



Medical Sciences
ISSN: 1308 7312 (NWSAMS)
ID: 2017.12.4.1B0044

Status : Original Study
Received: May 2017
Accepted: October 2017

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DOI	http://dx.doi.org/10.12739/NWSA.2017.12.4.1B0044		
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FACTORS AFFECTING BURNOUT, STRESS MANAGEMENT, AND JOB SATISFACTION OF HEALTH PROFESSIONALS: A COMPARISON OF OCCUPATION GROUPS FROM ISTANBUL

ABSTRACT

The importance of employees with low-burnout tendency, who are highly motivated, satisfied, and healthy, and can cope with stress in a complicated multidisciplinary service sector such as health, is vital. This study covers all healthcare workers and it is aimed at making comparisons in terms of the factors affecting stress management, burnout and job satisfaction in occupational groups. Frequency analysis, independent sample tests, One-way ANOVA and Pearson Correlation Analysis were used for 1237 health professional participants in İstanbul. The results show that the gender is not a significant factor in total burnout tendency rate; but the emotional burnout, personal success, marital status, age, educational background, monthly income and future concerns are effective in sub-dimensional rates. As far as the difference related to occupation is concerned; in all sub-dimensions of the field; nurses; managerial, technical and assistive personnel of health, except doctors, burnout rate has different results and these differences arise from the doctors. As may be expected, doctors' personal accomplishment average is the highest. Among all sub-dimensions the lowest averages of "Emotional Exhaustion" belong to supporting health personnel. In terms of both endogenous and extraneous satisfaction, whereas doctors have the highest average, the lowest average belongs to health support services employees. In terms of security the difference arises from doctors again whereas the highest average of secure approach belongs to doctors and the lowest belongs to health care technicians. The regulations based on the identified factors using the results obtained will ensure prosperity for both patients and healthcare workers.

Keywords: Professional Burn Out, Job Satisfaction, Stress Management, Health Professionals, İstanbul

1. INTRODUCTION

Healthy people only go to hospitals to visit or accompany their relatives or for some tests to take. Whatever the reason is, a hospital visit is a depressing and tense experience and this also affects the workers negatively. Hospital employees are affected in terms of burnout, stress, and job satisfaction. It is impossible not to be affected. It is also important to know which groups in what aspects are affected to what extent, depending on the occupation. Furthermore, as burnout syndrome is investigated, it may reveal effects at

How to Cite:

Güriş, S., Akyurt, N. and Astar, M., (2017). Factors Affecting Burnout, Stress Management, and Job Satisfaction of Health Professionals: A Comparison of Occupation Groups from İstanbul, **Medical Sciences (NWSAMS)**, 12(4):22-35, DOI: 10.12739/NWSA.2017.12.4.1B0044.



different levels in the job satisfaction and stress coping issues of the sub-dimensions. It is clear that burnout is a big problem among the health professionals. Although many studies have been conducted on the job satisfaction and burnout level of doctors, nurses, midwives and other health workers during the past ten years, there has been no study including all the health professionals. In recent years, one of the behavioral issues that the behavioral scientists are interested in is job satisfaction. First mentioned in 1920's, job satisfaction is a notion that has negative or positive impact on the collective office activities, motivation and productivity. The other psychological notion is stress in connection with burnout and job satisfaction factors. Stress is also a state that has a negative impact on the professional life, like burnout and job satisfaction.

2. RESEARCH SIGNIFICANCE

The aim of this study is to investigate the extent and nature of how health professionals (doctors, nurses, administrative staff, technicians and supporting staff) are affected by burnout, stress and their impact on job satisfaction. First defined in 1974 by Hubert Freudenberger, burnout as a result of stress is now a very frequent problem we encounter. Burnout that represents erosion in values, dignity, spirit, and will, and the physical reaction to the demands or danger coming from the extrinsic factors, is more frequently seen in service sector workers. Burnout accompanied by physical and mental fatigue, feeling of low achievement and despair and the stress with subjective reactions are all reflected in the individual's personal life, family life and in particular, his/her career. In the health sector where the human factor is of primary importance, health professionals are one of the groups with highest risk in terms of stress and burnout. The way the health workers cope with the stress they are exposed to in everyday routine, is very important. Workload, need for emotional support, low income, instability in career and feeling of inadequacy due to the innovations in the developing health sector can cause burnout. The effort of the individual to cope with the demands of intrinsic and extrinsic factors in stressful cases is called coping style.

As burnout or job satisfaction is considered, interaction with stress is revealed. Workers with low degrees of satisfaction may have different reactions to a situation they encounter in their working life. Where the health sector is concerned, this situation is of much more importance. The job satisfaction notion was first propounded in 1920's and it means the occupation and pleasurable or positive emotional state resulting from it. When the total quality management began to deal with the human workforce along with health sector quality improvement, the importance of health sector professionals' job satisfaction has emerged. The high importance of individuals' services and responsibilities in health institutions makes the human factor the most important element in the sector. Job satisfaction covers the whole positive attitude of the individuals concerning their working environment and the content of their occupation (Locke, 1976). The content or discontent of employees in terms of their occupation is defined as job satisfaction. Job satisfaction is identified by the compatibility of the individual's characteristics with particularities of the job and the degree of matching or differing individual's standards with the institution's (Luthan, 1998).

