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THE RELATIONSHIP BETWEEN EMPLOYEES' DEMOGRAPHIC CHARACTERISTICS AND BURNOUT: THE EXAMPLE OF HEALTHCARE PROFESSIONALS

ÇALIŞANLARIN DEMOGRAFİK ÖZELLİKLERİ İLE TÜKENMİŞLİK ARASINDAKİ İLİŞKİ: SAĞLIK ÇALIŞANLARI ÖRNEĞİ

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Abstract

The aim of this study is to reveal whether there is a difference in burnout levels in terms of demographic characteristics (gender, age and occupational groups) of healthcare professionals. The population of the study consists of 3568 healthcare professionals working in state, university and private hospitals in the city centre of Çanakkale. The sample of the study consists of 307 healthcare professionals working in state, university and private hospitals in Çanakkale, which accepted to participate in the study. Convenience sampling method, which is one of the non-random sampling methods, was used in the study. The data were collected both face-to-face and via internet by using the survey method, and it was tried to reach a high number of participants. Data were collected from 307 employees. Frequency analysis, factor analysis, t test, ANOVA analysis, validity and reliability analysis were performed in the study. "Maslach Burnout Inventory" was used to evaluate the burnout levels of healthcare professionals. According to the results of the study, it has been determined that there is no significant difference in the burnout levels of healthcare professionals in terms of gender and occupational groups concerning demographic characteristics. However, it is seen that there are differences on the burnout levels of healthcare professionals concerning the age variable. It has been revealed that the level of burnout decreases with increasing age, and the risk of experiencing burnout in younger healthcare professional increases.

Keywords: Burnout, doctor, nurse, healthcare professional

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Özet

Çalışmanın amacı sağlık çalışanlarının demografik özellikleri (cinsiyet, yaş ve meslek grupları) açısından tükenmişlik düzeyleri bağlamında fark olup olmadığını ortaya koymaktır. Araştırmanın evrenini Çanakkale il merkezinde bulunan devlet, üniversite ve özel hastanelerde görevli 3568 sağlık çalışanı oluşturmaktadır. Araştırmanın örneklemini, araştırmayı kabul eden Çanakkale ilinde devlet, üniversite ve özel hastanede görevli 307 sağlık çalışanı oluşturmaktadır. Araştırmada tesadüfi olmayan örnekleme yöntemlerinden kolayda örnekleme yöntemi kullanılmıştır. Veriler anket yöntemiyle hem yüz yüze hem de internet üzerinden toplanarak yüksek sayıda katılımcıya ulaşılmaya çalışılmıştır. 307 çalışandan veri toplanmıştır. Araştırmada frekans analizi, faktör analizi, t testi, ANOVA analizi, geçerlilik ve güvenirlilik analizleri yapılmıştır. Sağlık çalışanlarının tükenmişlik düzeyini değerlendirmek için "Maslach Tükenmişlik Ölçeği" kullanılmıştır. Yapılan araştırma sonuçlarına göre, demografik özellikler bağlamında bakıldığında sağlık çalışanlarının cinsiyet değişkeni ve meslek grupları açısından tükenmişlik düzeylerinde anlamlı bir farklılığın olmadığı tespit edilmiştir. Ancak çalışanların yaş değişkeni açısından tükenmişlik düzeylerine bakıldığında farklılıklar olduğu görülmüştür. Yaş ilerledikçe tükenmişlik düzeyinin azaldığını ve daha genç olan sağlık çalışanlarının, tükenmişlik yaşama riskinin arttığı ortaya konulmuştur.

Anahtar Kelimeler: Tükenmişlik, doktor, hemşire, sağlık çalışanı

INTRODUCTION

Burnout is seen in almost every sector in the world and also in our country. One of the sectors where burnout is seen the most is the health sector. After 1980, many health policies in the world have changed with the support of international organizations such as the World Bank, the European Union, the International Monetary Fund and the World Health Organization. These policies were adapted to the field of health until 2002 in order to create a more effective health system in Turkey, but the implementations were insufficient. With the "Health Transformation Program" that came into effect in 2003, innovations were made and the health sector has undergone great changes.

Many factors such as family medicine, general health insurance, public hospitals association, patient rights, e-health applications and pay for performance system have been included in the health system. From this point very important strategies have begun to be implemented for both healthcare professionals and patients (Seçtim, 2019). However, despite all these positive developments, problems continued to arise, especially in the field of human resources. The insufficient number of healthcare professionals in Turkey has led to an increase in the workload, prolonging shifts and working hours. This situation has increased the risk of burnout syndrome, especially for healthcare professionals, and has become an important problem in the field of health.

