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A QUALITATIVE STUDY ON DETERMINING THE CRITERIA (TO BE) USED IN RECRUITING OCEANGOING WATCHKEEPING OFFICERS\*

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*ABSTRACT*

*It is widely accepted that one of the most important factors playing an important role in the accidents encountered in shipping is the human factor. A thorough analysis of the most likely sources of this factor in particular world reveal the unfavorable strategies adopted in recruiting and hiring seafarers: employing incompetent ones. Who are not qualified enough to successfully carry out the critical jobs remarkably affective in sustaining the required safety in oceangoing vessels. In mitigating the mistakes and risks and sustaining safety on board ships, recruiting and employing qualitative and competent watchkeeping officers is of utmost importance. The purpose of this study is to determine the criteria (to be) used in recruiting oceangoing watchkeeping officers. To do this, semi-structured interviews, one of the instruments of qualitative research method, has been conducted through the human resource managers of 12 shipowning and/or operating/management companies. As a result of having analyzed the data, 18 vocational, attitudinal/behavioral competencies have been determined, and the overall results have been discussed.*

*Keywords: Seafarer, Oceangoing Watchkeeping Officer, Personnel Selection, Recruitment, Interview, Competency.*

UZAKYOL VARDİYA ZABİTİ SEÇİM KRİTERLERİNİN BELİRLENMESİ ÜZERİNE NİTEL BİR ARAŞTIRMA

*ÖZ*

*Denizcilikte yaşanan kazaların nedenleri arasında en büyük etkenin insan faktörü olduğu bilimsel olarak ispat edilmiş bir gerçektir. İnsan faktörü kök nedenleri incelendiğinde ise işletmedeki işgören seçim hataları ve yetkin olmayan personelin gemilerde çalışması sonucu meydana gelen hataların neden olduğu durumlar tespit edilmektedir. Bu nedenle gemide çalışan personelin yetkin ve yeterli olması oldukça önemlidir. Bu araştırma ile uzakyol vardiya zabitlerinin işe alım sürecinde işgören seçim kriterlerinin neler olduğunun tespit edilmesi amaçlanmıştır. Bu kriterlerin tespit edilmesi amacıyla 12 gemi donatan firmasının insan kaynakları müdürleri ile nitel araştırma tekniklerinden olan yüz yüze yarı yapılandırılmış görüşmeler gerçekleştirilmiştir. Görüşmelerden elde edilen veriler değerlendirilerek 18 adet mesleki ve davranışsal yetkinlik tespit edilmiştir. Araştırmanın sonucunda elde edilen verilere ilişkin sonuçlar değerlendirilmiştir.*

*Anahtar Kelimeler: Gemiadamı, Uzakyol Vardiya Zabiti, Personel Seçimi, İşe Alma, Mülakat, Yetkinlik.*

1. INTRODUCTION

The progress of recruiting and hiring a new employee for a new position or a position that has recently gotten vacant because the personnel employment in that position has quit or been transferred is called employee supply and employee recruiting. This concept, called “staffing”, personnel selection and supplying or personnel recruiting and employing, covers the most crucial function of human resource management department. While the needs of companies for new personnel are planned under some circumstances in compliance with the strategic targets of companies; in certain other conditions, the process of employing new personnel is carried out in accordance with the certain instant decisions made by the individuals authorities at the management of the companies (Acar, 2013:87). Prior to any personnel recruitment, a thorough analysis/scrutiny of the relevant job specifications related with the vacant position(s) is definitely an inevitable must.

Job specification analysis is an umbrella term covering such functions as establishing the units and departments within the company, determining the duties and liabilities of each unit and department, clarifying the interactions and interrelations among these units and departments, detailing the positions in each of these units and departments and specifying the job identifications for each position (Uyargil, 2013; 49-51). Determining the specific qualifications and competencies for each position is of vital importance in terms of gaining effective and efficient performance (Ferecov, 2011:21).In other words, in order for the tasks at a specific position to be carried out successfully, making sure of having provided the required vocational and educational competencies is a must (Tonus, 2013:3-40). In this study the competencies and qualifications required oceangoing watchkeeping officers have been determined through discovering the criteria required and (to be) used inn seafarer recruiting processes.