Workers' characteristics, expectations and needs are different in one another. Even though they work in the same environment, their working hours and conditions may cause different feelings. The fact that people are positively affected by the work they are responsible,



creating job satisfaction in order to be effective, productive and happy at work. Emotionally, job satisfaction is defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job experience" (Locke, 1976). Individual factors considered in assessing job satisfaction are: Age, gender, marital status, education, term of office, socio-cultural environment and personality. Besides, intense stress reveals the job dissatisfaction with anxiousness at the workplace, conflicts, missing working hours or resigning (Newbury-Birch and Kamali, 2001). The organizational factors consist of; business and its nature, salary, the physical conditions of the workplace and social environment of the establishment. When evaluated from this aspect; it has a huge impact in situations such as organization's labor loss, weakness in the competitive environment, failure to make use of resources (Bernal and *et al.*, 2005). For this reason, in this study it is aimed to examine the demographic reasons why the levels of burnout and job satisfaction differ by the health workers' occupation groups and the stress coping attitudes.

3. METHODOLOGY

The value of highly motivated employees with high job satisfaction and low burnout tendency and healthy workers who can manage stress in such a complicated multidisciplinary service sector as health, is vital. The high morale and job satisfaction of a health worker will make him/her more productive and increase the contentment of the patients with their service. Thus, it is very important to identify health workers' state regarding these three subjects and take precautions accordingly, work for better results, for the well-being of both the health establishment executives and the system. In order to examine the differences related to the occupation groups in terms of health workers in stress coping, burnout trends and job satisfaction status, and later the sub variables affecting these variables, İstanbul hospitals are investigated. Therefore, in this study, planned as a cross-sectional study, workers of 39 hospitals with 50 or more beds each in the province of İstanbul have participated.

Among the survey forms distributed to the workers the response rate was 80.4% with most of them responding via face to face interviews. University students who were given a two weeks training worked voluntarily in data collection. The research team contacted the hospital management and written permission is obtained. The subjects were informed about the aims, utility, and their role by the survey takers. In cases where this was not possible, the workers were required to fill the survey form via e-mail. The collected data was compiled and 124 forms were excluded due to incomplete data. IBM SPSS 21 version was used for the data analysis. Data was collected via survey forms with burnout, stress management and job satisfaction scales administered to these hospitals' workers and 1237 workers' responses were analyzed. The Stress and Coping Attitudes Scale developed by Folkman and Lazarus (1984) in order to identify how people, cope and what strategies they use to cope with a given stressor or an acute event adapted by Şahin *et al.* (1992) is a 4 point Likert-type scale and consists of 30 items. The scale basically measures two stress coping strategies; problem focused-active and emotion focused-passive. These two basic attitudes are categorized in 5 sub-dimensions. Active attitude's sub-dimensions are social support, optimistic approach and self-confident approach. Some of the sub-dimensions of passive attitude are helpless approaches. Cronbach alpha values calculated for the sub-dimensions of the scale support the literature results. The Maslach Burnout Scale developed by Maslach



and Jackson in 1981 with the aim of measuring the burnout that is defined by Freudenberger as a professional danger, was adapted by Ergin (1992). It consists of 22 items and 3 sub-dimensions. These are; emotional exhaustion defined as the most important symptom of burnout, depersonalization and contrarily, personal accomplishment that is defined as the vision of self-sufficiency. In this study, Cronbach alpha values (emotional exhaustion, depersonalization and the vision of self-sufficiency) are respectively; 0.859, 0.752 and 0.760. The Minnesota Satisfaction Questionnaire is a scale developed by Weiss and colleagues (Weiss *et al.*, 1967), consisting of working conditions, creativity, reward and achievement. The scale was translated by Baycan (Baycan, 1985).

It reveals intrinsic and extrinsic satisfaction factors. Intrinsic satisfaction level consists of items such as achievement, appraisal, recognition, the work itself, promotion which tends to identify work's intrinsic quality. These items constitute the job satisfaction related to the personal factors. Extrinsic satisfaction consists of environmental factors such as institutional strategies, management, auditing, working conditions and salary. Prior trials were executed in order to evaluate the intelligibility, validity and reliability of the survey questions and the 8th question from the intrinsic satisfaction section and 13th and 14th questions are removed from the extrinsic section as they decreased the Cronbach alpha values under 0.70. Cronbach alpha values were recalculated after the removal of these questions. The values have been respectively calculated for the intrinsic and extrinsic satisfaction as; 0.863 and 0.798. It is believed that the reason why these questions decreased the Cronbach alpha values is that the survey was conducted in public hospitals and the questions cover promotion, salary and job security domains which are not identified by the institution. The data obtained was considered normally distributed in terms of observation number; mode and parametric tests were applied. First of all Cronbach alpha values, frequency and percentage distributions, supplementary statistics, Independent Sample Test, One-way Anova Test, Pearson correlation analysis were performed.

5. RESULTS

Following symptoms were obtained in the frequency analysis of the demographic properties performed in order to identify the frame of the sample:

Among the health workers consisting the sample, 61% are women 39% are men, 48.6% are single, 46.7% are married and 4.7% are widow/divorced. The distribution of the health workers according to occupational groups is; 11.9% medical doctors, 22.2% nurses, 28.1% health support service employees, 28.2% technicians and 9.5% administrative staff. 70.2% of the health workers stated that they chose their occupation voluntarily, 50% work because of economic reasons and 37.1% have future anxiety. 23.6% work for 10 years or more, 31.2% since between 5-9 years, 45.2% for 5 years and less. We can say that 55% of the health workers work since more than 5 years and have sufficient experience for the facts planned to be studied (Table 1).



