Abstract

People are motivated according to their needs. These needs vary according to the time and based on various situations. Identifying and assessing human needs are the first and vital step in determining the amount of its impact on work and activity. According to these facts, the aim of this research is to identify the needs of the Iranian seafarers on board merchant ships. It also tries to specify the importance and priority of these needs in the frame of “Maslow’s hierarchy of needs” theory.

Research methodology is analytical and based on library resources and previous studies. Research was conducted using interview and questionnaire. 96 questionnaires were distributed among Iranian seafarers of which 94 questionnaires were completed and evaluated valid for further processing.

Surveyed population included masters, officers and engineers on board container ships, bulk carriers, tankers, special ships and general cargo vessels. The results showed that self-actualization and self-esteem are the most important needs of the seafarers and the physiological needs ranked the lowest.

Keywords: Hierarchy of needs, Human resource management, Motivation, Seafarers

1. Introduction

Following the development of managerial theory and practices in human resources, several models have been developed that represent functions and activities of the human resource management (Raducan and Raducan, 1994). History has realized not only charismatic national leaders and the wars they fought, but also recognized the fact that territorial expansion was to access genuine resources from abroad. Once Aat hand, resources were usually processed and used sustainably in many shapes and forms in the hands of master and expert workers, much so to achieve personal recognition and satisfaction. In any expanding and demanding community, organizational discipline and hierarchy became a necessity in order to ascertain welfare for its members, in the functional environment.

Organization, as an open system, uses a variety of resources such as, material, personnel, technology and knowledge to achieve the planned objectives. These objectives must be understood and accepted by members so to motivate personnel and guarantee satisfaction. Otherwise, personnel lose determination (Abrudan, 2006).

A motivated and qualified workforce is crucial to increase the productivity and quality of health services in order to contribute to achieving health services targets. Prioritized programs have a stake in a skilled and motivated workforce, as they are implemented.
primarily by existing health staff of a health facility. Motivation in the work context is defined as "an individual's degree of willingness to exert and maintain an effort towards organizational goals. The challenge for managers is how to create this kind of motivation. Research has shown that workers and their managers often perceive motivation differently. In addition, little is known about the motivational factors that are important for health workers in resource-poor settings (Dieleman et al., 2006).

Motivation is an equally important responsibility of management. It is translated directly into productivity and team effectiveness. People working together with energy and enthusiasm are far more effective and productive than a group lacking that spark because of job dissatisfaction or boredom. Generally, managers play a key role in building team motivation (Colta and Crisan, 2007).

From theoretical aspect, the main problem of motivation refers to determining the meanings through which members of an organization (public or private), each of them with their own necessities and with their own personality, can be stimulated to contribute positive and efficient in order to execute the established objectives. On the other hand, motivation is defined as an internal necessity state of the organism that orients behavior in the direction of its satisfaction. In these conditions, motivation influences and starts action, it stimulates and rouses the organism and directs it towards a certain behavior (and towards certain objectives capable to satisfy it). Defined also as the totality of internal behavior mobiles (native or obtained, consciously or unconsciously, simple physiological needs or abstract ideals), motivation is understood, not only as the ensemble of motives, but also as a process jostling towards action and stimulation in activity (Colta and Crisan, 2007).

Managers are continually challenged to motivate their employees firstly in helping the organization achieve its goals and secondly in achieving their own personal goals (Shanks, 2007). It is in this context, that every manager must go beyond his designated activities and organize, coordinate, command, control and motivate. This must be exercised effectively, because organizational performance is strongly related to the quality of member motivation (Roman, 2011).

Motivated human resources for doing assigned tasks are considered the most critical profitable factor. The motivation of the personnel will be obtained by increasing in the moral level and occupational satisfaction of the personnel. No doubt the collection of wise human resources is the greatest challenge in the successful economical agencies of the world. These human resources work without any personal intentions in the organizational evaluation. A successful and creative organization is a community which is consisted of human with organizational culture and common goals and thoughts will present his experiences and knowledge to the management of the organization (Iranshahi, 2009).