Low risk of burnout has many personal and organizational advantages. Studies on burnout show that the level of burnout is increasing day by day among healthcare professionals (Shanafelt, 2015; Tunçel et al., 2014). The low level of burnout of healthcare professionals not only improves doctor-patient relations (Passalacqua ve Segrin, 2012) but also increases the level of job satisfaction of employees (Astrom et al., 1990). In addition, from the patient's point of view the quality of patient care is improving (Shannon, 2013), patient satisfaction is increasing (Weng vd., 2011) and medical error rates (malpractice) are decreasing (Shanafelt et al., 2010).

There are many factors that affect the level of burnout of employees. Knowing the personal (gender, age, occupational group, education level and personality traits) and organizational factors (workload, rewarding mechanisms, sense of justice, working time and conditions) of burnout will be helpful in avoiding the syndrom. In other words, knowing which factors affect the level of burnout of employees is of great importance in order to prevent burnout syndrome.

In this study, the burnout levels of healthcare professionals working in public, private and university hospitals in Çanakkale were evaluated. It was examined whether there is a difference in the dimensions of burnout (depersonalization, emotional exhaustion and personal accomplishment) in terms of demographic characteristics of the employees.

CONCEPTUAL FRAMEWORK

Concept of Burnout

Burnout refers to the physical exhaustion, long-term fatigue, feelings of helplessness and hopelessness of people who are exposed to intense emotional demands by working with people (Maslach ve Jackson, 1981: 99). Maslach and Leiter stated that burnout refers to the situation between what people are and what they have to do. Burnout also represents the values, dignity, spirit and erosion of one's will (Maslach and Leiter, 1997, as cited in Schaufeli, 2007: 217).

Maslach and colleagues (1996: 3) defined burnout as “the physical, emotional and psychological reactions of work-related stress on a person”. In this context, physical reactions include low energy, chronic fatigue and weakness. Emotional reactions include depression, helplessness and hopelessness. Psychological reactions, on the other hand, are explained as a person being both anxious and stressed and distancing himself from the colleagues he works with (Maslach and Jackson, 1981). Burnout causes a person to have a negative attitude towards others with increasing emotional exhaustion and a weakening of the sense of achievement (Maslach and Jackson, 1981: 99).

Burnout is considered in three dimensions and so it is defined as a "syndrome of emotional exhaustion, depersonalization and decreased personal accomplishment" that is transmitted to people who communicate and work with other people. Maslach defines burnout as a reaction to chronic emotional tension, a "syndrome of depersonalization, emotional exhaustion and decreased personal accomplishment", which is transmitted to people who communicate with people through work (Maslach et al., 2001: 398).

Maslach and colleagues (1996) have developed the “Maslach Burnout Inventory (MBI)” to measure the level of burnout in different occupational groups that require face-to-face work with people. The three dimensions mentioned above (depersonalization, emotional exhaustion, and decreased personal accomplishment) were included in the scale and employees' burnout levels, the depersonalization they experience towards other people at work, and their own assessments of their achievements were included (Maslach et al., 1996).

The first dimension of burnout is depersonalization. This situation refers to the fact that a person exhibits negative, emotionless, indifferent, apathetic and cynical attitudes towards the individuals he serves (Sürgevil, 2006: 43; Schaufeli and Greenglass, 2001: 501). In addition, depersonalization indicates to an excessive alienation of a person from himself and the world in psychiatry. Employees in this situation do not feel a responsibility towards work and do not have expectations (Schaufeli and Greenglass, 2001: 501). As this situation increases, it is forgotten that people are individuals and they begin to be treated as if they were an object. For example, when this 'cold' behavior of nurses in the health sector is reflected on patients, both the nature of the nursing job disappears and these people stay away from their jobs by avoiding work-related responsibilities (Long, 2014).

Depersonalized nurses’ and other healthcare professionals’ use of derogatory expressions to the patients they serve, addressing the patient with their room number instead of their name, and the use of professional jargon in unnecessary places are the symptoms of this feeling (Cordes and Dougherty, 1993: 623). Lee and Ashforth (1996) report that depersonalization can be a type of reactive and protective actions aimed at preventing an unwanted request or reducing a perceived threat. Depersonalized people believe that it is better to remain indifferent than to be disappointed. In this case, depersonalization is also seen as an attempt to protect oneself from emotional exhaustion (Farmer, 2004: 30).

The second dimension of burnout is emotional exhaustion. This condition refers to the fact that a person's emotional resources are exhausted due to the excessive workload imposed on a person (Maslach et al., 2001: 399). Burnout is also associated with the concept of mental tension, which may be related to tension, anxiety, physical fatigue, somatic complications and insomnia (Rawana, 2001:11).