Table 1. Frequency analysis of demographic properties

Variable		Number	Percentage
Gender	Female	755	61.00
	Male	482	39.00
Age	Under 20	79	6.40
	btw 20-30	722	58.40
	btw 30-40	300	24.30
	btw 40-50	106	8.60
	btw 50-60	30	2.40
Marital Status	Single	601	48.60
	Married	578	46.70
	Widow/Divorced	58	4.70
Children	Yes	462	37.30
	No	775	62.70
Education	High School	202	16.30
	Health	290	23.40
	Occ. High School	0	0.00
	Occ. College	365	29.50
	University	255	20.60
	Medical Sp.	125	10.10
Years of Service	<5 years	559	45.20
	Btw 5-10 years	386	31.20
	>10 years	292	23.60
Management Duty	Yes	196	15.80
	No	1041	84.20
Occupation	Doctor	147	11.90
	Nurse	275	22.20
	Administrative Staff	118	9.50
	Health Technician	349	28.20
	Health Support Services Staff	348	28.10
Deliberate Choice of Occupation	Yes	868	70.20
	No	369	29.80
Working Reason	Economic	618	50.00
	Likes	359	29.00
	Other	260	21.00
Future Anxiety	Yes	459	37.10
	No	778	62.90

Since the aim of the study was to identify how the demographic characteristics of the health workers vary regarding the sub-dimensions of the level of burnout and stress coping attitudes and how they are affected. The analysis was executed using relevant demographic characteristics and the following results were obtained:

Although gender does not make any difference in terms of coping with stress and job satisfaction scores ($p>0.05$), it does in terms of emotional exhaustion in burnout and personal accomplishment scores ($p<0.05$), whereas the emotional exhaustion average of women ($=20.56$) is lower compared to men ($=21.63$); personal accomplishment average is lower for men ($=19.20$) compared to women ($=19.98$) (Table 2, 3, and 4).

Marital status reveals differences; in the emotional exhaustion and depersonalization sub-dimensions of burnout, in both sub-dimensions of job satisfaction and secure approach and social support sub-dimensions of coping with stress scale sub-dimensions ($p<0.05$). This difference is caused by the married workers in each sub-dimension. The difference in the emotional exhaustion dimension of burnout arises from widow/divorced workers ($=17.56$), in depersonalization it arises from the married ones ($=13.78$). The highest score in depersonalization belong to the married workers. In emotional exhaustion, the lowest score belongs to the widow/divorced



workers. In the scale of coping with stress, marital status makes differences in secure approach, optimistic approach and social support sub-dimensions ($p < 0.05$). As the lowest score in secure approach goes to widow/divorced worker (=10.62) the difference arises from this one. Other individuals have nearly same averages. In optimistic approach the difference arises from the married workers. The highest average belongs to the married worker (=9.21). In social support, as the highest averages are obtained from this group, the difference arises from the widow/divorced workers (=5.81). (Table 2), whereas health workers' reasons to work (score and compulsory/voluntary/other) makes a difference in the sub-dimension of emotional exhaustion of burnout ($p < 0.05$). It is not the case in depersonalization or personal accomplishment. The difference arises from the highest score workers who say they like their profession (=22.75). The working reason makes difference in both sub-dimensions of job satisfaction ($p < 0.05$), in coping with stress, there is difference only in unsecure approach ($p < 0.05$). Whereas the workers who work because they like their profession have higher scores in unsecure approach (=11.37), the intrinsic (=29.37) and extrinsic satisfaction (=15.71) in job satisfaction of the workers who chose the profession because they like it are higher than the others (Table 2 and 3).

Whereas the question "do you have scoreable social problems" creates a difference in all sub dimensions of burn out and job satisfaction ($p < 0.05$), it created differences in all sub-dimensions of coping with stress except for social support ($p < 0.05$). In burnout, the averages of depersonalization (=13.56) and emotional exhaustion (=21.97) and personal accomplishment (=20.25) of the ones without economical problems are higher than the ones who have it. In job satisfaction, the intrinsic (=28.61) and extrinsic (=15.02) satisfaction average of the workers without any economic problems are higher than the ones who have score problems. In the scale of coping with stress, the secure approach (=11.75) and the optimistic approach () of the worker without any score problem are high whereas in unsecure (=11.20) and submissive approaches (=7.40) scores of the workers having economical problems are higher. According to these results in terms of coping with stress, workers having economic problems have tendency to submissive and unsecure approach (Table 2, 3, and 4).

Monthly income shows differences in both scales of job satisfaction, in emotional exhaustion and depersonalization sub-dimensions of burnout, in social support optimistic and secure approaches in coping with stress ($p < 0.05$). In burnout, the average of the workers with 1000 TL or more monthly income (=55.00) is higher than the others' and the difference arises from the workers with an income higher than 1000 TL. In the sub-dimensions, whereas the emotional exhaustion average of workers with an income lower than 1000 TL (=18.93) is lower, depersonalization averages (=12.62) are lower compared to the other levels. Whereas the average of the worker who does not want to mention their income is lower in social support (=4.91), it is higher in the other group of workers who do not want to mention their income in secure approach (=11.92). In the optimistic approach (=9.12) the average of the workers with an income higher than 1000TL is higher. In intrinsic (=24.93) and extrinsic satisfaction (=12.66), the workers with an income lower than 1000TL is lower than the other levels as expected and the difference arises from the workers with an income lower than 1000 TL (Table 2, 3, and 4). Whether the worker has an administrative duty or not makes difference only in the social support sub-dimension of the coping with stress scale



($p < 0.05$). The average of social support of the workers who have administrative duties are lower than the others (=5.18) (Table 4).

