the International Journal on Marine Navigation and Safety of Sea Transportation Volume 16 Number 1 March 2022

DOI: 10.12716/1001.16.01.12

Maritime Transport Employees' Psychological Defense Mechanisms and Self-management

S. Lileikis

Lithuanian Maritime Academy, Klaipeda, Lithuania

ABSTRACT: Following the principle that "transport does not carry the goods, people do", this study identifies the problematical aspects of professional experience of seafarers as people of maritime transport, as well as personalities in terms of expression of their psychological defense mechanisms and their insights into the possibilities for self-management. The type of the research is a qualitative, pilot and expert study, which has indicated that seafarers are able to recognize their psychological defense mechanisms and can define them quite clearly on the basis of their personal experience of living and working on board a ship. The abilities of seafarers' intellectual consideration about their experience are acceptable from a point of view of scientific, namely, psychoeducational logic. The development of self-leadership and transformational leadership skills may help to partially control defensive reactions, and should be an appropriate tool to psychologically stabilize the seafarers' professional activities in terms of possibilities to create more constructive relationships among them in a team while achieving the common purpose of transportation.

1 INTRODUCTION

1.1 Relevance of the research problem

International maritime policy is progressive at the level of maritime technology but conservative in terms of personnel management, as well as human resource management, especially because of the necessity to work on board a ship in extreme conditions. On the one hand, the international maritime policy regulates the global maritime business and is gradually changing. On the other hand, a lot of logistics companies and higher maritime training institutions follow the principle that "transport does not carry the goods, people do".

Therefore, the international maritime policy has adopted a practical idea of leadership that is relevant to this post-industrial era. Employees in developed countries are increasingly characterized not only by

material but also non-material work motivation, its content and prestige, an opportunity for creative selfexpression, a need for a positive psychological climate, and prospects of professional growth.

The Manila Seafarer Training Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW Convention) has provided for seafarers' leadership training and its implementation in the teamwork of the ship's crew since 2010 [6, 21]. It is a political change in order to strengthen the human element, i.e. the personality of a maritime transport professional, along with his/her technological knowledge. Professionals are a crucial aspect of quality of the activities on board.

The need for the implementation of leadership in the field of seafaring is based not only on the maritime policy but also on psychosocial maritime science. The more important scientific directions are as follows:

- Issues of the global seafaring management and maritime policy;
- The need of democratization of relationships among seafarers, and sociopolitical commitment to seafarers at the international level;
- High-tech on board a ship, and the problem of reduced ship crews;
- Empowerment of subordinates in companies, and their appropriate reactions to the challenges on board;
- The importance of social skills of seafarers, and the strengthening their constructive collaboration taking into account its multicultural nature;
- Leadership of institutions for training of seafarers, and their psychological evaluation;
- Impact of transformational leadership on the global economy competitiveness in shipping sector, and managerial collaboration within the crew;
- Supportive maritime leadership, moral and professional authority of the shipmaster on board, and promotion of seafarers' self-confidence;
- Creation of vision and strategy of the activity, and motivation of seafarers to work effectively and safely;
- Physical and psychosocial factors, which relate to the integral motivation for accepting maritime work activities and to stay to work in the maritime industry;
- Successful professional maritime career and reduction of threats for health and life when working on board a ship at sea;
- Application of leadership to healthy lifestyle of seafarers and their abilities of the psychological self-management, while experiencing psychoemotional stress, loneliness, social isolation, monotony and depression;
- Culture of safety on board [1–4, 7–20].

Natural and semi-unconscious psychological defense mechanisms manifest themselves as personal security in difficult situations of co-existence on board. A focus on one's own personality and the inevitable defense mechanisms in difficult situations relates to the totality of self-leadership abilities in terms of recognition of these mechanisms and self-management.

It is very relevant that the people of maritime transport, especially future seafarers, learn to recognize their own psychological defense mechanisms and do not allow themselves to be fully overpowered by them in terms of valuable and practical significance of maritime leadership. This problem is quite new and should be explored not only as an integral part of psychological and educational studies of the people who are working on board, but also – as a stand-alone issue, by conducting a comprehensive scientific analysis.

