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## THE EFFECTS OF WORK-RELATED AND SOCIO-DEMOGRAPHIC CHARACTERISTICS ON ATTITUDES TOWARDS PROFESSION AND BURNOUT AMONG PHYSIOTHERAPISTS WORKING IN TURKIYE

#### **ORIGINAL ARTICLE**

#### ABSTRACT

**Purpose:** The purpose of this study is to determine the levels of burnout and attitude of physiotherapists towards profession and to examine variables that affect these levels.

**Methods:** The research was conducted on physiotherapists working in different fields between November 2020 and February 2021. Professional attitude levels and burnout levels of physiotherapists were evaluated with "Attitude Scale towards physiotherapists Profession (ASP)" and "Burnout Scale-Short Form (BSSF)", respectively. In addition, socio-demographic information of the physiotherapists; their institution, working days and hours, the physiotherapy field worked; their experience in the physiotherapy field, and perceived income adequacy were recorded. All evaluation forms were prepared electronically with GoogleDocs and delivered to participants via social media and other communication options.

**Results:** A total of 123 physiotherapists participated i this study. BSSF ranged from 1.20 to 6.40, while mean value was  $3.44\pm1.14$ . Mean score of ASP total, professional satisfaction subscale, qualifications required by profession and general concerns about profession was  $133.22\pm13.56$ ;  $71.33\pm8.28$ ;  $37.07\pm3.66$ ;  $24.82\pm3.65$ , respectively. Statistically significant correlations were found between burnout levels of physiotherapists and total score in the scale of attitude towards the profession (r=-0.519, p=0.001), professional satisfaction subscale (r=-0.509, p=0.001), qualifications required by the profession subscale (r=-0.374, p=0.001), profession-related concerns subscale (r=-0.397, p=0.001).

**Conclusions:** It is important to examine attitudes of physiotherapists towards profession and variables that affect these attitudes. Examining variables that cause negative attitudes towards profession can provide rearrangement of these variables in a way that can lead to a positive attitude. This situation may result in an increase in professional success and satisfaction of physiotherapists.

Keywords: Attitude, Burnout, Occupation, Physiotherapist

# TÜRKİYE'DE ÇALIŞAN FİZYOTERAPİSTLERDE İŞ İLE İLGİLİ VE SOSYODEMOGRAFİK ÖZELLİKLERİN MESLEĞE YÖNELİK TUTUM VE TÜKENMİŞLİK DÜZEYİ ÜZERİNDEKİ ETKİSİ

#### ARAŞTIRMA MAKALESİ

#### ÖZ

**Amaç:** Bu çalışmanın amacı, fizyoterapistlerin tükenmişlik düzeylerini ve mesleğe yönelik tutumlarını belirlemek ve bu düzeyleri etkileyen değişkenleri incelemektir.

Yöntem: Araştırma, Kasım 2020 – Şubat 2021 tarihleri arasında farklı alanlarda çalışmakta olan fizyoterapistler üzerinde gerçekleştirildi. Fizyoterapistlerin mesleki tutum düzeyleri "Fizyoterapistlik Mesleğine Yönelik Tutum Ölçeği (FMYTÖ)" ile tükenmişlik düzeyleri ise "Tükenmişlik Ölçeği-Kısa Formu (TÖ-KF)" ile değerlendirilmiştir. Ek olarak, çalışmaya katılan fizyoterapistlerin sosyodemografik bilgileri ile çalışılan kurum, haftalık çalışma günü sayısı, haftalık çalışma saatleri, çalışılan fizyoterapi alanındaki iş deneyimi, algılanan gelir durumu yeterliliği kaydedildi. Tüm değerlendirme formları, elektronik ortamda Google Dokümanlar ile hazırlanmış ve katılımcılara sosyal medya ve diğer iletişim yollarıyla ulaştırılmıştır.

**Sonuçlar:** Çalışmaya toplam 123 fizyoterapist katılmıştır. TÖ-KF 1,20 ila 6,40 puan arasında değişirken ortalama değer 3,44±1,14 idi. FMYTÖ toplam, mesleki memnuniyet alt ölçeği, mesleğin gerektirdiği nitelikler ve mesleğe yönelik genel kaygılar puan ortalamaları sırasıyla 133,22±13,56; 71,33±8,28; 37,07±3,66; 24,82±3,65'tir. Fizyoterapistlerin tükenmişlik düzeyleri ile mesleğe yönelik tutum ölçeği toplam puanı (r=-0,519, p=0,001), mesleki memnuniyet alt ölçeği (r=-0,509, p=0,001), mesleğin gerektirdiği nitelikler alt ölçeği (r=-0,374, p=0,001), mesleğe yönelik genel kaygılar alt ölçeği (r=-0,397, p=0,001) arasında istatistiksel olarak anlamlı korelasyonlar bulunmuştur.