Deliberate job choice makes difference in coping with stress scale in all sub-dimensions except submissive approach and social support ($p < 0.05$). Whereas the secure (=11.72), optimistic (=9.03) approach scores of the workers with deliberate job choice are higher; the average of unsecure approach is lower (=10.64). The emotional exhaustion (=21.89), personal accomplishment (=20.07) and depersonalization (=13.49) averages of workers who have deliberately chosen their job are higher. Their job satisfaction in terms of intrinsic (=28.37) and extrinsic (=15.02) view is high (Table 2, 3, and 4). Whereas intrinsic (=29.00) and extrinsic (=15.40) averages of the workers without future concerns is higher, depersonalization (=13.87) and emotional exhaustion averages (=22.56) are significantly higher compared to the ones with future concern. Here, the personal accomplishment averages are higher than expected (=19.98). The unsecure approaches of the ones with future concern (=11.36) are high but optimistic (=9.12) and secure (=11.86) approaches of the workers without future concern are higher (Table 3).

In employment (experience/practice), extrinsic satisfaction, personal accomplishment, secure approach, optimistic approach, unsecure approach and submissive approach make difference ($p < 0.05$). Whereas the personal accomplishment score of the workers who are working for 10 years or more (=20.46) is higher, the same group's extrinsic satisfaction average (=15.10) is higher than the other intervals. Whereas secure (=12.03) and optimistic (=9.31) approaches averages of the workers working for 10 years or more are higher; submissive approach scores are lower (=6.47). In Insecure approach, the average of workers of 5 years or less (=11.14) is higher (Table 3 and 4). In the evaluation in terms of education, both intrinsic (=29.56), and extrinsic satisfaction (=16.54) are higher in specialists compared to the other educational levels. In burnout, education makes the difference ($p < 0.05$). Whereas the emotional exhaustion is higher in workers who answered the education question as "other". Personal accomplishment (=21.28) average is higher in specialists. Secure approach average of specialists is higher than the others and makes a difference, it is lower in insecure approach (=9.96). In the other group, submissive approach workers who gave "normal high school" answer have higher average (=8.02).

As far as the age groups of health workers are concerned, secure and optimistic approaches make the difference ($p < 0.05$). For both sub-dimensions, average of workers 40-50 years old is (=12.38 and =9.83) higher. In burnout scale age groups affect the personal accomplishment average and +50 years old workers' average (=21.76) make the difference. In intrinsic (=30.83) and extrinsic satisfaction (=16.54) the highest average occurs in 40-50 years old workers (Table 2, 3, and 4). Furthermore, in the correlation analysis performed in addition to the results, it was seen that total workload is weakly but meaningfully associated with intrinsic and extrinsic satisfaction, burnout is meaningfully associated with each of its three sub-dimensions; positive with depersonalization and emotional exhaustion and negative with personal accomplishment. In terms of coping with stress, whereas optimistic and secure approaches are meaningfully positively associated, insecure and submissive approaches are in meaningful but negative association (Table 2, 3, and 4).



Table 2. Test results of burn out score

Variable	Total Burn Out Score	Emotional Exhaustion Score	Depersonalization Score	Personal Accomplishment Score
	Mean±SS	Mean±SS	Mean±SS	Mean±SS
Gender				
Female	53.94±12.78	20.56±7.42	13.38±4.41	19.98±5.25
Male	53.85±13.95	21.63±8.08	13.01±4.54	19.20±6.17
	t=0.10 p=0.915	t=2.34 p=0.019	t=1.43 p=0.151	t=2.29 p=0.022
Marital Status				
Single	52.63±13.02	20.29±7.71	12.84±4.57	19.49±5.60
Married	55.82±13.32	22.04±7.59	13.78±4.28	19.98±5.73
Widow/Divorced	48.01±11.60	17.56±6.98	11.86±4.46	18.58±4.88
	F=14.85 p=0.000	F=13.78 p=0.000	F=9.58 p=0.000	F=2.27 p=0.103
Having a child				
Yes	52.55±12.89	20.26±7.54	12.81±4.53	19.47±5.62
No	56.18±13.53	22.18±7.82	13.95±4.26	20.03±5.64
	t=4.69 p=0.000	t=4.26 p=0.000	t=4.38 p=0.000	t=1.70 p=0.089
Education				
Health Occ High School	54.64±13.10	21.39±7.43	13.26±4.53	19.98±5.85
Occ Collage	52.91±12.62	20.69±7.62	12.97±4.50	19.23±5.33
University	55.21±12.84	21.44±7.23	13.71±4.17	20.05±5.35
Medical Sp.	57.28±15.88	22.56±8.58	13.42±4.66	21.28±6.33
High School	50.92±12.60	19.36±7.99	12.95±4.53	8.60±5.64
	F=6.05 p=0.000	F=4.15 p=0.002	F=1.31 p=0.264	F=5.51 p=0.000
Age				
<20 years old	54.26±11.53	20.41±7.13	13.10±4.39	20.74±5.58
20-30 years old	53.25±12.78	20.77±7.66	13.02±4.54	19.45±5.56
30-40 years old	53.84±13.63	20.90±7.81	13.53±4.42	19.40±5.60
40-50 years old	57.07±14.69	22.69±7.80	13.72±4.17	20.65±5.66
50-60 years old	58.16±17.05	22.36±8.22	14.03±4.01	21.76±6.93
	F=2.75 p=0.027	F=1.80 p=0.125	F=1.30 p=0.265	F=2.99 p=0.018
Economic Problems				
Yes	52.18±12.57	20.08±7.50	12.94±4.30	19.16±5.42
No	55.80±13.71	21.97±7.80	13.56±4.62	20.25±5.82
	t=4.83 p=0.000	t=4.35 p=0.000	t=2.44 p=0.015	t=3.42 p=0.001
Monthly Income				
<1000 TL	51.06±12.57	18.93±7.99	12.62±4.72	19.50±5.41
>1000 TL	55.00±13.63	21.81±7.5	13.36±4.42	19.81±5.70
Other	54.84±12.52	21.53±7.27	13.73±4.14	19.57±5.79
	F=10.70 p=0.000	F=16.73 p=0.000	F=4.91 p=0.007	F=0.38 p=0.679
Management Duty				
Yes	52.67±13.98	20.05±8.13	12.71±4.53	19.90±5.60
No	54.14±13.09	21.16±7.61	13.33±4.46	19.64±5.64
	t=1.42 p=0.154	t=1.77 p=0.064	t=1.77 p=0.076	t=0.58 p=0.556
Future Anxiety				
Yes	49.64±11.64	18.31±7.63	12.15±4.66	19.17±5.12
No	56.42±13.33	22.56±7.30	13.87±4.22	19.98±5.90
	t=9.22 p=0.000	t=9.79 p=0.000	t=6.51 p=0.000	t=2.52 p=0.012
Years of Service				
<5 Years	53.25±12.56	20.53±7.41	13.09±4.35	19.63±5.63
5-9 Years	53.19±13.41	20.99±8.02	13.03±4.62	19.16±5.70
>10 Years	56.10±14.18	21.84±7.77	13.78±4.44	20.46±5.50
	F=5.28 p=0.005	F=2.81 p=0.060	F=2.91 p=0.055	F=4.48 p=0.011
Working Reason				
Economic and compulsory reasons	52.89±12.85	20.21±7.72	13.03±4.63	19.64±5.10
I like it	55.82±13.87	22.75±7.39	13.40±4.19	19.66±6.31
Other	53.69±13.0	20.38±7.70	13.49±4.42	19.81±5.87
	F=5.64 p=0.004	F=13.68 p=0.000	F=1.30 p=0.271	F=0.08 p=0.920
Deliberate Choice of Occupation				
Yes	55.47±13.65	21.89±7.68	13.49±4.41	20.07±5.76
No	50.23±11.45	18.84±7.33	12.62±4.52	18.76±5.23
	t=6.45 p=0.000	t=6.47 p=0.000	t=3.14 p=0.002	t=3.76 p=0.000