Arshi and others (2005) in their research concluded that the personnel satisfaction of managers in sanitary-remedied service presentation system is low. Amount of dissatisfaction of top managers is more. Self discovery and need to esteem have more priority within the needs of the personnel. These recommendations are presented in order to increase personnel satisfaction and provide personnel requirements: supporting human development among managers, applying scientific methods of leading personnel by managers, associate personnel more in decision making at different organizational levels, endeavor of university and ministry top managers for using their maximum legal authority in order to extol personnel livelihood of condition, informing correctly and clearly about university top managers performance, strategies and viewpoints for improvement of personnel situation.

In a research that was done by Ahmadvand and others (2007), ‘Identification of NAJA personnel needs and determining importance and priority of their analysis of the data by X2 test showed that different proportions of the personnel had put in each level of hierarchy needs (p<0.001). Results were showing a
converse pyramid. The majority of the personnel had described their needs priority in the high level needs as self-actualization and low level needs as safety and physiological conditions.

Zareimatin and Yousefzadeh (2010) concluded that there was a meaningful difference between present situation and desirable situation of managers’ communicative skill which indicated many problems existed between managers and employers. It was also indicated that there was a significant and positive correlation between manager communicational skill indicators and employee job occupational satisfaction. In most resources which are related to organizational behavior discussion, occupational satisfaction is introduced as one of the outputs of the management of organizational behavior process.

Namvar and Alishafia (2011) in a case study in the oil company of Falat Ghareh Iran, in administrative issues, have suggested that assessment must be done in the training and skillfullness of the supervisors on motivation management and operation of scientific systems. It is also suggested that the effective factors on personnel satisfaction must be analyzed according to different categories age, record, wedlock and workhouse. Salarianzadeh and sadr (2005) indicated although financial motivations were important determinant in job motivation, it was obvious that it could not solve all the personnel problems solely. Experiments have shown that paying more attention to financial motivation in public sector have had negative results. Therefore, consideration of other aspects of human resource management system and personnel motivation, such as job designing and performance appraisal system are also important.

Shipping industry, as one of the oldest industries of the world, has got significant role in the economy particularly in developed countries. Nowadays, due to the great development of the technology, ships have become more automated and therefore, there is less need to crew and individuals. In developed countries, the number of people entering this industry has declined during the past decades primarily because of more job opportunities ashore than at sea. The high seafarers training cost is regarded as a universal hocus pocus in most countries which is a serious issue in human resource management. The value of it increases more and more (Ezzati, 2007). The dependency of maritime transportation business on one hand, and the high seafarers training cost based on STCW and many occupational turnovers in this industry on the other hand, emphasizes the investigation into motivation management in maritime organizations of Iran. Undoubtedly, the favorable management motivation in maritime industry will affect the economy of the country (Sadjadi and et al, 2010). Because of this, it is attempted in this research to rank Iranian seafarers’ needs and put forward solutions.

2.1. Maslow's Hierarchy of Need Theory

One of the most widely accepted theories of motivation is Abraham Maslow's hierarchy of need theory, which was developed in the early 1940s. The theory postulates that all human needs are classified into five levels ranging from the most essential needs common to all people to higher level needs which only a few individuals are motivated to satisfy. The needs, listed from lowest level to highest level, are represented as a hierarchy (figure 1).

1. Physiological needs: These are the most basic needs, such as food, water, and air.
2. Safety needs: These needs, also referred to as security needs, include the desire for both physiological and psychological freedom from stress and protection from existing and future environmental threats.
3. Social needs: this category, sometimes referred to as belongingness or love needs, includes the needs for developing friendship, love, peer acceptance, and a general sense of belonging and acceptance in a social environment.
4. Esteem needs: these needs not only focus on self-esteem, but also highlight the individuals drive
toward acquiring respect, prestige and attention from others based on personal achievement.

Self-actualization needs: This category incorporates these needs which enable individuals to reach their fullest developmental potential. Basically, it can be viewed as the individual's motive for complete self-fulfillment. This is the highest level on the need hierarchy (Singer, 1990).

![Maslow's hierarchy of needs](source)

2. Research Methodology

Today, technology and modern equipment have made it possible for mankind to carry out rather complicated and systematic investigation of various phenomena. In simple terms, research refers to this systematic approach we use to answer our questions. In this section, the data obtained from Iranian seafarers is analyzed (Zarei, 2007).

