

ИЗМЕНЕНИЯ ХАРАКТЕРА МЕЖЛИЧНОСТНОГО ПОВЕДЕНИЯ РОССИЙСКИХ МОРЯКОВ ВО ВРЕМЯ РЕЙСА В ИНТЕРНАЦИОНАЛЬНЫХ ЭКИПАЖАХ

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Введение. Психоэмоциональная сфера моряков является одной из наиболее подверженных тяжелым условиям морского труда. При работе в море экипажа на судах иностранных компаний часто отмечаются нарушения условий труда. В результате возможно возникновение социально-психологических конфликтов, переходящих в психоэмоциональный стресс. В этой связи изучение эмоциональной сферы российских моряков, работающих на судах под флагами иностранных государств, очень актуально. Цель: определение особенностей состояния эмоциональной сферы у российских моряков при работе в интернациональных экипажах и обоснование необходимости ее коррекции в рейсовый и межрейсовый периоды.

Материалы и методы. Исследовано психоэмоциональное состояние российских моряков, работавших на судах иностранных компаний в динамике морского рейса с помощью метода «Диагностика межличностных отношений» Т. Лири, адаптированного Л.Н. Собчик.

Результаты и их обсуждение. Обнаружен достаточно высокий уровень напряженности эмоционального состояния в течение рейса, вероятно, обусловленный сложностью общения с иностранными моряками, тяжестью труда и, как следствие, возникновению конфликтных ситуаций. Эмоциональное напряжение может способствовать возникновению невротических реакций у моряков. Рекомендовано для работы на судах под иностранным флагом проводить тщательный отбор экипажей и не допускать заключения контрактов с психологически неустойчивыми лицами.

Ключевые слова: морская медицина, моряки, условия труда, иностранные суда, эмоциональное состояние

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CHANGES OF INTERPERSONAL BEHAVIOR OF RUSSIAN MARINERS WHEN WORKING ON INTERNATIONAL CREWS

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Background. Psycho-emotional sphere of mariners is one of the most susceptible to severe conditions of maritime labor. Crew work at sea on ships of foreign companies often has abnormal working conditions. As a result, socio-psychological conflicts can arise, turning into psycho-emotional stress. Thus, the research of Russian mariners' emotional sphere, working on the ships under flags of foreign states is very actual.

The aim of the work is to define the features of Russian mariners' emotional condition during their work with international crews and to substantiate the necessity of its correction during voyage and intervoyage periods.

Materials and methods. Psycho-emotional condition of Russian mariners who worked on foreign companies' ships during sea voyage was assessed using diagnostic method «Diagnostic of interpersonal relations» T. Leary, adapted by L.N. Sobchik.

Results of the research and discussion. A rather high level of tension of the emotional condition during the voyage was found, probably, caused by difficult communication with foreign mariners, hard work and, as a consequence, occurrence of conflict situations. Emotional stress may contribute to neurotic reactions in mariners. It is recommended to select crews for work on ships under the foreign flag and not to allow contracting with psychologically unstable person

Key words: marine medicine, mariners, labor environment, international crews, emotional condition

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Introduction. Ship crew work is often associated with the work at the limit of physiological possibilities of the organism. Besides, the emotional sphere is one of the most exposed to heavy conditions of sea work [1, p. 19–23; 2, p. 13–18]. Therefore, there are special requirements to the mariners' neuropsychic health, which are expressed in constant formation of mental endurance, emotional-volitional stability and flexibility [3, p. 1–166; 4, p. 1–240; 5, p. 43–45].

Russian mariners are in demand in the international labor market by foreign shipowners [6, p. 148–151]. However, often the labor on the sea of the ship crew in a private or foreign company has unclear contract conditions, accompanied by serious competition with other teams [7, p. 156–162; 8, 96–98; 9, p. 1–276]. In this situation it is quite possible the formation of socio-psychological conflicts that turn into emotional stress from the personal, individual level and, up to the population level. The decrease of all these negative manifestations is especially urgent nowadays when many experts predict the global mass stresses getting the epidemics character [10, pp. 43–46; 11, pp. 80–82; 12, pp. 50–54].

To date, the number of Russian mariners working on ships of foreign companies keep steadily growing. Meanwhile, there is a clear lack of research observation of the health of this contingent of mariners in maritime conditions [13, p. 110–122; 14, p. 147–155]. There is no proper medical and sanitary monitoring of the working conditions of Russian mariners. Therefore, one of the most important directions to solve the problems is to study the emotional sphere of Russian mariners working on ships under the flags of foreign states.

The research of psychological states of personality has a history of over 150 years, which is the basis for all the modern psychology [15, p. 1–359; 16, p. 1–175; 17, p. 1–536]. Currently, a considerable amount of information devoted to the study of the peculiarities of individual behavior in different environments has been accumulated. Depending on the external conditions, his or her emotional state changes,

which, in some cases, may require psychological correction. It is stated that in the etiology and pathogenesis of most neuropsychiatric and psychosomatic disorders, the socio-psychological state of an individual plays a leading role [18, pp. 3–18].

