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## ANALYSING BURNOUT LEVEL OF SEAFARERS: AN APPLICATION TO TURKISH YACHT MASTERS

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**Abstract.** There is an increasing demand for tourism worldwide. Tourism in many developing and least developed countries is the most viable and sustainable economic development option, and in some countries, it is considered as the main source of foreign exchange earnings. Tourism is an important industry for Turkey and there is a huge potential for marine tourism in Turkey due to the fact that marine tourism comprises a significant and promising field of tourism and there is an increasing potential for marine tourism in Turkey. Hence, coastal and marine tourism can be a major source of growth and employment in Turkey. The number of marinas in Turkey had doubled during the past decade and yachting also became the main component of marine tourism industry. These developments have played a great role in increasing numbers of sailors employed in the yachts. Ideally, every yacht in operation would have an owner and a captain that continuously work in collaboration with each other. However, some unfavorable issues between these parties may occur including problems with a crew member, unexpected maintenance issues, scheduling of yard time, budgets, and other off duty issues. Since yacht master's workload increases dramatically in high season, wide range of psychosocial stressors on board can arise that may also lead to burnout syndrome.

In the light of these, the purpose of this study is to investigate the burnout level of Turkish yacht masters with the conduction of emotional exhaustion (EE) of the Maslach Burnout Inventory (MBI) to assess the respective risks of job-related burnout level. The statistical analysis was carried out by using multiple methods within SPSS software in the study. It is expected that the results of the study provides certain outcomes and guidelines for related organizations dealing with yachting operations as well as suggestions for effective and efficient coordination among the relevant institutions.

**Key words:** Burnout, yacht masters, Burnout Inventory, marine tourism

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## 1 YACHT TOURISM IN TURKEY

Turkey is one of the 10 most important tourist destinations around the world that's why country has more competitive advantages by comparing its competitors. It has different alternatives to attract more tourists and also to get more revenues from world's tourism pie. In the beginning of 21<sup>th</sup> century, people have begun to tend toward some kinds of special interest tourism (Sariisik et al., 2011: 1015).

Yacht tourism, being a part of maritime sector, tends to play a part in the tourist activities and provides important resources for the economy. Realizing the huge potential, the government and private sector are investing heavily in the yacht tourism. A number of new marinas, both private and state, have either been constructed or are under construction (Incaz and Guler, 2000: 232).

Yachting is an excursive, entertaining, restful and sporting type of tourist activity made by both private and commercial types of usually medium sized boats. Yachting differs from cruise tourism by not having a regular transportation between ports, as normally the cruise takes place between bays, gulfs and sheltered areas, which could not be legally classified as harbors (Ergin, 2009). Yacht tourism is composed of private yachting. Private yachts' owners are both local owners and cruiser owners. Local owners moor their own yachts in nearest marina and sail at weekends. Cruiser owners have more convenient time to sail and cruise. Generally they give months to cruise in foreign seas and leave yachts in a marina so as to park for winter. Other groups of yacht tourists are charterers. They rent a yacht or a cabin for certain time from Yacht Charter (Atlay Işık and Cerit, 2008).

The demand of the services supplied by yachts and marinas is different depending on the season of the year. During the summer period, the traffic of leisure crafts increases resulting in higher demand for stay at marinas and ports. On the contrary, during the winter period the demand for shelter increases in order for vessels to be repaired and maintained (Sariisik et al., 2011: 1015).

Yacht crew face with difficulties such as working in extreme hot or cold weather conditions, job stress, and lack of sleep, poor physical conditions and excessive workload that cause burn out syndrome especially in high season. Yacht masters work/rest periods depend on the workload. In high season yacht masters workload increases dramatically due to increased touristic activity (Angelika et al., 2012: 2). Higher workload and stress can cause insomnia and poor sleep quality that are well established risk factors for burnout. Burnout syndrome may manifest by the presence of headache, sleep disturbances, difficulty in concentration, short

temper, upset stomach, job dissatisfaction and low morale (Rengamani and Murugan, 2012: 44). When yacht is on charter or the owner is on board the crew will, in essence, be working 24/7. This is a very common problem in yachting and leads to many great crews leaving the industry before they have reached their goals (Thatcer et al., 2012).

As is characteristically found in various studies, higher levels of stressors (e.g., heavy workload and uncertainty about supervisors' expectations) were associated with physical symptoms, such as headaches, and poor job attitudes (Oldenburg et al., 2013: 408).

