how. Later it is pure pleasure! (R1); The first month (R5, R21, R22, R39, R42).
- Communication in a foreign language (N=6): Break "Ice" in communication in a foreign language environment with crew (R7); The languages difference (R9, R11, R13, R27, R44).
- Lack of knowledge (N=6): You need to catch the right moments when officer can teach you (R8); Lack of knowledge (R4, R19, R27, R30); You have to realize that you must learn not only things related to navigation but also specific information (R15).
- Long duration of contract (N=6): It was the hardest to stay over 7 months (R26, R28); Duration of contract (R2, R8, R11, R37)
- Loneliness (N=2): Loneliness (R16, R35) and etc.

4.2 The impact of communication with the ship's crew members

The ship's crewmembers are an essential part of the ship's social space. Therefore, the impact of communication with them was highlighted in the study as a separate category. Discovering this category, maritime students were asked an openended question about the impact of communication with ship's crewmembers during seagoing practice on board a ship.

During the content analysis, responses with similar content were combined into the separate groups, then defined as the following impact of communication subcategories: development of professional knowledge, motivation to seek a seafarer's career; influence on attitude formation; teamwork skills; revealing of negative aspects of seafarer's career.

The subcategories of impact from the communication with other seafarers' with the original responses' content are set below in the descending order of number of responses in every subcategory:

- Development of professional knowledge (N=34): Deepened and widened theoretical knowledge, provided self-confidence performing specific tasks (R7); Sharing work experience (R8, R23, R26, R29, R37); Professionals strongly influenced by their accumulated knowledge of good seamanship practice (R10, R24, R27, R34, R38); They taught not only marine navigation (R11); Experienced seafarers is a good way to learn (R12); Provided knowledge what people working on deck must know(R18, R19, R22, R25, R27, R28, R30); I understood their work load (R29).
- Motivation to seek a seafarer's career (N=28): Encouraged to reach career (R3, R15, R28, R32, R39, R45); Supported and directed to the right way (R6, R23); Positive impact to know future career (R7); Motivated, encouraged to improve, learn from their mistakes, always move forward (R11); Motivated to learn and work (R13, R18, R25, R29, R33); motivated to continue learning (R19, R21, R31, R32, R42).
- Influence to attitude formation (N=11): Had a great deal of influence, because every older seafarer's advice or training was extremely important to me (R9, R12, R41); I realized that if the seafarers tell you one or another story it means they would like to teach you something. It is interesting to communicate with older seafarers because they have all kinds of stories, many instructional stories to listen! (R1); Older people have a lot of experience, so communicating with them usually has a good influence, not just in the professional sense (R2, R8, R11, R17, R25, R35, R43).
- Being as example of a professional (N=11): I understood how the whole crew could be positively affected by their actions (R5); They were an example for me (R9, R16, R25, R29, R31 R36, R42); I would like to become an officer like them (R22, R41); Chief officer became like a professional "father" (R23).
- Teamwork skills (N=7): Communication is a must as for a cadet only communication and collaboration can provide the necessary knowledge (R4, R16, R24, R39, R44); The key is to ask (R26); Everyone was friendly and was happy to work, and I didn't feel lonely (R33).

In general, maritime students noted high positive impact of communication with older seafarers' generations on their professional knowledge, on their motivation to seek a seafarer's career and help forming attitude towards seafarer's career.

Besides, students revealed negative impact of the communication with older seafarers' during seagoing practice:

 Demotivation to seek a seafarer's career (N=4): Not always motivating influence (R14); Only the captain had an impact (R15); Different influence, depending on people. But in general, nothing useful (R20); You just have to understand that they are older and with practice. Understand that often your opinion is underestimated because you do not have much practice. If you want your opinion to be accepted, you have to win/prove it (R16).

4.3 Adaptation on board (well-being support) measures

Maritime students were asked an open-ended question regarding the measures for their adaptation facilitation used by them to cope with the routine and other issues relevant to their well-being on board.

During the content analysis, the responses with similar content were combined into the separate groups, then defined as the following adaptation and well-being support measures subcategories: emotional wellness; social wellness; physical wellness and intellectual wellness.

The subcategories of the measures used for the adaptation on board (well-being support) with the original responses' content are set below in the descending order of number of responses in every subcategory:

- Emotional wellness (N=19): Movies (R4, R6, R9, R13, R23, R28, R31, R36, R43); Enjoy a sea view and beauty (R6); Leisure and work planning (R7, R10, R27, R34); Music (R10, R18, R26); humour (R15); Count the days spent on board how much is left until the end of the term no way (R24);
- Social wellness (N=18): Do not close, after work just enough to talk to the crew about a day, how things have gone by (R1, R3, R39); Communication and openness with crew members (R4, R23, R26, R29, R37, R39, R43); Adaptation on board is important, it is necessary to "knit" relations "with" the crew members as soon as possible (R5, R6, R9, R11, R13, R14, R16, R18, R35);
- Physical wellness (N=17): Sports (R4, R6, R12, R17, R13); Food (R7, R25, R29, R33, R34, R41); Leisure and work planning (R7); Good regime (R13, R23, R38, R41, R44);
- Intellectual wellness (N=11): Books (R4, R6, R15, R24, R27, R34, R38); Learning (R15, R22, R39, R42);
- Spiritual wellness: none of the given answers has been attributed to this aspect, reflected in the theoretical model.