In order to understand the significance of psychological factors in the genesis of mental adaptation disorders, tests have been developed and are widely used; they allow to understand the personality structure: emotional, motivational and interpersonal properties of an individual. The number of techniques which is used to determine the level of self-estimation of the personality and its social belonging (for example, according to the following criteria — social integration, attachment, the possibility to educate and raise someone, receiving confirmation of self-significance, the reliability of partners in communication, the teaching of leadership, etc.) is quite significant. One of the most well-proven and widely used in psychological and psychiatric practice is the «Interpersonal Behavioral Circle» diagnostic test developed on the basis of T. Leary's theory. In domestic practice, this test is russified and adapted by L.N. Sobchik. Application of this test showed its practical validity since it is entirely based on a complex analysis of the concepts describing communicative characteristics of a person. Its multidimensional character allows to get information about interpersonal relations and personal features, essential for personality-mediated interaction, revealing zones of actual personal conflicts and reasons for communication disorders in small groups. Consequently, the use of this test is quite acceptable for contractual form of employment of specialists in various industries, including maritime, to ensure the best interaction with employers (shipowners) on the issues of psychological stability and social protection of workers.

Aim of work: determination of features of emotional state of Russian mariners when working in international crews and substantiation of the necessity of its correction during voyage and intervoyage periods.

Materials and methods. Dynamic (quadruple) observation of 86 people on several sea voyages was carried out — mariners on ships of foreign companies. The age of the patients varied from 30 to 50 years (mean — 38.44 ± 3.21 years). At the time of the examination all the persons were practically healthy men who were not on the dispensary for diseases in the polyclinic of the N.A. Semashko Northern Medical Clinical Center and had no complaints.

The duration of the voyages varied from 160 to 180 days; geography was the Atlantic Ocean with the port calls to the North Sea and the Norwegian Sea. The mariners were employed on the Malta-flagged *Avrora* and *Wilson* vessels. The work on the vessel consisted in fishery activities connected with catching and primary handling of fish, preparation for its conserving.

Together with the Russian fishermen on the vessel there were Mauritanian workers, who worked at the local fish-processing factory.

Psycho-emotional state of all surveyed persons was studied with the help of «Diagnostic of interpersonal relations» (DIR) method by T. Leary, adapted by L.N. Sobchik. The used method is recognized as one of the most objective and convenient for studying the structure of both interpersonal and intrapersonal relations. It also allows to discover certain individual-typological aspects. The research technology represents as a set of laconic characteristics, by which the subject evaluates himself — his actual «I». In assessing the results, scores are calculated for the eight octants of the psychogram (types of interpersonal interaction). A brief description of the octants is presented in Table 1.

Table 1

Characteristic and interpretation of answers to T. Leary's «Interpersonal Behavior Circle», adapted by L.N. Sobchik

Таблица 1

Характеристика и интерпретация ответов на тест «Диагностика межличностных отношений» Т. Лири, адаптированного Л.Н. Собчик

Octants (types of interpersonal)	Interpretation of the octant
I	Power-leading type of interpersonal behavior in relations with others. Displays self-confidence, ability to be a good mentor and organizer, qualities of a leader
II	Independent-dominant. Reveals a style of interpersonal relationships from confident, independent to competitive
III	Straightforward-aggressive. Depending on the degree of expression of indicators reveals sincerity, directness, straightforwardness, persistence in achieving the goal
IV	A distrustful and skeptical style of interpersonal behavior. It is characterized by a realistic base of judgments and actions, skepticism and nonconformity
V	Submissive-shy. Reflects such features of interpersonal relations as modesty, shyness, tendency to take on someone else's responsibilities
VI	Dependent-obedient. If the score is moderate, there is a need for help and trust from others, for their recognition
VII	The cooperative-conventional style of interpersonal relations is characteristic of persons seeking close cooperation with the reference group and friendly relations with others
VIII	Responsible and magnanimous version of interpersonal behavior. It is shown by a pronounced readiness to help others, and a developed sense of responsibility

The interpretation of the obtained DIR results is mainly focused on the prevalence of absolute values of some indicators over others. When taking into account absolute values, moderate expression of the index was accepted up to 8 points; at higher points — expression of some or other characteristics sharply increases, up to a tendency to pathological manifestations¹.

When conducting research, the testing procedure was as uniform as possible: mariners were asked to agree to participate in the study two days in advance; they were assured of the need to provide the most complete information for the study; personal secrecy was ensured; they were informed of the purpose of using the test indicators. It was particularly emphasized

that the test results would have no effect on their careers and would not be taken into account at the annual medical examination of mariners.

Results and discussion. According to the results of the observation in the dynamics of voyages the peculiarities of Russian mariners' self-esteem when working on foreign ships were revealed, the differences in the dynamics of the voyage were established.