**Tartışma:** Fizyoterapistlerin mesleğe yönelik tutumlarının ve bu tutumları etkileyen değişkenlerin incelenmesi önemlidir. Mesleğe yönelik olumsuz tutuma neden olan değişkenlerin incelenmesi, bu değişkenlerin olumlu tutuma yol açabilecek şekilde yeniden düzenlenmesini sağlayabilir. Bu durum fizyoterapistlerin mesleki başarılarının ve memnuniyetlerinin artmasına neden olabilir.

Anahtar Kelimeler: Tutum, Tükenmişlik, Meslek, Fizyoterapist

#### INTRODUCTION

Physiotherapy is a profession that is related to the promotion of health and well-being in addition to the prevention, treatment, or rehabilitation of human movement disorders or dysfunctions. Physiotherapy is to provide health services for people to develop, maintain and restore maximum motor and functional abilities throughout the life cycle (1).

Healthcare service providers are at risk of burnout. Healthcare professionals such as doctors, occupational therapists, nurses, and in particular physiotherapists are at high risk of burnout because of working in emotionally demanding situations and exposure to the psychological and physical problems of their clients (2).

The condition characterized by physical or emotional exhaustion as a result of prolonged stress or loss of energy is called burnout syndrome. Burnout which is a cause of chronic work-related stress is related to a major public health problem. It can also cause various mental and physical health problems such as burnout syndrome, depression, difficulty to concentrating, back and low-back pain, insomnia, and gastrointestinal disorders (2,3).

Burnout may adversely affect the quality of patient care. Although it is known that burnout has negative effects on professional values such as performance and satisfaction (2), its effect on the attitude towards the profession has not been examined.

The behaviours of individuals who continue the same profession towards their own profession are called professional attitude. All positive and negative professional attitudes of individuals towards their profession affect the satisfaction and success towards the profession (4). Individuals' attitudes towards their profession are usually related to their enjoying and adhering to their profession, being aware of the importance and respectability of their profession in terms of society, and that they have to constantly improve and update themselves professionally (5,6).

The attitudes of physiotherapists and physiotherapy students have been studied in a limited way in some studies (7,8). In addition, many studies have been conducted on the factors that cause or contribute to burnout (2,3,20). On the other hand,

there is a limited number of studies in the literature examining the attitudes of physiotherapists towards their profession (12).

If all healthcare professionals, especially physiotherapists, feel professional burnout, they cannot establish a healthy relationship with their patients and provide them with health care (3). It is important to obtain significant findings by examining professional attitudes and burnout levels, which are important parameters that may affect physiotherapists to enjoy their profession, which has an important place in their daily lives, under healthy conditions, and for a long time. Research on burnout of physiotherapists and associated risk factors is a topical issue in the literature (23).

For these reasons, it is thought that there is a need for a study that examines the attitudes of physiotherapists towards the profession and investigates its relationship with burnout levels. Determining the physiotherapists' attitudes towards their profession and their level of burnout, examining the factors related to the work or sociodemographic characteristics that affect these levels will enable to predict their behaviours in these areas. It is thought that it can contribute to the quality of health services by measuring the levels of attitudes towards the profession and burnout among physiotherapists and taking precautions for the results obtained.

This research aims to examine whether physiotherapists' burnout and attitudes towards their profession differ across their sociodemographic and work-related characteristics. We assume that physiotherapists' burnout and attitudes towards their profession will differ according to their sociodemographic and work-related characteristics.

#### **METHODS**

#### **Participants**

Our research is a cross-sectional study whose population consists of physiotherapists working in Türkiye. The convenience sampling method was used in the research, and the research was carried out on physiotherapists living in Türkiye and working in different fields between November 2020 and February 2021. The professional attitude levels of the

physiotherapists participating in the study were evaluated with the "Attitude Scale towards Physiotherapy Profession" and their burnout levels were evaluated with the "Burnout Scale - Short Form". In addition, sociodemographic information of the physiotherapists participating in the study was recorded.

All evaluation forms in the study were electronically prepared and sent to the participants via social media and other communication channels. The ethics committee approval required for the study was obtained from the Non-Interventional Clinical Research Ethics Committee of Marmara University Faculty of Health Sciences with protocol number 59 dated 10.28.2020.

