BURNOUT AMONG UNIVERSITY ACADEMICIANS: AN EMPIRICAL STUDY ON THE UNIVERSITIES OF TURKEY

ÖĞRETİM ELEMANLARINDA TÜKENMİŞLİK: TÜRKİYE'DEKİ ÜNİVERSİTELERDE AMPİRİK BİR ÇALIŞMA

Boran TOKER

Akdeniz University School of Tourism and Hotel Management borantoker@akdeniz.edu.tr

ABSTRACT: The purpose of this study is to examine the levels of burnout among university academicians in Turkey and to investigate the effects of demographics on levels of burnout among university academicians. A questionnaire-based study was conducted on 648 academicians working in the Universities of Turkey. Data were collected using a Turkish version of the Maslach Burnout Inventory. The burnout levels of the university academicians were found to be average. The results indicated that research assistants reported a higher level of emotional exhaustion than professors. On the other hand, research assistants indicated a higher level of depersonalization than associate professors, and research assistants reported a lower level of personal accomplishments than other academicians. Nevertheless, among the demographic variables, marital status, and age were significantly related to job burnout. Gender was not significantly related to burnout.

Keywords: Burnout; University teacher; Turkey; Maslach Burnout Inventory

JEL Classifications: I23; L84; M12

ÖZET: Bu çalışmanın amacı, Türkiye'deki üniversite öğretim elemanlarının tükenmişlik düzeylerinin incelenmesi ve demografik değişkenlerin öğretim elemanlarının tükenmişlik düzeylerine olan etkilerinin değerlendirilmesidir. Anket tekniğinin kullanıldığı çalışma, Türkiye'deki üniversitelerde çalışan 648 akademisyen üzerinde gerçekleştirilmiştir. Veriler, Maslach Tükenmişlik Ölçeği'nin Türkçe versiyonu kullanılarak elde edilmiştir. Öğretim elemanlarının tükenmişliğinin orta düzeyde olduğu saptanmıştır. Sonuçlar, araştırma görevlilerinin profesörlerden daha yüksek duygusal tükenmişlik puanlarına sahip olduklarını göstermiştir. Diğer yandan, araştırma görevlilerinin doçentlerden daha yüksek düzeyde duyarsızlaşma ve diğer akademisyenlerden daha düşük düzeyde kişisel başarım puanlarına sahip oldukları görülmüştür. Bununla birlikte, demografik değişkenler içinde medeni durum ve yaş, mesleki tükenmişlik ile anlamlı bir ilişkiye sahiptir. Cinsiyetin ise tükenmişlik ile anlamlı bir ilişkisi bulunmamaktadır.

Anahtar Kelimeler: Tükenmişlik, Öğretim elemanı, Türkiye, Maslach Tükenmişlik Ölçeği

1. Introduction

Burnout is a work-related syndrome that stems from an individual's perception of the instability between demands and resources over a long period of time. It is usually characterized by apathy, detachment, and indifference in interpersonal relations, and feelings of emotional exhaustion related to a lack of psychic resources and helplessness (Ozdemir, 2006: 693). Burnout, caused by the cumulative effect of the

stressful working environment, that exceeds the coping capability of the staff, is a state which forces the employee to become introverted. In this state, the person is "burned out" not only physically but also socially and psychologically (Çam, 2001: 201).

The issue of burnout was introduced to the scientific community and the public in the 1970s and acquired extensive research attention (Ozdemir, 2006: 694). Many studies have revealed the importance of staff burnout relating to productivity, working efficacy and absenteeism, dissatisfaction, turnover, illness casualties and psychopathology, in addition to an important deterioration produced in social and family relationships (Dick and Wagner, 2001: 243-259; Garcia et al., 2005: 929-940; Maslach, 1976: 16-22; Sethi et al., 1999: 5-13).

Decreasing energy, power and resources in the presence of excessive demands associated with burnout is of interest to individuals and organizations (Wu et al., 2007: 234). Burnout is explained in all organizations (Golembiewski et al., 1998: 59-65) and costs businesses as much as \$200 billion annually in the United States in terms of moderate productivity (Smith, 1999: 31-32). Specifically, Freudenberger (1977) and Maslach and Pines (1979) documented the stress-included phenomenon known as burnout present in members of the helping professions, such as education, health, and social services (as cited in Ozdemir, 2006: 694).