Emotional exhaustion is usually observed in professions where intense and face-to-face relationships are high, such as at healthcare professionals. Employees are constantly overwhelmed by the emotional demands of other people, both intensely and emotionally. For this reason, the phenomenon of emotional exhaustion arises in response to the situation (Maslach et al., 2001: 399; Schaufeli, 1999: 19). For example, doctors who experience emotional burnout in the health sector state that they are working too hard and that they state that they are of no use to patients anymore. For many doctors, the inability to show compassion caused by emotional exhaustion leads to serious mental problems (Lacy and Chan, 2018: 311).

The biggest characteristic of people who feel emotionally exhausted is the fear of going to work again the next day. Employees refer to different coping methods to combat this situation. One of these measures is to act according to strict rules and principles by minimizing their communication with people (Sürgevil, 2006:43).

The third dimension of burnout is the decrease in personal accomplishment. In this situation the person tends to negatively evaluate the work he does for the individuals he serves. A person believes that he cannot achieve goals along with feelings of inadequacy and poor professional self-confidence (Schaufeli and Greenglass, 2001: 502). For example, a person experiencing depersonalization begins to think negatively about himself as a result of the negative thoughts he experiences about others. In the end, employees who feel that they are unable to progress in their jobs feel guilty. This situation leads to a feeling of not being loved by people and feeling unsuccessful which reduces a person's self-esteem (Maslach and Jackson, 1981: 99-100).

When these three dimensions of burnout are taken into account as a whole, it seems that researchers consider these dimensions sequentially and in relation to each other. Golembiewski and colleagues (1986) argue that burnout begins with depersonalization, progresses to reduced personal accomplishment and finally to emotional exhaustion (as cited in Miller et al., 1988: 251). Leiter and Maslach (1988) suggested that emotional exhaustion is initially directly affected by job demands and resources, while the coping method (depersonalization) and negative self-assessment (reduced personal accomplishment) are indirectly affected by emotional exhaustion.

Leiter (1993) proposed a correction that assumes that work demands and resources are differently related to these three dimensions. According to him emotional exhaustion and personal accomplishment develop separately. In other words, while job demands trigger emotional exhaustion, resources such as community support serve to reduce depersonalization and increase personal accomplishment (as cited in Lee and Ashforth, 1996). In Lee and Ashforth's meta-analysis of 61 studies, Leiter's (1993) hypothesis that the three dimensions are differently related to work and that personal accomplishment develops independently of emotional exhaustion and depersonalization was supported (as cited in Lee and Ashforth, 1996). It is widely used in the academic world that high scores on depersonalization and emotional exhaustion and low scores on personal accomplishment is associated with burnout (Maslach et al., 1996).

Burnout is a syndrome with symptoms and stages. De Hert (2020) separated the symptoms of burnout according to the different stages of burnout in his study. De Hert (2020: 175) shows in his study how burnout begins and which symptoms a person shows in the stage in which he is located.

The first stage begins with the honeymoon stage, which is characterized by a sense of enthusiasm. In the process of time work stress is experienced. If positive coping strategies are not implemented at this stage, there is a high risk of resulting in burnout. The second stage begins with the awareness that some days are more difficult than

others. In addition, this stage reveals common stress symptoms that affect the person emotionally as well as physically by neglecting social life and personal priorities, and makes life limited to working only. Then a chronic stress phase develops, which leads to frustration. At this stage, people experience a feeling of failure and powerlessness while efforts are not yielding any visible results. And so this creates the impression that people are not sufficiently accepted. This situation causes the person to develop a pessimistic perspective in the next stage and to experience burnout by moving away from their social environment. In this phase, the person also experiences physical problems such as severe headaches. Since people cannot see a way out at this stage, they resign and remain indifferent to the situation. The final stage is the habitual burnout phase, where all this sadness, mental and physical fatigue has become chronic (De Hert, 2020: 173-175).

Studies performed on the symptoms of burnout syndrome discuss this symptoms usually in three categories: physical, psychological and behavioral. These factors are described in detail below.

Physical symptoms of burnout include decreased appetite, insomnia, alcohol and drug addiction (Kampfhammer, 2012: 1277), headache, fatigue, indigestion (Hofmann et al., 2010: 29), weight loss, breathing difficulties, skin complaints, coronary heart disease, high cholesterol, loss of energy, depreciation, myogenic pain, backache and nausea (Glass, 1999: 82). Physical symptoms in people who experience burnout syndrome are mild at the beginning. But if it is not diagnosed or not prevented people may encounter persistent colds, general pains, skin and gastrointestinal diseases (Ardıç and Polatcı, 2009: 30).