## 2 BURNOUT SYNDROME

The burnout concept was first described in the 1970s and it was mainly associated to a reaction on interpersonal stressors on the job (Maslach et al., 2001). Over the past 30 years, there is an increasing interest in burnout both from academics and professionals as its negative impacts on employees have been understood (Halbesleben and Buckley, 2004). Moreover, it has become a growing phenomenon in the workplace context. Burn out concept was basically studied in the context of healthcare, social work, psychotherapy and teaching. According to the most prominent definition of burnout; "it is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach et al., 1996: 4).

Burnout has been related with negative workplace behaviors including increases in sick leave, resignation, alcohol abuse, increases in smoking and coffee consumption, social and economic problems, workplace accidents, low morale and frequent job changes (Bakker et al., 2000; Demerouti et al., 2001; Leiter et al., 2007).

Burnout mainly results from the increasing level of stress that exhausts people to the point where their energy related resources are insufficient to survive the pressure of a situation (Galanakis et al., 2009). According to Freudenberg (1975), syndrome is linked to the degree of commitment of the individual and the frustration experienced by the failure to achieve its objectives. The lack of insufficient feedback often encounters employees contribute to the emergence and development of this syndrome.

## 3 MATERIALS AND METHOD

The purpose of this study is to investigate the burnout level of Turkish yacht masters with the conduction of the Maslach Burnout Inventory (MBI) to assess the

respective risks of job-related burnout level. The statistical analysis was carried out by using multiple methods within SPSS software in the study. It is expected that the results of the study provides certain outcomes and guidelines for related organizations dealing with yachting operations as well as suggestions for effective and efficient coordination among the relevant institutions.

In this study, transversal descriptive study, by applying the Maslach Burnout Inventory (MBI) is conducted. The sample consists of Turkish yacht masters who currently work in the yacht tourism sector. A total of 42 yacht masters participated in the study.

MBI questionnaire with sociodemographic data sheet was used in the study. The MBI measures the dimensions of emotional exhaustion, depersonalization and personal accomplishment, according to which to define the syndrome. This scale has high internal consistency and reliability of nearly 90%, consists of 22 items in the form of statements about feelings and attitudes of the professional in their work and towards patients and its function is to measure burnout (Jimenez et al., 2014: 45).

The emotional exhaustion subscale consists of 9 items that assess experiences emotionally exhausted by the demands of work. The classification of this scale is to statements 1, 2, 3, 6, 8, 13, 14, 16, 20 (Herzberg et al., 1959). The depersonalization subscale consists of 5 items. These items assess the degree to which each recognizes attitudes of coldness and detachment. The classification of this scale is to statements of 5, 10, 11, 15, and 22. The personal accomplishment subscale consists of 8 items. It evaluates the feelings of self-efficacy and personal accomplishment at work. The classification of this scale is to statements of 4, 7, 9, 12, 17, 18, 19, and 21 (Celik et al., 2010). The data were entered in the database and analyzed using Statistical Package for the Social Sciences (SPSS, version 22.0).

Authors own questionnaire construction for the description of demographic and organizational data such as: gender, age, marital status, work experience, education and position. Respondents answer the question of how often they feel in a particular way on a 1–5 scale, where 1 indicates “never,” and 5 means “every time”.

The response categories and their corresponding values for emotional exhaustion, depersonalization and personal accomplishment on the Maslach Burnout Inventory (Maslach et al., 1996) are presented in Table 1.

The MBI scores assigned to each item were totaled and then divided by the total number of items in the subscale, which resulted in an average per subscale. Based on this average, the subscales were divided into high and low. Thus, values above the subscale’s average were classified as high and below the average were

**Table 1** Response Categories for Emotional Exhaustion, Depersonalization and Personal Accomplishment on the Maslach Burnout Inventory

Dimension	High	Moderate	Low
Emotional Exhaustion	27+	17-26	0-16
Depersonalization	13+	7-12	0-6
Personal Accomplishment	0-31	32-38	39+

**Note:** The numerical values for the personal accomplishment subscale are reversed. A score of less than 32 on the personal accomplishment sub-scale indicates a high degree of personal accomplishment.

considered to be low. Additionally, the classifications obtained by each individual on the three subscales were associated. Hence, when this association was concomitantly High Emotional Exhaustion, High Depersonalization and Low Professional Realization, the resident was considered to be experiencing Burnout Syndrome. Cronbach’s Alpha Coefficient was used to analyze the instruments’ internal consistency (Guido et al., 2012).

## 4 RESULTS

The study response rate is of 100%. A total of 42 yacht masters, of which 40 (95,2%) are male and the rest of 2 (4,8%) are female. Yacht masters of age between 26 and 45 comprised the majority of respondents (76,2%) in the study. The respondents who have professional experiences of 11 years or more have the highest rate (69%) of participation among them. In the study most of the yachts (57,1%) fly Turkish flag. The rest of them fly flag from 4 different countries. The distribution of graduates according to respondent’s socio-demographic characteristics is presented in Table 2.

