IAMU 2022 Research Project
(No. 20220102)

Creation of Practical Guide in "Applied Psychology for Seafarers"

By

Batumi Navigation Teaching University

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IAMU
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Research Coordinator : George Gabedava

Research Project for All Academic Staff in FY2022

Electronic Final Report for the FY2022 IAMU

Creation of Practical Guide in "Applied Psychology for Seafarers"

Theme 1: The Prospective Role of Maritime Education and Training

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Abstract The purpose of the present research is to make recommendations for dealing with psychological problems of the seafarers during their professional activities, based on the identification of risk factors. As a result of the research, a manual was created, which will introduce undergraduate students to the main types of psychological imbalances and stressful situations, the means of identifying them and the main ways to deal with them.

The involvement of specialists in the field has revealed that currently, no adequate attention is paid to researching the psychological state of seafarers before embarkation on the ocean-going vessels. Obviously, now, in the post-pandemic period, this is especially relevant, because the situation created during the pandemic had a great impact on the mental health of not only Seafarers, but also all society in general. The main findings of the study results are discussed in the report.

Keywords: Mental Health; Seafarers; Psychology; Well-being;

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1. Introduction

The profession of sailor is ancient and unique. Historians believe that the first sea navigation, after many years of inland navigation experience, was carried out by the Phoenicians around 1100 BC. If we take this date as a starting point, then we can say that this profession is more than 3000 years old and it is the work of strong and brave people.

The ancient Greeks and Romans, the tireless and invincible Vikings, the Normans, the great expeditions of the Chinese to India and Africa, the Arab merchant flotilla, Vasco da Gama, Ferdinand Magellan, Christopher Columbus, Amerigo Vespucci, the Netherlands, the military flotillas of England…

Even filibusters and pirates, including famous women - Anne Bonny, Rachel Wall, Grace O'Malley, Mary Jane Read, Ms. Zheng Yi Sao... (by the way, the latter, the first introduced a code of conduct for the pirate crew, according to which anyone who raped captive women was punished by beheading) …

Voyages and discoveries, adventures and dangers, victories at the cost of hopelessness and despair, hunger and illness, endurance, physical and moral strength, resilience and immense courage - all this is about sailors. About those people whose desire for adventure and discovering of the new corners of the World leads to new horizons, about those people without whom the world would still seem like a flat Earth standing on three elephants.

> ➢ **Intermezzo**

In the process of working on this project, Georgian researchers visited Slovenia on a business trip to work on the structure of the work. While exploring Ljubljana, their attention was drawn by the symbol of this city - a very handsome dragon, whose statues decorate and make this city completely unique. Obviously, they were interested in the history of the dragon, and here's what they found out:

After stealing the golden fleece for the invincible king of Colchis - Aeëtes and abducting his daughter - Medea, Jason, pursued by the powerful flotilla of Aeëtes, deviated from the road to his homeland and instead of the Aegean Sea, he hid from his pursuers in the Danube Delta. The possibility for retreat was cut off for the Argonauts, so they decided to disassemble the "Argo" and leave on foot. At the mouth of the river Ljubljanica, they had winter and the Argonauts, Under the leadership of Jason and Medea, they temporarily settled there. Near their camp, in the swamps, there lived a dragon who was dissatisfied with the new neighbourhood and attacked the camp of the Argonauts. Jason fought him and, as the legend tells us, defeated the dragon in an unequal battle. According to the story, Jason, Medea and the crew of "Argo" are considered to be the first people from Ljubljana.

Neither the Colchis should have known anything about Slovenia nor the Slovenians had any idea about the Colchis, but nevertheless, in the summer of 2022 AD, we discovered that around 1250 BC, the of the Argo, one famous ship, connected our countries forever as among the 45 first residents of Ljubljana, there was one Georgian woman.

> ➢ **About the idea:**

The idea of carrying out the present research was born in 2021, during the pandemic. Several graduates and the active students of the Batumi Navigation Training University contacted us via messenger and asked us to help them to deal with the uncertainty and anxiety caused by the panic situation caused by the Virus. They found themselves in a situation where they could not, despite the end of the contract, repatriate. To make matters worse, some of their family members were infected with Covid-19, which increased their anxiety levels. Fear of uncertainty and tension created a stressful background that did not allow them to deal with emotions and negative thoughts. In this situation, we involved the university psychologist to reduce the tension. Apart from this, each of us who worked directly with the seamen got involved in conversations with them. We communicated as much as possible, connected with family members, provided information. At the end, each of them returned home safely.

Concurrently with processes described above, we concluded that the psychological preparation provided during education and before joining the ship was not adequate to the challenges and situations seafarers may and most probably will encounter during their service period.

> **Working group**

On September 1, 2022, a working group was assembled, in which Georgian, Chinese and Slovenian specialists were united. In total, the working group was made up of psychologist, MD, Professor Aleksy Mindadze (Georgia), Professor Matia Svetina (Slovenia), Yang Chuanyong - Associate Professor (China), Yuan Gu - Teaching Assistant (China), as well as the project consultant, the Assistant-professor Master Mariner Levan Davitadze (Georgia), Education Quality Assurance Manager, Doctor of Philology, Professor Natia Mikeltadze, project coordinator, Associate Professor George Gabedava (Georgia). The project prepared by us was submitted to the grant competition "Research project for academic staff" announced by the International Association of Maritime Universities, the results of the competition were announced at the twenty-second General Assembly of the International Maritime Organization on October 19, 2022 in Alexandria (Egypt), where the project won and obtained funding for implementation.

Prior to actual research on the subject, the working group defined two main tasks: At the first stage, through the questionnaires, we identified the risk factors that cause seafarers' psychological discomfort, determined the level and intensity of the influence of risk factors and irritants.

 At the second stage, we tried to create a collection of theoretical and practical tips, that help to increase the stress tolerance of seafarers, to deal with stress individually and, in general, to attract more attention of the public/stakeholders to the research of mental health issues of seafarers.

> **The purpose and relevance of given research**

The purpose of the present research is to make recommendations for dealing with psychological problems of the seafarers during their professional activities, based on the identification of risk factors. As a result of the research, a manual was created, which will introduce undergraduate students to the main types of psychological imbalances and stressful situations, the means of identifying them and the main ways to deal with them.

The involvement of specialists in the field has revealed that currently, no adequate attention is paid to researching the psychological state of seafarers before embarkation on the ocean-going vessels. Obviously, now, in the post-pandemic period, this is especially relevant, because the situation created during the pandemic had a great impact on the mental health of not only Seafarers, but also all society in general.

Therefore, at this stage, there is a need, along with other health-related tests, to conduct a deep and thorough study of the psychological state and determine the lower limits of stress response threshold. Additional work will be carried out with the seafarers, whose lower limits are below accepted values. It is important that employers (ship-owning companies) acted as the initiators and financiers of this type of researches, because the low stress response and psychological instability of individuals recruited by them is problematic for both the crew and the shipowner and has a negative impact on the psychological condition and work efficiency and safety of the whole ship.

At the very first stage of the research, one fact was highlighted, which we would like to draw attention to in the introduction. As a result of interviews conducted by Georgian researchers, it was revealed that a large number of seafarers try to avoid talking about mental health and do not voice (sometimes - do not even think about) psychological problems that arise in the process of work. A widespread opinion was revealed that the presence of a psychological problem leads to a kind of stigmatization. When discussing this issue with project participants, all participants noted that the issue of stigmatization also appeared in the interviews they conducted. We believe that removing these types of barriers and speaking out about problems is also very important for the maritime industry. In our opinion, it is desirable to discuss this issue in the process of receiving maritime education, both at the professional and undergraduate levels. To provide future seafarers with the right approach to mental

health issues, ways of identifying them and ways to solve them. Considering the relevance of the research, we think this fact is very important and should be taken into account.

➢ **Key Findings of the Study Group**

During the research process, it became clear that the main factors causing stress for sailors include:
1. Type of work schedule;
2. Experience of previous employments/contracts (mostly- negative);
3. Low level of psychological training - insufficient services provided by the company;
4. Insufficient to the means of communication (mostly Internet);
5. Insufficient interpersonal communication (Internal communication on board the ship).

For the group of researchers, the tendency of the representatives of the third world countries towards high interpersonal sensitivity, which becomes a prerequisite for psychological lability and sometimes - behavioral deviation, remained very noticeable. High interpersonal sensitivity, which includes intense sensitivity, excessive attention to other people's emotions, evaluations and behaviour in a critical and non-accepting context of one's own person, may turn into an essential problem in a spatially localized multiethnic and multicultural society.

Seafaring requires a strong psycho-emotional constitution. It is important to make a detailed assessment of the current psychological state of the sailor, understand all the difficulties and where possible to deal with them pro-actively. Consequently, joint active involvement of both professional psychologists and representatives of shipowners in these processes becomes essential.

Here are some recommendations for employers of seafarers that emerged from this research:
1. More attention to be paid to the medical examination and psychological testing of the seafarers;
2. The members of the crew's management ring should be more thoroughly trained in terms of identifying psychological issues and rendering adequate assistance when needed;
3. The employing company is as much attractive, as much it cares about the employees and takes into account the interests of the employees;
4. The sensitive problems presented in the study should preferably be moderated/regulated through psychological counselling/psychological rehabilitation of seafarers upon completion of current contract by companies (or whenever deemed necessary);
5. It is very important for the company to provide psychological testing and counselling of the seafarer on shore after the end of the contract, in case any type of psychological problem was detected during the work process.

➢ **Methods used**
1. Oral interviewing;
2. Survey through a questionnaire;
3. Grouping and processing of received data through the SSPS (Statistical Program for Social Sciences);
4. Analysis of received data using SCL-90 (a clinical test and screening method, intended for the evaluation of the expression of psychopathological symptoms in psychiatric patients and healthy people);
5. Analysis, comparative analysis;
6. Overview;
7. generalization;
8. Induction and deduction;
9. Synthesis;
10. Summarizing and drawing conclusions.

➢ **For the student - the future sailor**

Remember that emotion is born in the head, it is a part of subjective reality, however, it emerges under objective influence. The main impetus for its emergence is verbal influence. Any text causes the emergence of certain images to which the brain reacts with emotion. That's why it often happens that we fall into the trap of our own ideas. In sum, our personal integrity is threatened - stress destroys personality, because spiritual pain is the most acute feeling for a person.

- You should know that explosiveness is a reaction to disappointment. At this time, holding the emotion for 5-7 seconds, breathing and counting to 10 will prevent you from making mistakes caused by emotional action.
- Remember, under stress, the body works like a car in top gear. This is especially felt when you are alarmed, so you must remember that the last stage in the cycle - alarm-resistance-exhaustion - is exhaustion, and you must do everything you can to stop this destructive cycle before it starts.
- Remember that people who are characterized by jealousy, pessimism, envy, reverence, revenge, anger - are vulnerable and often experience stress. At the same time, people whose characteristics are optimism, enthusiasm, restraint, tolerance, kindness, sociability - are less stressed and easily get out of crisis situations.
- In order to control something, you have to know it. Remember, the Human Mind has defensive reactions. They are characterized not only by mental activity, but also by physiological changes (e.g., the release of hormones). The information that brings instability into your mental body is as "foreign" to your mind as, for example, a certain bacterium is to your physical body; And just as the body begins to fight against the intervention by activating leukocytes, so your psyche begins to fight against the irritant with all means and resources. Frequent and uncontrolled damage to the mental body destroys and weakens it.

➢ **About the main determinants of the study**

The coronavirus has changed the world and it will never be the same again. The pandemic affected all aspects of life, all directions, and fields. Restrictions have intensified our sense of civic responsibility as well as our desire for freedom and a life "outside our borders".

There is not a person (of any profession) left in the world who, more or less, has not carried the burden of the pandemic. However, one of the hardest working conditions was found by seafarer who became key workers during a pandemic. Their greatest professional responsibilities, however, were intensified with the aggravation of the epidemiological background. It so happened that due to the restrictions caused by lockdown, part of the seafarers was forced to extend their employment contracts for even 8, 10, 12 months and, despite the severe psychological stress, not to stop the shipping processes that are vital to the world's economy.

Hard working conditions have obviously been compounded by the huge emotional pressure caused by prolonged separation from family and life on the land, the anxiety of family members about the threat of the virus, the inability to find oneself on the shore and, consequently, different social and physical environments. During the first wave of COVID-19 pandemic, the Batumi Teaching University, Georgia, had an opportunity to have online communication with both students and alumni, who substantially extended the contract, and needed help both in terms of administration of study and work, as well as psychological support. During this period, the idea has emerged that the psychological training courses offered today by maritime higher education institutions to future maritime officers contains insufficient topics preparing them for coping with stress and self-control in severely stressful situations onboard. Existing standard (5 ECT) for academic courses, such as General Psychology, Professional Psychology, Leadership and Team Management Psychology, etc., do not provide adequate training for seafarers for psychological self-assessment and self-control. The main aim of the current study therefore was to review previous findings regarding stress and mental health issues in seafarers, to obtain current data on stress-related factors, and to provide a guideline for future education of seafarers in terms of mental health.

The problems related to mental health in seafarers are not new and have existed far before COVID-19 pandemic.

Here we summarize their major findings, clustered into four groups: individual factors, work-related factors, problems specifically related to recent COVID-19 pandemic, and previous attempts and guidelines to organize help to maritime workers.

Individual factors. The data (Jonglertmontree et al. 2022, Brooks & Greenberg 2022) [1;2] suggest that younger seafarers generally experience higher level of stress than older ones. Younger stuff reported more depression, sleepiness, and burnout, although some data suggested that age in seafarers was not related to wellbeing. Secondly, quality of sleep was shown to relate to mental health and well-being. For example, changed sleep patterns in favour of working shifts and poor sleep habits were related to increased emotional strain, depressive symptoms, and burnout (Jonglertmontree et al. 2022) [1]. The outcomes of poor sleep are not restricted to seafarers but are also shown in jobs that work 24-hours shifts such as doctors, nurses, gas station attendants or truck drivers (see Jonglertmontree et al. 2022) [1]. Third, seafarers with health issues such as diabetes type 2 or those who are overweighted more likely to develop depressive symptoms and are therefore suggested to be screened for depression while onboard (Jonglertmontree et al. 2022) [1]. Finally, seafarers with previous mental health diagnosis or recent stressful events are more prone to experience depression (Brooks & Greenberg 2022) [2].