People who experience burnout show psychological symptoms as well as physical. Some of them are depression, attention deficit, cognitive dysfunction, suicidal tendencies, anxiety (Kampfhammer, 2012: 1277), increased inner restlessness and irritability (Hofmann et al., 2010: 33). In addition, impatience, dissatisfaction, pessimism, hopelessness and a decrease in self-confidence can be listed as other psychological symptoms seen in people experiencing burnout (Ardıç and Polatçı, 2008: 73-74).

In contrast to physical and psychological symptoms, it is easier to detect behavioral symptoms in people experiencing burnout. In this context it is seen that the employee experiencing burnout tends to think of quitting the job, not going to work frequently due to illness (Ardıç and Polatcı, 2008: 74), slowing down the work, low job performance and being constantly late for work (Ardıç ve Polatçı, 2009: 31).

There are many factors affecting the level of burnout of employees, including personal and organizational factors. The individual factors affecting the level of burnout are gender, age, occupational group, education level and personality characteristics. Organizational factors on the other hand can be listed as workload, reward mechanisms, sense of justice, working time and conditions. Knowing which factors affect the level of burnout is of great importance for the protection of employees from this syndrome.

METHODOLOGY

The Purpose, Method and Scale Information of the Study

The aim of this study is to reveal whether there is a difference in burnout levels in terms of demographic characteristics (gender, age and occupational groups) of healthcare professionals. Another aim of the study is to contribute to the literature with the results obtained and to offer suggestions to health professionals and managers. The population of the study consists of healthcare professionals working in state, university and private hospitals in the city centre of Çanakkale. The sample of the study consists of healthcare professionals working in state, university and private hospitals in Çanakkale, which accepted to participate in the study.

Convenience sampling method, which is one of the non-random sampling methods, was used in the study. The convenience sampling method is a fairly widely used technique in

which everyone who answered the survey is included in the sample. The data were collected both face-to-face and via internet by using the survey method, and it was tried to reach a high number of participants. Data were collected from 307 employees. The population of the study consists of 3568 (1782 state hospital, 1600 university hospital and 186 private hostpital) healthcare professionals working in state, university and private hospitals in the city centre of Çanakkale. The study was approved by the Ethics Committee of the Institute of Prostgraduate Education of Çanakkale Onsekiz Mart University (date: 26/01/2021, decision no: 02/42). Frequency analysis, factor analysis, t test, ANOVA analysis, validity and reliability analysis were performed in the study. "

Maslach Burnout Inventory" was used to evaluate the burnout levels of healthcare professionals. This scale consists of 3 dimensions and 22 items in total, including depersonalization, emotional exhaustion and personal accomplishment. It is answered on a 5-point Likert scale ((1 = Never, 2 = Very little, 3 = Sometimes, 4 = Most of the time, 5 = Always). Cronbach's Alpha coefficient for the scale was 0.921. The value is close to 1 which means that the reliability of the scale used in the study is high.

Hypotheses of the Study

Different results have been obtained in the studies conducted on the subject of whether there is a difference between the genders regarding the burnout levels of the participants. Some studies have argued that women's burnout levels are higher than men's (Karsavuran, 2014; Maslach and Jackson, 1981; Kılıç and Aytemiz Seymen, 2011; Cordes and Dougherty, 1993; Dyrbye et al., 2011). The most common opinion in the literature in the context of gender is that women experience more emotional burnout than men (Sağlık-Sen, 2012: 13; Karsavuran, 2014: 153; Maslach and Jackson, 1981: 111; Kılıç and Aytemiz Seymen, 2011: 60; Cordes and Dougherty, 1993: 632).

Dyrbye and colleagues (2011) conducted a study with 1043 female and 6815 male surgeons, and found that women were more exhausted and depressed than men, despite the same working hours. The reasons for this situation were listed as women experiencing conflicts at work, not trusting their spouses about childcare, and women finding their spouses' career a higher priority than their own. Maslach and Jackson (1985) examined the gender differences in occupational groups that work face-to-face with people and found that women have higher levels of emotional burnout and lower levels of personal accomplishment compared to men (as cited in Schaufeli and Greenglass, 2001: 502).

There are also studies in the literature that argue against the widespread view that women experience more emotional burnout than men. In other words, in some studies, it has been shown that male healthcare professionals experience higher emotional burnout than women. In a study conducted by Yakut et al. (2013: 1570) with 314 healthcare professionals in Ankara, the average scores of men were found to be higher than women in all three dimensions of burnout. On the other hand, it is observed in studies that draw attention to the fact that there is no correlation between gender and burnout (Ardıç and Polatçı, 2008). In this context, the following H_1 hypothesis was formed.

H_1 There is a difference in the burnout levels of the participants in terms of the gender variable.