It is appropriate to reveal some tendencies of this phenomenon by investigating the expression of psychological defense mechanisms and the possibilities for self-management of seafarers as people of maritime transport, at the level of a pilot and expert study.

1.2 Methodology and organization of the research

The object of the research is the expression of psychological defense mechanisms of seafarers as people of maritime transport. The aim of the research is to identify the problematical aspects of professional experience of seafarers as personalities in terms of expression of their psychological defense mechanisms and their insights into the possibilities for self-management regarding these mechanisms.

The type of the research is a qualitative, pilot and expert study. The main methods, namely scientific literature analysis, written survey of experts, phenomenological content analysis, interpretation, and synthesis, were applied to the research.

The process of simplified phenomenological content analysis conducted during the research consists of the following stages:

- Identification of manifest categories;
- Determination of the frequency of repetitive categories;
- Interpretation of results.

The statistical sample of the pilot study consists of 36 seafarers (18 marine navigators and 18 marine engineers, but this difference is not relevant to the pilot study). Samples ranging in size from 10 to 40 per group are evaluated for their adequacy in providing estimates precise enough to meet a variety of possible aims [5].

The mentioned seafarers are considered as survey experts. They are professionals who purposefully improve their qualifications at Lithuanian Maritime Academy. The pilot study is homogeneous because all interviewees are seafarers and all of them have more than 10 years of practical experience on board a ship.

The validity of this study is justified by the main following principles:

- Adherence to ethical standards;
- Long-term practical experience of the seafarers;
- Their free consent to participate in the survey;
- The fact that all questionnaires were returned and all questions answered (no obvious signs of an unfair response were found).

Thus, the validity of the non-representative pilot study can be considered as sufficient.

expression of psychological defense mechanisms in the ship's crew is analyzed in terms of compensation, sublimation, opposite projection, rationalization, and regression. Therefore, the questionnaire consists of 6 + 1 open-ended questions. All questions are answered, but the extent of the answers varies greatly. When investigating the expression of psychological defense mechanisms of seafarers on board a ship, the following selected most popular simplified problematic situations were presented to the respondents:

- How does compensation (e.g., a person who is not a leader begins to portray the boss) appear in the ship's crew?
- 2 How does sublimation (e.g., a person feels underestimated and, therefore, is trying to work and communicate too hard) appear in the ship's crew?

- 3 How does an opposite reaction (e.g., a person hates another person but panders to him/her) appear in the ship's crew?
- 4 How does projection (e.g., one person blames another person but does not see his/her own failures) appear in the ship's crew?
- 5 How does rationalization (e.g., a person does something wrong and is always trying to justify himself/herself) appear in the ship's crew?
- 6 How does regression (e.g., in case of failure, a person starts screaming at others) appear in the ship's crew?

This also indicates the standpoint expressed by the seafarers concerning the opportunities of a seafarer as a leader, which would prevent him/her from being completely overcoming by the psychological defense mechanisms:

7 What should a seafarer as a leader do in order to prevent himself/herself from being completely overpowered by these mechanisms?

The mentioned 6 + 1 open-ended questions are the basis for the structure of this article.

The basic methodological principles of the research are as follows:

- STCW Convention, i.e. its Manila amendments, establishes an obligation to develop leadership abilities of seafarers and apply them to ship crews since 2010 [6]. Operational safety ensured for employees in the field of maritime transport is associated with the implementation of leadership based on self-leadership development, and expression of which is characterized by a positive personal worldview, creativity, broad intellectual understanding horizons, psychological defense mechanisms, and ability to manage them, at least in part.
- Existentialism refers to the fear of a lonely person, who meets an unfamiliar and hostile world on land and at sea. Existential psychology expresses hope by denying excessive attachment to the pleasures of life and promoting the creative liberation of personality. The development of maritime leadership, of course, including selfleadership, extends the person's intellectual horizons and helps to overcome the tragedy of one's existence, improve emotional state and find peculiar consolation. Existentialism can help to acquire a valuable basis for self-confidence and when working in self-regulation conditions, especially when the boss is a leader characterized by professional and moral authority in supporting his/her subordinates.
- Personalistic humanism believes that seafarers are people first, i.e. the people of maritime transport, personalities, as well as values of sociotechnological life who have their life story and are characterized by the ability of self-awareness, learning, free and responsible decision-making, respect for themselves and their colleagues on board, teamwork, collaboration, and evaluation of their work activities, as a way of their cultural expression in seafaring.