Among the surveyed ones attention was attracted by III, IV and VII octants, in which the prevalence by absolute values was registered (Table 2). They (according to the methodology) were identified for a more detailed study.

Table 2

The mean of octants of T. Leary's «Interpersonal Behavior Circle» ($M \pm m$) among seamen that worked in international crews

Таблица 2

Средние значения октантов методики Т. Лири «Диагностика межличностных отношений» ($M \pm m$) у моряков, работающих на иностранных судах

Octants (types of interpersonal interaction)	Examination time				p-value
	Beginning of the voyage	After 1 month	After 3 months	End of the voyage	
I	5,06±0,58	5,24±0,60	5,62±0,21	5,74±0,61	1-2 = 0,32; 1-3 < 0,001; 1-4 < 0,001; 2-3 = 0,14; 2-4 = 0,004; 3-4 = 0,46
II	5,24±0,48	5,26±0,21	5,40±0,45	5,68±0,51	1-2 = 0,86; 1-3 = 0,26; 1-4 < 0,001; 2-3 = 0,19; 2-4 = 0,001; 3-4 = 0,06
III	8,02±0,98	6,22±0,41	6,81±0,23	8,04±0,41	1-2 < 0,001; 1-3 < 0,001; 1-4 = 0,92; 2-3 < 0,001; 2-4 < 0,001; 3-4 < 0,001

¹ Sobchik L.N. *Diagnostics of interpersonal relations. Modified version of the interpersonal diagnostics of T. Leary. Methodological Guide.* Moscow: The Moscow Personnel Center at the Head Department of Labor and Social Issues of the Moscow City Executive Committee. Consulting firm, 1990.

Octants (types of interpersonal interaction)	Examination time				p-value
	Beginning of the voyage	After 1 month	After 3 months	End of the voyage	
IV	5,22±0,52	5,41±0,29	6,94±0,44	7,22±0,54	$_{1-2} = 0,14;$ $_{1-3} < \mathbf{0,001};$ $_{1-4} < \mathbf{0,001};$ $_{2-3} < \mathbf{0,001};$ $_{2-4} < \mathbf{0,001};$ $_{3-4} = 0,06$
V	5,26±0,61	5,12±0,14	4,94±0,42	5,02±0,58	$_{1-2} = 0,30;$ $_{1-3} = \mathbf{0,05};$ $_{1-4} = 0,19;$ $_{2-3} = 0,06;$ $_{2-4} = 0,44;$ $_{3-4} = 0,06$
VI	5,02±0,52	4,97±0,43	4,72±0,34	4,98±0,68	$_{1-2} = 0,73;$ $_{1-3} = \mathbf{0,03};$ $_{1-4} = 0,79;$ $_{2-3} = \mathbf{0,04};$ $_{2-4} = 0,98;$ $_{3-4} = 0,09$
VII	6,12±0,48	6,10±0,40	6,08±0,27	6,02±0,54	$_{1-2} = 0,81;$ $_{1-3} = 0,61;$ $_{1-4} = 0,51;$ $_{2-3} = 0,59;$ $_{2-4} = 0,62;$ $_{3-4} = 0,74$
VIII	5,68±0,44	5,62±0,46	5,66±0,47	5,46±0,46	$_{1-2} = 0,84;$ $_{1-3} = 0,81;$ $_{1-4} = 0,09;$ $_{2-3} = 0,71;$ $_{2-4} = 0,31;$ $_{3-4} = 0,26$

Note: statistically significant differences in mean values between the periods of the survey are marked in bold type.

The indicator characterizing the degree of self-assertion (III octant), interpreted as a manifestation of straightforwardness in communication with others, up to aggressive behavior, statistically significantly differed during the voyage. Its rather high values, especially in the beginning and at the end of the voyage, are noteworthy. Its high level in the beginning is probably due to the initial acquaintance with a foreign crew, possible linguistic, social and

everyday misunderstandings. Further this index decreases, apparently, there is accommodation, convergence of interests, however by the end of the voyage this index increases sharply again, which is probably connected with the accumulation of interpersonal conflicts, general fatigue after several months of work.

A sharp increase in the value of the IV octant at the end of the voyage, which characterizes a distrustful-skeptical style of behavior, stands

out against the general, uniform average background. This increase is simultaneously combined with a high score of III octant, which indicates an increase in unfriendliness, irascibility of the subjects, cumulation of a conflict state.

Relatively high values in the first group were noted for the VII octant, which gives information about the person as striving for closer communication and close cooperation. There were no significant changes in this octant during the voyage, and it remained at an elevated level the entire time.

Conclusion. Thus, the work of domestic mariners in foreign companies is associated with

considerable emotional stress. It can contribute to neurotic reactions in the mariners. Consequently, to work on the ships under the foreign flag, especially when the voyage lasts five months or more, the crews should be thoroughly selected and the contracts with the psychologically unstable persons should be avoided. The results of studying the psychological status of the mariners while working on the ships of foreign companies determine the necessity of psychological correction during voyage and intervoyage periods.

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