The Inclusion criteria for the study were to be an active physiotherapist within the borders of the Republic of Türkiye and to participate in the study voluntarily and to answer the questionnaire consistently and fully. Those who did not actively work as physiotherapists, who filled out the questionnaire incompletely or incorrectly, and who did not want to voluntarily participate in our research were excluded from the study.

The sample size was determined by convenience sampling method in order to availability of participants who intends to participate this study voluntarily (22). In addition, the determination of the sample size was based on the study of Horata et al. "Assessment of the Attitudes of the Physiotherapist and Physiotherapist Academicians towards Physiotherapist Profession Who Work in Türkiye" (12). In this study, the "Attitude Scale towards Physiotherapist Profession" score of those working as physiotherapists in a private institution was 135.74±14.22 and the "Attitude Scale towards Physiotherapist Profession" score of those working as a physiotherapist in a public institution was 128.97±21.69. It was calculated to include at least 107 cases in the study with 85% power and an a error coefficient of 0.05. Despite the possibility of repetitive or incomplete answers in the study, the number of cases in the study was increased by 30% to have at least 140 physiotherapists. GPower v.3.1.9.7 program was used to determine the sample size.

#### **Data Collection Tools**

The data of all participants were collected by filling in electronically prepared forms via self-report. Before the electronically prepared forms were filled by the participants, they were asked whether they read the preliminary information on the first page stating the scope and purpose of the study and whether they participated in the study voluntarily. Individuals who voluntarily agreed to participate in the study were able to access the evaluation forms by obtaining their informed consent. It took about 10 to 15 minutes to complete the questionnaire in electronic format on Google Docs. The questionnaire consisted of three different parts in order to evaluate the sociodemographic characteristics, attitudes towards the profession, and burnout levels of participants.

# Work-Related and Socio-Demographic Characteristics Form

Sociodemographic and work-related characteristics of all physiotherapists participating in the study, such as age, gender, educational status, weekly working days and hours, working field and institution, work experience, perceived income adequacy, and perceived professional competence level were questioned.

# The Scale of Attitude towards Physiotherapy Profession

The Scale of Attitude towards Physiotherapy Profession was developed by Turhan et al in 2018. The scale is a valid and reliable assessment tool for evaluating the attitude of physiotherapists towards their profession. The scale, which is a five-point Likert type, consists of 35 items. While the minimum score that can be obtained from the scale is 35, the maximum score that can be obtained is 175. High scores indicate a more positive attitude towards the profession of the participants, while low scores indicate a negative attitude towards the profession. The scale is divided into three different sub-categories "professional satisfaction", "qualifications required by the profession" and "profession-related concerns" (9).

#### **Burnout Scale - Short Form**

The scale, which was developed by Pines and Aronson in 1988 and is a seven-grade classification sys-

tem to measure the physical, emotional, and mental burnout level of individuals, consists of twenty-one items in total. The scale is the second most frequently used measurement tool in the literature to measure professional burnout after the "Maslach Burnout Inventory". Each item of the scale is scored as "1 - never" and "7 - always". The total score of

the scale is found by summing each item's score and dividing it by the number of items. The scale total score takes a minimum of 1 and a maximum of 7 points. As the total score increases, the level of professional burnout increases. Turkish adaptation, validity, and reliability of the scale were carried out by Capri in 2006 (10).

Table 1. Sociodemographic Characteristics of the Physiotherapists Participating in the Study

ariables		Frequency (Percent)
Conde	Female	79 (64.2%)
Gender –	Male	44 (35.8%)
	Bachelor's Degree	85 (69.1%)
Education Status	Master's Degree	29 (23.6%)
_	PhD Degree	9 (7.3%)
	Academic Staff	18 (14.6%)
_	Private Hospital	18 (14.6%)
_	Public/University Hospital	25 (20.3%)
— //Orking Institution —	Special Education and Rehabilitation Centers	28 (22.8%)
orking institution —	Wellness Centers	10 (8.1%)
_	Medical Centers	10 (8.1%)
_	Others (Clubs, free, etc.)	14 (11.4%)
	Cardiopulmonary PT	7 (5.7%)
_	Musculoskeletal/Orthopaedic PT	39 (31.7%)
_	Neurologic PT	27 (22%)
Working Field	Paediatric PT	34 (27.6%)
	Sports PT	8 (6.5%)
_	Others (Geriatrics, Rheumatology, Women's Health, Community Health)	8 (6.5%)
	< 30 hours	15 (12.2%)
	31 - 40 hours	48 (39%)
Working Hours — (per week) —	41 - 50 hours	44 (35.8%)
(per week) —	51 - 60 hours	14 (11.4%)
_	> 60 hours	2 (1.6%)
	1 day	2 (1.6%)
_	2 days	1 (0.8%)
_	3 days	5 (4.1%)
Working Days —	4 days	5 (4.1%)
(per week) —	5 days	69 (56.1%)
_	6 days	37 (30.1%)
_	7 days	4 (3.3%)
	Very Sufficient	6 (4.9%)
Professional	Sufficient	72 (58.5%)
Competence	Moderately Sufficient	38 (30.9%)
Perceived	Insufficient	6 (4.9%)
_	Very Insufficient	1 (0.8%)
	Less Than 1 Year	13 (10.6%)
-	1 - 5 years	67 (54.5%)
Work Experience —	6 - 10 years	28 (22.8%)
_	11 years and above	15 (12.2%)
	Sufficient	17 (13.8%)
Perceived Income —	Partially Sufficient	68 (55.3%)
Status –	Insufficient	38 (30.9%)