Concerning the age variable Helvacı and Turhan (2013) and Geuenich (2009) found that young people have a lower risk of experiencing burnout compared to older ones. In contrast, Karsavuran (2014), Yakut and colleagues (2013), Ulusoy and colleagues (2012), Sağlık-Sen (2012), Kılıç and Aytemiz Seymen (2011) and Schaufeli and Greenglass (2001) argue that as the age progresses the level of burnout decreases.

Although there are studies that argue that there is no relationship between the age of healthcare professionals and burnout levels (Sayıl et al., 1997; Dikmetaş and Ergin, 2011: 147) there are studies that argue the opposite. Studies have also shown that younger healthcare professionals, whose burnout level decreases with increasing age, have a higher risk of experiencing burnout (Schaufeli and Greenglass, 2001; Ulusoy et al., 2012: 257; Sağlık-Sen, 2012: 14; Yakut et al., 2013: 1570; Kılıç and Aytemiz Seymen,

2011: 60). On the one hand the reason for this situation is that young employees have less experience and people's expectations about their professions are higher in the first years of their working life. On the other hand, the fact that skills of young employees to cope with problems they experience and to find effective solutions are not fully developed (Cordes and Dougherty, 1993: 633-636; Maslach et al., 2001: 409; Schaufeli, 2007: 221).

Williams (1989) concluded that age is negatively related to depersonalization and emotional exhaustion. In other words, younger nurses are more likely to experience burnout than older nurses. Karsavuran (2014:152) supported the above mentioned studies and stated that while the burnout level of the group whose age is between 29 and 39 is very high, those who are over 50 and 64 have the lowest level in terms of burnout.

Concerning personal accomplishment according to Taycan and colleagues (2006) the level of personal accomplishment increases with increasing age. However, in contrast to these studies, Tunçel and colleagues (2014) found that the personal accomplishment score was lower in nurses aged 40 and over compared to younger nurses. Contrary to this information, Geuenich (2009) revealed in a study conducted with 1300 doctors that doctors between the ages of 41 and 55 are more exhausted than those who are younger. Helvacı and Turhan (2013: 64) and) also argue that burnout increases with increasing age. In this context, the following H_2 hypothesis was formed.

H_2 There is a difference in the burnout levels of the participants in terms of the age variable.

It is observed that there are differences in terms of burnout concerning the occupational groups among healthcare professionals. In the study conducted by Ulusoy and colleagues (2012: 257), it was found that the level of depersonalization and emotional exhaustion of hospital managers was lower than that of doctors and nurses, while the level of personal accomplishment of managers was higher.

Karsavuran (2014:154) conducted a study with 244 hospital managers and the results indicated that the burnout levels of head nurses were higher than those of chief physicians. In addition, the personal accomplishment level of doctors was found to be lower than that of nurses. In addition, it has been stated in other studies that nurses experience more depersonalization and emotional burnout than doctors (Sayıl et al., 1997). The reasons for this situation are listed as the fact that nurses have higher workloads, communication difficulties within the team, and lower income levels (Demir, 2004).

Helvacı and Turhan (2013: 64-65) observed in their study that the doctors received the highest scores in terms of depersonalization among healthcare professionals while midwives and nurses had the lowest scores. Although there was no significant difference between occupational groups in terms of emotional exhaution, it was found that doctors had the highest level of emotional exhaution statistically.

Yakut and colleagues (2013: 1570) found that the burnout levels of assistant doctors are higher than other healthcare professionals. Ergin (1996) stated in his study conducted with 7255 healthcare professionals in 28 provinces that the levels of depersonalization and emotional exhaustion of general practitioners and nurses were higher than other healthcare professionals. Egle (2015: 15) expressed in his review the high level of burnout of assistant doctors comparing with specialists. The reason for this result is assumed because of the significant imbalance between the strength they spend mentally and the money they earn. In this context, the following hypothesis H_3 has been formed.

H_3 There are differences in the burnout levels of the participants in terms of their occupations.

Analysis and Findings of the Study

In the study, it was investigated whether the burnout levels of healthcare professionals differ depending on demographic characteristics. In this study, gender, age and occupational groups were used as demographic variables.

The demographic data of the participants of the study are given in Table 1 below. 60.9% (n=187) of the participants were female and 39.1% (n=120) were male. Concerning the age variable, 11.1% (n=34) of the participants were aged betweeen 18-25, 30% (n=92) were aged betweeen 26-34, 21.5% (n=66) were aged betweeen 35-44, 19.9% (n=61) were aged betweeen 45-54, 14.3% (n=44) were aged betweeen 55-64, and 3.2% (n=10) were 65 years or older.

