

Identifying Factors Affecting Professional Motivation of Iranian Seafarers Onboard Ocean Going Merchant Vessels

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ABSTRACT: - Human force employed in organizations is the main resources available to the managers. Management of human resources is perhaps the most important obligation of the manager activities and behaviors of human being are due to his needs and motivations. Since reinforcing motivations can lead to more improvements and achievements of every organization, the identification of factors affecting on motivation can help managers and supervisors to be aware of the origin of their staff's motivations and lead their behavior towards the desired organizational aims. For this reason, this research tries to identify the most important factors affecting on professional motivation of the Iranian seafarers working on ocean-going merchant vessels (case study: National Iranian Tanker Company) and to prioritize those factors in the next step. This research is of an "applied" and "descriptive-survey" type according to the goal and the methodology respectively. Statistical community of this research includes 540 of N.I.T.C. expert seafarers consisting: 1- key officers (high rank officers) with at least 10 years of experience, 2- low rank officers with at least 5 years of experience, 3-rating with diploma and at least 10 years of experience. Statistical sample mass based on "Kerjcie-Morgan" table includes 224 seafarers and the sampling method is the "simple random sample" method. The collecting method of data is field and library work. Further to the study of the available texts and researches about motivation and decision-making techniques and also interviewing with experts and lecturers who are masters and chief engineers of ocean-going vessels, a questionnaire has been prepared according to "Delphi method" to the scale of "Likert 5 degrees" and distributed among the statistical community. After analyzing the first questionnaire using the statistical methods and "SPSS" software, 20 affecting variables and also the final factors have been identified. Then the second questionnaire including matrix double scale tables of the criteria has been prepared and distributed. The resulted data has been used to prioritize the criteria of "AHP" method through math average method and the "expert choice" software. The research findings show that the most principle factors affecting seafarers' professional motivation are prioritized as follows:

1. Work environment, 2. The amount of salary and wages, 3. Job identification special needs, 4. Preparing welfare facilities, 5. Organizational factors, 6. Advancement and growth factors, 7. Leadership style and supervision. In the next step the 20 variables affecting professional motivation of seafarers' working on ocean-going merchant vessels has been prioritized. Finally, there have been some suggestions presented for each variable to create or increase seafarers' motivations.

KEYWORDS: - professional motivation, seafarers, ocean-going vessels, AHP.

Introduction

Viewpoint of organization and management shows that management of human resources is counted success of an organization. Organizations without human are not managed alone, but loose its concept.

In fact by existence of rapid movement of organizations toward technology human role as an important and strategic factor is important in survival or organizations. In this field method of applying human resources for achieving

organization's goal was important and is in a way that scientist know effective management on human resource as key organizational success. In this direction subjects like motivation pay attention to managers (Afshari, 1990, 1).

Because behavior and activity of human is resulted from motivation or their needs. Managers by identification and predicting motivation and real needs of staff under their management can satisfy their needs and motivations and benefit human force of organizations properly and in the direction of goals of an organization. Managers who are successful in their motivation provided an environment in which provide proper goals for satisfying their needs. addition to satisfying needs of human forces causes occurrence of maltreatment like failure-cruelty and decreasing output-leaving services (Ostvar, 2003, 23). Since proper motivation with conditions of time, place and subjects makes different methods. Therefore searching and determining effective factors in staff motivation can help change of an organization to capable dynamic organization having motivated human force. Therefore this research identifies factors affecting professional motivation of Iranian seafarer working on ocean-going merchant vessels and did order of importance of these factors (case study Iran national tanker company) and it is suggested that result is used in similar companies.

In sea section necessity of developing transportation and seamerchant at international level and deficiency of seafarer has been aid attention by international organization and Iran. Report of International maritime organization (IMO) shows that now more than 1.5 billion seafarers in ranks of officer and commander are active in relationship with ocean-going vessels at the world that in this rank there is deficiency and Bimco shows that this deficiency in 2012 is 84000 seafarer in ranks of officer and commander (harbor and the sea, 2009:33). Now international atmosphere related to maritime profession denotes falling maritime staff (Vadadi, 2007:69).