Job related factors. Studies show that stress at work and high work demands are directly related to lower levels of mental health, social problems, and decreased job-satisfaction (Jonglertmontree et al. 2022 and Brooks & Greenberg 2022) [1;2]. Among most important factors of job-related stress at sea is physical environment. (Brooks & Greenberg 2022) [2] report that work environment was among the most cited sources of job dissatisfaction. The seafarers are negatively affected by noise, vibration, ship motion, temperature, poor bedding conditions, restricted living space, ambient light, berthing conditions, quality of food, and poor hygiene. Noise and vibration were associated with negative psychological responses such as mental strain, but not to physiological responses (such as heart rate; Jonglertmontree et al. 2022) [1]. This is congruent with the findings on samples different than seafarers. For example, people living close to the airports or highways report being annoyed by constant noise (Gifford 2014) [3] and the question is whether one can get used to it. Gifford (2014) [3] suggests that the level of annoyance by constant noise can be reduced in the short- but not in a long-term, which does indeed pose a problem for seafarers.

In addition to physical environment, work-related demands are also a significant source of stress. For example, working more than 9 or 10 hours a day and working on night shifts are associated with emotional exhaustion, sleepiness, and lack of energy, emotional strain, and burnout (Brooks & Greenberg 2022, Jonglertmontree et al. 2022) [2;1]. Working under time pressure is associated with sleep difficulties; high job demands and pressure from contractors are associated with fatigue, low job satisfaction, and intention to leave the job (Brooks & Greenberg 2022, Jonglertmontree et al. 2022) [2;1]. Seafaring voyages longer than 3 months are associated with higher levels of emotional strain and higher likelihood to develop depressive symptoms (Jonglertmontree et al. 2022, Brooks & Greenberg 2022) [1;2]. Studies also found that staying in a port is associated with more mental stress than passages, which Jonglertmontree et al. (2022) [1] attributed to port-related demands such as watch keeping, engine repairs, contacts with contractors, and unstructured daily routines. Finally, the studies report that free internet access on the ship may serve as protective factor to buffer the effects of stress, not only at psychological, but also on physiological level. Sliškovič and Penezič (2016) [4], for example found that unlimited internet access on board was related to lower levels of cardiovascular symptoms. Although Brooks and Greenberg (2022) [2] found that free internet access is a common requirement among the seafarers and may have positive effects on life onboard, some studies included in the Brooks and Greenberg's (2022) [2] review showed that free internet access did not impact job satisfaction or mental health or that it even reduced socialization within teams onboard.

Stress-related outcomes also seem to depend on the role the seafarers have in team. Whereas (Brooks & Greenberg 2022) [2] report that the relationship between rank or role on the ship was inconsistent to

mental health, (Jonglertmontree et al. 2022) [1] found some commonalities. Deck officers reported more mental stress whereas engine personnel reported more physical stress. Deck personnel generally reported higher mental stress, higher burnout, and lower job satisfaction than ratings and in engine personnel. (Jonglertmontree et al. 2022) [1] compared deck personnel to white collar workers and rating and engine personnel to blue collar workers with the first coping with more mental and the second with more physical stressors. As the findings by (Jonglertmontree et al. 2022) [1] suggest, high job responsibilities are generally related to higher emotional stress and less favourable outcomes in terms of mental health. This is congruent with the findings in military where lower ranked nonofficers reported higher job satisfaction than officers in either deck or engine departments (Jonglertmontree et al. 2022) [1].

Finally, studies also reported high importance of interpersonal relationships in terms of mental health outcomes. Interpersonal relationships are important predictor of stress, burn out, job satisfaction, work motivation and commitment, working efficacy, and intentions to leave (Jonglertmontree et al. 2022, Brooks & Greenberg 2022) [1;2]. Interpersonal relationships do serve as an important protective factor to reduce negative effects of job-related stressors. There are number of ways to enhance positive relationships at sea. For example, (Brooks & Greenberg 2022) [2] report that social cohesion might be created and maintained by different activities, such as "allowing dedicated time for interaction during work and during time off; debriefing after demanding shifts; doing activities together outside work hours; common meeting areas and time and space for common activities; and recreational areas such as gyms or longue areas" (p17)—all of these can be systematically supported to enhance mental health in seafarers.

COVID-19. The pandemic related to COVID-19 contributed additional challenges to seafarers. The pandemic had a substantial impact on the transportation sector. While many parts of industry suspended operation during the lockdown, commercial shipping continued to operate, despite strong restrictions in the ports (Pauksztat et al. 2022) [5]. It is estimated that about 400 000 seafarers were directly affected by pandemic restrictions (Lucas et al. 2021) [5]. Studies report (Brooks & Greenberg 2022) [2] that pandemic created a number of additional problems for seafarers, such as problems in managing infections onboard, questions related to how to limit the spread of the disease on the ship, how to maintain quarantines and run the tests, problems with crew-changes, reduced possibilities for shore-leave, interactions with shore staff in ports, extended time onboard and financial concerns with being unexpectedly unemployed, disembarking bans, problems with repatriation, social isolation, problems with extended stay on-board and "no-crew-change" policy, limited shore-leave, fear of infection, inadequate information, feelings of being abandoned and unsafe, and felt like prisoners (Lucas et al. 2021, Kinali et al. 2022, Baygi et al. 2022, Brooks & Greenberg 2022) [6;7;8;2]. The findings among seafarers suggested that COVID-19 crises resulted in increased cases of suicide, increased levels of anger, boredom (Baygi et al. 2022) [8] and aggression on board. During the pandemic, the seafarers also reported increased levels of insomnia, depressive symptoms, fatigue, and lack of motivation for work (Brooks & Greenberg 2022) [2].

In short, the data clearly suggested that problems related to mental health increased during the COVID-19 pandemic; particularly prone to these stressors are the seafarers who are vulnerable to stress anyway (Slišković 2020, Pauksztat et al. 2022b) [9;10]. In addition, not only had stress effected seafarers during the pandemic alone, both direct and indirect findings bring in serious concerns about mental health issues in seafarers that we might anticipate in the future. For example, indirect data from previous studies on SARS (Baygi et al. 2022) [8] suggested that the current pandemic of COVID-19 could have huge negative effects on mental health of the seafarers in the years to come. For this reason, the findings must be taken with caution, to limit both negative psychological and economical outcomes in maritime industry and to run actions to maintain good mental health in seafarers who are obviously one on the most vulnerable part in the transportation chains.

It was the main goal of our project. Following, we present the study run in the summer of 2022, and suggest the guidelines to incorporate mental health issues in systematic seafarers' curriculum.

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		Number of Participants	Percentage of
1.Age	20-29 years old	84	24.1%
	30-39 years old	137	39.3%
	40-49 years old	79	22.6%
	50-59 years old	46	13.2%
	60 years and older	3	0.9%
2.Nationality	China	234	67%
	Georgia	34	9.7%
	Bulgaria	24	6.9%
	Croatia	1	0.3%
	Egypt	5	1.4%
	Finland	18	5.2%
	India	6	1.7%
	Japan	1	0.3%
	Montenegro	3	0.9%
	Serbia	2	0.6%
	Slovenia	20	5.7%
	United States	1	0.3%
3.Gender	Male	342	98%
	Female	7	2%
4.Department	Deck	181	51.9%
	Engine	156	44.7%
	Steward	4	1.1%
	Other	8	2.3%
5.Rank on the ship	Master/Captain	51	14.6%
	Officer	134	38.4%
	Support	106	30.4%
	Other	58	16.6%
6.Types of ships	Container Ship	193	55.3%
	Bulk Carrier	9	2.6%
	Ro-Ro	3	0.9%
	Dry Cargo	2	0.6%
	Passenger Ship/Ferry	19	5.4%
	Oil Tanker	39	11.2%
	Chemical and Product Tanker	8	2.3%
	Gas Tanker (LNG)	5	1.4%

	Other Tanker	50	14.3%
	Supply Ship	1	0.3%
	Other	20	5.7%
7.The time away from home	2	103	29.5%
	4	33	9.5%
	6	58	16.6%
	8	59	16.9%
	10	52	14.9%
	12& above	44	12.6%
8.Routes	Ocean Routes	224	64.2%
	Offshore routes	125	35.8%
9.The time as a seafarer	0-2 years	66	18.9%
	3-5 years	45	12.9%
	6-10 years	63	18.1%
	11-15 years	70	20.1%
	Over 15 years	105	30.1%
12.normal duty schedule	4 hours on, 8 hours off	129	37%
	6 hours on, 6 hours off	17	4.9%
	8 hours on, 8 hours off	90	25.8%
	Other	113	32.4%
13.How much are you exposed to the following while working at sea?			
① Noise	not at all	12	3.4%
	rarely	46	13.2%
	often	113	32.4%
	most of the time	178	51%
② Vibration	not at all	16	4.6%
	rarely	70	20.1%
	often	104	29.8%
	most of the time	159	45.6%
③ work in tight spaces	not at all	36	10.3%
	rarely	125	35.8%
	often	114	32.7%
	most of the time	74	21.2%
④ working alone	not at all	48	13.8%
	rarely	121	34.7%
	often	132	37.8%
	most of the time	48	13.8%
⑤ lack of	not at all	164	47%

personal protective equipment	rarely	128	36.7%
	often	36	10.3%
	most of the time	21	6%
⑥ sharp objects	not at all	79	22.6%
	rarely	163	46.7%
	often	86	24.6%
	most of the time	21	6%
⑦ heavy lifting	not at all	54	15.5%
	rarely	154	44.1%
	often	118	33.8%
	most of the time	23	6.6%
⑧ Heat	not at all	19	5.4%
	rarely	57	16.3%
	often	138	39.5%
	most of the time	135	38.7%
⑨ Chemicals	not at all	115	33%
	rarely	150	43%
	often	64	18.3%
	most of the time	20	5.7%
⑩ Dust	not at all	60	17.2%
	rarely	130	37.2%
	often	112	32.1%
	most of the time	47	13.5%
⑪ Smoke	not at all	117	33.5%
	rarely	83	23.8%
	often	90	25.8%
	most of the time	59	16.9%
⑫ physical injuries	not at all	130	37.2%
	rarely	166	47.6%
	often	40	11.5%
	most of the time	13	3.7%
⑬ viruses and diseases	not at all	117	33.5%
	rarely	161	46.1%
	often	48	13.8%
	most of the time	23	6.6%
⑭ Seasickness	not at all	112	32.1%
	rarely	162	46.4%
	often	58	16.6%
	most of the time	17	4.9%

⑮ Homesickness	not at all	35	10%
	rarely	64	18.3%
	often	138	39.5%
	most of the time	112	32.1%
⑯ Mobbing	not at all	127	36.4%
	rarely	145	41.5%
	often	49	14%
	most of the time	28	8%
⑰ not allowed to get off the ship even when in port	not at all	57	16.3%
	rarely	53	15.2%
	often	61	17.5%
	most of the time	178	51%
⑱ Other	not at all	198	56.7%
	rarely	73	20.9%
	often	40	11.5%
	most of the time	38	10.9%
14.need more training	Never	19	5.4%
	Seldom	138	39.5%
	Often	168	48.1%
	Most of the time	24	6.9%
15.Can set your own work pace	Never	7	2%
	Seldom	134	38.4%
	Often	161	46.1%
	Most of the time	47	13.5%
16.Does your company take care of its workers	No	123	35.2%
	Yes	226	64.8%
17.In the past year, have you gotten sick	No	181	51.9%
	Yes	168	48.1%
18.how would you say your health is	Excellent	45	12.9%
	Very good	133	38.1%
	Good	130	37.2%
	Fair	36	10.3%
	Poor	5	1.4%
19. Have you ever been diagnosed with any of the following:			
①High cholesterol	No	294	84.2%
	Yes	55	15.8%
②High blood pressure	No	286	81.9%
	Yes	63	18.1%

③Heart problems	No	311	89.1%
	Yes	38	10.9%
④Sleep disorder	No	220	63%
	Yes	129	37%
⑤Diabetes	No	331	94.8%
	Yes	18	5.2%
⑥Cancer	No	342	98%
	Yes	7	2%
⑦Liver problems	No	329	94.3%
	Yes	20	5.7%
⑧Depression	No	310	88.8%
	Yes	39	11.2%
⑨Anxiety	No	282	80.8%
	Yes	67	19.2%
⑩other	No	310	88.8%
	Yes	39	11.2%
20. How often do you exercise while working at sea	Never	84	24.1%
	Less than 4 times per month	114	32.7%
	1 to 2 times per week	96	27.5%
	More than 3 times per week	55	15.8%

26. How much you believe each of the following may contribute to your mood when you feel down or depressed:

① Working Alone	not at all	155	44.4%
	rarely	141	40.4%
	often	42	12%
	most of the time	11	3.2%
② Cultural difference at work	not at all	146	41.8%
	rarely	135	38.7%
	often	51	14.6%
	most of the time	17	4.9%
③ Food quality	not at all	89	25.5%
	rarely	107	30.7%
	often	96	27.5%
	most of the time	57	16.3%
④ Amount of food available	not at all	124	35.5%
	rarely	128	36.7%
	often	64	18.3%
	most of the time	33	9.5%

⑤ Isolation from family or friends	not at all	86	24.6%
	rarely	116	33.2%
	often	84	24.1%
	most of the time	63	18.1%
⑥ Length of contract	not at all	117	33.5%
	rarely	104	29.8%
	often	77	22.1%
	most of the time	51	14.6%
⑦ Shift work	not at all	147	42.1%
	rarely	124	35.5%
	often	53	15.2%
	most of the time	25	7.2%
⑧ Trouble sleeping	not at all	119	34.1%
	rarely	123	35.2%
	often	64	18.3%
	most of the time	43	12.3%
⑨ Supervisors demands	not at all	137	39.3%
	rarely	128	36.7%
	often	54	15.5%
	most of the time	30	8.6%
⑩ Mobbing from co-workers	not at all	165	47.3%
	rarely	125	35.8%
	often	34	9.7%
	most of the time	25	7.2%
⑪ Worry about money	not at all	152	43.6%
	rarely	97	27.8%
	often	55	15.8%
	most of the time	45	12.9%
⑫ Covid-19	not at all	119	34.1%
	rarely	74	21.2%
	often	77	22.1%
	most of the time	79	22.6%
⑬ Not allowed to get off the ship in port	not at all	94	26.9%
	rarely	67	19.2%
	often	73	20.9%
	most of the time	115	33%
⑭ Seasickness	not at all	176	50.4%
	rarely	116	33.2%
	often	43	12.3%

	most of the time	14	4%
⑮ No internet or limited internet access	not at all	126	36.1%
	rarely	84	24.1%
	often	55	15.8%
	most of the time	84	24.1%
⑯ Bad weather / rough sea	not at all	100	28.7%
	rarely	121	34.7%
	often	69	19.8%
	most of the time	59	16.9%