2 RESEARCH RESULTS

2.1 Seafarers' standpoints concerning their experienced defense mechanisms

As it was mentioned, the expression of psychological defense mechanisms in the ship's crew is analyzed in terms of compensation, sublimation, opposite reaction, projection, rationalization, and regression.

The first question is "How does compensation (e.g., a person who is not a leader begins to portray the boss) appear in the ship's crew?". The answers of the seafarers are given in Table 1.

Table 1. Expression of psychological compensation

"The boss on board is unable to explain the task and is angry because of it". "The boss starts screaming when his subordinates disagree with his incompetent opinion" "The shipmaster is engaging the aggressive chief mate to solve the problem of disobedience of a subordinate" "The boss is hyperactive, avoids his	
the task and is angry because of it". "The boss starts screaming when his subordinates disagree with his incompetent opinion" "The shipmaster is engaging the aggressive chief mate to solve the problem of disobedience of a subordinate" "The boss is hyperactive, avoids his	7
"The boss starts screaming when his subordinates disagree with his incompetent opinion" "The shipmaster is engaging the aggressive chief mate to solve the problem of disobedience of a subordinate" "The boss is hyperactive, avoids his	
incompetent opinion" "The shipmaster is engaging the aggressive chief mate to solve the problem of disobedience of a subordinate" "The boss is hyperactive, avoids his	15
"The shipmaster is engaging the aggressive chief mate to solve the problem of disobedience of a subordinate" "The boss is hyperactive, avoids his	
chief mate to solve the problem of disobedience of a subordinate" "The boss is hyperactive, avoids his	
disobedience of a subordinate" "The boss is hyperactive, avoids his	e 3
"The boss is hyperactive, avoids his	
mana an ailailita an dia diatma ata d"	1
responsibility and is distracted".	
"Apparently, the shipmaster hates his life	2
and has been in an unsatisfying position	
for too long".	
"The angry chief engineer is unhappy and	2
gives strange instructions".	
"A subordinate does not listen to the	2
outrageous boss and behaves in his own w	ay".
"The boss is unable to work in a team and	4
is too controlling".	
Total	36

It was found that the majority of the respondents note that the boss on board a ship screams in a difficult situation showing who is the boss. The instructions of Scandinavian fleets, however, prohibit screaming at subordinates, but such behavior as psychological defense is natural.

A fifth of the seafarers distinguish their boss's anger as compensation for his inability to explain the task. The compensational defense mechanism usually characterizes less experienced leaders, especially those who have got their positions not by working hard from the point of view of consistent development of their maritime career.

The second question is "How does sublimation (e.g., a person feels underestimated and, therefore, is trying to work and communicate too hard) appear in the ship's crew?". The answers of the seafarers are given in Table 2.

Table 2. Expression of psychological sublimation

CATEGORIES	NUMBER OF RESPONDENTS
"This is typical for new crew members,	5
especially for those who are starting	
their career on board".	
"A mechanic wants a promotion but his	3
work and achievements are irrelevant	
for a senior mechanic".	
"Sometimes there are those who work	9
more than it is required".	
"Some employees take dangerous but	1
not the most important actions".	
"Employees are afraid of losing their jobs"	". 8
"They avoid work activities but like to	6
have discussions with the manager".	
"They cannot find their place in the crew"	. 4
Total	36

The majority of the seafarers identify a situation when some members of the crew are working more than it is required. They also express their fear of losing their job. When a person does not make much effort, this can increase the risk of losing one's job.