Organization and maritime companies are especial companies that have especial function and their activities are different from usual activities of other companies. Educated human resource in maritime area that have passed classic and experimental educations related to the type of maritime specialties have caused various cost for centers of education and growing system and this section of human resource is counted part of the most valuable source. Therefore saving human resources is very important and so it has certain prosperity so that for its leadership proper plan is done from absorption to saving (Vadadi, 2007:25). It is known that meeting needs of human resource regarding culture, motivation and professional satisfaction causes continuity of sense of belonging to dependency so identification of methods of attention to these problems is important by relying to maritime profession.

Studying in the area of human resources especially those who plan. Control and create relationship between processes will be useful for staff and organizations and by regarding that research work in national Iranian tanker company and were active for 12 years in ocean-going vessels in different ranks of and by awareness of conditions and factors of motivation of seafarers have always faced this question in their mind that what factors are effective on job motivation of these seafarers and how is the order of their effectiveness? Identifying factors affecting professional motivation of seafarers and determine priority and its importance with a completely scientific method for exploiting is authorized by management of related organization and similar maritime companies and also findings of this research can be a problem-solving in this area.

Literature Review

Motivation

Behavior as a set of activities is a motivational action that defined motivations as reasons of behaviors. Motivation is reason of behavior. They cause start and fallowing of activity and in the general direction determined behavior of a person.

Motivation are defined as needs, tendencies-internal stimulators of a person. Motivations that are concentrated toward goals may be awarely or unawarely. They differ not only regarding the power of doing work but also regarding tendency of doing work or motivation. Motivation of people depends on their motivating force (Rezaeian, 2005:92).

Defining motivation is a difficult. It is sufficient to refer to studies in this field to find out available difficulty in definition of motivation well. In organizational viewpoint, motivated human is the one who emphasizes doing works, does behaviors and attitudes that help him in achieving its goals and organization. However most psychologist have accepted this definition: motivation in extensive meaning of word is a change that created in organism and make him in reducing this change. Also motivation is a psychological factor that prepares a person for doing some actions or going toward some goals in advance. From above definition the concept of force is inferred the force that makes a person for doing a specific behavior. In belief of all who worked in this field the concept of force is basis of motivation. Therefore we can accompany motivation with forces that may be appearance of a behavior and lead it as respond to needs of conditions that created these forces. In other word motivation is a force that moves a person in the direction of making a specific behavior, is a movement that lead a worker or clerk for doing work, satisfying their physical and mental needs with the work that does. Therefore motivation has become an internal phenomenon (need, tendency, goal) that forces a person to act with an specific method (Ganji, 2008:57).

Cycle of motivation

Motivation is a process that starts with physiological or mental deficiency or need that strengthens behavior or activates it or is a exciter that has been directed toward a goal or stimulator/ therefore the factor of perceiving motivation is hidden in meaning and relationship between words

of needs, motivators and goals. Needs causes occurrence of motivators for achieving goals of researchers. With a systemic viewpoint motivation is compound of interaction and dependency of triple factors of needs, motivations and goals (Boromand, 2009: 93).

1-needs created when physiological and mental unbalance occurs. The best word for definition of need is deficiency;2- motivators(two words that are used instead) are for decreasing needs. A physiological motivator can be defined simply as directed deficiency 3- at the end of motivation cycle; there are goals or encouragers that are defined as discounters of need or reducer of motivators. Therefore achievement of encourager or achieving goal caused physical or mental balance and decreases or removes motivation (Boromand, 2009:94).

Internal or external motivation

Motivational resources are sometimes internal or external. Internal resources rooted from the person himself or external resources rooted from outside environment. All of us give importance to some works or responsibilities in working environment, in case we do some affairs without interest and only our goal is removing duty, answering high demands and receiving wage. In first state it is supposed that the person has internal motivation that is working due to enjoyment that is felt by doing work. Human by sense of competition and self-flourishing and perfection that doing work provides for it is stimulated from inside. However external motivation is principally accompanied by useful communications; that is a person works for the reason to benefit its material privilege or be far from its unhappy consequences. He works for the reason to receive wages and benefit its social advantage. Also policy of organization such as managers' method at controlling staff are factors that are acted from outside and affect person's motivation (Ganji, 2009:62).

Theory of working motivation

Viewpoint of scientific management

Taylor the greatest theorician of scientific management believed that staff have economic motivation and try for achieving more money. Taylor used a person named smith for carrying iron bar in order to show the concept of scientific management. Documents indicate interview that Taylor had with Smith was artificial and Smith didn't have external existence. Although this subject was real it shows that how much Taylor believed his economic viewpoint about human motivation and demanded distributing his theories. Soon it was manifested that hypothesis of theoricians of scientific management about motivation can't explain complicated behavior of human (Morhed, 2007:118).