27.　　Have you asked for help from feeling depressed to any of the following people?

①Friend	No	201	57.6%
	Yes	148	42.4%
②Coworkers	No	227	65%
	Yes	122	35%
③Family member	No	188	53.9%
	Yes	161	46.1%
④Medical doctor	No	293	84%
	Yes	56	16%
⑤Therapist	No	319	91.4%
	Yes	30	8.6%
⑥Religious advisor	No	329	94.3%
	Yes	20	5.7%
⑦Other	No	313	89.7%
	Yes	36	10.3%
⑧I have not asked for help	No	259	74.2%
	Yes	90	25.8%
28.think about leaving your job within a year	No	233	66.8%
	Yes	116	33.2%
30. how often do you have unrestricted access to the internet	No restrictions, internet access at all times	47	13.5%
	Internet access at all times, but network capacity is limited	152	43.6%
	More than one day each week	35	10%
	About one day each week	12	3.4%
	About one day per month	16	4.6%
	Other	87	24.9%

31. Has your company ever given you training on mental health?	No	222	63.6%
	Yes	127	36.4%
32. How many mental health training sessions the company has done in the past year?	0	235	67.3%
	1	67	19.2%
	2	22	6.3%
	3&above	25	7.2%
33. Does the company you work for have a mental health policy?	Yes	128	36.7%
	No	60	17.2%
	Do not know	161	46.1%
34. Do you know what to do if you suspected a crew mate was depressed?	No	202	57.9%
	Yes	147	42.1%

Table 1. Descriptive Statistics

This book is our humble attempt to provide a little support for all seafarers fighting stress and maintaining personal integrity. We reserve the hope of making some contribution to your great and extremely important job.

2. Main Findings of the Study and Analysis

In this report, we present the key data from this project study, as well as the results of the analysis. The research program began in 2021, when the shipping industry was still receiving the effects of the New Crown epidemic, and multiple reports indicated that seafarers' physical and mental health was greatly affected. Thus, the project focuses on the mental health of seafarers in the context of the epidemic and how to respond to it. There may be some commonalities in the impact of global public health emergencies on seafarers, and thus it is hoped that the results of this study will also provide some reference for the future.

This study relied on a questionnaire to collect information about seafarers. Due to the length of the questionnaire, it was not possible to design too many questions that would lead to boredom among the respondents. Thus, the design of the questionnaire mainly considered demographic factors and the collection of necessary information related to occupational environment and corporate system. For the psychological status assessment, the SCL-90 General Scale was used. Through a preliminary literature analysis, four subscales of obsessive-compulsive symptoms, phobia, paranoia, and psychoticism were discarded and five subscales of anxiety, depression, hostility, interpersonal sensitivity, and somatization were retained.

The distribution and collection of questionnaires was completed in August 2022, and the final project team received a total of 352 questionnaires, of which 349 were valid.

The tool for statistical analysis was IBM SPSS Statistics 27. Three methods were used in the process: univariate analysis, correlation analysis, and stratified regression analysis. Next, the main statistics and analysis results of this study are presented.

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(BNTU)

2.1 Descriptive statistics

352 seafarers from 12 countries participated in the survey, of which 3 samples were discarded due to incomplete information, resulting in a total of 349 valid samples being retained.

2.2 Analysis of the SCL-90 Scale

The five factors (depression, anxiety, hostility, interpersonal sensitivity, somatization) of the SCL-90 scale applicable to seafarers were selected for measurement in this study, whose overall Cronbach's alpha coefficient is 0.986.Meanwhile,the Cronbach's alpha coefficient of depression is 0.949, the Cronbach's alpha coefficient of anxiety is 0.966, the Cronbach's alpha coefficient of hostility is 0.9 the Cronbach's alpha coefficient of interpersonal sensitivity is 0.954, and the Cronbach's alpha coefficient of somatization is 0.953. The tool for statistical analysis was IBM SPSS Statistics 27.

2.3 Positive SCL-90 Symptoms Distribution

Depression: The symptoms of depression are characterized by feelings of sadness and distress, but also by a decrease in interest in life, lack of motivation, and loss of energy. Disappointment, pessimism, and cognitive and somatic feelings associated with depression are also manifested, in addition to thoughts about death and suicidal ideation.

A mean score of 3 or more on this subscale indicates a high degree of depression, a lack of sufficient interest in life, a lack of motor vitality, and, in extreme cases, possible thoughts of death and suicidal ideation. A mean score of 2 or less indicates that the individual is less depressed, has an optimistic and positive attitude towards life, and is energetic and happy. In general, the higher the score, the more pronounced the degree of depression, and the lower the score, the less pronounced the degree of depression.

Anxiety: Generally, refers to those who are irritable, fidgety, hypersensitive, nervous and the resulting somatic signs, such as tremors.

A mean score of 3 or more on this subscale indicates that the individual is more prone to anxiety and is prone to irritability, restlessness, and nervousness, which in extreme cases may lead to panic attacks. A mean score of 2 or less indicates that the individual is less prone to anxiety and is more likely to appear stable. In general, the higher the score, the more pronounced the anxiety. The lower the score, the less likely it is to lead to anxiety.

Hostility: Three main aspects reflect the manifestation of hostility: thoughts, feelings and behaviours. The content includes various aspects such as feelings of boredom, dropping objects, arguments up to uncontrollable temper outbursts.

A mean score of 3 or more on this subscale indicates that the individual is prone to hostile thoughts, feelings, and behaviours. A mean score of 2 or less indicates a tendency to exhibit friendly thoughts, feelings, and behaviours. Overall, the higher the score, the more hostile the individual is, the more argumentative the individual is, and the more difficult it is to control temperament. The lower the score, the milder the temperament of the individual, the friendlier the individual is, the less argumentative and non-destructive the individual is.

Interpersonal sensitivity: It mainly refers to certain interpersonal feelings of discomfort and inferiority, especially when compared to others. Feelings of inferiority in interpersonal interactions, distraction, apparent discomfort, and poor self-referral in interpersonal communication, and negative expectations are typical causes of symptoms in this area.

A mean score of 3 or more on this subscale indicates that the individual is more sensitive in interpersonal relationships, has a high sense of inferiority in interpersonal interactions, and is accompanied by behavioural symptoms (e.g., fidgeting, withdrawing, etc.). A mean score of 2 or less indicates that the individual is more normal in interpersonal relationships. Overall, the higher the score, the more problematic the individual is in interpersonal interactions, the lower the inferiority complex, the more egocentric the individual is, and the more negative expectations have been demonstrated. The

lower the score, the more comfortable the individual is in interpersonal relationships, the more confident and confident in interpersonal communication, and has positive expectations.

Somatization: It mainly reflects physical discomfort, including cardiovascular, gastrointestinal, respiratory and other system discomfort, and headache, back pain, muscle aches and pains, as well as somatic discomfort manifestations such as anxiety.

A mean score of 3 or more on this subscale indicates that the individual has more pronounced physical discomfort and is often accompanied by symptoms such as headache and muscle aches and pains. With a mean score of 2 or less, somatic symptoms are not evident. In general, the higher the score, the greater the somatic discomfort; the lower the score, the less pronounced the symptom experience.

		Number of Participants	Percentage of
Depression	1-2 points	221	63.3%
	2-3 points	81	23.2%
	3-4 points	35	10%
	4-5 points	12	3.4%
Anxiety	1-2 points	256	73.4%
	2-3 points	54	15.5%
	3-4 points	24	6.9%
	4-5 points	15	4.3%
Hostility	1-2 points	261	74.8%
	2-3 points	57	16.3%
	3-4 points	18	5.2%
	4-5 points	13	3.7%
Interpersonal sensitivity	1-2 points	242	69.3%
	2-3 points	70	20.1%
	3-4 points	21	6%
	4-5 points	16	4.6%
Somatization	1-2 points	281	80.5%
	2-3 points	52	14.9%
	3-4 points	8	2.3%
	4-5 points	8	2.3%

Table 2. Descriptive Statistics of SCL-90

2.4 Comparison of Factor Results and Chinese Norm

The SCL-90 factor scores of the 349 seafarers compared to the Chinese norm are shown in Table 2. As can be seen from the table, the seafarers' scores for each factor measured in the SCL-90 were higher than the Chinese norm, and with significant differences for the depression, anxiety, hostility and somatization, and with no significant differences for interpersonal sensitivity. It indicates that the seafarer group has more severe psychological symptoms than the normal Chinese population and that some seafarers may have mental health problems.

Table 3. Comparison of SCL-90 Factor Scores with Chinese Norm (Unit: scores)

Projects	seafarers (n=349) (M±SD)	Chinese norm (n=1388) (M±SD)	t-value
Depression	1.91±0.86	1.50±0.59	8.943***
Anxiety	1.70±0.89	1.39±0.43	6.414***
Hostility	1.59±0.83	1.48±0.56	2.400*
Interpersonal sensitivity	1.71±0.90	1.65±0.51	1.350
Somatization	1.51±0.70	1.37±0.48	3.658***
Notes：*p<0.05, **p<0.01, ***p<0.001			

2.5 Single Factor Analysis

In the single factors analysis on the five SCL-90 factors mentioned above, we obtained the following results.

In term of age, seafarers aged 30-39 have higher scores on all SCL-90 factors than seafarers in other age groups, and with significant differences in all factors.

In term of gender, female seafarers have higher factor scores on all SCL-90 factors than male seafarers, with significant differences in interpersonal sensitivity.

In term of department, the engine department seafarers have higher scores on all SCL-90 factors than seafarers in other departments, and with significant differences in depression, anxiety and interpersonal sensitivity.

In term of rank, officer level seafarers have higher factor scores on all factors of the SCL-90 than other levels of seafarers, and with significant differences in all factors.

In term of ship type, seafarers on gas tankers (LNG) scored higher on all SCL-90 factors than seafarers on other types of vessels, but there were no significant differences in any of the factors.

In term of duration away from home, seafarers who had been away from home for 10 months had higher factor scores on all SCL-90 factors than other seafarers, and with significant differences in all factors.

In term of routes, seafarers on ocean routes have higher SCL-90 factor scores than seafarers on offshore routes, with significant differences in depression, anxiety, hostility and interpersonal sensitivity.

In term of sea-age, seafarers with 11-15 years of seafaring experience have higher factor scores on anxiety, hostility and somatization than other seafarers, and with significant differences in them; seafarers with 6-10 years of seafaring experience had higher factor scores on depression and interpersonal sensitivity than other seafarers, and the significant differences in them.

In term of normal duty schedules, seafarers with a normal duty schedule of six hours of work and six hours of rest had higher SCL-90 scores on all SCL-90 items than other seafarers, but the differences were not significant.

In term of training requirement, seafarers who 'most of the time' did jobs that required more training had higher scores on all SCL-90 factors than other seafarers, and with significant differences in anxiety, hostility, interpersonal sensitivity and somatisation.

In term of work pace, seafarers who are seldom able to set their own pace at work have higher SCL-90 scores on all SCL-90 factors than other seafarers, and with significant difference in depression.

In term of company care, seafarers whose companies do not care about their employees have higher scores on all SCL-90 factors than seafarers whose companies do care about their employees, and with significant differences in all factors.

In term of disease history, seafarers who have gotten sick while working as a seafarer in the past year had higher scores on all SCL-90 factors than seafarers who have not gotten sick, and with significant differences in all factors.

In term of health status, seafarers who overall felt their current health was poor had higher scores on all SCL-90 factors than other seafarers, and with significant differences in all factors.

In term of exercise, seafarers who never exercised while working at sea had higher scores on all SCL-90 factors than other seafarers, and with significant differences in all factors.

In term of internet usage, there is no significant differences in any of the factors.

In term of mental health training, seafarers whose companies have never given training on mental health had higher scores on all SCL-90 factors than other seafarers, and with significant difference in depression and anxiety.

In term of company mental health policy, seafarers whose companies did not have a policy on mental health had higher scores on depression, anxiety, hostility, and somatisation than other seafarers (Yes/Do not know), and with significant difference in depression, anxiety and somatisation

In term of helping depressed crew member, seafarers who did not know what to do had higher scores on all SCL-90 factors than seafarers who knew what to do, and with significant differences in all factors.