*Bold symbols indicate significance at the level 5%



Table 3. Test results of job satisfaction score

Variable	Total Job Satisfaction Score Mean±SS	Intrinsic Satisfaction Score Mean±SS	Extrinsic Satisfaction Score Mean±SS
Gender			
Female	41.66±11.95	27.44±7.79	14.21±4.75
Male	41.94±13.05	27.31±8.70	14.62±5.01
	t=0.38 p=0.700	t=0.25 p=0.798	t=1.44 p=0.149
Marital Status			
Single	40.46±12.44	26.71±8.37	13.75±4.79
Married	43.43±11.83	28.32±7.61	15.11±4.76
Widow/Divorced	38.77±15.03	25.24±10.03	13.53±5.50
	F=10.37 p=0.000	F=7.94 p=0.000	F=12.63 p=0.000
Having a child			
Yes	43.54±12.24	26.82±8.22	13.88±4.85
No	40.71±12.36	28.34±7.97	15.20±4.77
	t=3.91 p=0.000	t=3.18 p=0.001	t=4.36 p=0.000
Education			
Health Occ. High School	43.10±10.74	28.42±7.13	14.68±4.32
Occ. Collage	40.87±12.00	26.97±7.86	13.89±4.75
University	41.91±12.43	27.29±7.98	14.62±5.10
Medical Sp.	46.11±13.96	29.56±9.54	16.54±4.80
High School	38.61±13.26	25.44±8.87	13.73±5.03
	F=8.64 p=0.000	F=6.62 p=0.000	F=11.00 p=0.000
Age			
<20 years old	41.15±11.97	27.50±8.04	13.64±4.63
20 - 30 years old	40.97±12.15	26.97±7.90	13.99±4.91
30 - 40 years old	41.65±12.20	27.06±8.33	14.58±4.50
40 - 50 years old	47.38±12.73	30.83±8.25	16.54±4.91
50 - 60 years old	44.06±14.98	28.23±9.89	15.83±5.38
	F=6.62 p=0.000	F=5.48 p=0.000	F=7.827 p=0.000
Economic Problems			
Yes	40.07±12.28	26.28±8.08	13.79±4.91
No	43.63±12.24	28.61±8.06	15.02±4.72
	t=5.10 p=0.000	t=5.06 p=0.000	t= 4.48 p=0.000
Monthly Income			
< 1000 TL	37.59±13.21	24.93±8.77	12.66±5.14
>1000 TL	43.31±11.88	28.36±7.78	14.94±4.69
Other	43.32±11.23	28.11±7.59	15.20±4.31
	F=27.05 p=0.000	F=21.51 p=0.000	F=30.17 p=0.000
Management Duty			
Yes	41.03±14.34	26.48±9.43	14.54±5.50
No	41.91±11.99	27.56±7.8	14.34±4.73
	t=0.80 p=0.422	t=1.49 p=0.136	t=0.47 p=0.637
Future Anxiety			
Yes	37.31±13.05	24.66±8.68	12.64±5.08
No	44.40±11.18	29.00±7.37	15.40±4.41
	t=9.723 p=0.000	t=8.95 p=0.000	t=9.963 p=0.000
Years of Service			
<5 Years	40.97±12.52	27.03±8.23	13.93±4.94
5-9 Years	41.65±11.86	27.18±7.81	14.46±4.70
>10 Years	43.46±12.69	28.35±8.40	15.10±4.83
	F=0.60 p=0.547	F=2.725 p=0.066	F=5.70 p=0.003
Working Reason			
Economic and compulsory reasons	39.65±12.13	26.19±7.90	13.46±4.81
I like it	45.09±12.24	29.37±8.32	15.71±4.50
Other	42.21±12.18	27.51±8.00	14.70±4.98
	F=22.89 p=0.000	F=17.84 p=0.000	F=26.17 p=0.000
Deliberate Choice of Occupation			
Yes	39.65±12.1	26.19±7.90	13.46±4.81
No	45.09±12.24	29.37±8.32	15.71±4.50
	t=6.73 p=0.000	t=5.90 p=0.000	t=7.21 p=0.000