Viewpoint of human relations

Human relations are result of Harson information. According to the hypothesis human is also stimulated with other factors except money. According to this hypothesis existence of proper hypothesis like job satisfaction causes enhancing performance of staff. Viewpoint of human relations didn't answer most questions related to human behavior. However one primary rhetoricians of this movement that is Abraham Mazelo has presented important theory of need in motivation (Morhed, 2007: 119).

Factors affecting motivation

In table 1 the most important factors affecting motivation of personal dimension, working variables and organizational variables have been pointed.

Table 1: Factors affecting motivation

Personal variables	Working variable	Organizational variables
1- tendency 2- attitude toward a- self b- job c- working aspects 3- needs of ... a- safety b- social c- self-flourishing	1- degree of using skills 2- degree of autonomy 3- set of feedbacks received about performance 4- degree of work changing 5- meaningfulnes or importance of work	1- working environment 2- colleagues 3- direct boss 4- organizational performance 5- systems of reward 6- norms and controls 7- policies

Classifying hypothesis of motivation Content hypothesis

Content theory of working motivations tries to determine factors that create motivation n human. Content theorician pay attention to determining needs or motivation and the order of their priority and recency. They are interested in those groups of stimulators and goals that human try to be satisfied by achieving them and have good performance. In these theories needs and stimulators that cause motivation are distinguished and the way of satisfying them in the organization is explained. For example in scientific school money and material rewards are counted as main tool of motivation and

the only encourager of staff. In school of management of human relations immaterial needs such as continuity and intimacy, the way of supervision and flourishing, personal growth and so on are paid attention (Boromand, 2009: 103). Content models try to determine what stimulates people in working environment (for example self-discovery, responsibility and growth); they try to distinguish correlation of stimulated behavior.

Process hypothesis (structural)

In process theories flow and process of people's motivation have been emphasized procedural theory considers the way of people's motivation in

perceptual viewpoint and doesn't point out factors that cause motivation (Boromand, 2009:117).

Combining content theories

In content theories the aim of all is explaining needs and their role in setting up motivation cycle. Researchers who provided this hypothesis tried to identify factors that force a person to act. This hypothesis instead of paying attention to self-motivation tried to identify needs and factors

affecting motivation of people. Mezlo and Alderfer talked about needs that stimulates staff, in case porter emphasizes needs of entrepreneurs Herzberg by identifying needs of staff connect hypothesis of MezloAlderfer but adds that some organizational variables affect motivation of staff. Finally Mack Kelend by presenting this hypothesis that needs root from culture, norms and personal experience takes a new step. Table 2 shows factors of consisting these hypothesis together (Ganji, 2008: 77-78).

Table 2: Order of content thories

Mack kelend	Herzberg	Alderfer	Porter	Mezlo
People's motivation is affected by three classes of needs: *self-actualization *connecting *Power There isn't any development and hierarchy. These three distinct needs are felt independent from satisfying other needs and based on situation in which a person locates. Three continuum	People's motivation is affected by two groups of factors: *healthcare *motivational There isn't any development and hierarchy. There are completely two distinct factors that act based on two different continuums. two continuum	Motivation of people is affected by 3 factors: *existence *safety *growth There is development in appearance of needs but we can't conclude that fallow an exact hierarchy Only a continuum	Motivation of entrepreneurs is affected by 5 factors: *safety *social *self-esteem *self-actualization *autonomy Needs fallow an exact hierarchy and start with safety needs. Only a continuum	Motivation of staff is affected by 5 factors: *Environmental *safety *social *self-esteem *self-actualization Needs fallow an exact hierarchy and start with environmental needs. Only a continuum

Quality of working life

One of the most challenging methods of motivation is attention to quality of plans of working system quality or working life quality. These plans introduce a systemic tendency to job designing and introduces extensive dimension of "job enrichment" that roots in tendency of technical-social systems in management. "Working life quality" is more related to working atmosphere. In analysis that is done about working life quality it is defined:

1-attention to the effect of work on staff and organization's effectiveness

2-cooperation in solving organizational problem and decision-making

Distinct aim is changing working atmosphere and for this aim interaction of human factors-technology-organization is directed toward better quality of working life. By analysis that was

distinguished technical-social tendency in job designing depends on correlation of human –social-technological duties. Application of QWL is redesigning technological work process and conforming autonomous groups-and self-control groups (Boromand, 2009: 138). In new attitude of management of human resource merely service of staff is not compensated through paying wages and its advantages but degree of working life quality that includes direct financial and non-financial advantages are paid attention (Mirsepassi, 2005:119).