## Statistical Analysis

The data obtained in the study were evaluated using the SPSS statistics program version 11.5 (Statistical Package for the Social Sciences Inc; Chicago, IL, ABD) at a 95% confidence interval, at a significance level of p<0.05. Descriptive statistical methods such as mean, standard deviation, percentage, and frequency were used in the study. In addition, minimum and maximum values and 95% confidence intervals were also given.

The conformity of the data to the normal distribution was evaluated with the Shapiro-Wilk Test and normal distribution graphs (histogram plot). Oneway ANOVA test was applied to analyze the difference between groups, as the statistical analysis of the data provided the normal distribution conditions. Tukey's test was performed in the post-hoc analysis section to show the difference between which groups. Pearson Correlation Test was used

to examine the relationship between physiotherapists' attitudes towards the profession and their burnout levels.

#### **RESULTS**

Between November 2020 and February 2021, 140 physiotherapists participated in our study by filling out our questionnaire. The answers of 17 participants were excluded from the study due to the fact that there were repetitive or incomplete answers among the 140 answers that filled out the questionnaire. Finally, the responses of 123 participants were evaluated in the study. Accordingly, 79 of the 123 physiotherapists participating in our study were female (64.2%) and 44 were male (35.8%). The age range of the participants ranged from 22 to 52 years, with a mean of 28.09±4.72 years. Of the 123 physiotherapists who participated in the study, 85 were "bachelor" (69.1%), 29 "master" (23.6%), and 9 "philosophy of doctorate-PhD"

Table 2. The Relationship between Levels of Burnout and Attitudes towards the Profession

			Correlation	
Variables		Mean±SD	Professional Burnout	n
	Professional Burnout	3.44±1.14	-	
	Professional Satisfaction	71.33±8.28	r= -0.509 p= <b>0.001</b> *	123
Subscales of Attitude Towards the Profession	Qualifications Required by the Profession	37.07±3.66	r= -0.374 p= <b>0.001</b> *	
110.033.0.1	Profession-Related Concerns	24.82±3.65	r= -0.397 p= <b>0.001</b> *	-
	Total Score of Attitude Towards the Profession	133.22±13.56	r= -0.519 p= <b>0.001</b> *	

Pearson Correlation Test, p<0.05, SD: Standard Deviation, n: number of participants.

**Table 3.** Investigation of Levels of Professional Burnout and Attitudes towards the Profession by Education Levels of Physiotherapists

	Education Status	n	Mean±SD	%95 Confidence Interval	Min - Max	р
	Bachelor	85	3.62±1.18	[3.36-3.88]	1.40-6.40	
Professional	Master	29	3.16±0.90	[2.81-3.50]	1.40-5.40	- 0.013*
Burnout	PhD	9	2.62±0.95	[1.89-3.35]	1.20-4.20	0.013
	Total	123	3.44±1.14	[3.28-3.64]	1.20-6.40	
Total Score of Attitudes Towards the Profession	Bachelor	85	131.05±14.49	[127.93-134.18]	93-164	
	Master	29	137.82±10.06	[133.99-141.65]	120-163	0.020*
	PhD	9	138.88±9.03	[131.94-145.83]	120-154	- 0.028*
	Total	123	133.22±13.56	[130.80-135.64]	93-164	_

One-Way ANOVA, p<0.05, SD: Standard Deviation, n: number of participants, Min: Minimum, Max: Maximum.