Results are calculated for each of the subscales separately, according to the key. This questionnaire has been validated in Turkish language and achieved the following alpha values for the scales as shown in Table 3.

The internal consistency analysis of the items composing the MBI subscales presented a Cronbach’s alpha of 0.787 for Emotional Exhaustion and 0.572 for Depersonalization and 0.725 for Personal Accomplishment. It is clear that internal consistency values of subscales of this study is satisfactory for the social sciences. On the basis of the reference levels included in the manual for the MBI questionnaire, it may be assumed that, in the group of yacht masters, emotional exhaustion and depersonalization reached their low level but personal accomplishment reached to the high level using

**Table 2** Baseline characteristics of the study population

Characteristic		F	%
Gender	Male	40	95,2
	Female	2	4,8
Age	18-25 years	1	2,4
	26-35 years	16	38,1
	36-45 years	16	38,1
	46 years or more	9	21,4
Marital Status	Married	27	64,3
	Single	12	28,6
	Divorced	3	7,1
Educational Status	Elementary	12	28,6
	Secondary	4	9,5
	High School	15	35,7
	University	10	23,8
Years of Experience	Post Graduate	1	2,4
	1-5 year	5	11,9
	6-10 years	8	19
	11-20 years	14	33,3
Type of Yacht	21 years or more	15	35,7
	Sailing Boat	20	47,6
Nature of Service	Motor Yacht	22	52,4
	Private	25	59,5
Flag	Commercial	17	40,5
	Turkish	24	57,1
Flag	USA	9	21,4
	UK	6	14,3
	Germany	1	2,4
	Malta	2	4,8

Maslach's scale as described in Table 4, Table 5 and Table 6.

There are some significant differences on the level of emotional exhaustion regarding to different age groups as shown in the table. The respondents of age between 26 and 35 experienced lower level of emotional exhaustion and significantly have higher values compared to the group of age of 45 or more. There are no significant differences between age groups on the level of depersonalization and personal accomplishment subscales. The respondents of all age group experienced lower level of personal accomplishment and depersonalization subscales.

There are some significant differences on the level of emotional exhaustion and depersonalization subscales regarding to the work experience of the respondents. The respondents that have 21 years or more work experience reached lower level of emotional exhaustion compared to the respondents who have 6-10 years of work experience and 11-20 years of work experience. The respondents who have 21 years or more work experience have lower level of depersonalization compared to the respondents that have 1-5 years of work experience and 11-20 years of work experience. The respondents who have high 1-5 years of work experience experienced higher level of personal accomplishment.

**Table 3** Internal Consistency and Other Descriptive Findings

Dimension	Items	N	Scale			
			Mean	Variance	Std. Deviation	Alpha ( $\alpha$ )
Emotional Exhaustion	8	42	10,2143	24,904	4,990	0,787
Depersonalization	5	42	3,7381	8,783	2,963	0,572
Personal Accomplishment	9	42	11,1429	25,101	5,010	0,725

**Note:** Emotional Exhaustion: 0-16 = Low, 17-26 = Moderate, >27 = High; Depersonalization: 0-6 = Low, 7-12 = Moderate, >13 = High; Personal Accomplishment: >39 = Low, 32-38 = Moderate, 0-31 = High.

**Table 4** Professional burnout scores in relation to "age"

Dimension	Age	N	Mean	Std. Deviation	F	Sig.
Emotional Exhaustion	18-25	1	7,00	-	3,073	,039
	26-35	16	12,18	2,495		
	36-45	16	10,68	3,747		
	45+	9	6,44	1,313		
Depersonalization	18-25	1	1,00	-	2,698	,059
	26-35	16	6,25	1,855		
	36-45	16	5,00	1,456		
	45+	9	3,98	1,322		
Personal Accomplishment	18-25	1	14,00	-	1,090	,365
	26-35	16	11,20	2,485		
	36-45	16	12,40	2,391		
	45+	9	13,30	3,858		

**Note:** Emotional Exhaustion: 0-16 = Low, 17-26 = Moderate, >27 = High; Depersonalization: 0-6 = Low, 7-12 = Moderate, >13 = High; Personal Accomplishment: >39 = Low, 32-38 = Moderate, 0-31 = High.