5 CONCLUSIONS

The quality of life and work at sea is influenced by factors such as loneliness, homesickness, monotony, psycho-emotional stress, fear of piracy or pure nutrition, etc. The identification and understanding of these factors could help young seafarers to adapt on board and to apply the principles of well-being at sea.

Based on the scientific literature analysis, the authors prepared the theoretical research model, which reflects the interaction of a young seafarer and social space on board ship, forming seafarer wellbeing over wellness aspects: social, emotional, physical, intellectual and spiritual.

During the conducted research, the difficulties that students faced during their seagoing practice, the impact of communication with other seafarers on board a ship and measures facilitating students' adaptation, coping with the routine and other issues relevant to their well-being on board were determined.

The adaptation on board and well-being support measures distributed between different wellness aspects and are set in the descending order of number of responses: The most important were emotional and social wellness, then physical wellness and intellectual wellness. None of the answers has been attributed to spiritual wellness aspect.

The presented study discovers a ship as a social space for adaptation as a multi-dimensional interactional phenomenon, unique for every person because of his personal holistic nature with own ideas, feelings, behaviour, needs, moral values and physical attributes. The article determines and evaluates adaptation and well-being support measures used by young seafarers' on board.

The perception of these ideas is important for the maritime education and training institutions whose purpose is to prepare young people for maritime career at sea, forming their technical competences and providing them basic social abilities, necessary for the adaptation at sea and maintaining well-being on board.

REFERENCES

- Aubert, V., & Arner, O. (1959). On the Social Structure of the Ship. *Acta Sociologica*, Vol. 3, No. 4 (1959), pp. 200-219. [Online cit.: 2019-02-25]. Available from: http://www.jstor.org/stable/4193493.
- *Cambridge Dictionary.* [Online cit.: 2019-03-28]. Available from: https://dictionary.cambridge.org.
- Guidance on fatigue. 2019. International Maritime Organization. MSC.1/Circ.1598 24 January 2019. 62 p.
- Guidance on fatigue mitigation and management. 2001. International Maritime Organization. MSC/Circ.1014 12 June 2001. 105 p.

- Horck, J. 2005. Getting the best from multi-cultural manning. *Paper presented at the BIMCO 100 years and GA*. Copenhagen, Denmark, 2005. 20 p.
- Lileikis, S. 2014. What kind of leadership do seafarers need in regard to their main emotional states caused by the physical and psychosocial maritime work environment? *Journal of Maritime Transport and Engineering*. Volume 3, No 2. Latvian Maritime Academy, 2014. P. 24-33.
- Lileikis, S. 2018. Jūrų lyderystė: vertybės, psichologija, saviugda. Klaipėda: *Lithuanian Maritime Academy*.
- Maritime Labour Convention, 2006, as amended. 2019. Maritime Labour Conference. [Online cit.: 2019-02-28]. Available from: https://www.ilo.org/wcmsp5/groups/public/--ed_norm/--
 - normes/documents/normativeinstrument/wcms_554767. pdf
- Nyman, C., Nilsén, Å. 2016. Perspectives on health and well-being in social sciences. *International Journal of Qualitative Studies on Health and Well-being*. [Online cit.: 2019-04-01]. Available from: https://doi.org/10.3402/qhw.v11.31468.
- Oxford Dictionary. [Online cit.: 2019-03-28]. Available from: https://en.oxforddictionaries.com/definition/well-being.
- Russo, A., Popović, T., Tomić, V. 2014. The impact of technology on seafarer's work and leisure. 6th International Maritime Science Conference (IMSC 2014) Book of Proceedings. P. 173-178.
- Senčila, V. & Kalvaitienė, G. 2018. Finding a Balance: Companies and New Seafarers Generation Needs and Expectations. *TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation*. Volume 12 Number 2, June 2018. 285-290 p.
- Shared 'Dublin' descriptors for the Bachelor's, Master's and Doctoral awards. 2004. JQI meeting in Dublin on 23/03/2004PC. 6 p.
- Simons, S. A. 2013. Ships as 'Total Institutions'. Acculturating Seafarers for a Global Political Economy. *The Central European Journal of Social Sciences and Humanities*. [Online cit.: 2019-02-28]. Available from: http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.c ejsh-214af3dd-13ad-4202-82f9-f75129346b48.
- Smith, J. 2016. Wellness at Sea: A New Conceptual Framework for Seafarer Training. *Paper presented at the Ergoship* 2016, 6-7 April 2016, Melbourne, Victoria, Australia, 10 p.