Burnout is regarded as a serious problem among teachers (Van Horn et al., 1997: 372). Blandford (2000) stated that teachers' burnout can affect their job performance by decreasing the quality of teaching, which in turn influences children's academic achievement (as cited in Koustelios and Tsigilis, 2005: 190). Schwab (1986) listed a number of reasons for the continuing interest in the phenomenon of teachers' burnout. Among these was the fact that teachers are in contact with a large proportion of society and that teaching is considered as a key profession to solve social problems (as cited in Çam, 2001: 201).

2. Theoretical Background

The term burnout was first used among health workers by Freudenberger (1974). Freudenberger (1980) identified burnout as a "state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected reward" (as cited in Tsigilis et al., 2004: 666-667). A widespread perception of burnout is that it is a "state of physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding" (Harrison, 1999: 25). Burnout is a work-related syndrome that most often influences human-service professionals (Togia, 2005: 130). An operational definition, though, burnout is a prolonged response to chronic emotional and interpersonal stressors at work, and is defined by the three dimensions of emotional exhaustion, depersonalization and loss of a sense of personal accomplishment (Maslach et al., 2001: 397). Emotional exhaustion, the central dimension of burnout, is characterized by a feeling that one's emotional resources are used up. Depersonalization refers to a cynical, callous and detached attitude toward clients, co-workers and organization. The third dimension of burnout, decreased personal accomplishment, is marked by a sense of ineffectiveness and inadequacy in relation to job performance accompanied by negative self-evaluation (Togia, 2005: 130).

Factors that lead to burnout have been detailed and discussed in the relevant literature (Cordes and Dougherty, 1993: 621-656; Harrington et al., 2001: 1-16; MacDougall, 2000: 14; Maslach, and Leiter, 1999: 50-53; Tyler, 1999: 34-40; Zbar, 1999: 46). Burnout exists when too much workload, lack of personal control, inadequate rewards, breakdown of the working community, shortage of fairness or conflicting values (Maslach and Leiter, 1999: 50-53). Besides, role stress, role conflict, and workload as antecedents of burnout were revealed by Lee and Ashforth (1996). Furthermore, burnout is hypothesized to be associated with both unmet job conditions and one's personal expectations (Jackson et al., 1986: 630-640).

Burnout has been mainly observed in individuals whose professional demands include both a high sense of ideals and a high degree of interaction with other people, for instance medical staff and especially teachers (Evers et al., 2005: 35-46). Burnout is a concern of many educators and is frequently caused by high levels of prolonged stress related to excessive time pressure, weak relationships with colleagues, large classes, lack of resources, fear of violence, isolation, behavioural problems of students, role ambiguity, role conflict, limited promotional opportunities, lack of support and lack of participation in decision-making (Abel and Sewell, 1999: 287-293; Brissie et al., 1988: 106-112; Fimian and Blanton, 1987: 157-165; Friedman, 1991: 325-333; Friedman, 1995: 281-289). Nevertheless, as mentioned by Lamude and Scudder (1992), the effects of burnout are personal, and differ from one person to another depending on their access to social and emotional support. Some teachers prefer to leave the profession and find another job. Teachers who do not have an opportunity to start a new career, however, become exhausted due to the challenges they face every day and become incapable of delivering services (as cited in Ozdemir, 2006: 694).

University academicians are not exempt from problems associated with burnout (Lackritz, 2004: 714). Harrison's (1999) descriptions profile many issues and characteristics that universities deal with on a regular basis, including "pressures, conflicts, demands, and too few emotional rewards, accomplishments, and successes". In his study he discusses unrealistic goals and expectations set for people without their input, and frustrations in achieving professional growth. University academicians are potential candidates for burnout syndrome due to their relationships with large numbers of students, personnel and administrators. In addition to this, university academicians with higher levels of burnout are more likely to consider job changes (Blix et al., 1994: 157-159).