Generally, the answers of the seafarers are practical, versatile, and psychologically mature, especially when considering their answer about the importance of finding one's appropriate place in the crew. The problem of crew integration inevitably involves unnatural, defensive, and sublimating behavior at work.

The third question is "How does an opposite reaction (e.g., a person hates another person but panders to him/her) appear in the ship's crew?". The answers of the seafarers are given in Table 3.

Table 3. Expression of an opposite reaction

1 11	
CATEGORIES	NUMBER OF RESPONDENTS
"It is very common between managers and their subordinates".	14
"The chief mate prepares coffee for the	1
shipmaster". "A person remains neutral in order to	8
avoid conflicts". "He knows that working with this person	3
will take a long time". "A person blindly follows the illogical	7
instructions of the primitive leader so that he/she can grow in his/her career".	
"A seafarer is trying to please the senior in rank".	3
Total	36

It was identified that most seafarers have limited themselves by defining a defensive and psychologically simulated opposite reaction on board a ship as a very common practice among managers and their subordinates. It is also appropriate to note their frequent desire to avoid conflicts and take care of their own maritime careers. The predominant categories explain the relevance of transformational leadership of managers in seafaring.

The fourth question is "How does projection (e.g., one person blames another person but does not see his/her own failures) appear in the ship's crew?". The answers of the seafarers are given in Table 4.

Table 4. Expression of psychological projection

CATEGORIES	NUMBER OF RESPONDENTS
"The new crew member blames others,	1
although he has not fulfilled his duties".	
"The chief mechanic knows little and	11
attacks unnecessarily".	
"The man lacks self-confidence and	8
avoids responsibility".	
"When a person wants to attack others, it i	s 2
a sign of a mental disorder".	
"The manager gives inappropriate	8
instructions, is afraid of admitting to maki	ng
a mistake, and blames his subordinate".	•
"By emphasizing other people's mistakes,	3
the manager tries to hide his own mistakes	
"This can happen to any crew member in	3
an emergency".	
Total	36

Most seafarers express doubt about the professional competence of the manager. It means that, because of this problem, he psychologically defends himself by attributing his mistakes to others. The seafarers also highlight the situation when the manager lacks self-confidence and avoids responsibility.

The respondents' answers are logical and justify projection as a mechanism of psychological defense. Some seafarers say that psychological projection can happen to any crew member in an emergency when working on board. This statement shows the practical experience of the seafarers and their psychologically mature insights.

The fifth question is "How does rationalization (e.g., a person does something wrong and is always trying to justify himself/herself) appear in the ship's crew?". The answers of the seafarers are given in Table 5.

Table 5. Expression of psychological rationalization

CATEGORIES	NUMBER OF RESPONDENTS
"An employee is afraid of his/her boss".	6
"The subordinate defends himself claimin	g 6
that he has been poorly explained how to	
perform the task".	
"Seafarers make a mistake and then they a	are 12
afraid of losing the trust of others and dan	nage
their own reputation".	
"The chief mechanic litters the room and o	does 1
not want to clean it".	
"The employee's self-esteem is too high".	4
"There are situations when after some tim	
we see that this way was the only possible	
"The cook of the ship does not cook well b	out 2
justifies himself by the lack of products".	
"Before starting work activities, experienc	
seafarers carefully think about how they a	ire
going to justify themselves in case of possi	ible
failure".	
Total	36

It was found that the seafarers apply psychological rationalization mostly because they are afraid of losing the trust of others, especially the trust of the administration, and damaging their own reputation. The fear factor is often emphasized. The seafarers also explain that a subordinate defends himself because he has been poorly explained how to perform the task.

There are some situations in which, after some time, the seafarers see that their chosen way was the only way possible. This category is very rare but also very significant at the level of a broader practical professional approach. Thus, the seafarers perceive psychological rationalization in the wider context of their work activities and their long-term outcomes.

Generally, the professional erudition of seafarers in Eastern Europe is a unique phenomenon, which should be investigated in the social sciences of seafaring more in terms of the relevant matter of transformational leadership.