1. CONCEPTUAL FRAMEWORK

An employee, in this case an oceangoing watchkeeping officers, reflects the individual dimensions of knowledge, skills, attributes, attitudes, behaviors, qualifications and competencies all of which plays a critical role in the success of a company (Chien and Chen, 2005:282).

Employee recruitment or selection refers to the terms employment, placement and this selection involves personnel and human resource as well (Daft, 2000: 429). In employee selection, selecting and employing the most proper one rather than the best one is important. Failure to employ the most suitable employee is likely to result in losing that employee to the competitors, which would mean a disadvantage for the loser in competition; on the other hand the selection of an unsuitable candidate will cause economic damage to the enterprise due to the repeated selection process (Tonus, 2013: 68-69). Such a dilemma underlines the importance of determining the exact requirements of the position in question. The next step to be carefully managed is assessment of the competencies of the candidate in term of whether his/her competencies match with the previously determined requirements and/or qualifications. If the owned competencies (in terms of knowledge-cognition, skills and attitudes) match with the requirements of the post, the candidate would mean the most proper one to get employed for that post (Byars and Rue, 2004: 92).

The main target of the companies within the shipping industry is to produce services with the lowest possible costs. To reach this target many companies in this industry have a tendency to employ low-cost seafarers, concerning the high costs brought about by severe competition and international regulations. On the other hand, there have been certain movements in this industry favoring the employment of qualified personnel, which would enable the cargoes to get transported safety and thus grant the relevant companies a high prestige which is also of great importance in the competitive environment (Progoulaki and Theotokas, 2010:575-576).

In the severe competition, in order to mitigate the financial burden of establishing a dynamic recruiting and employment process within the company and thus reduce the costs, some companies tend to outsource the process of employment (John and Gailus, 2014: 275).

In the industries other than shipping, personnel employed usually keeps the relevant position for years. In shipping industry, however, employment process is at work very frequently for employment on board ships is subject to certain time-limited contracts; the expectation in the personnel to get promoted are high, the employment volume steadily get higher due to the continuous expansion of the world trade, which means many new ships get included in shipping, which also means more and more seafarers tend to get transferred to other companies with the expectations of enjoying better opportunities. This trend usually pushes many shipping companies towards outsourcing the process of providing seafarers (Lewarn and Francis, 2009:65-68). Eventually, seafarers are provided from countries with cheap labor and it is aimed to reduce the cost of employee wages, which corresponds to 32% of the operating cost of the ship (Stopford, 2002: 160).

Despite the advanced technology and highly bettered safety systems, the accidents encountered in shipping industry have not been prevented yet. Most of these accidents are noted to have occurred due to human errors. Human Factors Analysis and Classification System (HFACS) reveals that human factors have been found to be responsible for 75-96% of these accidents. The ratio in 2015 was 94%, in 2016 it was 78% and 86% in 2017 (Galieriková, 2019: 1319-1320).

The analyses carried out through HFACS also reveal that the main sources of human-related accidents are cognitive/knowledge, decision-making, perceptions leadership and communication. The errors are classified into two categories; **wrong personnel employment decisions and business-management** sourced wrong decisions (Chauvin et. al, 2013:29-30).

1. **AIM AND IMPORTANCE OF THE STUDY**

As the seaborne trade has expanded, need for seafarers have increased. This increase has encouraged many people to get seafarer proficiency certificates and apply to work on board ships. Working in the shipping industry, particularly on-board ships; is a demanding and difficult profession which requires high level of competencies. This is a must in terms of mitigating human-error-based accident that bring about various dangers, damages, deaths, injuries as well as costs and environmental disasters.

The main aim of this study is to determine the competencies and qualifications oceangoing watchkeeping officers are required to have, which is thought to contribute to the recruitment and employment strategies of shipping companies.