2.6 Analysis on Working Environment Factor

In order to understand the impact of certain factors in the work environment on the mental health of seafarers, we set the question:
How much are you exposed to the following while working at sea? Here are the statistics and analysis of the answers to this question
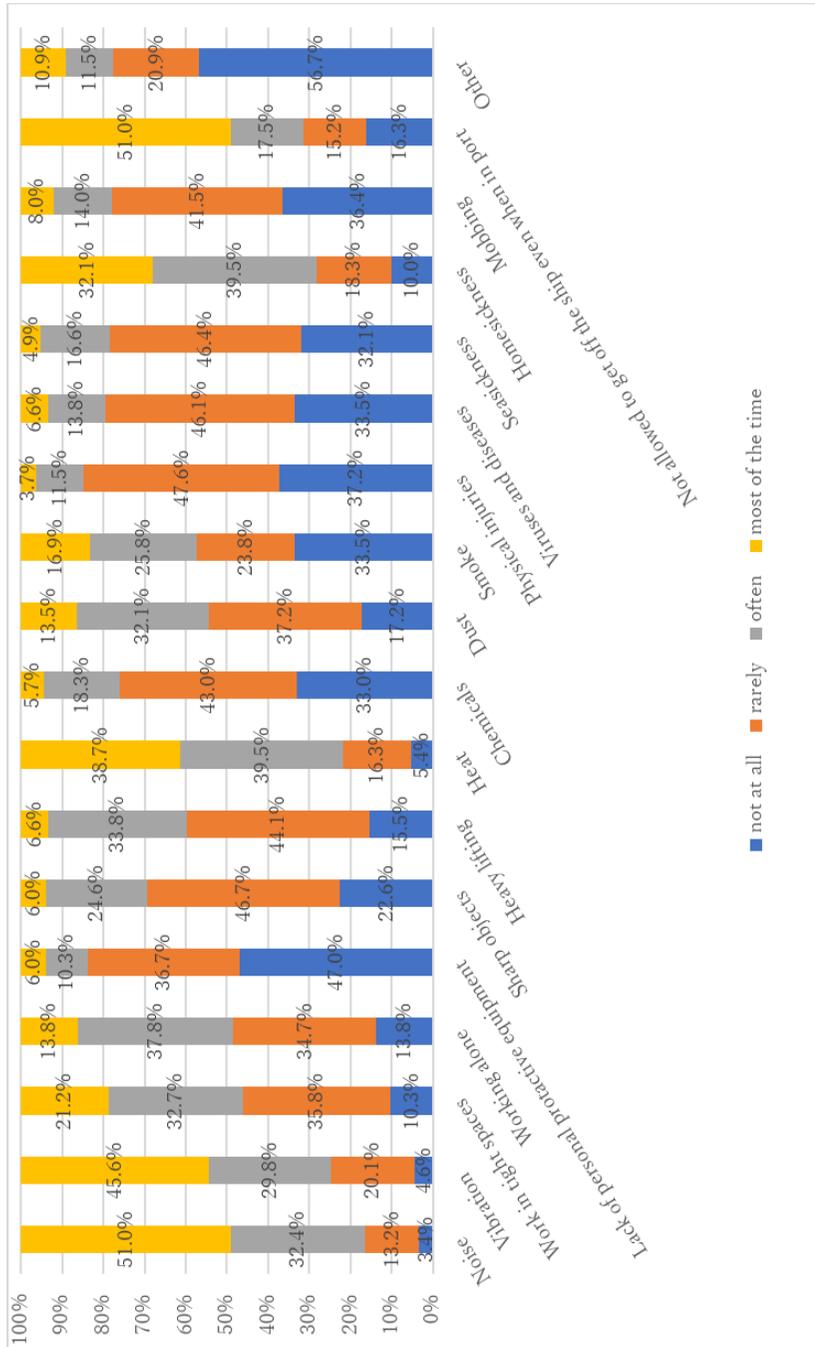
Fig. 1. Descriptive Statistics

As can be seen from the figure 1 above, the top five things that seafarers are most often exposed to when working at sea are, in order, "Noise", " Not allowed to not allowed to get off the ship even when in port", "Vibration", " Heat" and "Homesickness"; The top five things that have never been touched are, in order, "Lack of The top five things that have never been touched are, in order, "Lack of personal protective equipment", "Physical injuries", "Mobbing" , "Smoke" and "Viruses and diseases".

2.7 F-test

A F-test for the relationship between working environment factor and SCL-90 factors showed that: Seafarers who were 'most of the time' exposed to the above environments were more likely to score higher on all five SCL-90 factors than other seafarers, and in most cases, there were significant differences.

2.8 Analysis on emotional influences

In order to understand the relationship between daily events and low mood of seafarers, the following questions were set: *When you are feeling down, how much do you think each of the following things affects   your   mood?*
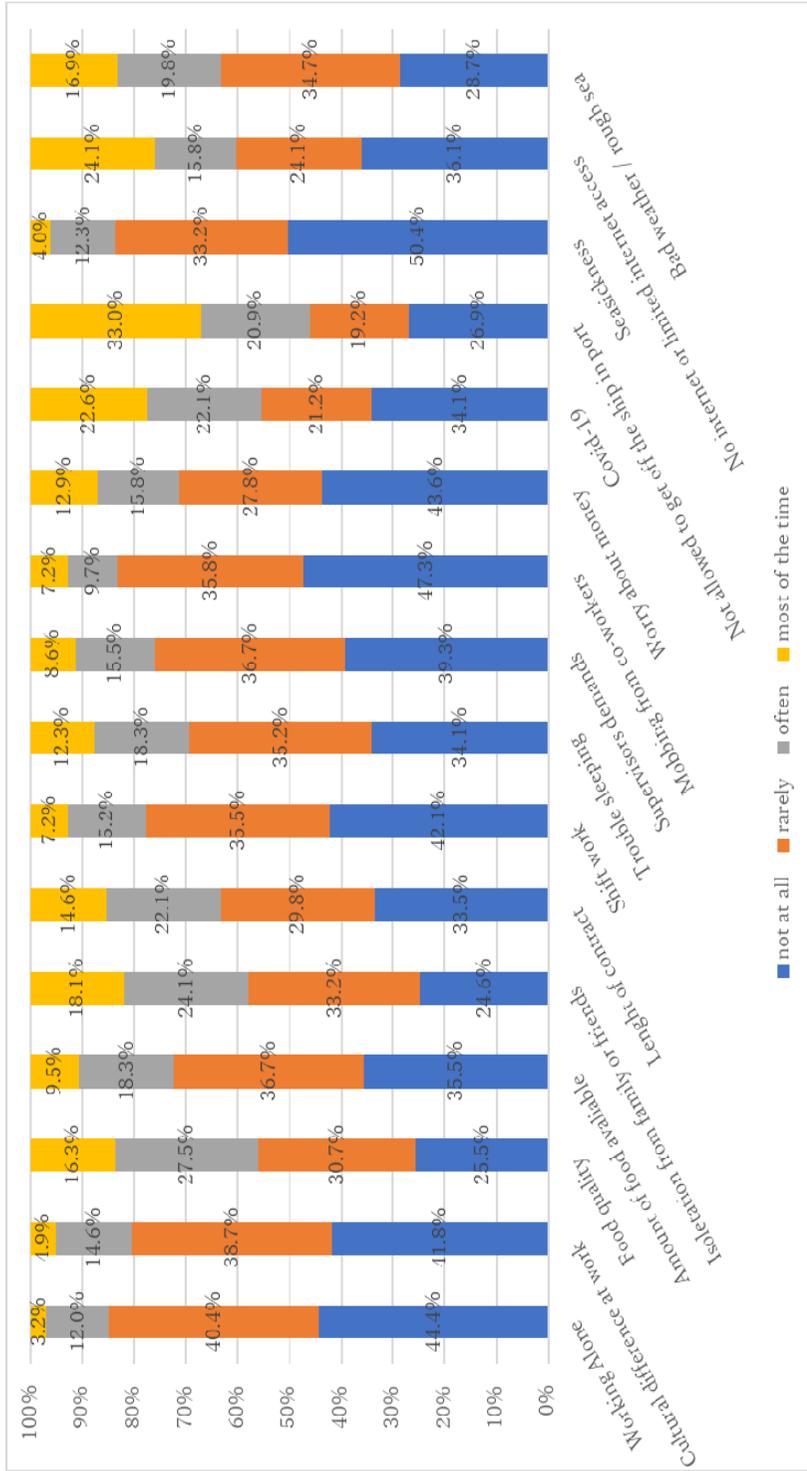
Fig. 2. Descriptive Statistics

According to the chart, the top five things that seafarers felt 'most of the time' affected their mood when they were feeling down were "Not allowed to get off the ship in port", "No internet or limited internet access", "Covid-19", "Isolation from family or friends" and "Bad weather /rough sea", in that order; the top five things that affect their mood 'not at all' were "seasickness", "Mobbing from co-workers ", "Working alone", "Worry about money", "shift work".

2.9 Analysis on Disease History

In order to understand the relationship between disease history and the five factors, the following questions were set: *Have you ever been diagnosed with any of the following?* Here are the statistics and analysis of the answers to this question.
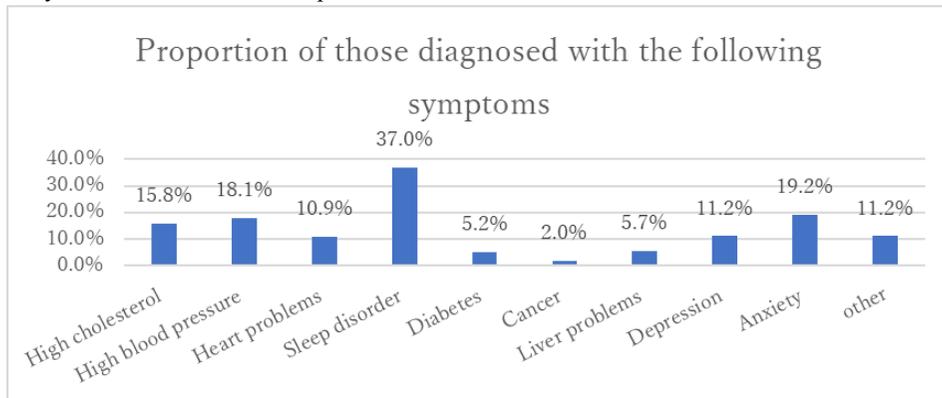
Fig. 3. Descriptive Statistics

As we can see from the chart above, 37% of seafarers are diagnosed with sleep disorders, the largest proportion, followed by anxiety at 19.2%.

2.10 t-test

A t-test for the relationship between disease history and SCL-90 factors showed that: Seafarers with a disease history had higher factor scores on all items of the SCL-90 than other seafarers, but the significance of the differences differed.
Significant differences were found between seafarers diagnosed with "high cholesterol", "hypertension", "heart problems", "liver problems", "sleep disorder", "depression", "anxiety disorder" "other" in depression, anxiety, hostility, interpersonal sensitivity and somatization.
The differences in the scores of seafarers diagnosed with "diabetes", "cancer" were not significant.

2.11 Analysis on Asking for Help

In order to understand the relationship between asking for help and the five factors, the following questions were set: *Have you asked for help from feeling depressed to any of the following people?*
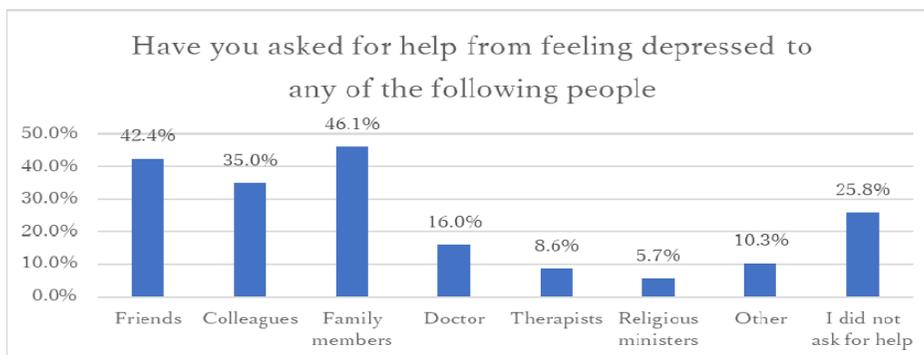
Fig. 4. Descriptive Statistics

The chart above shows that when seafarers feel depressed, they are more likely to turn to family members and friends.

2.12 t-test

A t-test for the relationship between *'whom have you asked for help from feeling depressed to'* and *SCL-90 factors* showed that: When seafarers felt depressed, asking for help usually reduce levels of depression, anxiety, hostility, interpersonal sensitivity, and somatization. In particular, those seafarers who asked their friends, cco-workers, medical doctor, therapist, religious advisor or chaplain for help showed a significant difference in the reduction of their scores. Besides, sseafarers who asked co-workers for help showed a significant difference in Hostility and Interpersonal Sensitivity too.

2.13 Analysis on Leaving Job

In order to understand the relationship between leaving job and SCL-90 factors of seafarers, the following questions were set: *Are you thinking about leaving your job as a seafarer within a year?* After performing a binary logistic regression analysis, we found that the intention to leave job did not have any predictive properties for each factor of SCL-90.

2.14 Correlation Analysis

To further understand the relationship between the factors of this investigation and the five SCL-90 factors, we did an overall correlation analysis, and the results showed that:

(1) All the SCL-90 factors scores were significantly positively correlated with the following factors：

- While working at sea, how much are you exposed to the following? noise/vibration/tight spaces/working alone/ lack of personal protective equipment/ sharp objects/ heavy lifting/ heat/ chemicals/ dust/ smoke/ physical injuries/ viruses and diseases/ seasickness/ homesickness/ mobbing/ not allowed to get off the ship even when in port.
- In the past year, have you gotten sick while working as a seafarer?
- In general, how would you say your health is?
- Have you ever been diagnosed with High cholesterol/ high blood pressure/ heart problems/ sleep disorder/ liver problems/ depression/ anxiety?
- When you feel down or depressed, how much you believe the following may contribute to your mood? Working Alone /cultural difference at work Food quality / Food quality/Amount of food available/ Isolation from family or friends/ Length of contract / Shift work / Trouble sleeping / Supervisors demands / Mobbing from co-workers / Worry about money / Covid-19 /

Not allowed to get off the ship in port / Seasickness / No internet or limited internet access / Bad weather / rough sea.

(2) The factor scores of depression and somatization were significantly positively correlated with 'Does the company you work for have a mental health policy?'.

(3) The factor scores of the hostility and somatization were significantly positively correlated with 'Do you perform work tasks for which you would need more training?'.

(4) The factor score of the somatization was significantly positively correlated with 'not asking for help'.

(5) All the SCL-90 factors scores were significantly negative correlated with the following factors：

- Does your company take care of its workers?
- How often do you exercise while working at sea?
- Do you know what to do if you suspected a crew mate was depressed?

(6) The factor scores of depression and anxiety were significantly negatively correlated with - - 'Has your company ever given you training on mental health?'.

(7) The factor scores of hostility and interpersonal sensitivity were significantly negative correlated with 'Have you asked for help from feeling depressed to Coworkers?'

(8) The factor scores of depressions were significantly negatively correlated with the following factors：

- Have you asked for help from feeling depressed to Friends/Coworkers/ Medical doctor/ Therapist/ Religious advisor/chaplain?
- How many mental health training sessions the company has done in the past year?