The sixth question is "How does regression (e.g., in case of failure, a person starts screaming at others) appear in the ship's crew?". The answers of the seafarers are given in Table 6.

Table 6. Expression of psychological regression

1 1 2 0	
CATEGORIES	NUMBER OF
	RESPONDENTS
"The manager screams at seafarers,	2
particularly trainees".	
"The chief mechanic lacks skills".	1
"Some seafarers are panicking in stressful	9
situations".	
"The boss screams because his mistakes	1
are obvious to everyone".	
"The boss is very annoyed when someone	1
does not fulfill his duties".	
"A person has nervous disorders".	4
"The manager lacks knowledge, patience,	6
and professional experience in particular".	
"The manager does not trust the subordina	ate 6
and thinks that he will not do his job well	
on his own".	
"The chief mechanic is screaming and curs	sing 1
when the bolt is broken".	
"The manager has nowhere to pour out his	s 5
anger".	
Total	36

Most seafarers indicate that some people of maritime transport are panicking in stressful situations and, therefore, they psychologically regress to primitive defensive self-expression. Moreover, the seafarers quite often state that their manager lacks knowledge, patience, and professional experience in particular and does not trust the subordinate that he will do his job well on his own.

There is a tendency that seafaring requires, in particular, the seafarers' abilities of self-leadership and transformational leadership.

2.2 Seafarers' recommendations on psychological selfmanagement

The seventh question is "What should a seafarer as a leader do in order to prevent himself/herself from being completely overpowered by these mechanisms?". Psychological defense mechanisms are inevitable, but they may partially be controlled at the cognitive level, i.e. meaningful perception of

personality. Seafarers' recommendations are given in Table 7.

Table 7. Seafarers' recommendations on psychological self-management

CATEGORIES	NUMBER OF RESPONDENTS
(D. 1.1. 1	
"Read the classics".	3
"Find your place to relax".	2
"Trust your knowledge and be self-critical	
"Analyze your personal and others' mistal	kes". 6
"Control your emotions by perceiving their	
nature".	
"Observe yourself and look at yourself as	if 4
from the outside".	
"Be humane with other crew members".	4
"Learn to predict a situation".	4
Total	36

It was identified that most seafarers suggest controlling one's emotions by perceiving their nature. A sixth part of them recommend analyzing personal and others' mistakes. These recommendations are constructive. The answers of the seafarers are natural and practical.

It is appropriate to note that the respondents' vocabulary is not poor. Such words and phrases as "classics", "nature", and "look as if from the outside" show that. Long-term studies on the approach and professional experience of seafarers make it possible to generalize that poor vocabulary is usually not characteristic of them. On the one hand, their speaking can be characterized by professional slang. On the other hand, the content of their speeches is rich. This is a good prerequisite for their ability of self-management.

3 CONCLUSIONS

In summarizing the problematical analysis of the expression of psychological defense mechanisms of seafarers as people of maritime transport, as well as personalities, three statements about the pilot study may be formulated, following the basic methodological principles (STCW Convention, existentialism, and personalistic humanism) of the research:

- Seafarers are able to recognize their psychological defense mechanisms and can define them quite clearly on the basis of their personal experience of living and working on board a ship.
- The abilities of seafarers' intellectual consideration about their experience are acceptable from a point of view of scientific, namely, psychoeducational logic. The development of self-leadership and transformational leadership skills may help to partially control defensive reactions, and should be an appropriate tool to psychologically stabilize the seafarers' professional activities in terms of possibilities to create more constructive relationships among them in a team while achieving the common purpose of transportation.
- The people of maritime transport are naturally more characterized by the expression of psychological defense mechanisms because of their

extreme working conditions. Partial management of these mechanisms is a relevant scientific and practical issue that should be more deeply investigated. The expression of psychological defense mechanisms of seafarers and their selfmanagement abilities should more frequently become an object of psychosocial studies on seafaring.