1. **METHODOLOGY**

In order to reach the aim of determining the competencies and qualifications considered by shipping companies while recruiting and employing seafarers, one of the instruments of qualitative method, semi-structured interview technique has been conducted through the managers of human resource management departments of **12 ship owning and/or ship management companies.**

* 1. **Conducting Interviews**

Through the semi-structured interview technique, one of the qualitative method instruments, the participants were interviewed orally and they were asked certain semi-structured and framed questions (Serper and Gürsakal, 1989:125). Through this technique, rather than generalized, specific responses are sought; the personnel views, ideas and feelings of the respondents are collected and analyzed (Mason, 2002:62-63).

In scientific research, validity and reliability are undeniably of great importance. Determining these two aspects in qualitative method is a bit different. In interview technique, validity is set on the expert views. This technique is based on such steps as the frame of the research, data collection form, interview conduction guidance and asking the questions to the participants. Within these steps validity is determining whether the data collection instrument is comprehensive or not. Reliability is whether the results are the same or not in case the same research is carried out once more. Besides in qualitative research method, validity and reliability are evaluated through such five aspects as credibility, transferability, dependability, confirmability and integrity (Wallendorf and Belk, 1989:71-72).

* 1. **Data Collection Tool**

In order to determine the competencies and criteria considered while oceangoing watchkeeping officers are employed, the relevant secondhand sources such as national and international articles, reports, books, theses, circulars and internet sources have thoroughly been analyzed. Through this analysis; overall competencies have been determined and classified into two categories; vocational and general. Based on the data at hand, a semi-structured interviews form has been formed, and ensure the acceptable validity, the form has been checked by **three academicians** from Dokuz Eylul University, Maritime Faculty (**1 professor and 2 associated professors)** in terms of whether the questions involved are comprehensive and proper to collect the targeted data. Following certain analysis and corrections the data collection tool has been finalized. Besides, to make sure of the validity, pre interviews have been conducted through **2 oceangoing masters** one of whom is experienced as a manager in human resource management. These interviews have been repeated a week later to check whether the responses will be the same or not. Having gained similar responses has made certain that the data collection instrument has the required validity.

* 1. **Sample Group**

In qualitative research, generalization has not been taken as a point of concern. Thus, not the number of the participants but their expertise has been considered (Kıncal, 2013:64). In this study, decisional sampling method has been employed. In this method, the participants are not selected of random, but their effective expertise is taken into consideration and the sample group is determined accordingly (Coşkun et. al.:2015, 142).

Following this principle, the group has been formed by **15 managers of the human resources** who have had experience at shipping industry for at least five years. In this selection, the views of **two academicians** have been taken. The criteria regarding these academicians have been set as with experience at sea, still employed university and well informed about the human resources personnel at shipping companies since they have been in charge of holding career days at the university.

* 1. **Limitation of the Study**

This research has been formed and based on the data collected from the literature regarding the selection/recruitment of employees at shipping industry and some other fields. The research has been carried out/conducted through the human resource managers with experience of the least five years at shipping companies each of which has at least 100 seafarers employed.

* 1. **Findings of the Study**

14 of the 15 company representatives selected to be the participants have accepted to meet with the researchers. Intentions to contact with 2 of the determined participants have failed as they have had to go abroad because of some unexpected emergency situations arised. The semi-structured interviews have been conducted with the remaining 12 participants. 11 of the participants are graduates from maritime faculties of some universities and 1 is the graduate from a faculty of education.

As for the competencies the participants have, 5 of them are oceangoing ship masters, 4 of them are oceangoing chief officers, but 3 of them have no proficiency certificates. The overall average of sea service of the 12 participants is 6.6 years. The average of the periods the participants have worked for human resource management at the shipping companies is 8.9 years, for each participant the period at the mentioned position is 15.6 years.

The positions the participants have held at their companies are as follows: 8 are human resource managers, 1 vice personnel manager and 1 deck inspector and HSEQ manager under auspices of personnel management.