2.1. Structure of Questionnaire

Collection of primary data was done through library studies (literature review) and secondary data through distribution of questionnaire. The questionnaires consisted of 34 questions, in two parts. The first four questions were related to personal characteristics of seafarers and the next 30 were about the needs. Each need was measured by six indicators.

In the first section of the questionnaire which contained demography questions, type of the ship (Container ships, Bulk carriers, Tankers, Special ships and General cargo vessels) and the rank (Masters, officers and engineers) of seafarers in the ship were questioned. Questions in part 2 were created by integrating Maslow’s hierarchy of needs and basic seafarer’s needs. The items regarding needs included physiological needs, safety needs, social needs, esteem needs and self-actualization. A likert scale was used to measure the desirability of each need among the seafarers. Mediate method was used in order to determine the rate of each need using statistical software namely SPSS and EXCEL. The significance level of different factors in job satisfaction were ranked from very unimportant, unimportant, average to important and the most important with numbers from 1 to 5 modified Standard questionnaire of Maslows’ hierarchy of needs in Alvanis’ book titled as” Public Management”. Also the questionnaire was distributed among 96 Iranian seafarers by using simple random method. 94 respondents (98%) answered the questions and sent them back.

2.2. Data Sampling

The research population is Iranian seafarers of which a random sample was used. The bulk of the sample space by Cochran formula (Hafeznia, 2004) and with 10 percent error showed 96 seafarers.

2.3. Cochran Equation-

\[
n = \frac{t_{a}^{2} \times p_{q}}{d^2}
\]

Where \(n\) is sample size, \(t_{a}\) is variable size in normal distribution, \(p_{q}\) is success proportion and \(d\) is error percentage.

\[
t_{a} = 1.96
\]

\[
p_{q} = 0.25
\]

\[
n = \frac{(1.96)^2 \times (0.25)}{(0.1)^2} = 96
\]

\[
d = 0.1
\]
2.4. Questionnaire Validity and Reliability

By conducting a pilot study among experts in maritime field and Chabahar Maritime University’s professors, it was approved that the questionnaire contains formal, structural and content validity to satisfy Baker (2007) and Human, (2005) characteristics. The reliability of questions and variables were tested through Cronbach Alpha (0.747 and the number of questionnaires (30) using SPSS19).

2.5. Demography Data

The first section of the research questionnaire contained anthropological questions. In this study, there were two fundamental questions which dealt with the seafarers duty on the ships and their type of ships. As it can be seen in the table 2 the duties can be divided into three and the type of ships into five categories.

In this research, the major part of the sample included seafarers who were working on general cargo ships. The second major part of the sample included seafarers who were working on container ships. The special ship seafarers provided the least number of the sample. From the seafarer's rank point of view, the major part of the sample was second officers and second engineers working on board ships. In this classification the least number of the sample was masters. The Iranian seafarers anthropological question statistics as well as their percentage of contribution to the sample of research is shown at the Table 1.

3. Results and Discussion

The average rate of each seafarer’s need is specified in Table 2 and figure 2.

In figure 2, self-actualization need has the highest point followed by social needs, safety needs and esteem needs and physiological need.

Fig. 2: The Average Rate of Iranian Seafarer’s Needs

3.1. The Condition of Iranian Seafarer’s Needs in Maslow’s Hierarchy of Needs

Organizational psychologists believe that hierarchy of needs would be effective for investigating job satisfaction, since individual’s satisfaction can be determined according to this fact that his job is responsible for dominant needs (the most essential needs which are satisfied) (Saatchi, 2010). Maslow’s hypothesis is based on three main assumptions: First, individuals only are motivated by unsatisfied needs. Second, individuals’ needs are arranged in order of significance from simple to complex. Third, the high level needs motivate individual when the low level needs are satisfied (Alvani, 2007).