**Table 4.** Investigation of Levels of Professional Burnout and Attitudes towards the Profession by Working Field of Physiotherapists

	Working Field	n	Mean±SD	%95 Confidence Interval	Min - Max	р
	Cardiopulmonary PT	7	2.97±0.82	[2.20-3.73]	2.10-4.20	
	Musculoskeletal/ Orthopaedic PT	39	3.28±1.03	[2.95-3.62]	1.60-6.00	
Professional -	Neurologic PT	27	3.82±1.30	[3.30-4.33]	1.40-6.20	
Burnout	Paediatric PT	34	3.64±1.10	[3.25-4.02]	1.70-6.40	0.121
	Sports PT	8	2.96±1.15	[1.99-3.92]	1.40-4.50	
	Others	8	2.97±1.17	[1.99-3.95]	1.20-4.80	
	Total	123	3.44±1.14	[3.23-3.64]	1.20-6.40	
	Cardiopulmonary PT	7	141.28±16.05	[126.43-156.13]	112-163	· 0.565
Total Score -	Musculoskeletal/ Orthopaedic PT	39	133.12±11.97	[129.24-137.01]	94-150	
of Attitudes	Neurologic PT	27	132.11±14.36	[126.42-137.79]	93-163	
Towards the Profession	Paediatric PT	34	132.00±14.62	[126.89-137.10]	103-164	
	Sports PT	8	137.62±15.82	[124.39-150.85]	118-163	
	Others	8	131.25±8.77	[123.91-138.58]	118-143	
	Total	123	133.22±13.56	[130.80-135.64]	93-164	

One-Way ANOVA, p<0.05, SD: Standard Deviation, n: number of participants, Min: Minimum, Max: Maximum, Others: Geriatrics, Rheumatology, Women Health, Community Health.

(7.3%) degree (Table 1). In addition to this, working field and institution, professional competence perceived, perceived adequacy of income, work experience, and number of working days and hours per week of the physiotherapists participating in the study were examined and presented in Table 1.

While the burnout levels of the physiotherapists participating in the study ranged from 1.20 to 6.40 points, the mean value was 3.44±1.14. The total score on the scale of attitude towards the profession was 133.22±13.56; the mean scores of professional satisfaction subscale, qualifications required by the profession subscale, and profession-related

**Table 5.** Investigation of Levels of Professional Burnout and Attitudes towards the Profession by Working Institute of Physiotherapists

	Working Institute	n	Mean±SD	%95 Confidence Interval	Min - Max	р
	Academic Staff	18	3.01±0.77	[2.62-3.40]	1.70-4.20	
	Private Hospital	18	3.51±1.16	[2.92-4.09]	1.70-6.40	
	Public/University Hospital	25	3.01±1.00	[2.59-3.43]	1.20-5.50	
Professional	Special Education and Rehabilitation Centers	10	4.19±1.09	[3.40-4.97]	2.40-6.00	0.001*
Burnout	Wellness Centers	28	4.01±1.05	[3.60-4.41]	1.90-6.20	0.001
	Medical Centers	10	3.23±1.27	[2.32-4.13]	1.60-5.50	
	Others (Clubs, free, etc.)	14	3.15±1.31	[2.39-3.90]	1.40-5.50	
	Total	123	3.44±1.14	[3.23-3.64]	1.20-6.40	
	Academic Staff	18	138.83±10.62	[133.55-144.11]	120-163	
	Private Hospital	18	133.94±10.40	[128.77-139.11]	107-149	
	Public/University Hospital	25	130.88±13.89	[125.14-136.61]	94-155	
Total Score of Attitudes Towards the Profession	Special Education and Rehabilitation Centers	10	131.90±12.65	[122.84-140.95]	122-163	0.205
	Wellness Centers	28	129.07±16.66	[122.61-135.53]	93-164	0.205
	Medical Centers	10	133.80±11.48	[125.58-142.01]	118-156	
	Others (Clubs, free, etc.)	14	138.14±13.49	[130.35-145.95]	118-163	
	Total	123	133.22±13.56	[130.80-135.64]	93-164	

One-Way ANOVA, p<0.05, SD: Standard Deviation, n: number of participants, Min: Minimum, Max: Maximum.

**Table 6.** Investigation of Levels of Professional Burnout and Attitudes towards the Profession by Work Experience of Physiotherapists

	Work Experience	n	Mean±SD	%95 Confidence Interval	Min - Max	р
	Less Than 1 Year	13	3.78±1.30	[2.99-4.57]	1.60-6.20	
56	1 - 5 years	67	3.47±1.07	[3.21-3.73]	1.40-6.00	- - 0.520 -
Professional Burnout	6 - 10 years	28	3.35±1.27	[2.86-3.85]	1.20-6.40	
Burnout	11 years and above	15	3.16±1.08	[2.56-3.75]	1.90-6.20	
	Total	123	3.44±1.14	[3.23-3.64]	1.20-6.40	
	Less Than 1 Year	13	134.00±13.98	[125.55-142.44]	114-155	- - 0.936
Total Score	1 - 5 years	67	133.70±12.80	[130.57-136.82]	104-164	
of Attitudes Towards the Profession	6 - 10 years	28	131.82±14.36	[126.25-137.39]	94-163	
	11 years and above	15	133.06±16.06	[124.17-141.96]	93-154	
	Total	123	133.22±13.56	[130.80-135.64]	93-164	-

One-Way ANOVA, p<0.05, SD: Standard Deviation, n: number of participants, Min: Minimum, Max: Maximum.