While preparing the form, semi structured interview form, conducting the interviews, analyzing and evaluating the data, the principles of qualitative research method regarding validity and reliability have been into consideration in Table 1 (Sağlam and Karataş Çetin, 2018:369-370).

Table 1: Rigor of the Study

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| --- | --- |
| **Criteria** | **Actions** |
| **Credibility** | * Before the application of the interview form, the experts were asked to understand the questions and the interviews were prepared as semi-structured. The researcher clarified with additional questions when the difference in interpretation or the problem was found to be misunderstood.
* The coding of the interviews was conducted separately by the researcher and the supervisor and the results were compared. In case of a conflict between codes, a detailed evaluation was made.
 |
| **Transferability** | * In this study, decisional sampling method has been employed. In this method, the participants are not selected of random, but their effective expertise is taken into consideration and the sample group is determined accordingly.
 |
| **Dependability** | * The number of participants was predetermined, and interviews continued until the number of repetitions increased and saturation reached.
 |
| **Confirmability** | * No response was given if the participants asked what the other participants were responding to a particular question. There was also no comment on other participants.
* The findings section consisted of the identified codes and the statements of the participants regarding the codes.
 |
| **Integrity** | * The names of the companies and individuals of the participants are kept confidential.
* Names in the information and documents provided by the participants about other companies or individuals are kept confidential.
* The statements requested to be kept off the record by the participants were not transcribed and not quoted in the findings section.
 |

Source: Wallendorf and Belk (1989); Lincoln and Guba (1985) and was compiled by Sağlam (2018).

The total amount of time spent for the interviews is 431 minutes; and approximately 35.9 minutes for each participant. 9 out of 12 participants have accepted to get recorded, the remaining 3 have rejected. One of them has asked to stop recording while the recorder is on, and recording has been stopped as per his request. Regardless of recording or not recording, careful notes have been taken during all the interviews. The positions and the periods of interview are indicated in Table 2.

**Table 2:** The Positions of the Participants and the Periods of the Interviews

|  |  |  |
| --- | --- | --- |
| **Participant No** | **Positions** | **Duration (min)** |
| P1 | Human Resource Manager | 19 |
| P2 | Human Resource Manager | 55 |
| P3 | Human Resource Manager | 23 |
| P4 | Vice Personnel Manager | 34 |
| P5 | Personnel Manager | 75 |
| P6 | Human Resource Manager | 49 |
| P7 | Human Resource Manager | 18 |
| P8 | HSEQ Manager- Inspector | 30 |
| P9 | Human Resource Manager | 33 |
| P10 | Human Resource Manager | 10 |
| P11 | Vice Human Resource Manager | 45 |
| P12 | Human Resource Manager | 39 |
| **Total Duration** | **431** |

Source: Created by the Author

The interviews have been carried out in the offices or the assembly halls of the participants. The places for the interviews have been found to be proper, and necessary actions/measures have been taken to prevent any disturbance. When it is possible to carry out over three interviews on the same day, the process of the interview has been ended towards the end of the office hours considering the likelihood of fatigue. Each of interviews has started after the rules have been clarified, and the data collected have been content analyzed on return and the key words have been coded, each of which has been given points/marks depending upon the repetition of and/or emphasis on the code. The method of giving points to the codes is indicated in Table 3.

**Table 3:** A Sample for Calculating the Points to Be Given

|  |  |  |
| --- | --- | --- |
| **Type of Expression Code** | **Example** | **The Points Given** |
| Normal Expression/Statement | A watchkeeping officer is to be equipped with the knowledge on navigation and cargo handling. | 1 |
| Strong Expression/Statement | Knowledge on navigation is an important competency for an watchkeeping officer. | 2 |
| Very Strong Expression/Statement | Knowledge on navigation is the most important competency for an watchkeeping officer.  | 3 |

Source: Yıldırım and Şimşek, 2011:228.

The participants first have been asked to **explain the methods used by the companies in employing oceangoing watchkeeping officers**. Grading the responses is indicated in Table 4.