3.2. Rates Average

Fig. 3: The status of Iranian seafarers in the pyramid of the Maslow’s hierarchy of needs
Table 1. Demography of Seafarers

<table>
<thead>
<tr>
<th>Ranks on board Ship</th>
<th>Masters</th>
<th>Officers</th>
<th>Engineers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>2</td>
<td>11</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>% within Type of Employees</td>
<td>8.7%</td>
<td>47.8%</td>
<td>43.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>2.1%</td>
<td>11.7%</td>
<td>10.6%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Count</td>
<td>2</td>
<td>10</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>% within Type of Employees</td>
<td>11.8%</td>
<td>58.8%</td>
<td>29.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>2.1%</td>
<td>10.6%</td>
<td>5.3%</td>
<td>18%</td>
</tr>
<tr>
<td>Count</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>% within Type of Employees</td>
<td>25%</td>
<td>60%</td>
<td>15%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>5.3%</td>
<td>12.8%</td>
<td>3.2%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Count</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>% within Type of Employees</td>
<td>14.4%</td>
<td>42.8%</td>
<td>42.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.1%</td>
<td>3.2%</td>
<td>3.2%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Count</td>
<td>3</td>
<td>10</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>% within Type of Employees</td>
<td>11.1%</td>
<td>37%</td>
<td>51.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>3.2%</td>
<td>10.6%</td>
<td>14.9%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Count</td>
<td>13</td>
<td>46</td>
<td>35</td>
<td>94</td>
</tr>
<tr>
<td>% within Type of Employees</td>
<td>13.8%</td>
<td>48.9%</td>
<td>37.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>13.8%</td>
<td>48.9%</td>
<td>37.3%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2. Average Rate of Seafarer`s Needs

<table>
<thead>
<tr>
<th>Factors</th>
<th>Achieved Rate of Study</th>
<th>Maximum Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological</td>
<td>3.58</td>
<td>5</td>
</tr>
<tr>
<td>Safety</td>
<td>3.79</td>
<td>5</td>
</tr>
<tr>
<td>Social</td>
<td>3.65</td>
<td>5</td>
</tr>
<tr>
<td>Esteem</td>
<td>3.90</td>
<td>5</td>
</tr>
<tr>
<td>Self-actualization</td>
<td>3.91</td>
<td>5</td>
</tr>
</tbody>
</table>

Now according to obtained results in respect of Iranian seafarers’ needs condition, shown in figure 3, self-actualization needs and then esteem need obtained the highest points among all factors.

Maslow hypothesized that human beings were creatures of desire who craved satisfaction of certain needs and who pursued the paths essential to their procurement. The manner in which they prioritized need gratification was predetermined in a set, predictable fashion and was universal across populations. Once a need becomes satisfied, and as long as it remained satisfied, people's behavioral priority shifted to the next highest need level. If individuals failed to achieve gratification, or if fulfillment was withdrawn, they experienced tension and anxiety. These psychological forces result in motivated behaviors designed to reduce the stress and restore internal equilibrium. Suppose, for example, that an individual is attempting to satisfy the need for social interaction (social need on the need hierarchy). For this state of affairs to exist, the first two need levels (physiological and safety needs) would be in a state of satisfaction. All motivated behavior would center on the gratification of the social need. Should the individual suddenly lose his job, causing the gratification of the physiological and safety need levels to be in jeopardy, the individual would redirect his priorities toward satisfying these lower level needs (Singer, 1990).

Many researchers have carried out different researches about job satisfaction, such as Frederick Tailor who was one of the pioneers in this area. All those researchers have emphasized that staffs’ satisfaction contributes a lot to the growth and development of organization and that their efficiency depends on their satisfaction. Also, they believe that the consequences of lack of job satisfaction, such as anxiety, delays, non-attendance, and etc. can be a
crisis for the organizations. So, the managers of organizations should consider this issue as a fundamental principle in the policy and vision of organization or company. In order to satisfy the employees, consideration of their needs is vital.

According to the results of this research, it is evident that the major need of Iranian seafarers is self-actualization, with esteem at the second place. Also, physiological need gained the least importance among the Iranian seafarers’ needs. The managers of maritime companies should take into consideration the two mentioned major needs more than the other ones in order to develop their own career and increase satisfaction and motivation in Iranian seafarers. In addition to this numerous points regarding their needs on board the vessels have been raised by Iranian seafarers, among which the most significant (and the most frequent) ones are:

- Setting up the Internet on the vessel for the seafarers to use during voyage.
- Providing a place in ports of loading and unloading away from the sea for seafarers to rest.
- Reducing the length of seafarers’ stay on the vessel.
- Considering special contrivance for the family of seafarers.

References

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