Blix et al. (1994) revealed that burnout positively correlated with stress, productivity, and health problems but negatively correlated with job satisfaction. Job burnout in university faculty members showed significant correlations with numbers of students taught, time invested in various activities, and numerical student evaluations (Lackritz, 2004: 713). Singh et al. (1998) found a negative relationship between research burnout and both intrinsic motivation to do research and job satisfaction, with the other relationship stronger for untenured faculty than tenured faculty. In their study was found a positive relationship between perceived lack of research rewards and research burnout and this relationship was stronger for tenured faculty than untenured faculty (as cited in Lackritz, 2004: 714). Çam (2001) also found that the most significant predictor of EE was work-setting satisfaction, of DP was job pressure, and of PA was job satisfaction in nursing education settings in Turkey.

A previous study related to burnout in a university performed by Neidle (1984) revealed that burnout is not a problem reserved for the end of a long career, but may be encountered at different intervals throughout the career continuum. Gmelch et al. (1984) revealed that faculty reported similar degrees of stress associated with the teaching, research, and service functions, with teaching as the most stressful activity. Seiler and Pearson (1985) asserted that a serious consequence of burnout is the consideration of job change. Richard and Krieshok (1989) found significant interaction between gender and rank on predicted strain scores. Blix and Lee (1991) found that there was an association between misfit and consideration to change jobs for university administrators.

There have been several burnout studies in Turkey, however very few of them are about the university academicians in general and most of these studies have been applied in limited samples. For example, Budak and Sürgevil (2005) determined the burnout levels of 185 academic staff in one faculty. Ardıç and Polatcı (2008) identified the burnout levels of academic staff in one public university, and evaluated the relationship between some variables of academic staff's burnout level. Eker and Anbar (2008) measured the levels of burnout among academicians and investigated the factors that affect burnout levels of 160 academicians that have been working in accounting and finance sub-department in faculties of economics and administrative sciences in 78 public and foundation universities in Turkey. Gezer et al. (2009) determined the burnout levels of academicians of one High School of Physical Education and Sports, and its relation to personal and vocational features. Gürbüz et al. (2007) also determined the burnout situations of 108 lecturers working at three public universities. Cavus et al. (2007) analyzed the burnout levels of 79 lecturers in three Vocational High Schools. Özkanal and Arıkan (2010) investigated burnout among the 28 instructors working at one university's preparatory school and found out what factors affect their levels of burnout. Aktuğ et al. (2006) determined the burnout of physicians in medical faculty of one university and its relation to socio-demographic features. Tümkaya (2006) investigated the relationship between university faculty's gender, age, academic position, and working environment with their burnout levels at 283 full-time faculties working at one public university. On the other hand, Bilge (2006) examined the relationships between burnout and job satisfaction of academics along with other related factors in 194 academics. Serinkan and Bardakcı (2009) also explored the factors influencing job satisfaction, levels of burnout and levels of job satisfaction of the academicians of one university. Bilici et al. (1998) investigated if there is an association between the level of burnout, sociodemographic factors and depression, and measured the level of burnout in 160 academicians who work in five faculties in one university.

3. Methodology

3.1. Participants and Procedure

This study was executed in three basic stages: sampling, data collection, and data analysis. Sampling design and sample size are significant subjects to statistically represent the population and to be able to suggest implications in both theory and practice. There were 94 state and 31 foundation universities, and 96.105 academicians in Turkey at the research time. 13.8% of these academicians were professors, 7% were associate professors, 18.5% were assistant professors, 14.4% were instructors, 7.1% were lecturers, 3% were specialists, and 36.1% were research assistants in Turkey. The

survey was sent as a web page link to 7 state and 1 foundation universities randomly chosen from 7 regions in Turkey. Surveys were sent to all academicians in every department at these universities and completed anonymously. Numbers of academicians sent e-mail were 7196 and response rate was 9% with a valid number of 648 academicians, including instructors, research assistants, and professors. The number of the sample population was adequate for research (Sekaran, 2000). The survey was carried out between June and October 2008.