**Table 7.** Investigation of Levels of Professional Burnout and Attitudes towards the Profession by Perceived Income Status of Physiotherapists

	Perceived Income Status	n	Mean±SD	%95 Confidence Interval	Min - Max	р
	Sufficient	17	2.42±0.82	[1.99-2.84]	1.20-3.50	_
Professional	Partially Sufficient	68	3.34±1.01	[3.09-3.58]	1.40-6.20	- 0.001*
Burnout	Insufficient	38	4.08±1.12	[3.71-4.45]	2.30-6.40	0.001
	Total	123	3.44±1.14	[3.23-3.64]	1.20-6.40	
Total Score	Sufficient	17	140.41±11.42	[134.53-146.28]	123-163	
of Attitudes Towards the Profession	Partially Sufficient	68	134.11±14.11	[130.70-137.53]	93-164	0.005*
	Insufficient	38	128.42±11.84	[124.52-132.31]	94-148	- 0.006*
	Total	123	133.22±13.56	[130.80-135.64]	93-164	_

 $One-Way\ ANOVA,\ p<0.05,\ SD:\ Standard\ Deviation,\ n:\ number\ of\ participants,\ Min:\ Minimum,\ Max:\ Maximum.$ 

concerns subscale were  $71.33\pm8.28$ ,  $37.07\pm3.66$ ,  $24.82\pm3.65$ , respectively (Table 2). There are statistically significant correlations between burnout levels of physiotherapists participating in the study and total score in the scale of attitude towards the profession (r=-0.519, p=0.001), professional satisfaction subscale (r=-0.509, p=0.001), qualifications required by the profession subscale (r=-0.374, p=0.001), profession-related concerns subscale (r=-0.397, p=0.001) (Table 2).

When the levels of burnout and attitudes towards the profession are examined according to education status, working field and institution, work experience, and perceived income status of physiotherapists participating in the study. According to the education status of physiotherapists participating in the study, a statistically significant difference was found in the burnout level (p=0.013) and the total score on the scale of attitude towards the profession (p=0.028) (Table 3).

According to the Tukey Test result, which was an-

alyzed to determine the source of the difference, physiotherapists with a bachelor's degree had higher burnout scores than those with a PhD degree. Physiotherapists with a master's degree had a higher score in terms of total score on the scale of attitude towards the profession compared to those with a bachelor's degree. According to the working field of physiotherapists participating in the study, no statistically significant difference was found in the burnout level (p=0.121) and total score on the scale of attitude towards the profession (p=0.565) (Table 4). According to the working institution of physiotherapists participating in the study, a statistically difference was found in the values of burnout level (p=0.001) (Table 5).

According to the Tukey Test result, which was analyzed to determine the source of the difference, the physiotherapists working in the special education and rehabilitation center had higher burnout scores than those working as academic staff at the university and those working in the public/univer-

sity hospital. According to the work experience of the physiotherapists participating in the study, no statistically significant difference was found in the burnout level (p=0.520) and the total score on the scale of attitude towards the profession (p=0.936) (Table 6). According to the perceived income status of the physiotherapists participating in the study, a statistically significant difference was found between the level of burnout (p=0.001) and the total score on the scale of attitude towards the profession (p=0.006) (Table 7). According to the Tukey Test result, which was analyzed to determine the source of the difference, those with low perceived income status had a higher burnout score than those with partially sufficient and sufficient perceived income status. In addition, those with sufficient perceived income status had a higher total score on the scale of attitude towards the profession than those with insufficient perceived income status.

### **DISCUSSION**

Professional burnout syndrome is a condition characterized by fatigue, which can lead to negative behaviours and attitudes towards one's self, work, and colleagues, reduce occupational satisfaction and work efficiency, and is called occupational burnout syndrome. All of the common behaviours that people working in the same profession develop towards their jobs are called professional attitudes. Physiotherapists, one of the most important occupational groups working in the field of health, spend most of their day in their professional lives (11,12).