Satisfaction of right

The relationship that exists between satisfaction and right is the most attractive relation. Right is part of healthcare factors (external factors).Therefore if right is fair it provides mental state of

dissatisfaction for the clerk; in case right is unfair it leads to dissatisfaction. Although right acts as a healthcare factor it has power as it can be counted part of motivational factors and as studies of 1959 showed it is accompanied by satisfaction. Therefore right can be counted as part of attention and in this case it gets more force toward time that is seemed in material viewpoint. Therefore right has two features: when it has relation with working condition it changes into factor of dissatisfaction (healthcare factor); but it is given as reward against the work that is done well it is changed into a motivation factors (Ganji, 2008: 75).

Conditions of working environment

Variables that have physical nature but like human variables can affect performance of a person. These variables are known as conditions of working environment. It is obvious that bad conditions of work not only affect output but also affect satisfaction, dissatisfaction and degree of stress are; for example staff who have problem about commuting to work probably get involved with low oxygen, temperature of their working place is very low or very high and... certainly will not have proper mental health and will have less output. Nowadays it has become obvious that conditions of working environment such as degree of brightness,

noise, music, working hours, rest, weekly holiday and weather condition all affect performance (Ganji, 2008: 267).

Research Question

According to research subject, the main research questions are as follows:

- 1) What are the factors affecting Motivation of seafarers working on ocean-going vessels?
- 2) How is the Order of factors affecting Motivation of seafarers working on ocean-going vessels?

Methodology

Statistical society of this research are all seafarers of national Iranian tanker company in three ranks A) key officers; B) officers C) rating that Shown in the Table 3 and have Following Characteristics: All key officers and with at least ten years of experience at sea. And all officers with the last of the officers in the corresponding category (Deck Department, Engine Department, Catering Department) with at least 5 years of experience at sea. In the category of rating: rating with a minimum diploma and a Bosun or Seaman one, Fitter, Oiler, chief cook, or First cook with at least ten years of experience at sea. Number of the whole statistical society of this research are 540 people.

Table 3: Volume of Statistical society

Expert key officers	Expert officers	Expert Rating	Total
187	208	145	540

Sample volume was 224 people regarding Kerjensi-Morgan table and sampling method was simple classified random sampling method (fixed proportion sampling).

Table 4: Volume of Sample

Expert key officers	Expert officers	Expert Rating	Total
78	86	60	224

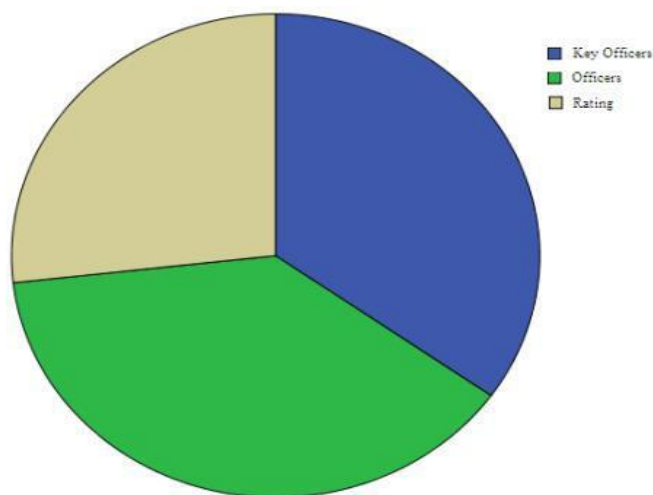


Figure 1: Frequency of Sample

in this research firstly library studies was considered for identification of effective factors on motivation and then interview with some professors of marine lessons at the marine expertism education center of Mahmoudabad was done in order to identify factors affecting motivation of Iranian seafarers and finally in the form of Delfi method a questionnaire having 5 criteria was set based on Likret spectrum distributed among statistical samples. At the next step in the form of AHP

technique a questionnaire of prioritizing factors (table of paired comparison) was supplied at four matrix and distributed among statistical samples at national tanker company. In this research Delphi and AHP methods have been used for data analysis.