2.15 Hierarchical Regression Analysis

2.15.1 Depression

According to the results of single factor analysis, Depression differs significantly on the seven demographic variables, including Age, Department, Rank on the ship, Types of ships, The time away from home, Route, and Years as a seafarer. Therefore, this study controls for these seven demographic variables before exploring the predictive effect of each variable on the Depression factor for seafarers.

We found that the following factors has a significant positive predictive effect on the score of depressive factors.

- While working at sea, how much are you exposed to the following? Noise / Vibration/ working alone / lack of protective equipment/sharp objects/physical injuries/viruses and diseases/ Homesickness/ Mobbing
- In general, how would you say your health is?
- Have you ever been diagnosed with Liver problems/depression/anxiety?
- When you feel down or depressed, how much you believe the following may contribute to your mood? Working alone/Cultural difference at work/Food quality/Length of contract/Shift work/Trouble sleeping

When one of the above occurs more often, the more likely the seafarer will become depressed.

Also, we found that 'Have you asked for help from feeling depressed to Friend/ Co-workers/ Medical doctor?' has a significant negative predictive effect on the score of depressive factors. This means that asking friends, coworkers or medical doctor for help when seafarers feel depressed is an effective way to reduce depression levels.

2.15.2 Anxiety

According to the results of single factor analysis, anxiety differs significantly on the seven demographic variables, including Age, Department, Rank on the ship, Types of ships, The time away from home, Route, and Years as a seafarer. Therefore, on the basis of controlling these seven demographic variables, this study further discusses the predictive effects of each variable on the anxiety factor of seafarers.

We found that the following factors has a significant positive predictive effect on the score of anxiety factor.

- While working at sea, how much are you exposed to the following? Noise /Vibration/working alone/ lack of protective equipment/sharp objects/physical injuries/viruses and diseases/ Homesickness/ Mobbing
- In the past year, have you gotten sick while working as a seafarer?
- In general, how would you say your health is?
- Have you ever been diagnosed with high cholesterol/High blood pressure/Liver problems/ depression/ anxiety?
- When you feel down or depressed, how much you believe the following may contribute to your mood? Working alone /Cultural difference at work/ Food quality/ Trouble sleeping/ Mobbing from co-workers
- Have you asked for help from feeling depressed to someone? Religious advisor/chaplain/I have not asked for help
- How many mental health training sessions the company has done in the past year?

When one of the above occurs more often, the more likely the seafarer will become anxiety.

Also, we found that 'Have you asked for help from feeling depressed to Friend?' has a significant negative predictive effect on the score of anxiety factor. It means that asking friends for help when seafarers feel depressed is an effective way to reduce anxiety levels.

2.15.3 Hostility

According to the results of single factor analysis, Hostility factor differs significantly on the five demographic variables, including Age, Rank on the ship, The time away from home, Route, and Years as a seafarer. Therefore, this study controls for these five demographic variables before exploring the predictive effect of each variable on the Hostility factor for seafarers.

We found that the following factors has a significant positive predictive effect on the score of Hostility factor.

- While working at sea, how much are you exposed to the following? Noise /Vibration/working alone/ lack of protective equipment/ sharp objects/ Chemicals/ Smoke/ physical injuries/ viruses and diseases/ Mobbing
- In general, how would you say your health is?
- Have you ever been diagnosed with high cholesterol/High blood pressure/Liver problems/ depression/ anxiety?
- When you feel down or depressed, how much you believe the following may contribute to your mood? Working alone /Cultural difference at work/ Food quality/ Amount of food available/ Shift work/Supervisors demands
- I have not asked for help when feeling depressed.

When one of the above occurs more often, seafarers are more likely to have high levels of hostility.

Also, we found that 'Have you asked for help from feeling depressed to Friend/ Co-workers?' has a significant negative predictive effect on Hostility factor scores. It means that asking friends or coworkers for help when seafarers feel depressed is an effective way to reduce hostility levels.

2.15.4 Interpersonal Sensitivity

According to the results of single factor analysis, Interpersonal sensitivity differs significantly on the seven demographic variables, including Age, Gender, Department, Rank on the ship, The time away from home, Route, and Years as a seafarer. Therefore, this study controls for these seven demographic variables before exploring the predictive effect of each variable on the Interpersonal sensitivity factor for seafarers.

- While working at sea, how much are you exposed to the following? Noise /Vibration/working alone / lack of protective equipment/ sharp objects/ Chemicals/ physical injuries/ viruses and diseases/ Mobbing
- In general, how would you say your health is?
- Have you ever been diagnosed with High blood pressure/Liver problems/ anxiety?
- When you feel down or depressed, how much you believe the following may contribute to your mood? Working alone /Cultural difference at work/ Food quality/ Length of contract/ Trouble sleeping/Supervisors demands/ Mobbing from co-workers
- Have you asked for help from feeling depressed to someone? Religious advisor/chaplain/I have not asked for help.

When one of the above occurs more often, seafarers are more likely to have high levels of Interpersonal sensitivity.

Also, we found that 'Have you asked for help from feeling depressed to Friend?' has a significant negative predictive effect on Interpersonal sensitivity factor scores. It means that asking friends or coworkers for help when seafarers feel depressed is an effective way to reduce Interpersonal sensitivity levels.

2.15.5 Somatization

According to the results of single factor analysis, Somatization differs significantly on the five demographic variables, including Age, Rank on the ship, Type of ship, The time away from home, and Years as a seafarer. Therefore, this study controls for these five demographic variables before exploring the predictive effect of each variable on the Somatization factor for seafarers.

- While working at sea, how much are you exposed to the following? Noise/Vibration/working alone/ lack of protective equipment/ sharp objects/ physical injuries/ viruses and diseases/ Mobbing
- In general, how would you say your health is?
- Have you ever been diagnosed with high cholesterol/ High blood pressure/Heart problems/ Cancer/ depression/ anxiety?
- When you feel down or depressed, how much you believe the following may contribute to your mood? Working alone /Cultural difference at work/ Food quality/ Shift work/ Trouble sleeping
- I have not asked for help when feeling depressed.

When one of the above occurs more often, seafarers are more likely to have high levels of Somatization.

Summary for This Part

Seafarers are more likely to show higher levels of depression, anxiety, hostility, interpersonal sensitivity, and somatization levels if they are in an unsafe and uncomfortable work environment for long periods of time, such as high noise, dust, isolation, physical injury, viruses, and group violence, if they have low levels of self-evaluation of health, if they have a history of hypertension, depression, and other illnesses, and if they do not seek help from others when they are depressed.

If seafarers are able to seek timely help when they are depressed, especially from friends, coworkers or medical doctors, they are likely to significantly reduce their levels of depression, anxiety, hostility, and interpersonal sensitivity.

3. Stress Management

Psychological problems arising among seafarers as a result of stress. Our research revealed that the most common psychological problems among seafarers are:
1. Depression;
2. Anxiety;
3. Hostility;
4. Somatization;
5. Interpersonal sensitivity.

What is introduced in this report is under the category of mental health problems. In psychology, we usually distinguish between mental health problems and mental disorders. Simply put, mental disorders are diseases, while mental health problems are not diseases, but uncomfortable states of the human mental condition. Most people have experienced mental health problems, but rarely mental disorders. This is also true for mariners. In addition, mental disorders are within responsibility of psychiatrists, and not the general psychologists. Our guide is written for general reader and we are not explaining mental disorders in detail. after all, very few people have them. To illustrate the difference between mental disorders and mental health problems note following: depression and anxiety, which usually belong to mental health problems, developed to a serious degree, become depression and anxiety disorders and become mental disorders, and thus the methods and means of dealing with them have to be changed and adjusted accordingly.

3.1 Types of stress

Types of stress can be different, because each type, in all its individual manifestations, may have a different course. Nevertheless, it is possible to distinguish several large groups of stressful situations. these are (According to American Psychological Association (APA)[1]):

Acute stress
Acute stress results from your body's reaction to a new or challenging situation. It's that feeling you get from an approaching deadline or when you narrowly avoid being hit by a car.
We can even experience it as a result of something we enjoy. Like an exhilarating ride on a roller coaster or an outstanding personal achievement.
Acute stress is classified as short-term. Usually, emotions and the body return to their normal state relatively soon.

Episodic acute stress
Episodic acute stress is when a person experiences acute stress frequently. This may be due to the tight job-related deadlines or other sources of pressure. The nature and/or working environment are significant contributors to the episodic acute stresses.
With this type of stress, we don't get time to return to a relaxed and calm state. And the effects of the high-frequency acute stresses accumulate.
It often leaves us feeling like we are moving from one crisis to another.

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[1] https://www.apa.org/topics/stress

Chronic stress

Chronic stress is the result of stressors that continue for a long period of time. Examples include living in a high-crime neighbourhood or constantly fighting with your life partner.

This type of stress feels never-ending. We often have difficulty seeing any way to improve or change the situation that is the cause of our chronic stress.

Factors causing stress. There are many factors that cause stress. These factors are called stressors. The same stressor has different effects on different people - what is a source of stress for one person may be just an opportunity to "try their strength" for another, so it is difficult to say in individual cases what caused the stress. For example, a noisy, crowded place may be a source of stress for a small child, while for an adult it is a normal environment, even desirable. Getting into a traffic jam, being late for work, coming to an exam unprepared, performing a medical procedure, giving a speech in front of an audience puts some people in a stressful situation.

Despite the wide variety, the special literature highlights several groups of stressors, which are distinguished by general features and are perceived as stressors for the majority. these are:
- Situations related to dangerous work (extreme working conditions, firefighting, natural disasters, etc.);
- Working in difficult environment (noise or dust, lack of time, distracting factors, excessive burden of official responsibility, etc.);
- Unexpected factors for which a person is not ready.

Therefore, in the study of stress, the individual - intellectual and personal characteristics of a person should be taken into account, through which he analyzes the significance of the irritant acting on him and the damage caused.

An interesting result was shown by a large-scale study conducted by the American Psychological Association in 2015 (Norman B. Anderson, PhD, Paying With Our Health, FEBRUARY 4, 2015) [30], the purpose of which was to determine the factors causing the stressful state of the population. According to the research, three-quarters of the surveyed Americans experience stress, which is mainly related to finances.

Stress response and management. As we have already mentioned, stressful events affect each person with different strength and are manifested in different ways; The range of possible reactions and emotions is huge. Many are depressed or unable to understand what caused their condition. People experience and express fear and anxiety, or on the contrary, fall into a state of apathy. Some express emotions more, others less. Depending on the degree of stress and the psychotype of the person, symptoms can be completely different, including:
- Throbbing/trembling, sharp headache, sudden pain attacks in different parts of the body;
- Anxiety, fears, inexplicable sadness, desire to cry and be alone;
- Tension and high excitability;
- Apathy, self-isolation, loss of desire to communicate;
- Loss of ability to make basic decisions;
- Simple tasks are hypertrophied and presented as insurmountable obstacles.

How a person reacts to a particular fact or event is influenced by many factors. These factors are defined as follows in the World Health Organization psychological first aid manual:
- The nature and severity of the stress-causing event;
- Psychological traumas suffered previously;
- Degree of dependence of a person on the support of other people;
- Physical health;
- Revealing psychological disorders of a person or his family members in the past;
- Cultural roots, traditions, etc.

Every living being, including humans, has an instinct for self-preservation, which manifests itself in stressful situations, however, the limit of resistance is completely individual.

On any vessel, a non-standard situation may arise, and apart from a crew, that is more or less prepared/trained for such situations, there may be other people (passengers, survivors, shore-based technicians etc.) who are under stress for objective reasons, and who also need psychological assistance.

In general, the captain is responsible for the complete safety of the ship's crew and cargo. Unfortunately, he does not have effective instruments to reveal the psycho-emotional mood of an individual crewmember (or passenger). Considering and compensating for this circumstance, it is desirable that all crew members are familiar with the basic issues of psycho-emotional condition and are able to provide minimal support and assistance and/or report a possible problematic case to superiors for timely response. For this purpose, it is very important to know what to pay attention to in case of deviant behaviour of a person on board the ship and to try to render the first psychological aid as much as possible.

Not all people in a stressful situation need psychological help, because there are people who deal with problems by themselves, but everyone needs the feeling of support.

Upon rendering assistance on board, following to be determined:
- Psychological problems that threaten the person under stress;
- Psychological problems that threaten those around stressed person;
- Failure to perform mandatory duties safely, which may cause disruption of the ship's operation.

During a crisis situation, the cultural and ethnic traditions of the aid object must be taken into account. This is important because, for example, in some cultures talking about one's own psychological state is considered a weakness and it is not acceptable to share problems with others.

Therefore, we should be guided by the following principles:

1. Safety - our intervention should be as safe as possible and should not aggravate the existing stressful situation;

2. Dignity - the social and cultural norms, specific ethnical and religious peculiarities must be taken into account;

3. Rights - to ensure the protection of all the rights of the person in need of assistance and to act within the framework of legal norms.

This book is designed for the situation when stress cannot be managed using professional psychological and medical help. Therefore, the authors consider it advisable that all future and/or current seafarers have a minimum knowledge of the symptoms that may be the first sign of a severe stress disorder, so that irreversible processes do not develop, both for the seafarer and for the ship-owning company, which may suffer significant economical and reputational losses.

3.2 Depression

Definition: *Depression (also known as major depression, major depressive disorder, or clinical depression) is a common but serious mood disorder that negatively affects how you feel, the way you think and how you act. Fortunately, it is also treatable. Depression causes feelings of sadness and/or a loss of interest in activities you once enjoyed. It can lead to a variety of emotional and physical problems and can decrease your ability to function at work and at home.*

Depression symptoms can vary from mild to severe and can include:
- Feeling sad or having a depressed mood;
- Loss of interest or pleasure in activities once enjoyed;
- Changes in appetite — weight loss or gain unrelated to dieting;
- Trouble sleeping or sleeping too much;
- Loss of energy or increased fatigue;
- Increase in purposeless physical activity (e.g., inability to sit still, pacing, handwringing) or slowed movements or speech (these actions must be severe enough to be observable by others);
- Feeling worthless or guilty;

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- Difficulty thinking, concentrating or making decisions;
- Thoughts of death or suicide.