*Bold symbols indicate significance at the level 5%



Table 4. Test results of coping with stress score

Vari-able	Total Coping With Stress Score	Secure App- roach Score	Opti-mistic App- roach Score	Insecure Approach Score	Sub-missive Approach Score	Social Support Approach Score
	Mean±SS	Mean±SS	Mean±SS	Mean±SS	Mean±SS	Mean±SS
Gender						
Female	43.45±7.56	11.56±3.02	8.73±2.62	10.91±3.99	6.99±3.44	5.24±2.01
Male	43.66±7.93	11.38±3.3	9.01±2.79	10.72±4.18	7.28±3.4	5.24±2.19
	t=0.456 p=0.649	t=0.97 p=0.330	t=1.77p=0.076	t=0.80 p=0.422	t=1.45 p=0.145	t=0.01 p=0.998
Marital Status						
Single	43.30±7.77	11.23±3.2	8.53±2.73	10.96±4.06	7.33±3.41	5.30±2.25
Married	43.74±7.61	11.85±2.9	9.21±2.60	10.69±4.05	6.85±3.40	5.12±1.87
Widow/ Di-vorced	43.01±7.99	10.62±3.4	8.31±2.81	11.00±4.2	7.27±3.29	5.81±2.19
	F=0.44 p=0.64	F=8.04 p=0.000	F=10.48 p=0.000	F=0.70 p=0.492	F=2.84 p=0.059	F=3.42 p=0.033
Having a Child						
Yes	43.52±7.50	11.83±3.02	9.11±2.59	10.69±3.96	6.77±3.49	5.09±1.87
No	43.54±7.82	11.29±3.20	8.67±2.64	10.93±4.1	7.30±3.41	5.33±2.19
	t=0.05 p=0.957	t=2.94 p=0.003	t=2.79 p=0.005	t=1.01 p=0.311	t=2.61 p=0.009	t=1.93 p=0.053
Education						
Health Occ High School	44.11±7.88	11.72±3.12	8.94±2.77	10.97±4.02	7.14±3.61	5.33±1.98
Occ Collage	42.76±7.57	11.33±2.94	8.61±2.71	10.76±4.02	6.86±3.21	5.17±2.02
Univer-sity	43.09±7.47	11.55±3.14	9.00±2.39	10.36±4.26	6.84±3.48	5.32±2.12
Medical Sp.	43.13±7.09	12.10±3.20	9.14±2.67	9.96±3.96	6.78±3.48	5.13±2.08
High School	44.91±8.14	11.04±3.43	8.70±2.91	11.93±3.80	8.02±3.43	5.20±2.28
	F=3.25 p=0.012	F=2.77 p=0.026	F=1.51 p=0.194	F=6.14 p=0.000	F=4.71 p=0.001	F=0.42 p=0.791
Age						
<20 years old	44.30±6.73	11.94±2.90	8.55±2.68	11.36±4.10	7.20±3.04	6.77±1.60
20-30 years old	43.26±7.95	11.30±3.18	8.75±2.72	8.75±2.72	7.17±3.48	6.77±2.16
30-40 years old	43.81±7.73	11.47±2.97	8.77±2.65	11.10±4.23	7.20±3.42	6.75±2.09
40-50 years old	44.29±7.08	12.38±3.38	9.83±2.34	10.21±3.69	6.47±3.69	6.61±.81
50-60 years old	42.73±5.41	12.00±3.23	9.00±3.05	9.73±3.40	6.66±3.11	6.66±2.10
	F=0.8 p=0.487	F=3.41 p=0.009	F=4.09 p=0.003	F=1.84 p=0.118	F=1.15 p=0.328	F=0.16 p=0.959
Economic Problems						
Yes	43.76±7.93	11.26±3.1	8.63±2.82	11.20±3.98	7.40±3.47	5.25±2.08
No	43.28±7.43	11.75±3.5	9.06±2.53	10.44±4.12	6.78±3.40	5.23±3.40
	t=1.1 p=0.27	t=2.74 p=0.006	t=2.81 p=0.005	t=3.26 p=0.001	t=3.119 p=0.00	t=0.21 p=0.833
Monthly Income						
<1000 TL	42.84±8.69	10.95±3.66	8.27±2.96	10.95±4.09	7.22±3.60	5.42±2.42
>1000 TL	43.74±7.21	11.61±2.90	9.12±2.58	10.72±4.10	7.00±3.32	5.27±1.96
Other	43.92±7.51	11.92±2.91	8.83±2.49	10.99±3.93	7.25±3.58	4.91±1.86
	F=1.91 p=0.148	F=7.71 p=0.000	F=11.20 p=0.00	F=0.56 p=0.569	F=0.70 p=0.496	F=4.33 p=0.013
Management Duty						
Yes	43.31±7.08	11.30±3.39	8.71±2.76	10.40±3.87	7.33±3.56	5.57±2.17
No	43.57±7.81	11.53±3.10	8.86±2.68	10.92±4.09	7.06±3.43	5.18±2.06
	t=0.44 p=0.685	t=0.95 p=0.342	t=0.72 p=0.469	t=1.65 p=0.099	t=1.00 p=0.315	t=2.42 p=0.015
Future Anxiety						
Yes	43.28±8.34	10.88±3.32	8.35±2.66	11.36±4.13	7.33±3.56	5.37±2.28
No	43.68±7.30	11.86±2.98	9.12±2.67	10.53±3.99	7.06±3.43	5.17±1.95
	t=0.86 p=0.387	t=5.35 p=0.000	t=4.92 p=0.000	t=3.50 p=0.000	t=1.00 p=0.315	t=0.86 p=0.387
Years of Service						
< 5 Years	43.66±7.59	11.37±3.13	8.68±2.65	11.14±4.08	7.31±3.39	5.13±2.18
5-9 Years	43.47±8.18	11.26±3.04	8.70±2.77	10.80±4.17	7.29±3.44	5.40±2.02
>10 Years	43.38±7.27	12.03±3.25	9.31±2.62	10.31±3.80	6.47±3.49	5.23±1.95
	F=0.145 p=0.868	F=5.75 p=0.000	F=6.00 p=0.003	F=4.09 p=0.017	F=6.41 p=0.002	F=1.90 p=0.150
Working Reason						
Econo-mic and com-pulsory reasons	42.92±7.90	11.35±3.28	8.82±2.76	10.64±3.95	6.93±3.31	5.16±2.14
I like it	44.91±7.62	11.82±2.95	8.95±2.65	11.37±4.31	7.41±3.72	5.35±2.11
Other	43.08±7.08	11.38±3.04	8.73±2.51	10.58±3.92	7.09±3.37	5.29±1.89
	F=8.24 p=0.00	F=2.7 p=0.061	F=0.53 p=0.586	F=4.31 p=0.014	t=2.18 p=0.113	t=1.01 p=0.363
Deliberate Choice of Occupation						
Yes	43.64±7.61	11.72±3.05	9.03±2.62	10.64±4.04	7.02±3.45	5.22±1.97
No	43.27±7.92	10.96±3.2	8.38±2.82	11.30±4.09	7.31±3.44	5.30±2.32
	t=0.79 p=0.429	t=3.92 p=0.000	t=3.88 p=0.000	t=2.62 p=0.009	t=1.34 p=0.179	t=0.63 p=0.526