**Table 5** Professional burnout scores in relation to “years of experience”

Dimensions	Years of Experience	N	Mean	Std. Deviation	F	Sig.
Emotional Exhaustion	1-5 year	5	11,18	3,112	4,499	0,008
	6-10 years	8	12,37	3,611		
	11-20 years	14	12,36	3,715		
	21 years +	15	9,07	2,385		
Depersonalization	1-5 year	5	6,75	1,223	6,142	0,002
	6-10 years	8	5,41	2,611		
	11-20 years	14	6,56	2,739		
	21 years +	15	3,97	1,611		
Personal Accomplishment	1-5 year	5	8,2	2,388	0,689	0,565
	6-10 years	8	11,4	4,701		
	11-20 years	14	11,0	4,329		
	21 years +	15	11,9	3,687		

**Note:** Emotional Exhaustion: 0-16 = Low, 17-26 = Moderate, >27 = High; Depersonalization: 0-6 = Low, 7-12 = Moderate, >13 = High; Personal Accomplishment: >39 = Low, 32-38 = Moderate, 0-31 = High.

**Table 6** Professional burnout scores in relation to “type of yacht”

Dimensions	Type of yacht	N	Mean	Std. Deviation	F	Sig.
Emotional Exhaustion	Sailing	20	11,00	3,687	0,083	0,531
	Motor yacht	22	11,60	4,570		
Depersonalization	Sailing	20	6,00	3,819	1,522	0,367
	Motor yacht	22	6,68	4,665		
Personal Accomplishment	Sailing	20	6,00	3,667	3,418	0,791
	Motor yacht	22	6,07	4,457		

**Note:** Emotional Exhaustion: 0-16 = Low, 17-26 = Moderate, >27 = High; Depersonalization: 0-6 = Low, 7-12 = Moderate, >13 = High; Personal Accomplishment: >39 = Low, 32-38 = Moderate, 0-31 = High.

**Table 7** Professional burnout scores in relation to “nature of service”

Dimensions	Purpose of Service	N	Mean	Std. Deviation	F	Sig.
Emotional Exhaustion	Private	25	8,75	2,480	0,074	0,788
	Commercial	17	9,25	2,805		
Depersonalization	Private	25	3,75	1,616	0,228	0,635
	Commercial	17	3,29	1,910		
Personal Accomplishment	Private	25	8,25	2,446	3,428	0,071
	Commercial	17	10,55	3,658		

**Note:** Emotional Exhaustion: 0-16 = Low, 17-26 = Moderate, >27 = High; Depersonalization: 0-6 = Low, 7-12 = Moderate, >13 = High; Personal Accomplishment: >39 = Low, 32-38 = Moderate, 0-31 = High.

There are no significant differences regarding to the subscales of burnout inventory between the groups of respondents who employed in the different types of boat. Both groups experienced lower degree of emotional exhaustion and depersonalization subscales but all of the scores were in the range identified by Maslach et al. (1996) as indicative of high personal accomplishment.

There are no significant differences regarding to the subscales of burnout inventory between the groups of different services. According to measurement both group have lower degree of emotional exhaustion and depersonalization and higher degree of high personal accomplishment.

## 5 CONCLUSION

The present study tries to examine the effects of burnout on the yacht masters. Based upon the findings of this study, burnout is not considered as a serious problem for yacht masters. While there are indications that yacht masters are experiencing some level of stress, these stress levels have not reached the point where burnout is a problem. This may be due to the reason that the working conditions, employee-employer relationships and the dynamics of yachting business can be considerably different compared to the other shipping-related industries.

The analysis of data clearly presents that yacht masters at all age group and the age of the yacht master, the years of working experience, type of boat and nature of services are not related to emotional exhaustion and personal accomplishment scores on the Maslach Burnout Inventory. Although the relevant literature supports the existence of burnout syndrome in the yachting business, findings of the study showed that only a limited number of variables were found significant. Significant differences between the level of emotional exhaustion and depersonalization, and work experience was noted. Lower levels of emotional exhaustion were observed in yacht masters with more working experience. Moreover, yacht masters with 21 years or more work experience had lower level of depersonalization compared to the yacht masters with less years of experience. This may be due to the fact that yacht masters with more years of experience may internalize the main responsibilities and the outcomes of their job so that they may perceive the unusual or unexpected incidents with regards to burnout syndrome as acceptable or normal.

This study was conducted to the yacht masters in low season period. For better scientific results this study has to be performed to yacht masters again after high season conditions. Following a busy season, the perceptions of the yacht masters regarding the dimensions of burnout could be different. The same scale employed in this study can be employed for the yacht masters working basically in certain regions such as Mediterranean, Aegean etc. so that the regional differences leading to burnout in yacht masters can be observed as well. Comparative studies can also be conducted between Turkish and foreign yacht masters in order to point out some possible differences or similarities with regards to burnout syndrome and its indicators. Lastly, qualitative studies such as focus groups, in-depth interviews or Delphi research can be employed for understanding the basic determinants of burnout for yacht masters as well as the main parameters for the level of burnout.

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