Symptoms must last at least two weeks and must represent a change in your previous level of functioning for a diagnosis of depression.

Also, medical conditions (e.g., thyroid problems, a brain tumor or vitamin deficiency) can mimic symptoms of depression so it is important to rule out general medical causes.

Depression affects an estimated one in 15 adults (6.7%) in any given year. And one in six people (16.6%) will experience depression at some time in their life. Depression can occur at any time, but on average, first appears during the late teens to mid-20s. Women are more likely than men to experience depression. Some studies show that one-third of women will experience a major depressive episode in their lifetime. There is a high degree of heritability (approximately 40%) when first-degree relatives (parents/children/siblings) have depression.

3.3 Anxiety

Definition: *Anxiety may be defined as apprehension, tension, or uneasiness that stems from the anticipation of danger, which may be internal or external (Diagnostic and Statistical Manual of Mental Disorders, 1980).*

Ever wondered why you were trembling before your exam, or why your palms got sweaty before that job interview? These anxious feelings are a natural way for the body to prepare itself for an important event. You would have also noticed how you started to calm down once the event was under way; you started to breathe easier and your heart stopped thumping. Such an anxiety actually helps us perform better as it makes us more alert.

However, some people experience anxiety or anxiety attacks for no apparent reason. If you find it hard to control your worries and if these constant feelings of anxiety affect your ability to go about your daily activities, then it might be a case of an anxiety disorder.

What is the difference between regular anxiety and an anxiety disorder? Here is a quick checklist that you could use to see if your anxiety is a disorder:

Regular anxiety:
- Worrying about PSC inspections, job interviews, tests, possible consequences of heavy weather or other important events. The feeling of" butterflies in your stomach" before a public performance or a big meeting.
- Fear of a dangerous object, place or situation, for instance, a stray dog barking at you on the street.
- Sadness or worry immediately after a traumatic event such as the loss of a loved one.
- Maintaining hygiene personally and in your surroundings.
- Breaking into a sweat before a big match.

Anxiety disorder
- Worrying constantly and excessively for no apparent reason, making it difficult for you to perform day-to-day activities.
- Fearing any social or performance-related situations, in which you may be exposed to possible scrutiny by others. You fear that you will act in a way that will be humiliating or embarrassing.
- Irrational fear of an object or place, such as fear of entering an elevator believing that an escape might be not possible.
- Repeated flashbacks, dreams and subsequent worry following exposure to an extremely traumatic event in the past.
- Repeated panic attacks along with nervous feelings like "I am going to die "for no apparent reason, and the constant fear of having another attack.

What are the symptoms of an anxiety disorder?

Everyone experiences feelings of anxiety, so it is difficult to say when it can be diagnosed as an anxiety disorder. If your feelings of worry and dread have a disabling effect on you over a period of

time, you should seek advice from a mental health professional. There are many types of anxiety disorders but their most common symptoms are:

- Increased heart rate and heavy breathing;
- Increased muscle tension;
- Tightening sensation in the chest;
- Unsubstantiated and growing worries, and restlessness;
- Obsessing over needless things leading to compulsive behaviour;

If you have noticed these signs in a friend or crew member, you should talk to them about their possible condition and advise them to inform their superior or consult with a mental health professional (via Skype or equivalent).

What causes anxiety disorders?

The most common factors that cause anxiety disorders are:

- Stressful events: Stress at the workplace, loss of a loved one, or troubled relationships, can also trigger symptoms of anxiety.
- Health issues: Ailments such as thyroid problems, asthma, diabetes or a heart disease can also cause anxiety. People suffering from depression can also develop symptoms of anxiety disorders. For instance, someone who has been suffering from depression for a long period, may start to under-perform at work. This can then lead to work-related stress which could trigger anxiety.
- Substance use: People who are heavy users of drugs, alcohol and other substances, develop anxiety problems when the effects of the substance begin to wear off (in withdrawal).
- Personality factors: Sometimes, people with certain personality traits such as perfectionists or people who like to be in control, develop anxiety-related issues.

Types of anxiety disorders

Anxiety affects people in different ways leading to a variety of disorders. The most common forms of anxiety disorders are:

- Generalized Anxiety Disorder (GAD) People suffering from GAD experience excessive anxiety and worry about various events and situations. They have difficulty in controlling anxiety and worry, along with restlessness and 'feeling keyed up or on edge' all the time. Such people are not worried about anything in particular and there is no specific trigger.
- Social phobia/Social anxiety disorder People with social anxiety disorder fear social and performance-related situations where they may be subject to the scrutiny of others. They have an intense fear that something they do or say will lead to their humiliation or embarrassment. These people are unable to handle everyday situations such as making small talk or even eating in public.
- Specific phobias are unsubstantiated fears and people with phobias go to great lengths to avoid the object or situation that triggers their anxiety. Their fears could range from flying in airplanes, being in crowded places, to harmless things such as spiders and high-rise buildings.
- Post-Traumatic Stress Disorder (PTSD) Being part of or witnessing an extremely traumatic event such as accidents or an assault can later lead to PTSD. The person will have difficulty sleeping or relaxing due to constant flashbacks of the event. (PTSD is common among merchant navy. Accidents/incidents related to hijacking, hostages, explosions, brutal attacks leave significant trace on a mariner's psychical stability. There are cases, when people quit their job or spend a lot of time for rehabilitation since they have been held as the hostages by pirates).

Panic disorder People with panic disorder suffer from panic attacks that are uncontrollable and include a range of physical symptoms such as dizziness, shortness of breath and excessive perspiration. During these episodes, they also report psychological symptoms (thoughts) like experiencing a sense of impending doom and feelings such as 'I am going to die' or 'I will go crazy'. These attacks happen for no apparent reason, and the person then lives in constant fear of suffering another such episode.

Getting treatment for anxiety disorders

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Anxiety disorders can be overcome but one must not underestimate the seriousness of the problem. If you suffer from any of the above symptoms, it is best you seek professional advice and treatment. Anxiety disorders are treated through anxiety medication, counselling or a combination of the two.

Remark: If you perform certain duties on board the ship (particularly you are engaged in navigation or are watchkeeper), consuming certain medicines are violation of law and may have severe consequences. For further details medical advice should be received.

Coping with anxiety disorders

There are many skills which you can learn in order to manage your anxiety. Positive thinking, stress management, leading a healthy lifestyle and relaxation are some of the common techniques that people use. Trying to manage anxiety by yourself can be challenging, especially if you are experiencing a lot of discomfort and unease. It's always a good idea to reach out for professional advice in such cases.

3.4 Hostility

Definition: *Hostility is defined by mistrust, cynicism, and negative beliefs and attributions concerning others (Smith, 2003, pp. 139-172). APA defines it as the overt expression of intense animosity or antagonism in action, feeling, or attitude.*

Anger signals your body to prepare for a fight. This reaction is commonly classified as "fight or flight." When you get angry, adrenaline and other hormones are released into the bloodstream. Then your blood pressure goes up, your heart beats faster, and you breathe faster.

Many people mistakenly believe that anger is always a bad emotion and that expressing anger is not okay. In reality, anger can be a normal response to everyday events. It is the right response to any situation that is a real threat. Anger can be a positive driving force behind our actions. Anger can also be a symptom of something else, depending on how often a person feels angry and how angry the person feels.

Hostility is being ready for a fight all the time. Hostile people are often stubborn, impatient, hot-headed, or have an "attitude." They are frequently in fights or may say they feel like hitting something or someone. Hostility isolates you from other people.

Anger and constant hostility keep your blood pressure high and increase your chances of having another health problem, such as depression, heart attack, or a stroke.

Violent behaviour often begins with verbal threats or relatively minor incidents, but over time it can involve physical harm. Violent behaviour is very damaging, both physically and emotionally. Violent behaviour can include physical, verbal, or sexual abuse of an intimate partner (domestic violence), a child (child abuse), or an older adult (elder abuse).

Below you can see edited extract version of Capt. Apostolos Skempes' presentation during the 2019 Hellenic American Maritime Forum:

Due to the different cultural and ethnic backgrounds of the crewmembers, "grey areas" of harassment and bullying, can take a wide variety of forms, such as:

- use of offensive language,
- rude gestures,
- spreading malicious rumors,
- making unwelcome sexual advances.

Those committing the above acts may be unaware of the impact their behaviour has on others.

It can occur unconsciously, not as a result of a deliberate malign intention, or involve a "personality-clash", or individuals described as "over-sensitive", "unable to see a joke", or "having an attitude problem".

It can be Officers who bully a crew member of a lower rank, but can also occur between crew members of the same rank.

It is important that seafarers are aware that complaints of bullying or harassment, or information from staff relating to such complaints, will be dealt with, fairly, confidentially, sensitively and promptly.

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Seafarers should be provided with safeguards against the possibility of victimization for filing complaints.

Complaints should be investigated promptly and objectively, on the basis that seafarers will not normally make an accusation, unless they feel seriously aggrieved. Companies investigating claims of harassment and bullying, should consider all the circumstances and conduct an objective investigation, before reaching a conclusion.

3.5 Somatization

Definition: *Somatization is generally defined as the tendency to experience psychological distress in the form of somatic (bodily and organic) symptoms and to seek medical help for these symptoms, which may be initiated and/or perpetuated by emotional responses such as anxiety and depression.*
What is it?
Mind-body connection explained.

Everyone experiences the mind-body connection all the time. The mind-body connection is the back-and-forth communication between our brain and our body that involves the spinal cord and electrical and chemical messengers (like neurotransmitters and hormones). This communication system is responsible for taking in information using our body (like our eyes, ears, nose and skin), getting that information to our brain and then sending important messages to all parts of the body for action. This system is what makes it possible for our brains to send signals to our bodies, like moving our fingers, realizing we are hungry, jumping back from danger. The mind-body connection is automatic and involuntary.

The fight-flight-or freeze response is a great example of the mind-body connection. When we sense that we are in danger, a very powerful physical response is triggered. This can happen when we feel scared and there is a major danger present. It may also happen when we feel scared or stressed and the "danger" is not life threatening.

The nervous system has two main parts:
- The sympathetic system;
- The parasympathetic system.

These two systems are always acting in balance. The sympathetic nervous system is like a gas pedal in a car - it tells your body to get going. The parasympathetic nervous system, on the other hand, is like the brakes in a car - it tells the body to calm down. The fight-flight-or-freeze response is the sympathetic nervous system sounding the alarm.

The body's fight-flight-or-freeze response all starts with your ears, eyes and nose sensing a signal. Your brain considers the incoming information and decides there is a danger and what to do. Then your brain sends signals to your body, using electrical and chemical signals. These signals tell your body to stay alert and be ready to act quickly. For example, your heart beats faster, your muscles tense up, your pupils dilate and your stomach slows down to get you ready for action. This helps you survive danger by fighting or escaping (flight). All of these physical reactions happen quickly and without you even knowing it. Later when the danger is gone, your parasympathetic system kicks in and tells your body to calm down.

It is important to remember that these 'fight or flight' physical symptoms are not dangerous but they can be very powerful.

Somatization explained (Remark: some of below treatment methods are not available on board and are for information purpose only)

All emotions have a physical part. For example, we tear up when we are sad and breathe faster when we are afraid. Soma is the Greek word for body. Somatization is the word we use for the physical (or body) expression of stress and emotions through the mind-body connection. In fact, up to 12% of doctors' visits are for somatic symptoms that are caused by anxiety and depression. Somatic symptoms are very real. Everyone experiences somatization, but, for some people, it gets in the way of everyday life and requires treatment.

How does somatization happen?

Somatization occurs through the mind body connection. There are a few ways that somatization can start.

It can happen on its own. Emotions and stress may cause the physical symptoms. Emotions and stress may make the symptoms of a medical condition stronger or more intense. For example, Leo, who is Able Seaman was diagnosed with ulcerative colitis (condition that may cause bloody diarrhea, belly cramps, pain, fatigue, and major weight loss), an inflammatory bowel disease several years ago. He has had many treatments at the hospital and currently his IBD is well controlled. Leo and his crew members notice that when he experiences anxiety or stress, for instance during cargo operations or pilotage, his gastro-intestinal symptoms worsen. Leo was diagnosed with IBD with an element of somatization.

This connection between emotions and physical symptoms is called the mind-body connection.

Diagnoses

There are two main types of disorders that describe somatization:

Somatic symptom disorder. People with this disorder may have body symptoms like:

- Pain in abdomen (belly);
- Headache;
- Fatigue;
- Nausea;
- Chronic pain;
- Conversion disorder (functional neurological symptom disorder).

People with this disorder may have neurological symptoms like:

- Weakness or paralysis;
- Dizziness or fainting;
- Abnormal movements (that may look like epileptic seizures);
- Trouble with speech;
- Tingling or numbness;
- Memory loss.

Often people can have an "element of somatization" when they have strong physical symptoms or a medical condition. This means that they may have an illness like migraines, but stress and certain emotions make the symptoms more intense or more frequent.

What can be done?

It's important to have a doctor check any new physical symptom for an injury, infection, tissue damage or inflammation. But, when the symptom is related to somatization, it is also important to begin treatments for somatization. This may avoid unnecessary tests or treatments that can cause side effects and problems.

We call this "walking two paths" to follow a mind-body connection treatment path, and to continue a medical path as needed.

There are very good and effective treatments for somatization. The treatments are not the same for everyone. The best treatment involves a team that understand the emotional and physical impact of the person's symptoms.

Team members may include:

- Family doctors, or other medical specialists;
- Therapists, psychologists or counsellors;
- Psychiatrists;
- Nurses;
- Physiotherapists;
- Occupational therapists;
- Social workers;
- Dietitians;

Complementary and integrative medicine providers (massage therapists, acupuncturists).
Treatment has many goals and may include:
- Mind-body strategies;
- Medication;
- Therapy and counselling;
- Physiotherapy and rehabilitation.

Treatment helps to learn to manage their physical symptoms and return to wellness. People learn to recognize what causes them stress, how their body reacts and how to manage it.

Where to from here?

Start by talking to your family doctor, Medico Roma or mental health professional.
Check out related information and resources:
- Learn more about ways to recognize manage and reduce stress;
- Explore mindfulness with the Breath app (for example https://breatheapp.uk/);
- Learn more about strategies to support and manage pain.