*Bold symbols indicate significance at the level 5%

The results of One Way Anova test applied in order to investigate how the sub-dimensions of the examined scales differ depending on the occupational groups are as follows: (Table 5)



In all the sub-dimensions of burnout, occupational groups make difference ($p < 0.05$). In all the three groups, this arises from the medical doctors. As expected, doctors' personal accomplishment averages are higher than the other groups ($F = 8.387$, $p = 0.000$, $\eta^2 = 21.51$) as emotional exhaustion ($F = 5.923$, $p = 0.000$, $\eta^2 = 23.36$) and depersonalization averages are ($F = 4.995$, $p = 0.001$, $\eta^2 = 14.32$). In all sub-dimensions the lowest averages belong to the healthcare staff. In the job satisfaction scale, the difference arises from the medical doctors ($p < 0.05$). The group with the highest intrinsic satisfaction is doctors ($\eta^2 = 30.37$) and the lowest is observed for health support service providers ($\eta^2 = 26.42$). Also in extrinsic satisfaction, doctors' average ($\eta^2 = 16.85$) is higher and the lowest is observed for health care support service providers ($\eta^2 = 13.46$). Differences in secure approach average arise due to medical doctors ($p < 0.005$). Whereas the highest average in secure approach is observed in doctors ($\eta^2 = 12.22$) the lowest average in unsecure approach is observed for ($\eta^2 = 11.45$) health technicians. In the optimistic and submissive approach averages, occupation is observed as the component which crates the difference ($p < 0.005$). The highest average in optimistic approach is observed in doctors ($\eta^2 = 9.29$) but submissive approach is observed in healthcare staff ($\eta^2 = 7.52$) (Table 5).

Table 5. Differentiation in coping with stress, burn out and job satisfaction according to the occupation

Variable	Doctor	Nurse	Administrative Staff	Healthcare Staff	HSS Staff	F	p
	Mean±SS	Mean±SS	Mean±SS	Mean±SS	Mean±SS		
TTP	59.21±14.79	55.73±13.48	52.76±13.47	51.21±11.4	53.31±13.2	11.56	0
DT	23.36±7.67	21.60±7.58	20.75±8.45	19.91±8.13	20.64±8.13	5.92	0
D	14.32±4.04	13.68±4.47	13.07±4.77	12.55±4.26	13.16±4.62	4.99	0
KB	21.51±5.96	20.45±5.64	18.93±5.82	18.74±5.32	19.50±5.50	8.38	0
TİD	47.23±13.73	42.88±11.26	40.36±15.00	40.94±11.04	39.89±12.27	10.788	0
İD	30.37±9.39	28.17±7.18	26.56±10.00	26.76±7.45	26.42±7.99	7.738	0
DD	16.85±4.71	14.71±4.61	13.79±5.64	14.17±4.34	13.46±4.96	14.069	0
TSP	43.24±7.42	43.93±7.62	42.58±8.02	43.83±7.80	43.36±7.68	0.086	0.48
SG	12.22±3.25	12.21±2.86	11.11±3.43	10.93±3.017	11.31±3.19	9.318	0
SGSİZ	9.86±3.93	10.45±4.19	10.94±4.35	11.45±4.03	10.91±3.85	4.837	0
SB	6.66±3.46	6.70±3.46	7.05±3.53	7.52±3.41	7.20±3.41	2.903	0.02
Sİ	9.29±2.62	9.32±2.52	8.37±2.70	8.44±2.61	8.82±2.85	6.175	0
SS	5.19±1.96	5.22±1.85	5.10±2.41	5.47±2.12	5.10±2.14	1.65	0.15