The socio-demographic details of respondents are given in Table 1. There was not much difference in gender: 50.6% of the respondents were female and 49.4% were male. Concerning age of the respondents, 35.1% were between 31-40 years, 30.7% were between 21-30 years, 23.2% were between 41-50 years, and 8.5% were between 51-60 years. Only 2.5% of the respondents were 61 and over years of age. 64.3% of the respondents were married, 29.5% were single and 6.2% were divorced or widowed. Distribution of the academic title of the respondents was as follows: 35.9% research assistants, 20.6% were assistant professors, 16.9% were instructors, 13.9% were professors, 10.1% were associated professors, and 2.6% were specialists and lecturers.

Table 1. Demographic Profile of the Respondents

	N	%
Gender		
Female	321	50.6
Male	314	49.4
Age		
21-30	198	30.7
31-40	227	35.1
41-50	150	23.2
51-60	55	8.5
61 and over	16	2.5
Marital Status		
Married	414	64.3
Single	190	29.5
Divorced/Widowed	40	6.2
Academic Title		
Professor	90	13.9
Associate professor	65	10.1
Assistant professor	133	20.6
Instructor	109	16.9
Research assistant	232	35.9
Lecturer	4	0.6
Specialist	13	2.0

3.2. Measures

The Maslach Burnout Inventory (MBI) is the most widely accepted and frequently used burnout instrument in current research (Azeem and Nazır, 2008: 54). The MBI was originally developed by Maslach and Jackson (Maslach and Jackson, 1981: 99-113) and has been translated into Turkish and its validity-reliability studied by Ergin (1992) and Çam (1992). In this study, the Turkish version of MBI translated by Ergin (1992) was used. Analysis of the findings resulted in some changes on the

MBI made by Ergin. Since the Turkish language does not respond to 7-point degree scale (Ergin, 1992: 145), the 7-point Likert type scale in the original instrument was changed to a 5-point Likert type scale. This version of the MBI has been extensively used in the Turkish context (e.g. Alimoglu and Donmez, 2005; Altun, 2002; Arıkan et al., 2007; Çam, 2001; Çetin and Basim, 2008; Demir et al., 2003; Ergin, 1996; İlhan et al., 2008; Oncel et al., 2007; Ozdemir, 2006; Ozyurt et al., 2006).

The MBI consists of 22 statements describing the feelings an individual might have as a result of being overstressed or burnout (Azeem and Nazır, 2008: 54). It measures burnout on three subscales: Emotional Exhaustion (EE), Depersonalization (DP) and Personal Accomplishment (PA). The first subscale (EE) describes feelings of being exhausted by the job (range 0–36). The DP subscale deals with self-esteem and behaviour towards recipients of care which lacks emotion for the individual (range 0–20). The PA subscale addresses feelings about ability to cope with the problems of working directly with people in the work environment (range 0–32) (İlhan et al., 2008: 101). High EE and DP, and low PA are considered to indicate burnout (Çam, 2001: 202). In addition to this, low degrees of emotional exhaustion and depersonalization and a high degree of personal accomplishment reflect a low level of burnout; high degrees of emotional exhaustion and depersonalization coupled with a low degree of personal accomplishment reflect a high level of burnout. Average degrees of all three dimensions show a moderate level of burnout (Brewer and McMahan, 2004).

Reliability analysis was evaluated by Cronbach's alpha coefficient for internal consistency. Cronbach's alpha values for the dimensions were as follow: EE: 0.84, DP: 0.70 and PA: 0.76 are similar to those of Maslach et al. (1996). The validity of MBI was evaluated by confirmatory factor analysis (CFA) using LISREL 8.54. The results of the CFA confirmed the existence of the distinct structure of the Turkish version of MBI. Nevertheless, preliminary research supported the structural validity of the Turkish version of MBI with a normative sample by means of factor analysis. As a result of varimax rotation following the principle component analysis, the factor structure was found to be well established (Çam, 2001: 203).

The questionnaire also included a demographic section, which asked for the following information: academic title, gender, age, and marital status. Having completed tests for reliability and validity, ANOVAs and t-test were computed to determine differences in level of three dimensions of burnout within the subcategories related to academic title, gender, age, and marital status.