Table 1. *Demographic Characteristics of Study Participants*

Variable	Value	n	%
Gender	Woman	187	60,9
	Man	120	39,1
Age	18-25	34	11,1
	26-34	92	30,0
	35-44	66	21,5
	45-54	61	19,9
	55-64	44	14,3
	65+	10	3,2
Occupational Groups	Manager / Healthcare Manager / Director/ Assistant Manager	2	0,7
	Physician / Specialist / Dentist	109	35,5
	Nurse	109	35,5
	Midwife	38	12,3
	Health Officer	43	14,0
	Health Technician	4	1,3
	Others	2	0,7

Table 1 indicates also that 35.5% (n=109) of the participants consist of Physicians/Specialists /Dentists, 35.5% (n=109) of the participants were Nurses, 12.3% (n=38) of the participants were Midwives, 14% (n=43) of the participants were Health Officers, 1.3% (n=4) of the participants were Health Technicians and 0.7% of the participants worked in other professions.

As seen in Table 2 the Shapiro Wilk test results (<0.001) reveal that the data is not normal distributed. But according to the central limit theorem, if the data is greater than 30, normal distribution conditions are accepted. In this case, parametric tests can be performed (Ak, 2004: 73).

Table 2. *Descriptive Statistics and Normality Tests*

Variable and Dimensions	Mean	Standard Deviation	p*
Burnout Scale	2.76	0.639	<0,001
Depersonalization	2.60	0.654	<0,001
Emotional Exhaution	3.04	0.846	<0,001
Personal Accomplishment	2.55	0.563	<0,001

**Shapiro Wilk testi*

Table 2 above shows the mean values of the burnout scale and its dimensions according to the answers given by the participants. According to these results, it can be said that the participants partially (2.76) experienced burnout. When the sub-dimensions were examined, the answers given to the scale expressions in the depersonalization dimension were determined as 2.60. This shows a low level of burnout. In addition, the average of the answers given to the expressions in the emotional exhaustion dimension was determined as 3.04. It is seen that the highest average among the dimensions is in the dimension of emotional exhaustion. Despite this, it shows that the average participants experience a moderate level of burnout. The average of the answers given to the statements in the personal accomplishment dimension, one of the burnout sub-

dimensions, was determined as 2.55, and this dimension emerges as the lowest burnout dimension.

Validity and Reliability Analysis of Maslach Burnout Inventory

Table 3. *Reliability Analysis*

Factors	Cronbach Alfa Coefficient	p	Cronbach Alfa Coefficient of the Scale	p
Emotional Exhaution	0,902	<0,001		
Depersonalization	0,693	<0,001	0,921	<0,001
Personal Accomplishment	0,714	<0,001		

As seen in Table 3, the Cronbach Alpha coefficient of the burnout scale was calculated as 0.921. If the value is close to 1 it means that the reliability of the scale used in the study is high. Table 3 shows that the validity of the burnout scale was quite high.

Table 4. *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,887
Bartlett's Test of Sphericity	Approx. Chi-Square	5127,536
	df	210
	Sig.	,000

As seen in Table 4, as a result of the validity analysis, the KMO value was found to be 0.887 ($p<0.05$). In addition, it was determined that the data set collected according to Barlett's test (=5127,536, $p<0.001$) was suitable for factor analysis and sample adequacy was achieved.

Factor Analysis

As a result of the factor analysis performed on 22 items in Tables 5 three factor were found explaining the burnout scale (depersonalization, emotional exhaustion and personal accomplishment). The total variance explained was 65.14% (Table 5).

Table 5. *Factor Analysis of Maslach Burnout Inventory*

Dimension	Items	1	2	3
Depersonalization	I feel recipients blame me for some of their problems.	0,785		
	I feel burned out from my work.	0,774		
	I deal very effectively with the problems of my recipients.	0,621		
	I can easily understand how my recipients feel about things.	0,426		
	I feel exhilarated after working closely with my recipients.	0,325		
Emotinal Exhaution	I feel very energetic.		0,852	
	I feel emotionally drained from my work.		0,831	
	I can easily create a relaxed atmosphere with my recipients.		0,818	
	I feel used up at the end of the workday.		0,809	
	I feel fatigued when I get up in the morning and have to face another day on the job.		0,806	
	I feel like I'm at the end of my rope.		0,737	
	I feel frustrated by my job.		0,687	
	I worry that this job is hardening me emotionally.		0,564	
	I have accomplished many worthwhile things in this job.		0,146	