Regarding calculations arithmetic mean method and expert choice software, priorities of seventh main factors are as below in Table 3:

Table 3: Priorities of seven main factors affecting job motivation of Iranian seafarers

Seve mai factor s n	Factors Name	Weight	Rank
	Conditions of working environment	0.223	1
	Amount of salary	0.221	2
	Specific needs of the nature of job	0.218	3
	Providing facilities	0.160	4
	Organizational Factors	0.068	5
	Development and progress factors	0.058	6
	supervision and leadership style	0.052	7

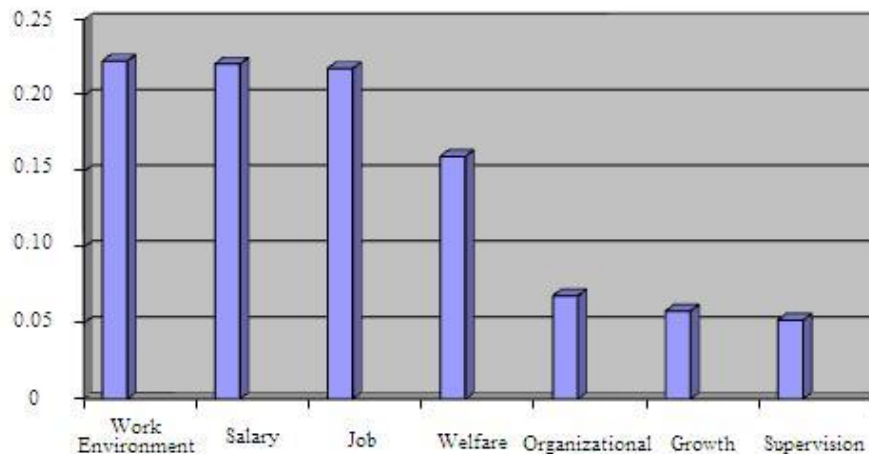


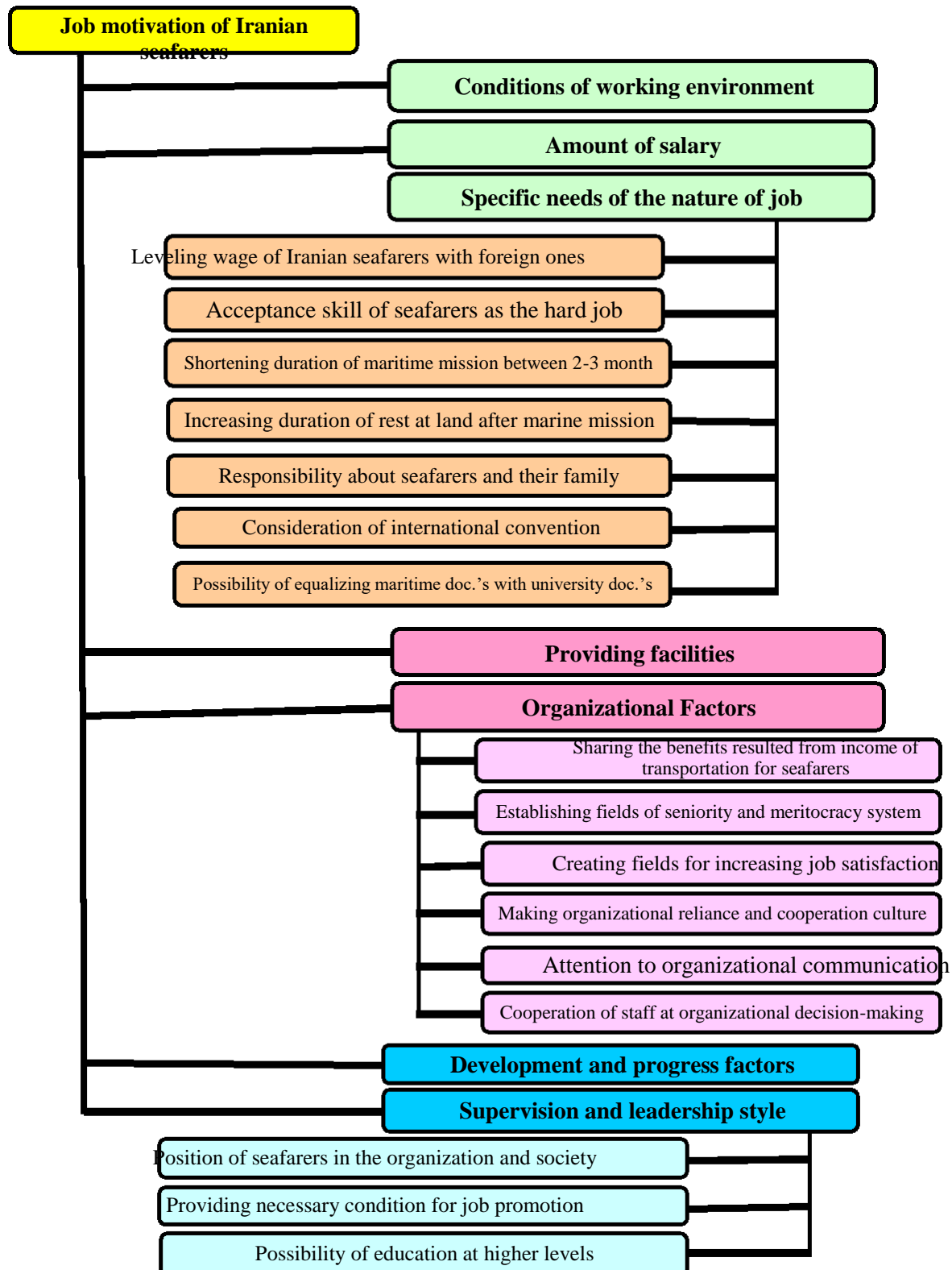
Figure 2: Priority of main factors influencing on the motivation of Seafarers