4. Findings

For emotional exhaustion and depersonalization, higher scores reflect higher degrees of burnout, whereas a high score on personal accomplishments indicates a positive outcome rather than a negative one (Ghorpade et al., 2007: 247). Mean, standard deviation, and alpha scores of all three dimensions are shown in Table 2 for the respondents.

As can be seen in Table 2, the means (standard deviations) were 12.24 (5.85) for Emotional Exhaustion (EE), 3.84 (2.94) for Depersonalization (DP), and 22.47 (4.09) for Personal Accomplishment (PA). This result indicates that the EE and DP levels of the university academicians of this study were found to be average and PA level were found to be more than the average, but not very high.

Table 2. Burnout Scores of the Respondents

Dimensions	Mean	S.D.	Alpha
Emotional Exhaustion	12.24	5.85	0.84
Depersonalization	3.84	2.94	0.70
Personal Accomplishment	22.47	4.09	0.76

ANOVAs and t-test were computed to determine differences in means for the three dimensions of burnout by academic titles, marital status, age, and gender. Analyses were performed using SPSS for Windows 16.0 program. Firstly, ANOVA was used to examine subscale mean differences among the academic titles. The relationships between the three dimensions of burnout and academic titles are statistically significant. A post-hoc Hochberg's GT2 test was used to detect the difference in means among professors, associate professors, assistant professors, instructors and research assistants. Table 3 shows the results of the one-way ANOVA comparison and the post hoc Multiple Comparison Tests (Hochberg's GT2). As can be seen in Table 3, the difference in means of emotional exhaustion for research assistants was statistically different and higher than professors. Research assistants indicated a higher level of depersonalization than associate professors, and research assistants reported a lower level of personal accomplishments than other academicians¹.

Table 3. One-Way ANOVA and Post Hoc Multiple Comparison Tests (Hochberg's GT2) of the Burnout by Academic Titles

(Hoch beig s G12) of the Burnout by Academic Titles												
		Sum of Squares	DF	Mean Square	F Sig. Mean		Mean	Post hoc analysis (Hochberg's GT2)				
								1	2	3	4	5
	Datassa Cassas	707 107	(121 105	2 022	001	1=10.11					*
	Between Groups	787.107	6	131.185	3.922	.001	2=11.39					
EE	Within Groups	20635.391	617	33.445			3=12.52					
EE							4=12.39					
	Total	21422.498	623				5=13.24	*				
	Data and Care and	204 490	6	24.000	4.025	025 .001	1=3.31					
	Between Groups	204.480	0	34.080	4.025		2=2.86					*
DP	Widtin Commun	5257.450	621	8.466			3=3.87					
	Within Groups	3237.430	021	8.400			4=3.83					
	Total	5461.930	627				5=4.43		*			
	Between Groups	928.182	6	154.697	10.051	.000	1=23.80					*
	Detween Groups	926.162	U	134.077	10.031	.000	2=23.63					*
PA	Within Groups 9373.102	9373.102	609	15.391			3=22.59					*
	w min Groups	101111 Groups 33/3.102 009 13.391	13.391			4=23.43					*	
	Total	10301.284	615				5=20.93	*	*	*	*	

Notes: 1= Professor, 2= Associate professor, 3= Assistant professor, 4= Instructor, 5= Research assistant

Next, ANOVA test was used to analyze the burnout dimensions for any significant differences among the respondents' marital status. A post-hoc Hochberg's GT2 test was used to detect the difference in means among married, single, and divorced/widowed academicians. Single academicians indicated a higher level of DP than married. On the contrary, married academicians reported a greater level of PA

¹ Data for lecturers and specialists were not evaluated because of an inadequate group size.

_

than singles. Meanwhile, no significant differences were observed for EE subscale score. Results are presented in Table 4.

Table 5 also shows the difference in means for the three dimensions of burnout by age groups. The relationships between the DP and PA dimensions of burnout and the age groups are statistically significant. A post-hoc Hochberg's GT2 test was used to explore the difference in means among 21-30, 31-40, 41-50, 51-60, and 61 and over age groups. The difference in means of DP for 21-30 years was statistically different and higher than 41-50 years. The difference in means of PA for 41-50 and 51-60 years were statistically different and higher than 21-30 years. No significant differences were found in the EE subscale among the five age groups.