It is important to obtain significant findings by examining the professional attitudes and burnout levels, which are important parameters that may affect physiotherapists to enjoy their profession, which has an important place in their daily lives, under healthy conditions and for a long time. Therefore, in this study, it was investigated whether having different education statuses and working experience among physiotherapists affect their levels of burnout and attitudes towards the profession.

When the sociodemographic characteristics of the physiotherapists participating in our study were examined, it was seen that they were similar to the literature. In a study by Şimşek et al. examining the burnout level of physiotherapists, 61% of the 114

physiotherapists included in the study were female and 39% were male (13). In another study by Tiğli et al., examining the burnout level of physiotherapists, approximately 62% of the 90 physiotherapists included in the study were women; the mean age of these physiotherapists was 27.56 years (14). When the education status of the physiotherapists included in this study are examined (14), it is seen that the physiotherapists who have bachelor's degree are the most in number and the physiotherapists who have PhD degree are the least, which is similar to the data in our study.

Among the physiotherapists included in our study, as the institution they work; academic staff at university, public or private hospital, private education and rehabilitation center, wellness center, medical center, other for those who work independently or in sport clubs were asked to choose one of options. The physiotherapists included in our study were approximately equally distributed among these options, and the highest distribution was special education and rehabilitation centers with 28 physiotherapists, the least distributions were in wellness or medical centers with 10 physiotherapists in each. In another study examining the burnout levels of physiotherapists, the distributions in terms of the institute where the physiotherapists worked were approximately similar to our study (15).

While many studies have been conducted examining the burnout levels of physiotherapists working in Türkiye (11,13,14,16), only one study examining the attitudes towards the profession among physiotherapists has been found (12). Controversy results have been encountered in studies examining the burnout levels of physiotherapists in the literature. The main reason for these controversial results can be shown as the use of different scales to measure the burnout levels of physiotherapists in the studies and dividing the status of physiotherapists included in the study into subgroups in different ways, not with standard methods.

While the Masclach Burnout Inventory was generally used to assess the level of burnout in studies in the literature (17,18), we used the Burnout Scale - Short Form, which is a relatively new, rapid, and easy scale to fill, in contrast to the literature.

In a study examining the burnout levels of occu-

pational therapists working in the public sector in Türkiye (19), the level of burnout was measured using the Burnout Scale - Short Form, which we also used in our study, which was developed by Pines and Aronsson and translated into Turkish by Çapri et al. The burnout level of the physiotherapists included in our study  $(3.44\pm1.14)$  and the burnout levels of the occupational therapists working in the public sector in the study  $(3.39\pm0.91)$  conducted by Abaoğlu et al. are similar (19).

In a study examining burnout levels in physiotherapists by Pustulka-Piwnik et al., it was concluded that physiotherapists working in hospitals have higher emotional exhaustion levels (20). Among the physiotherapists included in our study, those working in special education and rehabilitation center had higher burnout levels than those working in university as academic staff or working in public/university hospitals. We attribute the main reason for this situation to the fact that physiotherapists working in special education and rehabilitation centers in Türkiye do not have a job guarantee compared to those working in public and academic environments, and their salaries are relatively low.

According to the findings of our study, institutions where physiotherapists work do not statistically affect their level of attitude towards the profession. On the other hand, in parallel with their burnout levels, physiotherapists with the highest scores of attitude towards the profession were the physiotherapists working as academic staff at the university, while the lowest score belonged to those working in special education and rehabilitation center.

In a study by Corrado et al that investigated burnout syndromes of Italian physiotherapists (21), male and young physiotherapists were more prone to develop high levels of desensitization compared to their female and more experienced colleagues. In our study, unlike this study, the level of burnout did not differ according to gender and age. According to the results of our study, the field in which the physiotherapists work and their work experiences are not among the factors that significantly affect the levels of burnout and attitudes towards the profession of physiotherapists. Although the findings show that the work experience of physiotherapists does not significantly affect the level of

professional burnout, it is reported that the time spent in the profession reduces the level of burnout proportionally, contrary to expectations. This is one of the important findings of our study. In our study, the highest burnout level belonged to physiotherapists with less than 1 year experience, while the lowest burnout level belonged to physiotherapists who had worked for more than 11 years. We associate the main reason why the level of burnout in the profession is higher in relatively inexperienced physiotherapists with reasons such as job anxiety, low salary, inadequacy in the profession, and new lifestyle after graduation. Although there was no statistically significant difference in the levels of attitude towards the profession, the highest score belonged to the physiotherapists who worked less than 1 year. We basically attribute this situation to the decrease in the level of attitude towards the profession with the increase in professional experience.