Table 4 shows final score and total prioritization of 20 variables affecting job motivation of Iranian seafarers.

Table 4: Final score and total priority of 20 variables affecting job motivation of seafarers

Row	Affective variable	Total weight
1	Attention to working condition	0.223
2	Attention to wage	0.221
3	Providing welfare facilities for seafarers	0.160
4	Leveling wage of Iranian seafarers with foreign ones	0.059
5	Attention to the way of supervision and style of leadership	0.052
6	Acceptance skill of seafarers as the hard job, benefiting cash and non-cash (shortening duration of service for retiring)	0.046
7	Shortening duration of maritime mission between 2-3 month	0.041
8	Attention to the position of seafarers in the organization and society	0.030
9	Increasing duration of rest at land after marine mission	0.029
10	Creating advantage of cooperation at benefits resulted from income of marine transportation for seafarers	0.024
11	Sense of professional responsibility about seafarers and their family	0.021
12	Providing necessary condition for job promotion	0.018
13	Establishing fields of seniority and meritocracy system	0.015
14	Creating fields for increasing job satisfaction	0.014
15	Consideration of international convention, international convention of work and international job criteria extensions by goals of observing rights of national seafarers	0.012
16	Possibility of education at higher levels	0.0091
17	Possibility of equalizing documents of maritime with university documents	0.009
18	Making organizational culture filled with reliance and cooperation	0.007
19	Attention to organizational communication	0.004
20	Cooperation of staff at organizational decision-making	0.003

Hierarchical structure of Effective Factors on Job Motivation of Iranian seafarers who work on onboard ocean going merchant vessels Have been Shown as Follow:



Conclusion

Findings of research shows that factors affecting motivation of Iranian seafarers onboard ocean going merchant vessels in the form of 7 main factors included: 1- conditions of work 2- providing welfare facilities 3- specific needs of job nature 4- degree of wage 5- organizational factors 6- way of supervision and style of leadership 7- factors of development

Regarding that the possibility of balance at favorable level among work and life outside working environment (family) is not implementing regarding nature of maritime job, the necessity of implementing methods that reduces its affects seems necessary like decreasing age of entering a profession that until getting social age of being seafarer (about 30-35 year old) at least complete 14-18 years of marine services, for achieving this goal it is necessary to do education according to the needs of skill, changing the educational methods and level of starting education to decrease duration of education period.

Also at the final section of service length that a seafarer get social age (especially for key officers) and needs to relationship with family after its conformation seems for saving seafarer and balancing work and life in this specific period length of marine service decreases at a year about 4 month and rial wage and insurance payment along a year is done for seafarer so that don't make problem regarding years of service for retirement and insurance advantages in regard with country's insurance regulations and make necessary job securities for seafarer and marine companies don't lose these forces regarding all cost that spend for education of expertise forces and lead to saving expertized human resources of seafarer.

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