Table 4. One-Way ANOVA and Post Hoc Multiple Comparison Tests (Hochberg's GT2) of the Burnout by Marital Status

(Hoch beig 9 G12) of the Burnout by					1116611	tui Stutus				
		Sum of Squares	DF	Mean Square	F ratio	Sig.	Mean	Post hoc analysis (Hochberg's GT2)		is rg's
	Between Groups	135,680	2	67,840	1,975	0,140	1=11,89			
EE	Within Groups	21261,105	619	34,348			2=12,91			
	Total	21396,785	621				3=12,50			
	Between Groups	99,450	2	49,725	5,778	0,003	1=3,56		*	
DP	Within Groups	5361,208	623	8,605			2=4,45	*		
	Total	5460,658	625				3=3,78			
	Between Groups	259,341	2	129,670	7,927	0,000	1=22,85		*	
PA	Within Groups	10011,433	612	16,359			2=21,46	*		
	Total	10270,774	614				3=23,19			

Notes: 1 = Married, 2 = Single, 3 = Divorced/Widowed

Table 5. One-Way ANOVA and Post Hoc Multiple Comparison Tests (Hochberg's GT2) of the Burnout by Age Groups

(
		Sum of	DF Mean	F	Sig.	Mean	Post hoc analysis (Hochberg's GT2)					
		Squares		Square	ratio			1	2	3	4	5
					1=12,68							
	Between Groups	386,325	4	96,581	2,841	,024	2=12,80					
EE							3=11,51					
	Within Groups	21045,160	619	33,999			4=10,98					
	Total	21431,486	623				5=9,23					
	Daturaan Crauma	81,650	4	20,413	2 260	60 ,052	1=4,28			*		
	Between Groups	81,030	4	20,413	2,300		2=3,89					
DP	Within Groups 5388,36	5388,367	623	8,649			3=3,35	*				
	within Groups	3300,307	023	0,049			4=3,48					
	Total	5470,018	627				5=3,50					
	Between Groups	419,680	4 104	104,920	6,493	,000	1=21,40			*	*	
	Between Groups	419,080	4	104,920	0,493	,000	2=22,45					
PA	Within Groups	9873,535	611	11 16 160			3=23,29	*				
	w min Groups	7013,333	011	16,160			4=23,49	*				
	Total	10293,214	615				5=24,42					

Notes: 1 = 21-30, 2 = 31-40, 3 = 41-50, 4 = 51-60, 5 = 61 and over

Lastly, the effect of gender on the three burnout dimensions was analyzed by t-test but no significant differences were found in the three burnout subscales between men and women academicians.

5. Discussion and Suggestions

The burnout levels of the university academicians in this study were average, but not very high. The findings of the study indicate that there were significant differences between the three burnout dimensions and academic titles. Research assistants have a higher level of emotional exhaustion as compared to professors. Research assistants have a higher level of depersonalization than associate professors, and research assistants have a lower level of personal accomplishments than other academicians. Consequently, professors and associate professors have low levels of emotional exhaustion and depersonalization, and high levels of personal accomplishment than other academicians. This result may be explained that these groups of academicians can cope effectively with various problems in their academic life and this can also be related to having a tenured position for professors and associate professors at the universities of Turkey. Only professors and associate professors have tenured positions in Turkey. However, other academicians such as research assistants, assistant professors, and instructors are employed under contract and their contracts are renewed every 2 or 3 years in the universities of Turkey.