**Table 4:** The Frequency in Repetition and the Weight Points Given Regarding the Employee Recruiting/Selecting Methods used by Shipping Companies

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **W.** | **F.** | **Participants Statements** |
| P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 |
| Pre-evaluation | **2** | **2** |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| English Exam | **18** | **10** | 2 |  | 2 | 1 | 3 | 3 |  | 1 | 1 | 1 | 1 | 3 |
| Vocational Exam | **24** | **12** | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 3 |
| Interview by HR Manager | **27** | **12** | 2 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 1 | 3 |
| Collage Interviews | **2** | **2** |  | 1 |  |  |  |  |  |  |  |  |  | 1 |
| Control on References | **7** | **6** |  | 1 | 1 |  | 1 |  |  | 1 |  |  | 1 | 2 |
| Psychometric Tests | **13** | **9** | 2 | 1 | 3 |  | 1 |  |  | 1 | 1 | 1 | 1 | 2 |
| Department Interview | **15** | **7** |  |  | 3 | 1 | 1 |  |  | 1 |  | 3 | 3 | 3 |
| Training Evaluation | **10** | **4** |  |  |  |  |  | 1 |  |  |  | 3 | 3 | 3 |

Source: Created by the Author

Throughout the employee recruitment process, pre-evaluation has been found to be used by 2 out of 12 companies; English exam has been used by 10 gaining 18 points; vocational exam has been used by all 12 participants, having gained 24 points; interviews by HR departments have been used by all the participants and gained 27 points; interviews at schooling/collage stage have been used by 2, gaining 2 points; references and contacts with previous employers have been used by 6, gaining 7 points; psychometric tests have been used by 9, with 13 points; an additional evaluating by the unit the candidate will be employed at has been used by 9, with 15 points; and including the candidate at a training session where he/she is graded has been used by 4 with 10 points.

**Table 5:** The Frequencies of the Methods Used by the Human Resource Management Departments in Employing Oceangoing Watchkeeping Officers.

|  |  |  |
| --- | --- | --- |
| **The Methods Used** | **Weight Points** | **Frequency** |
| Vocational Exam | 24 | 12 |
| Interview by HR Manager | 27 | 12 |
| English Exam | 18 | 10 |
| Psychometric Tests | 13 | 9 |
| Department Interview | 15 | 7 |
| Control on References | 7 | 6 |
| Training Evaluation | 10 | 4 |
| Pre-evaluation | 2 | 2 |
| Collage Interviews | 2 | 2 |

Source: Created by the Author

The frequencies of the methods used by the human resource management departments that are employing oceangoing watchkeeping officers are indicated in Table 5.

As can be seen in Table 5, vocational exams and interviews by human resources management departments are the most frequently used methods.

The second group of question(s) directed to the participants has been:” **What vocational competencies do you expect to see at an oceangoing watchkeeping officer? And what method(s) do you use to measure/evaluate the expected competencies?”** In Table 6, the frequencies of expressions concerning the vocation-related personnel selection/recruitment criteria are indicated.

**Table 6:** Vocational-Related Criteria Frequently Used in Employing Oceangoing Watchkeeping Officers.

|  |  |  |
| --- | --- | --- |
| **Vocational Employment Criteria** | **Weight Points** | **Frequency** |
|
| Ability to Watchkeeping | 31 | 12 |
| Vocational English | 29 | 12 |
| Safety Related Knowledge and Skill | 28 | 12 |
| Navigation Related Knowledge and Skill | 29 | 11 |
| Cargo Handling Knowledge and Skill | 14 | 8 |
| ISM-Quality Implementation | 12 | 7 |
| Maintenance Related Knowledge and Skill | 14 | 7 |
| International Maritime Conventions Related Knowledge | 10 | 7 |

Source: Created by the Author

Table 6 reveals that in oceangoing watchkeeping officer employment process, the most frequently used vocational criteria are Vocational English. Safety Related Knowledge and Skills, some other frequently used vocational criteria are Cargo Handling Related Knowledge and Skills, ISM-Quality Implementation, Planned Maintenance and International Maritime Conventions Related Knowledge and Skills.

