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## Particularities of individual and psychological traits of seamen before and after voyage

At the moment there is a range of professions that can be considered as the most difficult. One of those is the work of a seaman. The features of seamen's work are connected to social and sensorial isolation, cumulative effect of oscillatory motion and vibration, climate and zonal contrasts, around-the-clock work, high intensity, extensive pressure of the labour. All these and some other extremal factors influence all the seamen regardless of their functions on the board. [3]

In the previous researches, the authors mainly studied the influence of the above-mentioned factors upon nervous system, labour process (activity, information processing), from the point of view of the engineering psychology, examining the particularities of different kinds of the operating activity of seamen in the context of dynamic connection of elements "man-ship". [1, 2]

We haven't found in the literature information regarding psychological and acknowledge analysis of seamen features. That's why the aim of our research was studying of individual and psychological seamen features before and after voyage. The knowledge of psychological and technical components of professional activity of shipboard personnel let us make a suggestion, that their professional activity involves stress, high level of anxiety, emotional problems, that, finally, can distort their mentality and personality, and create conditions for profession deformation in general. 285 men, working on water transport, and having annual medical examination in the first clinical hospital of Rostov-on-Don, took part in our research. The age range of respondents was from 20 up to 52 years.

We tried to realize the following tasks in the process of our study: the comparative research of existing level of anxiety and stress of water transport workers; studying of interpersonal relation indices and group behavior among the employees of trade fleet; studying of character accentuations of shipboard personnel and finding out individual and personal determinants that cause professional deformations among the trade fleet seamen before and after voyage.

Mathematical data processing was carried out using methods of mathematical statistics. Computer processing of results was made by programs SPSS 11.0 and NC-SS2000-PASS2000.

First of all in the groups of shipboard personnel, that were examined before voyage and after voyage we have studied the stress level with help of Lusher's methodology. We have discovered that the stress tension highly increases after the voyage. 40% and 23 % correspondingly.

Before the voyage the deviation from autogenic norm and the level of anxiety is lower (33% and 16% correspondingly), than after voyage (45% and 27% correspondingly). So the research points out, that time spent on the board, has a negative effect



on emotional state of shipboard personnel, as a consequence we observe the double increase of anxiety level and stress tension.

Literature analysis demonstrates that the necessity of staying in constraint environment and relative social isolation during voyage has a negative impact on interpersonal relations. In this connection we have added the methods of T.Liri to our battery of tests. It permits to study the deviations of attitudes towards interpersonal relations before and after voyage.

The results showed that shipboard personnel has moderately aggressive and authoritarian types of relations before voyage, and after voyage we observe the moderate authoritarian type of relations and high rates of aggressive and suspicious types of relations.

Thus, it is evident that time spent on the board of the ship has a negative effect on seamen abilities to build constructive interpersonal relations.

The received data testify that negative influence of professional activity on their emotional, personal and interpersonal spheres, that can not reflect in their social behavior. Due to this fact we included the method of "Q-sorting" in order to elicit the main changing rates in shipboard personnel behavior. Based on the data, received before voyage, we can say that the seamen have an inner desire to accept group standards and values: social, moral and ethical, building the emotional links within the group and outside it.

After the voyage the tendencies of dependency and asociality dominate, besides they gradually become stable personal traits that characterize almost all the workers of the fleet.

So the received data allow us to make the following conclusions:

The professional activity, during a spell of time (during the voyage that can last up to six months) enhances at the statistically significant level the aggression increase in behavior, increases independence of group, its standards and values. We believe, it results in marginalization of behavior. The level of anxiety and stress tension greatly rises up.

The differences in all the parameters studied, made us advance hypothesis that particularities of seamen professional activity must have a negative impact upon their personal traits, distorting several qualities, and sharpening character accentuations. The next task of our research was to study the manifestation of character accentuations before and after the voyage. The seamen completed the test of G. Shmishek before and after the voyage. Before the voyage the average group indices are close to normal, but two scales show the sharpening tendencies. These are the scales which reflect fixedness and depression.

After the voyage all the shipboard personnel experience the increase of fixed and depressive type of accentuations, the tendencies to demonstrative and emotional behavior also grow. It can be explained by the inertia of mental processes, their rigidity, a long coping with traumatic events. The respondents try to avoid interpersonal contacts, they prefer solitude.



The data received let us make a conclusion that professional activity negatively influences the seamen's personal, emotional and interpersonal spheres and it manifests in their behavior.

The scientific novelty consists in finding out individual and psychological determinants, creating professional deformations among the seamen working on water transport. The use of the received data enables to create more effective professional rehabilitation programs and methods of vocational selection.

### **Literature**

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