6. DISCUSSION AND CONCLUSION

Healthcare services, when considered from the both receivers and providers' sides, become much more crucial. Patients going to the hospitals for health problems come in contact with health workers and are in contact with them during this difficult process. When viewed from this aspect, good service is not only provided by just the good treatments but also the mutually productive relations between the patient and the health worker. The patients are in contact with not only medical doctors and nurses but with all health workers during the time they pass in the hospital. For this reason, the psychological condition of the health workers is as important as the quality of the service given to the patients. It has to be underlined that the health condition of the workers as individuals and not just as service providers is also of great importance.

According to the results of the analysis, for the İstanbul sample, gender is not an important factor for these three scales, but marital status, age, education, monthly income and future concerns are. As gender does not create any difference in coping with stress and job satisfaction rates ($p > 0.05$), it causes difference in burnout,



emotional exhaustion and personal success rates ($p < 0.05$). As women health workers' emotional exhaustion rate ($x = 20.56$) is obtained less than the men workers ($x = 2.63$); personal success rate has been obtained ($x = 19.20$) less than the women workers ($x = 19.98$). Though gender does not create difference in coping with stress and job satisfaction rates ($p > 0.05$), in Burke and Weir's study (1978) it is declared that women have more stress than men. In Hisli, Güler (2009) study it is also seen that female gender has direct proportion with stress. In our study, no difference has been determined. As the average rate of emotional exhaustion is high in workers who answered the educational level as "other", personal success rate in doctors has been obtained higher ($= 21.28$). In the study of Terhi Kankaanranta, T. & Nummib, T. (2007) and friends made on doctors it has been determined that the job satisfaction rate is higher. When the differentiation according to the occupation is concerned; in all the sub-dimensions of burnout occupation groups mark the difference and this difference arises from the doctors in all three groups. As expected, medical doctors' personal accomplishment averages are higher than the other groups, emotional exhaustion and depersonalization averages are also high. Among all sub-dimensions the lowest averages belong to the healthcare staff. The group with the highest intrinsic and extrinsic satisfaction is medical doctors, the lowest is observed as health support service providers. In secure approach averages, the difference arises from the medical doctors as they have the highest average. In insecure approach the lowest belongs to the health technicians.

The average of optimistic approach is obtained from the health workers. Submissive approach average is also high in health workers. Furthermore, workers who have deliberately chosen their job and who have no economic problems have unexpectedly more burnout symptoms. The submissive and unsecure approach averages of the workers in terms of stress coping attitude are higher. These two sub-dimensions reveal passive approaches of workers and support the literature. Intrinsic and extrinsic satisfactions, personal accomplishment scores, optimistic and secure approach attitudes are higher. In addition to these results, workers' depersonalization and emotional exhaustion scores are unexpectedly high. Nevertheless, the results reflect that, the workers with future concern adopt unsecure approach in terms of coping with stress. Another important result is the fact that the workers with higher income have higher burnout level. This result is supported by the workers without any economic problems. Marital status causes difference in total burnout rate and also in emotional exhaustion and unresponsiveness sub-dimensions but it does not cause any difference in personal success. Both the emotional exhaustion and unresponsiveness rate of the married workers is found higher regarding other statuses. In the study made by Ilter, statistical difference in the health workers total burnout or sub-dimension rates. In our study, we have indicated that the workers are effected in emotional exhaustion and unresponsiveness as being married and living in İstanbul.

As all the results are considered, we can say that there are various factors affecting burnout, stress coping attitudes and job satisfaction. As far as these factors' negative effects are concerned; a healthcare worker close to burnout, with low job satisfaction and low ability of coping with stress is likely to face problems in his life and it will cross over the service receivers and cause worker-patient satisfaction problems. In this aspect, workers' burnout, job satisfaction and stress management abilities should be considered important besides the administrative, financial and medical decisions and the affective factors should be identified. The benefit to



employees that occurs from identifying and reducing these factors will increase the worker, patient, and consequently system quality. As these results are consulted, the marginal utility provided by the rehabilitation is undeniably important. Burnout and job satisfaction are as important as physical diseases and need to be diagnosed and cured. For example, job satisfaction reveals the general emotional condition of workers whereas burnout reveals the state of depersonalization and emotional exhaustion. Burnout may influence the individual's life in every way; it may cause familial and social problems and also a negative view and attitude against life and consequently mistakes. In this case, the result may be negative for both the health workers and the patients receiving service from them. Besides, studies in the literature reveal the impact of job satisfaction and stress in burnout. In addition to these two emotional conditions, coping with stress along with self-control is of vital importance, for workers of such a critical sector which usually causes the expression of feelings like anger and unhappiness. As far as health is concerned this effect is important not only in terms of employees but also of patients. Therefore, all improvements obtained by evaluating these results will provide a cyclical management of health benefits.

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