Continuation of Table 5

Dimension	Items	1	2	3
Personal Accomplishment	Working with people all day is really a strain for me.			0,810
	In my work, I deal with emotional problems very calmly.			0,730
	Working with people directly puts too much stress on me.			0,458
	I've become more callous toward people since I took this job.			0,455
	I feel I treat some recipients as if they were impersonal 'objects'.			0,434
	I feel I'm working too hard on my job.			0,324
	I feel I'm positively influencing other people's lives through my work.			0,232
	I don't really care what happens to some recipients.			0,121
	Total Variance %	42,67	12,83	9,64
	Total Variance Explained %	65,14		

As a result of the factor analysis, it was determined that all the items of the burnout scale were in the predicted dimensions (Depersonalization, Emotional Exhaustion and Personal accomplishment) and the factor loads of the items varied between 0.121 and 0.852 (Table 5). Despite the fact that some factor loads go below 0.5, the question has not been raised because the validity of the burnout scale has been proven (Ergin, 1992). While the scores of the factors in the scale were calculated, factor scores were obtained by taking the average of the items.

Hypothesis Tests

Table 6 shows tht burnout levels of the participants according to their gender.

Table 6. Findings Related to Gender Variable

Gender	n	$\bar{x}$	ss	sd	t	p
Man	120	3,3284	,472	305	,893	0,373
Woman	187	3,2807	,445			

T test was performed to determine whether there is a statistical difference between the burnout levels of the participants in terms of gender variable. In Table 6, it is seen that the average response of the participants to the statements was determined as 3.32 for male employees and 3.28 for female employees. According to the results of the T-test, it is observed that there is no statistical difference between the burnout levels of the participants in terms of gender variable. In this context, the H_1 hypothesis was rejected ($t(305)=0.893$, $p>0.05$).

The relationship between the age of the participants and their burnout levels was examined and presented in Table 7.

Table 7. Descriptive Statistics – Age Variable

Age	n	Mean	Standard Deviation	Standard Error	95% Confidence Interval		Min.	Max.
					Lower bound	Upper bound		
18-25	34	3,2674	,56149	,09629	3,0715	3,4633	1,95	18-25
26-34	92	3,2456	,46711	,04870	3,1488	3,3423	2,14	26-34
35-44	66	3,1798	,44116	,05430	3,0713	3,2882	2,23	35-44
45-54	61	3,4255	,44296	,05672	3,3120	3,5389	2,68	45-54
55-64	44	3,4421	,32444	,04891	3,3435	3,5408	2,82	55-64
65+	10	3,2955	,38703	,12239	3,0186	3,5723	2,64	65+
Total	307	3,2994	,45615	,02603	3,2482	3,3506	1,95	Total

According to the information given in Table 7, the average values of all age groups vary between 3.24 and 3.44. The average of the participants between the ages of 26-34 was determined as (3,24), and the lowest average belongs to this age group. The highest average belongs to the participants between the ages of 55-64 (3,44). Tukey test was performed in order to determine the differences between age groups. The results of Anova analysis are given in Table 8 and the results of comparison between groups are given in Table 9.

Table 8. *ANOVA Analysis – Age Variable*

	Sum of squares	df	Mean square	Sig.	Levene's test	df1	df2	Sig.
Between groups	3,113	5	,623					
Within groups	60,557	301	,201	,010	3,591	5	301	,004
Total	63,670	306						

As can be seen in Table 8, one-way variance analysis was performed for differences between group averages ($p<0.05$). H_2 hypothesis was accepted as it was seen that there was a difference between the ages of the participants and their burnout status.

Table 9. *Results of Multiple Comparison Tests – Age Variable*

(I) Age	(J) Age	Mean Difference (I-J)	Standard Error	Sig.	(I) Age	(J) Age	Mean Difference (I-J)	Standard Error	Sig.
	26-34	,02183	,09002	1,000		18-25	,15810	,09600	,568
	35-44	,08763	,09469	,940		26-34	,17993	,07406	,149
18-25	45-54	-,15810	,09600	,568	45-54	35-44	,24573*	,07966	,027
	55-64	-,17477	,10242	,529		55-64	-,01666	,08872	1,000
	65+	-,02807	,16136	1,000		65+	,13003	,15303	,958
	18-25	-,02183	,09002	1,000		18-25	,17477	,10242	,529
	35-44	,06580	,07235	,944		26-34	,19660	,08221	,163
26-34	45-54	-,17993	,07406	,149	55-64	35-44	,26240*	,08730	,034
	55-64	-,19660	,08221	,163		45-54	,01666	,08872	1,000
	65+	-,04990	,14935	,999		65+	,14669	,15713	,938
	18-25	-,08763	,09469	,940		18-25	,02807	,16136	1,000
	26-34	-,06580	,07235	,944		26-34	,04990	,14935	,999
35-44	45-54	-,24573*	,07966	,027	65+	35-44	,11570	,15221	,974
	55-64	-,26240*	,08730	,034		45-54	-,13003	,15303	,958
	65+	-,11570	,15221	,974		55-64	-,14669	,15713	,938

As seen in Table 9, the burnout levels of the participants in the 35-44 age group differ from the participants in the 45-54 age group (p=.027) and the participants in the 55-64 age group (p=.034).