Unlike the studies in the literature, in our study, burnout and attitudes towards the profession of physiotherapists were also examined according to their working fields. Although there was no statistical difference between physiotherapists working in different fields in terms of burnout and attitude towards the profession, the physiotherapists with the highest burnout score and lowest score in the level of attitude towards the profession were those working in the neurological and paediatric fields. The fact that physiotherapists working in both of these fields work with their patients relatively longer compared to other fields and their patients' functional disability levels are considered to be the main reasons for this situation. As a matter of fact, it is known that the feeling of burnout can easily develop in the health sector where long-term care services are provided (3).

According to the results of our study, the levels of burnout and attitude towards the profession are affected by the education level of physiotherapists. Physiotherapists who have bachelor's degree had higher burnout levels than those who have PhD degree. Physiotherapists who have bachelor's degree had a lower score for the level of attitude towards the profession compared to physiotherapists with postgraduate education who had master's or doctorate degrees. We attribute the reason for this sit-

uation to the fact that while the physiotherapists at the doctoral level participating in our study have the opportunity to find a job easily under better working conditions in various institutions such as universities and research centers in our country, especially the academic staff, the physiotherapists at the graduate level, on the contrary, have job anxiety.

One of the important findings obtained in our study was that the perceived income levels of physiotherapists were an important parameter that affected the score of attitude towards the profession in addition to occupational burnout. Accordingly, while those with insufficient perceived income had a higher burnout score than those with partially sufficient and sufficient income, those with sufficient income had a higher occupational attitude score than those with insufficient income. The data we obtained in our study are as expected and it is thought that with the improvement of the income level of physiotherapists, more positive results will be obtained in terms of level of burnout and attitude towards the profession.

While the burnout levels of the physiotherapists included in our study were 3.44±1.14 points, the total score of the attitude scale towards the profession was 133.22±13.56 points. There is a moderately statistically significant correlation between the levels of burnout and the total score of the scale of attitude towards the profession of the physiotherapists participating in the study. This relationship between the level of burnout and the attitude towards the profession is expected and acceptable. This result shows that the burnout level of physiotherapists is one of the important factors that can change their attitudes and behaviours towards their profession. There is only one study in which we can compare the findings obtained from our study with the studies conducted in the literature in terms of the level of attitude towards the profession of physiotherapists working in Türkiye. The total score of the attitude scale towards the profession of 200 physiotherapists included in a study conducted by Taşvuran-Horata et al. was 133.94±6.72. In this study, it was reported that there was a moderate positive relationship between professional attitude and job satisfaction (12). Any study investigating the relationship between the level of burnout and

the score of attitude towards the profession has not been found in the literature. Therefore, this finding of our study may shed light on future studies. However, there is also one more study which we may compare our results investigating the relationship between burnout and professional attitude. In this study by Rodriguez-Nogueira et al (24), it was found that higher levels of burnout are associated with lower levels of empathy. So if we equate empathy with professional attitude, we interpreted that we had the similar results.

In our study, unlike the studies in the literature in terms of studies examining the burnout levels of physiotherapists, working field and perceived professional competence, and perceived income status were also questioned. In terms of examining these parameters, which play an important role in the professional lives of physiotherapists, our study has the potential to shed light on future studies.

There are some limitations of our study. The most important of these limitations was that the physiotherapists were not distributed homogeneously to all groups in equal numbers. For example, while 8 physiotherapists working in the field of sports participated in the study; 34 physiotherapists working in the paediatric field took part in the study. Another important limitation was the number of physiotherapists included in our study. Although a power analysis was conducted regarding our study, considering the number of physiotherapists working in Türkiye, it is thought that the number of 140 physiotherapists who filled out the questions in the study was not sufficient. In addition, conducting the research online may have caused bias in sample selection.

In conclusion, a moderately statistically significant correlation between the levels of burnout and the total score of the scale of attitude towards the profession of the physiotherapists participating in this study. This result shows that the burnout level of physiotherapists is one of the important factors that can change their attitudes and behaviours towards their profession.

The findings of this study show that while the levels of burnout are affected by the education status, working institute, and perceived income status of the physiotherapists, the levels of attitude towards

the profession are affected by the education status and perceived income status of the physiotherapists.

This study was carried out to contribute to the understanding of the burnout syndrome experienced by physiotherapists working in Türkiye and the factors that affect and do not affect the level of professional attitude they have. The results from this study can be useful for not only physiotherapists but also other health professionals to deliver high-quality health care service. More research is needed with physiotherapists working in various settings to gain an understanding of the factors that promote burnout and attitude towards the profession.

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