In a similar study, Dillon and Tanner (1995) reported that professors and associate professors are statistically significantly more likely to score low on the personal accomplishment subscale than are lecturer, instructor, and assistant professor. In their study, professors and associate professors were also more likely than lecturer, instructor, and assistant professor to score low on the emotional exhaustion subscale, and the depersonalization subscale showed an insignificant degree of difference between these faculty groups. Jackson (1993) found that significant differences were found among pharmacy faculty with regard to academic rank. Azeem and Nazir (2008) also found significant differences on emotional exhaustion but not found significant differences on depersonalization and personal accomplishment among university academicians. In a study by Brewer and McMahan (2004), industrial and technical teacher educators reported an average degree of burnout for all three dimensions of burnout. Nonetheless, Lackritz's (2004) study estimates the percentage of incidence of highest levels of burnout is at half the rate of the general workforce but it was reported that there were no significant differences among academic titles. Croom (2003) found that agricultural teachers experience moderate levels of emotional exhaustion, low levels of depersonalization and a high degree of personal accomplishment. He also reported that an agriculture teacher's academic degree does not seem to influence teachers' responses on each of the sub-scales of the MBI. In Turkey, Ardıç and Polatcı (2008) found that academic personnel reported moderate levels of emotional exhaustion and depersonalization, but high level of reduced personal accomplishment in one public university. Bilge (2006) found that the status of academics is capable of predicting not only emotional exhaustion but also personal accomplishment at 194 academics. Serinkan and Bardakcı (2009) revealed that significant differences were found in level of burnout among research assistants, associate professors and full-time professors in one university. Tümkaya (2006) also found that professors as a group feel emotional exhaustion and personal failure the least, whereas research assistants feel it the most

in a public university. Bilici et al. (1998) reported that the levels of personal accomplishment were significantly higher among professors than research assistants.

Nonetheless, among the demographic variables, marital status and age was significantly related to burnout subscales. Single academicians have significantly higher mean levels of depersonalization, but married academicians have higher mean personal accomplishment levels. In age groups, 21-30 years have significantly higher mean levels of depersonalization than 41-50 years and, 41-50 and 51-60 years have significantly higher mean levels of personal accomplishment than 21-30 years. Gender is not significantly related to burnout in this study. Croom (2003) reported similar result from his study that gender had no effect on responses among agriculture teachers. In his study, age of the agriculture teacher is related to depersonalization scores, but not to emotional exhaustion and personal accomplishment scores. Dillon and Tanner (1995) also reported no significant differences in the three burnout subscales in relative to gender and age. Similar results were also found by Friedman and Farber (1992). In Turkey, Bilici et al. (1998) also reported that there was no significant difference in emotional exhaustion, depersonalization and personal accomplishment levels according to sex and type of school. Özkanal and Arıkan (2010) found that demographic characteristics, educational background and work-related factors proved to have low or no significant effect on instructors' burnout levels in one university. Çavuş et al. (2007) revealed that significant relationships were found between age and personal accomplishment among 79 lecturers in three Vocational High Schools in Turkey. Gürbüz et al. (2007) determined that the effects of "personal characteristics, age, gender, education level, and experience" on burnout are related to emotional exhaustion, diminished personal accomplishment and depersonalization subscales of 108 executive lecturers working at three public universities.

Besides, Lackritz (2004) found that female academicians have significantly higher mean scores on emotional exhaustion than males, while male academicians have higher scores on depersonalization. In his study, it was also found that age is inversely correlated to emotional exhaustion. Jackson (1993) also found significant differences in levels of burnout in relation to gender, age, and marital status among pharmacy school faculty. Ghorpade, et al. (2007) reported that gender is significantly related to emotional exhaustion and females are more likely to be emotionally exhausted than males. Gezer et al. (2009) revealed that only personal accomplishment subscale scores differ according to age, having a managerial work, and academic level in academicians of a High School of Physical Education and Sports in Turkey. Aktuğ et al. (2006) revealed that a significant correlation between the levels of burnout and academic level, duration of the work, and sex was found in one university. Bilge (2006) also found that female gender was found to be an important predictor of a lower level depersonalization. Tümkaya (2006) found that female faculty experience emotional exhaustion more in comparison to male faculty.

As mentioned by Lackritz (2004), there are significant implications for university administrators, who should be interested in the mental state of their members. With an available instrument which measures burnout, periodic administration of such an instrument would allow them to anticipate burnout, rather than waiting for it to happen. Azeem and Nazır (2008) also claimed that university administrations must regularly observe the factors which may have adverse effects on the effectiveness of academicians and take remedial actions to develop education. Otherwise, the

relationships among teachers, students, and administrators will be damaged and hence the quality of education will be negatively affected.