3.6 Interpersonal sensitivity

Definition: *Interpersonal sensitivity (emotional and social) is the ability to accurately assess others' abilities, states, and traits from nonverbal cues. The authors predicted that individuals' interpersonal sensitivity would be related to accurate judgments of friends' interpersonal sensitivity (by Dana R Carney, Jinni A Harrigan).*

Interpersonal sensitivity manifests itself in cases when
- The person believes that he is not able to justify the expectations of others, does not correspond to the expectations of the society and projects this negative situation on the people who are in direct contact with him;
- The person has "aggravating feeling of mourning" - he thinks that his situation (caused by the death of someone, a loved one or even - loss of social status) deserves much more sympathy than the people around him express to him;
- The person experiences an acute deficit of interpersonal relationships.

During this type of dysesthesia (a condition in which a sense, especially touch, is distorted. Dysesthesia can cause an ordinary stimulus to be unpleasant or painful), it is most important to connect the person with those people who are important to them (nowadays from most of the ship's there is access both to the phone and internet communications), with whom they have a strong emotional connection; It is necessary to reassess one's own role and place, to provide positive-oriented support.

Basic principles of rendering assistance. After all of the above, we would like to emphasize once again the fact that assistance is based on the principle of self-help and mutual assistance. Mutual assistance, on the other hand, is based on three main principles: "observing-listening-giving direction".

A relationship with a depressed person has certain characteristics. A person may experience tension, anxiety, and an acute sense of guilt. It is important that he feels our peace and support, that he is cared for and ready to help. Creating this mood will make it easier for them to open up and share their problem with us. Sometimes, even just listening can be a big help. Let's not be boring, let's not wrap ourselves in the desire to help, give the person under stress the opportunity to open up step by step and share their emotional pain with us.

"First psychological aid" manual tells us that for such a conversation, it is preferable to choose a quiet place where there are no other crew members; The interlocutor should feel that the conversation is confidential; It is necessary to be close to the person in need of help, but to maintain a mandatory distance, taking into account his age, gender and cultural characteristics; We should listen patiently and calmly to the interlocutor. In order to be more effective, the status of the person and the duties to be performed on the ship should be taken into account; We need to determine how safe it is for this

person to continue fulfilling his work obligations and plan further action accordingly. When we realize that our mission is exhausted, we must turn to the superiors.

The ability to listen is one of the most important in the process of mutual assistance. If a person sees the interlocutor's willingness to listen and understand, he calms down and starts a conversation, which, at a certain stage, turns into a dialogue and ultimately gives us the most positive effect. Never ask unnecessary questions to force the interlocutor to tell us what happened, this is not allowed. Any pressure can turn into a wave of irritation or even aggression. While conducting the dialogue, one should maintain a calm tone and a calm tone of voice. During the conversation, we should keep calm as much as possible, do not evaluate the behavior of the interlocutor or other persons, in general, avoid personal evaluations, because this always causes additional anxiety. During such a conversation, we should not use specific and incomprehensible words and terms, try to speak simply and clearly so as not to burden important communication. Repeat several times during the dialogue that you are on his side and ready to help.

Try not to lose eye contact with the interlocutor, but as mentioned earlier, you should keep in mind that this may not be acceptable in some cultures.

If such a necessity arises, ask the interlocutor to change the breathing rhythm and breathe slowly and rhythmically.

In a stressful situation, a person feels vulnerable and powerless. Often, he thinks that he has no associates; He perceives those around him as hostile subjects and reacts sharply even to their completely harmless replies. When providing help to a person in such a situation, it is necessary to provide him with only positive verified, clarified information, not to touch on sensitive topics and be as tactful as possible.

When we consider that we have exhausted our capabilities or failed to establish the necessary communication with a person in a stressful situation, it is desirable to turn to universal, socially proven methods of help, such as, for example, contact with loved ones, religious conversations (as needed), improvement of food, sleep and rest conditions. In this case, it is also very important to correctly determine how responsible the work of this particular person is and whether he is in a position to continue to perform the duties assigned to him without endangering him and other members of the ship's crew.

Basic models of coping with stress. Coping with stress is related to the process of coping with external and internal demands when these demands, according to the individual's perception, challenge or exceed his resources. To do this, people talk to themselves, engage in certain behaviours, seek social support, try to avoid stressors, etc. Therefore, it is difficult to define stress management in strict terms. Coping can be defined in terms of strategies, tactics, responses, cognitions, or behaviours. It includes both overt and covert actions as well as internal events. Therefore, in modern science, there are many studies and articles on this topic, which offer different theoretical approaches, models and classifications. It is impossible to discuss all of them, so we will focus on 3 main approaches. These are: 1) psychoanalytical approach; 2) a personal approach, which explains coping with stress through strong internal dispositions of the individual, and 3) coping as a process.

For the purpose of this study, coping as a process (cognitive approach) is most relevant.

Coping as a process (cognitive approach) - representatives of this approach believe that coping is a dynamic process, the specificity of which is determined not only by the situation, but also by the stage of development of the conflict arising from the collision of the subject with the outside world (cited in the study: Martskvishvili 2010).

This theory, which views coping as a process, is known as cognitive theory. According to this approach, stress is determined as a result of the interaction between the individual and the environment, where the environment is perceived by the person as a threat that interferes with his well-being. Cognitive theory distinguishes two main processes. These are: cognitive appraisal and coping.

In the process of cognitive appraisal, an individual evaluates a stressful event in the environment. Does this event correspond to his being well? 2 stages of cognitive evaluation are distinguished: primary evaluation and secondary evaluation (Gerig and Zimbardo 2009). An initial assessment

identifies whether there are any threats in the environment. Figuratively, the individual asks the other, "What's going on?", "Is there a problem?" If the answer to the question is "yes", then the secondary assessment begins and the individual finds out in his own strength how to deal with a situation threatening his health, life or general well-being - "What can I do?". It is at this point that coping occurs. In this process, the individual mobilizes his cognitive and behavioural skills to respond to internal or external demands that are perceived as demands that exceed the individual's capabilities and resources.

There are 3 important points in the above definition. Three important points are distinguished in this definition. The first is process orientation, which means that the explanation focuses on what an individual thinks and how individual behaves in a specific crisis situation and what are the changes when actual situation changes. This coping approach contrasts with the Personal approach, which emphasizes that an individual is characterized by the general strategies he or she uses, emphasizing stability rather than change. Second, coping is contextual, it is influenced by the assessment of the current demands of a person in a specific stressful situation and assessment of resource management. Emphasis on context means that certain variables of the person and the environment together create, together shape, the coping effort. Third, the definition does not evaluate the strategy in terms of "good" and "bad". Coping is an effort, whether or not the effort will be successful and productive. This specificity distinguishes it from the psychoanalytic model. The latter, as mentioned above, characterizes protection mechanisms according to the degree of adequacy.

According to cognitive theory, coping strategies have the following specificity of action, namely: changing the problematic person-environment relationship causing distress (problem-focused coping) and emotion regulation (emotion-focused coping). Coping with stress involves both, and people use them in almost all types of stressful situations. Problem-focused coping involves taking action, changing something to solve a problem situation, and is more often used in changing situations. An emotion-focused coping strategy involves the control of negative emotions and is mainly used in situations that are judged as unchangeable.

Thus, the psychoanalytical approach focuses on the use of defense mechanisms, and the personal approach - on an individually characteristic. According to both of these approaches, coping is primarily a function of personal characteristics. In contrast, the coping-as-a-process approach emerges from the cognitive-behavioural model and views the person and the environment as two variables that continuously influence each other. Stress is understood as a connection between the person and the environment, which is evaluated by the person as a threat to his well-being and which exceeds the person's resources. Coping represents a transactional variable, meaning that it reflects not only the person, and not only the environment, but the integration of both in a given transaction.

Put simply, the cognitive approach looks at how our thoughts impact our feelings which in turn influence our behaviour. However, it is worth asking: what are the benefits of cognitive approach for seafarers?

#1 Improves comprehension: The cognitive approach can improve seafarers' comprehension when attempting new subjects or tasks onboard. With cognitive learning we learn by doing, thus being able to gain a deeper, more comprehensive understanding of new materials, tasks and overall operation of the ship.

#2 Enhances problem-solving skills: The cognitive approach helps us learn how to learn. As such, seafarers can be better equipped to develop problem-solving skills that they can deploy later to deal with challenging situations.

#3 Boosts confidence: By promoting problem-solving and improving comprehension, the cognitive approach theory can also boost seafarers' confidence. Cognitive learning theory equips crew with the skills to handle challenging and complex problems onboard, therefore making new challenges seem less frightening, thus empowering them with the confidence they need to deal with them.

#4 Promotes lifelong learning: Cognitive learning is ongoing, continuously adding new building blocks to the learning pyramid. As a result, using cognitive skills can promote lifelong learning by allowing seafarers to connect their existing skills with new ones, as shipping is a constantly

developing environment. Cognitive strategies also encourage a love of learning by making it exciting, engaging, and fulfilling.

A cognitive approach can help you with mental health issues such as depression, anxiety, and anger management. Instead of focusing on what's happening to you, you concentrate on how you can think differently to have a more positive outcome. When you take charge of your thoughts, you can also change the way you respond to your feelings. For example, if you try to focus on how you can overcome your depression rather than on how bad you feel, you can make positive changes, such as taking care of your physical health, that diminish your depression.

And finally, our research has shown that a better mental state is usually observed in staff who have undergone special training - appropriate training courses, know what difficulties they will face and how to deal with them. It is very important that seafarer, who is providing aid, does not suffer psychological damage as a result of contact with a person in a severe stressful situation. Assistant should not fall into despair and hopelessness.

At the same time, it is in the interest of the ship-owning company itself to prepare employees to deal with job-related difficulties in order to minimize material and human losses.

Experience we gained studying stress matters among seafarers allows us to share our vision and give advice to both seafarers and Maritime College students:

- Establish friendly, trust-based relationships among crew members to enable problem solving using internal resources;
- Share problems with superiors and other colleagues;
- Try to establish a systematic relationship with the family left on the shore whenever possible;
- In critical situations, start writing a diary, in which you will try to clearly formulate your own problems, evaluate and "look at things from the side";
- If you have the opportunity, engage in sports and physical activities- it is a proven and highly effective way to relax, relieve stress and restore physical and psychological balance;
- Train your mind, read, learn or deepen a foreign language - reading books, learning new languages or perfecting what you have already learned, receiving and memorizing new professional information helps your mind to free itself from negative impulses and direct its own resources to a specific cognitive activity. It is possible that this point seems banal, but as practice shows, it is very effective and efficient.

For personnel who have been in particularly difficult conditions (e.g., if the contract/voyage lasted much longer than expected, there was an excess of technical problems, there was a fire or other similar incident/accident etc.), it is recommended that the employing companies provide seafarers with psycho-social rehabilitation courses upon repatriation. In this way, the company will be able to retain capable, highly professional and highly experienced employees for a long time.

For a person, regardless of his profession, nothing human is alien. Each of us has a moment when he feels alone with his phobias and problems. There are times when a little annoyance can lead us to despair. It is at times like these that we want you to be close to our work so that you know that you are not alone. There are plenty of people just like you and worse than you; There are also many people who want to help you, share your pain, listen and understand. It is up to each of us to deal with the psychological problems of ourselves and the people around us, the main thing is to understand, analyse the situation, correctly assess our own surrounding and act, do not put down a shield and sword, do not give in to self-harm and the destructive syndrome of self-blame. Every new day is a new opportunity. Every morning is brighter and warmer than a lonely night. Take action, don't give up. Remember that a person is a thinking, speaking and communicative being who can overcome any resistance.

In the next part of our report, psychological tests are presented that will help you determine the state of yourself or a member of your crew, after which you can act in accordance with the general rules for psychological help presented above.

4.Tests and Assessments

Testing is one of the most common and proven method for determining individual differences in the behaviour or abilities of individuals.

The test measures a person's abilities; therefore, it contains "tasks" to reveal the target abilities. Such are - tests of intelligence, personality traits and projection.

Tests are standard tools for the study of mental characteristics. The Englishman Francis Galton is considered to be the creator of the first test, who developed tests of mental abilities, although those tests were very different from the existing analogues. The testing boom began with the rise of practical psychology in America after World War I.

It is very important to use a test that is standardized and considered valid by experts in the field when assessing one's condition. Also, the consistency and accuracy of the test, questionnaire is important.

Subject information must be treated as strictly confidential throughout the study. It is unacceptable to disclose any test details to anyone without the consent of the person being tested. The subject's right to privacy should not be.

Tests required to identify one's psychological condition

Below is given list of tests, that are most appropriate, simple and user friendly to identify psychological condition. In most cases they can be used for self-assessment either.
1. Self-Rating Anxiety Scale (SAS)
2. Self-Rating Depression Scale (SDS)
3. Hamilton Anxiety Rating Scale (HAM-A)
4. Depression Anxiety Stress Scale
5. CAGE Alcohol Questionnaire (CAGE)
6. Buss Perry Aggression Questionnaire (BPAQ)
7. Eating Attitudes Test – 26 Item (EAT-26)
8. Trauma-Related Shame Inventory (TRSI-24)
9. Primary Care PTSD Screen (DSM-5) (PC-PTSD-5)
10. Obsessive Compulsive Inventory-Revised (OCI-R)
Remark:
Below description of each type of test, you will find link and QR code to access relevant test online.

1.Self-Rating Anxiety Scale (SAS)

The Zung Self-Rating Anxiety Scale (SAS) is a method of measuring levels of anxiety in patients who have anxiety-related symptoms. The scale focuses on the most common general anxiety disorders; coping with stress typically causes anxiety.
For actual test please check following link: https://psychology-tools.com/zung-anxiety-scale/

2. Self-Rating Depression Scale (SDS)

The Zung Self-Rating Depression Scale (SDS) is a 20-item measure, with each item rated on a 4-point scale. It requires approximately 5–10 minutes to complete. Ranges for mild to moderate depression, moderate to severe depression, and severe depression are 50–59, 60–69, and over 70, respectively (Zung, 1967).