REFERENCES

- Andres, T.Q.D.: Management by Filipino Values Training. Manila: Our Lady of Manaoag Publishers (1991).
- 2. Fjærli, B. et al.: Maritime Managers of the Future What do They Think is Good Leadership? TransNav, International Journal on Marine Navigation and Safety od Sea Transportation. 9, 1, 107–111 (2015). https://doi.org/10.12716/1001.09.01.13.
- 3. Gerstenberger, H., Welke, U.: Arbeit auf See: zur Ökonomie und Ethnologie der Globalisierung. Münster: Verl. Westfälisches Dampfboot (2008).
- Haughton, C.J.: From ships to leaderships the leadership of maritime education and training (MET) institutions in the United Kingdom. University of Birmingham (2012).
- 5. Hertzog, M.A.: Considerations in determining sample size for pilot studies. Res Nurs Health. 31, 2, 180–191 (2008). https://doi.org/10.1002/nur.20247.
- International Maritime Organization: International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), (2020).
- 7. Jezewska, M. et al.: Health promotion in the maritime work environment--training of leaders. Int Marit Health. 58, 1–4, 129–137 (2007).
- 8. Jezewska, M.: Psychological evaluation of seafarers. Int Marit Health. 54, 1–4, 68–76 (2003).
- 9. Kalvaitiene, G., Sencila, V.: Ship as a Social Space for Adaptation: Perception of the Phenomenon by Young Seafarers. TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation. 13, 3, 635–640 (2019). https://doi.org/10.12716/1001.13.03.21.
- 10. Lileikis, S.: E-learning and economism in regard to the psychic health and development of seafarers' leadership. Maritime Transport and Engineering. 2, 28–35 (2013).

- 11. Lileikis, S.: Jūrų lyderystė: vertybės, psichologija, saviugda. Klaipėda: Lietuvos aukštoji jūreivystės mokykla. (2018).
- 12. Lileikis, S.: Supporting maritime leadership in regard to moral authority on board and pre-self-development of seafarers as psycho-educational factors improving their self-confidence at work. Maritime Transport and Engineering. 3, 16–23 (2014).
- 13. Nielsen, M. et al.: Relationships between work environment factors and workers' well-being in the maritime industry. International Maritime Health. 64, 2, 80–88 (2013).
- 14. Progoulaki, M., Roe, M.: Dealing with multicultural human resources in a socially responsible manner: a focus on the maritime industry. WMU Journal of Maritime Affairs. 10, 1, 7–23 (2011). https://doi.org/10.1007/s13437-011-0003-0.
- 15. Roe, M.: Maritime Governance and Policy-Making. Springer, London (2013).
- Sąlyga, J.: Jūrininkų patiriama psichoemocinė įtampa, socialinė izoliacija: krikščioniškosios karitatyvinės veiklos patirtis. Tiltai. 36, 164–183 (2007).
- 17. Vasilovschi, N., Georgescu, S.: Transformational leadership and the economic competitiveness in shipping industry today. Constanta Maritime University Annals. 17, 307–310 (2012).
- 18. Vervoort, M.: Maritime leadership competence and its further implementation and assessment into the nautical education program. In: EDULEARN12 Proceedings. pp. 804–810 IATED (2012).
- Weintrit, A., Neumann, T.: Advances in marine navigation and safety of sea transportation. Introduction. Advances in Marine Navigation and Safety of Sea Transportation - 13th International Conference on Marine Navigation and Safety of Sea Transportation, TransNav 2019. 1 (2019).
- Weintrit, A., Neumann, T.: Safety of marine transport introduction. In: Safety of Marine Transport: Marine Navigation and Safety of Sea Transportation. pp. 1–4 (2015). https://doi.org/10.1201/b18515.
- 21. Weintrit, A., Neumann, T.: STCW, maritime education and training (MET), human resources and crew manning, maritime policy, logistics and economic matters. Introduction. Marine Navigation and Safety of Sea Transportation: STCW, Maritime Education and Training (MET), Human Resources and Crew Manning, Maritime Policy, Logistics and Economic Matters. 9–10 (2013).