Descriptive statistics regarding the tasks of the participants are shown in Table 10 below.

Table 10. *Descriptive Statistics – Occupational Groups Variable*

Occupational Groups	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval		Occupational Groups	Max.
					Lower bound	Upper bound		
Physician / Specialist / Dentist	109	3,2840	,43056	,04124	3,2022	3,3657	2,23	5,00
Midwife	38	3,2787	,49626	,08050	3,1156	3,4418	2,50	4,59
Patient and elderly care	1	3,9091					3,91	3,91
Nurse	109	3,3215	,45542	,04362	3,2351	3,4080	1,95	5,00
Health Officer	43	3,3499	,48861	,07451	3,1995	3,5003	2,14	3,95
Health Technician	4	2,9659	,35863	,17932	2,3952	3,5366	2,64	3,45
Trainee Midwife	1	2,6818					2,68	2,68
Manager/ Healthcare Manager/ Director/ Assistant Manager	2	2,9091	,12856	,09091	1,7540	4,0642	2,82	3,00
Total	307	3,2994	,45615	,02603	3,2482	3,3506	1,95	5,00

According to the data in Table 10, the average values of all occupational groups range from 2.68 to 3.90. According to this result, the average burnout of the trainee midwife (2.68) is lower than the average burnout of the healthcare professional providing patient and elderly care (3.90). Whether the differences between these averages were statistically significant was determined by the ANOVA test. ANOVA analysis was conducted to determine whether there was a difference between the burnout levels of the participants according to the task variable. These results are listed in Table 11 below.

Table 11. *ANOVA Analysis – Occupational Groups Variable*

	Sum of Squares	df	Mean of Squares	F	Sig.	Levene test	df1	df2	Sig.
Between groups	1,708	5	,244	1,177					
Within groups	61,963	299	,207		,316	1,246	5	299	,287
Total	63,670	306							

As can be seen in Table 11, one-way analysis of variance (ANOVA) was performed for the differences between the group means and the result was $p>0.05$. It is seen that there is no difference between the occupational groups. In this context, the H_3 hypothesis was not accepted.

DISCUSSION AND CONCLUSION

The aim of this study is to reveal whether there is a difference in burnout levels in terms of demographic characteristics (gender, age and occupational groups) of healthcare professionals. Considering the hypotheses established in the context of demographic characteristics, no difference was found in the burnout levels of healthcare professionals in terms of gender (H_1). The results of this study coincide with the study results of Ardıç and Polatçı (2008). However, Karsavuran (2014), Maslach and Jackson (1981), Kılıç and Aytemiz Seymen (2011), Cordes and Dougherty (1993) and Dyrbye and colleagues (2011) argue that women experience burnout more than men.

Differences were found in burnout levels in terms of the age variable (H2). According to this, the burnout levels of middle-aged (35-44) were lower than those of older age (55-64). Helvacı and Turhan (2013) and Geuenich (2009) also found similar findings in their studies. Although there are studies that argue that there is no relationship between the age of healthcare professionals and burnout levels (Sayıl et al., 1997; Dikmetas, and Ergin, 2011) Karsavuran (2014), Yakut and colleagues (2013), Ulusoy and colleagues (2012), Sağlık-Sen (2012), Kılıç and Aytemiz Seymen (2011) and Schaufeli and Greenglass (2001) argue that as the age progresses the level of burnout decreases.

The reason why burnout levels of young healthcare professionals are lower than the elderly ones can be explained as they have just started their profession and are more idealistic. In addition, the fact that middle age is the most productive period in human life and that motivation is higher and fatigue level is lower at these ages compared to later ages also reduces the risk of experiencing burnout. In order to reduce the burnout levels of healthcare professionals who are at an advanced age, as a government policy, these people may be offered the opportunity to work part-time without making a very excessive reduction in salaries.

Finally, no difference was found in terms of burnout levels (H3) in the context of occupational groups. There are very few studies comparing different occupational groups in the field of health, both in Turkey and abroad. When we look at the studies investigating the differences between occupational groups in the context of burnout, contrary to the results of this study, there are studies that found that doctors and nurses are more exhausted than other healthcare professionals (hospital administrators, dentists, pharmacists, health technicians and midwives) (Ergin, 1996; Ulusoy et al. 2012; Helvacı and Turhan, 2013). In other studies, it is seen that nurses experience more burnout than doctors (Karsavuran, 2014; Sayıl et al., 1997).

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