The third set of questions the participants have been asked are: “**What sorts of personnel attitudinal competencies do you expect third oceangoing watchkeeping officers are equipped with? What sorts of measurement methods do you use to measure such competencies**?”

The frequencies of using the general criteria in employing oceangoing watchkeeping officers are indicated in Table 7.

**Table 7:** General Employment Criteria Frequently Used in the Employment of Oceangoing Watchkeeping Officers.

|  |  |  |
| --- | --- | --- |
| **General Employment Criteria** | **Weight Points** | **Frequency** |
|
| Teamwork | 22 | 11 |
| Effective Communication Skills | 19 | 11 |
| Enduring Challenging Situation | 16 | 11 |
| Situational Awareness | 22 | 11 |
| Discipline | 23 | 11 |
| Stress Management | 14 | 9 |
| Emergency Management | 11 | 8 |
| Personnel Management | 10 | 7 |
| Be open to Criticism | 12 | 7 |
| Decision Making | 10 | 6 |

Source: Created by the Author

 Table 7 reveals that the general employment criteria most often used in the employment of oceangoing watchkeeping officers are as follows: **Teamwork, Effective Communication Skills, Enduring Challenging Situation, Situational Awareness, Discipline, Stress Management, Emergency Management, Personnel Management, Be open to Criticism and Decision Making competencies.**

1. **CONCLUSION**

The overall findings of the thorough analyses of the data collected through this study reveals that the methods most often used in employing oceangoing watchkeeping officers are the **vocational exams and the interviews** conducted by the human resource management departments in shipping industry. Though relatively less frequently used, some other methods employed are as follows: **English exam, psychometric tests, interview conducted by the head of the relevant department, considering the references and the vocational background** of the candidates. Some other techniques used by a few of the shipping companies interviewed by means of this study are **school/collage interviews and evaluation through the training stages**. Another worthwhile point revealed is that only one of 12 shipping companies involved in this research is said to have used all the employment process largely mentioned in the relevant literature; and the others have used at least two of the nine employment processes determined through the literature review. Still another considerably important result revealed through this study that the interviews have been found to be the most critical process in making the final decisions about the employment oceangoing watchkeeping officers, and that the other processes act only as filtering complements.

Due to its international characteristics, shipping industry is to get accredited by certain national and international organizations, and this accreditation in same cases imposes extent employment criteria. This research reveals that some shipping companies have used some of imposed methods as they compulsory only.

The inventories used in **vocational exams** and **psychometric tests** mostly seem to have been compiled from those prepared for industries other than shipping industry. A clear need has been revealed for inventories prepared for shipping exclusively. Besides, most of the exams and/or tests used shipping industry seem to have been **prepared by nonexperts** in this particular field. The exams and/or tests to be used in shipping must be based on certain actual experiences and/or sceneries.

Another point noticed during carrying out this study is that most of the shipping companies have human resource management departments that work under the **traditional approaches** (8 out of 12 companies involved in this study could be regarded in this traditional category).

Keeping in mind that the basic source of the marine accidents has been the human errors. Thus, in order to mitigate the harm suffered from these accidents, the education at the institutions offering maritime education must be rearranged accordingly focusing practices more than theoretical crowding.

The last but not the least important point to be underlined herein is that shipping companies must have well-organized and well-equipped human resource management departments in which qualified personnel who are well knowledge about personnel recruitment/employment methods and practices must be employed, and there must be developed a fair and encouraging as well as motivating reward system.

In future studies, these selection criteria should be compared by ship type. And it will be useful to determine the effect of these criteria on the selection decision. In addition, determining the selection criteria for all proficiencies is necessary to establish the competence pool of the maritime profession.

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\* This study was derived from the doctoral thesis titled “Developing Models for Decision Making Process to Be Adopted by Shipowners in Employing Ship Officers” completed by Erdem Kan under the supervision of Asst. Prof. Burak KÖSEOĞLU. [↑](#footnote-ref-2)