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For actual test please check following link: https://psychology-tools.com/test/zung-depression-scale

3.Hamilton Anxiety Rating Scale (HAM-A)

Developed by M. Hamilton, this widely-used interview scale measures the severity of a patient's anxiety, based on 14 parameters, including anxious mood, tension, fears, insomnia, somatic complaints and behavior at the interview.
For actual test please check following link: https://psychology-tools.com/test/hamilton-anxiety-rating-scale

4. Depression Anxiety Stress Scale

The Depression, Anxiety and Stress Scale - 42 Items (DASS-42) is a set of three self-report scales designed to further the process of defining, understanding, and measuring the ubiquitous and clinically significant emotional states of depression, anxiety and stress. DASS-21 is the shorter version of the test with the same three domains. It was designed by the Psychology Foundation of Australia.
DASS-42 has 14 items in each domain while the DASS-21 has seven. Each domain assesses the negative emotional symptoms on a four-point Likert scale. A greater score indicates higher severity of these negative symptoms. For actual test please check following link:
https://www.healthfocuspsychology.com.au/tools/dass-42/

https://www.healthfocuspsychology.com.au/tools/dass-21/

5.CAGE Alcohol Questionnaire (CAGE)

The CAGE is a 4-item, relatively nonconfrontational questionnaire for detection of alcoholism, usually phrased as "have you ever" but may be focused to delineate past or present alcohol problems.
For actual test please check following link: https://psychology-tools.com/test/cage-alcohol-questionnaire

6.Buss Perry Aggression Questionnaire (BPAQ)

The Buss–Perry Aggression Questionnaire (BP-AQ) is a 29-item, four-factor instrument that measures physical aggression, verbal aggression, anger, and hostility. A large number of competing versions of the original BP-AQ have been proffered in the literature, but testing with aggressive offenders is limited.

For actual test please check following link: https://psychology-tools.com/test/buss-perry-aggression-questionnaire

7.Eating Attitudes Test – 26 Item (EAT-26)

This is a screening measure to help you determine whether you might have an eating disorder that needs professional attention. This screening measure is not designed to make a diagnosis of an eating disorder or take the place of a professional consultation.

For actual test please check following link: https://psychology-tools.com/test/eat-26

8.Trauma-Related Shame Inventory (TRSI-24)

Individuals who experience traumas often have many different types of reactions. Below are a number of statements that describe thoughts and feelings that people sometimes have about themselves.

The Trauma Related Shame Inventory (TRSI) is a self-assessment that clarifies between shame and guilt in individuals with PTSD.

For actual test please check following link: https://psychology-tools.com/test/trauma-related-shame-inventory

9.Primary Care PTSD Screen (DSM-5) (PC-PTSD-5)

The PC-PTSD-5 is a 5-item screen designed to identify individuals with probable PTSD. Those screening positives require further assessment, preferably with a structured interview.
Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s). Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
For actual test please check following link: https://www.ptsd.va.gov/professional/assessment/screens/pc-ptsd.asp

10.Obsessive Compulsive Inventory-Revised (OCI-R)

The Obsessive-Compulsive Inventory-Revised (OCI-R) (Foa et al., 2002) is an 18-item self-report questionnaire and measures OCD symptoms across 6 subscales including washing, checking, neutralising, obsessing, ordering and hoarding.
For actual test please check following link: https://psychology-tools.com/test/obsessive-compulsive-inventory-revised

6. Conclusion

Above tests are just instruments to assist in determination of one's condition, but their results should not be considered as the final conclusion and under no circumstances they can replace professional assessment carried out by health professionals.
Since ancient times, the themes of fighting with the water element, fighting with the sea and the amazing endurance and courage of man have repeatedly become a source of inspiration for great writers and poets. Legends and stories were created about the "tamers" of the sea long before invention of writing.
As we have already said, the sailor's profession is one of the oldest. In this profession, many things have changed over the millenniums, but the main thing has remained unchanged - it is still a profession of people who are physically and mentally strong, healthy and mentally stable, people who are ready to overcome any challenges, to find a way out of any difficulties, always ready to assist others over the vast oceans.
Maritime Industry changed, ships become bigger, faster and more sophisticated in every single way. Despite complexity of modern ship's machinery, equipment and electronics, human remains the most advanced part of the maritime transportation chain, most important part that requires attention and care every given moment. In given guide, we tried to reveal most important and common mental issues that modern seafarers encounter along with the tools and methods required to identify them. We agree that it is job of health professionals to deal with mental challenges proper way, however, there is room for interference on board the ship either, far away from a professional psychological assistance, where your

fellow crewmember is the only person who can help to share your burden. Furthermore- knowing risks, threats and patterns of mental challenges that become even more demanding in harsh maritime environment, makes you well prepared to cope and fight back such issues. As we said before, you are the most important and sophisticated part of maritime industry. If it is essential to know how to do proper maintenance of navigational radar or main engine, the same should be applicable for your mind and mood.

Each of us, regardless of our occupation, creates and shapes own personality. We grow every day by challenging ourselves, overcoming our fears, and dealing with problems. Every new day is a new opportunity for victory. And next time, when you do something against all odds, remember words once said by William Ernest Henley, English writer, poet and editor: "I am the master of my fate. I am the captain of my soul."

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Attachment

Attachment

Seafarers Well-being and Mental Health Survey
(Questionnaire)

This research is conducted under the research project: Creation of practical guide "Applied Psychology for Seafarers", which is financed by the International Association of Maritime Universities.

The Batumi Navigation Teaching University (Georgia) is conducting this research, Dalian Maritime University (China) and University of Ljubljana (Slovenia) are involved in the study. We are committed to studying how mental health conditions in working seafarers are. This questionnaire will help us to learn about factors related to seafarers' mental health during their work on board.

Your participation in this research would be invaluable to get familiar to challenges seafarers are facing while they are performing their duty on-board.

Participation in this research is completely anonymous, we are not asking for your name or any kind of personal identifying information.

Below there are a series of questions related to your life and problems you may have encountered while on-board. Please read them carefully and answer them honestly. There are no right or wrong answers. You can stop anytime you want, without any consequences. The data will be saved anonymously and will be used only for the purpose of this project. Should you have any questions concerning this study or problems you may have encountered while on-board, you may contact: international@bntu.edu.ge

Please tick this box if you agree with the terms and conditions of this study.

Part 1. Orientation, Demographical Data, General Working Conditions & Motivation For Work

1.   Your age?

2.   Where were you born? (country)

3. What is your gender	
Male	Female

4. In what Department do you work on the ship?			
Deck	Engine	Steward	Other

5.   What is your rank on the ship?
Master/Captain
Officer
Raiting
Other

6.   What type of ship do you work on?
Container Ship
Bulk Carrier
Ro-Ro
Reefer
Dry Cargo
Passenger Ship/Ferry
Oil Tanker
Chemical and Product Tanker
Gas Tanker (LNG)
Other Tanker
Supply Ship
Other

7. How many months have you been away from home?					
2	4	6	8	10	12 & above

8.   What route (Region) are you currently sailing?
Ocean Routes
Offshore Routes

9.   How many years have you worked as a seafarer?
0-2 years
3-5 years
6-10 years
11-15 years
More than 15 years

10. What motivated you to start sailing?
Money
Travelling
Love sailing
Advice from families or friends
Have no better choice
Others:

11. What motivates you to stay with this job?
Money
Sense of achievement
Travelling
Career Development
Support from families or friends
Love sailing
Have no better choice
Others:

12. What is your normal duty schedule?
4 hours on, 8 hours off
6 hours on, 6 hours off
8 hours on, 8 hours off
Other

13. How much are you exposed to the following while working at sea? 0= not at all, 1= rarely, 2= often, 3= most of the time				
noise	0	1	2	3
vibration	0	1	2	3
work in tight spaces	0	1	2	3
working alone	0	1	2	3
lack of personal protactive equipment	0	1	2	3
sharp obects	0	1	2	3
heavy lifting	0	1	2	3
heat	0	1	2	3
chemicals	0	1	2	3
dust	0	1	2	3
smoke	0	1	2	3
physical injuries	0	1	2	3
viruses and diseases	0	1	2	3
seasickness	0	1	2	3
homesickness	0	1	2	3
mobbing	0	1	2	3
not allowed to get off the ship even when in port	0	1	2	3
other	0	1	2	3

14.Do you perform work tasks for which you would need more training?
Never
Seldom
Often
Most of the time

15.Can you set your own work pace?
Never
Seldom
Often
Most of the time

16.Does your company take care of its workers?	
Yes	No

17.In the past year, have you gotten sick while working as a seafarer?	
Yes	No

Part 2. General Health Issues

18.In general, how would you say your health is?
Excellent
Very good
Good
Fair
Poor

19. Have you ever been diagnosed with any of the following:

High cholesterol	yes	no
High blood pressure	yes	no
Heart problems	yes	no
Sleep disorder	yes	no
Diabetes	yes	no
Cancer	yes	no
Liver problems	yes	no
Depression	yes	no
Anxiety	yes	no
other _____		

20. How often do you exercise while working at sea?

Never
Less than 4 times per month
1 to 2 times per week
More than 3 times per week

Part 3. SCL-90 Depression, Anxiety, Hostility, Interpersonal Sensitivity, Somatisation

For each of the 13 statements in the table below, check the box that is closest to how you have been feeling over the **last week**:

(0= not at all, 1= a little bit, 2= moderately, 3= quite a lot, 4= extremely)

21.					
Loss of sexual interest or pleasure	0	1	2	3	4
Feeling low in energy or slowed down	0	1	2	3	4
Thoughts of ending life	0	1	2	3	4
Crying easily	0	1	2	3	4
Feeling of being trapped or caught	0	1	2	3	4
Blaming yourself for things	0	1	2	3	4
Feeling lonely	0	1	2	3	4
Feeling blue	0	1	2	3	4
Worrying too much about things	0	1	2	3	4
Feeling no interest in things	0	1	2	3	4
Feeling hopeless about the future	0	1	2	3	4
Feeling everything is an effort	0	1	2	3	4
Feeling of worthlessness	0	1	2	3	4

(0= not at all, 1= a little bit, 2= moderately, 3= quite a lot, 4= extremely)

22.					
Nervousness or shakiness inside	0	1	2	3	4
Trembling	0	1	2	3	4
Suddenly scared for no reason	0	1	2	3	4
Feeling fearful	0	1	2	3	4
Heart pounding or racing	0	1	2	3	4
Feeling tense or keyed up	0	1	2	3	4
Spells of terror or panic	0	1	2	3	4
Feeling so restless you couldn't sit still	0	1	2	3	4
Feeling that familiar things are strange or unreal	0	1	2	3	4
Feeling pushed to get things done	0	1	2	3	4

(0= not at all, 1= a little bit, 2= moderately, 3= quite a lot, 4= extremely)

23.					
Feeling easily annoyed or irritated	0	1	2		
Temper outbursts that you could not control	0	1	2		
Having urges to beat, injure or harm someone	0	1	2		
Having urges to break or smash things	0	1	2		
Getting into frequent arguments	0	1	2		
Shouting or throwing things	0	1	2		

(0= not at all, 1= a little bit, 2= moderately, 3= quite a lot, 4= extremely)

24.					
Feeling critical of others	0	1	2		
Feeling shy or uneasy with the opposit sex	0	1	2		
Your feelings being easily hurt	0	1	2		
Feeling others do not understand you or are unsympathetic	0	1	2		
Feeling that people are unfriendly	0	1	2		
Feeling inferior to others	0	1	2		
Feeling uneasy when people are watching or talking about you	0	1	2		
Feeling very self-conscious with others	0	1	2		
Feeling uncomfortable about eating or drinking in public	0	1	2		

(0= not at all, 1= a little bit, 2= moderately, 3= quite a lot, 4= extremely)

25.					
1. Headaches	0	1	2		
2. Faintness or dizziness	0	1	2		
3. Pains in heart or chest	0	1	2		
4. Pains in lower back	0	1	2		
5. Nausea or upset stomach	0	1	2		
6. Soreness of your muscles	0	1	2		
7. Trouble getting your breath	0	1	2		
8. Hot or cold spells	0	1	2		
9. Numbness or tingling in parts of your body	0	1	2		
10. A lump in your throat	0	1	2		
11. Feeling weak in parts of your body	0	1	2		
12. Heavy feelings in your arms or legs	0	1	2		

Part 4. Sources Of Anxiety And Social Support

How much you believe each of the following may contribute to your mood when you feel down or depressed. Please check the box that is closest to your feeling.

(0= not at all, 1= rarely, 2= often, 3= most of the time)

26.				
Working Alone	0	1	2	3
Cultural difference at work	0	1	2	3
Food quality	0	1	2	3
Amount of food avaliable	0	1	2	3
Isoletation from family or friends	0	1	2	3
Lenght of contract	0	1	2	3
Shift work	0	1	2	3
Trouble sleeping	0	1	2	3
Supervisors demands	0	1	2	3
Mobbing from co-workers	0	1	2	3
Worry about money	0	1	2	3
Covid-19	0	1	2	3
Not allowed to get off the ship in port	0	1	2	3
Seasickness	0	1	2	3
No internet or limited internet access	0	1	2	3
Bad weather / rough sea	0	1	2	3

27. Have you asked for help from feeling depressed to any of the following people?		
Friend	yes	no
Coworkers	yes	no
Family member	yes	no
Medical doctor	yes	no
Therapist	yes	no
Religious advisor/chaplain	yes	no
Other (please list)		
I have not asked for help	yes	no

Part 4. Career Plans

28.Are you thinking about leaving your job as a seafarer wihtin a year?
Yes
No

Part 5. Internet Access

29.Do you have regular internet access on any of the following places?
At sea never - rarely - often - most of the time
At port never - rarely - often - most of the time
At home never - rarely - often - most of the time

30.When working at sea, how often do you have unrestricted access to the internet?
No restrictions, internet access at all times
Internet access at all times, but network capacity is limited
More than one day each week
About one day each week
About one day per month
Other

Part 6. Company Policy Towards Mental Health Issues

31.Has your company ever given you training on mental health?
Yes
No
32.How many mental health training sessions the company has done in the past year?
0
1
2
3&above
33.Does the company you work for have a mental health policy?
Yes
No
Do not know
34.Do you know what to do if you suspected a crew mate was depressed?
Yes
No