Consequently, burnout is an important topic that needs to be investigated further in academic life. As, staff burnout is related to job performance, productivity, absenteeism, dissatisfaction, turnover, illness casualties and stress. Academic burnout studies can help the university administrators and teachers to develop the quality of education. There have been several burnout studies in Turkey, but very few of them are about the academic staff, and most of these studies have been applied in limited samples. In the current study, the number of the sample population is adequate for the research.

The study has some limitations. First, the sample of the study was chosen among the university web sites which hold a place of the e-mail addresses of all the academicians. Second, the sample sizes of subgroups are different which may have influenced the study's results.

It would be useful that future studies should be replicated within the prescribed time limits, considering variables such as job stress, depression, communication, intention to leave and managerial support.

References

- ABEL, M.H., SEWELL, J. (1999). Stress and burnout in rural and urban secondary school teachers. *Journal of Educational Research*, vol. 92, pp. 287-293.
- AKTUĞ, İ.Y. SUSUR, A., KESKİN, S., BALCI, Y., SEBER, G. (2006). Osmangazi Üniversitesi Tıp Fakültesi'nde çalışan hekimlerde tükenmişlik düzeyleri (The levels of burnout in physicians in Medical Faculty, Osmangazi University. *Osmangazi Tıp Dergisi*, vol. 28, no. 2, pp. 91-101.
- ALIMOGLU, M.K., DONMEZ, L. (2005). Daylight exposure and the other predictors of burnout among nurses in a University Hospital. *International Journal of Nursing Studies*, vol. 42, pp. 549-555.
- ALTUN, İ. (2002) Burnout and nurses personal and professional values. *Nursing Ethics*, vol. 9, no. 3, pp. 269-278.
- ARDIÇ, K., POLATCI, S. (2008). Tükenmişlik sendromu ve akademisyenler üzerinde bir uygulama (GOÜ örneği). *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, vol. 10, no. 2, pp. 69-96.
- ARIKAN, F., KÖKSAL, C.D., GÖKCE, C. (2007). Work-related stress, burnout, and job satisfaction of dialysis nurses in association with perceived relations with professional contacts. *Dialysis & Transplantation*, vol. 36, pp. 182-191.
- AZEEM, S.M., NAZIR, N.A. (2008). A study of job burnout among university teachers. *Psychology Developing Societies*, vol. 20, no. 1, pp. 51-64.
- BILGE, F. (2006). Examining the burnout of academics in relation to job satisfaction and other factors. Social Behavior and Personality, vol. 34 no. 9, pp. 1151-1160.
- BİLİCİ, M., METE, F., SOYLU, C., BEKAROĞLU, M., KAYAKÇI, Ö. (1998). Bir grup akademisyende depresyon ve tükenme düzeyleri. *Türk Psikiyatri Dergisi*, vol. 9 no. 3, pp. 181-190.
- BLANDFORD, S. (2000) *Managing professional development in schools*. London: Routledge. BLIX, A.G., LEE, J. (1991). Occupational stress among university administrators. *Research in Higher Education*, vol. 32, no. 3, pp. 289-302.
- BLIX, A.G., CRUISE, R.J., MITCHELL, B.N., BLIX, G.G. (1994). Occupational stress among university teachers. *Educational Research*, vol. 36, no. 2, pp. 157-169.
- BREWER E.W., MCMAHAN, J. (2004). Job stress and burnout among industrial and technical teacher educators. *Journal of Vocational Education Research*, vol. 28, no. 2.

- BRISSIE, J.S., HOOVER-DEMPSEY, K.V., BASSLER, O.C. (1988). Individual, situational contributors to teacher burnout. *The Journal of Educational Research*, vol. 82, no. 2, pp. 106-112.
- BUDAK. G., SÜRGEVİL, O. (2005). Tükenmişlik ve tükenmişliği etkileyen örgütsel faktörlerin analizine ilişkin akademik personel üzerinde bir uygulama. *D.E.Ü .İ.İ.B.F. Dergisi*, vol. 20, no. 2, pp. 95-108.
- CORDES, C.L., DOUGHERTY, T.W. (1993). A review and an integration of research on job burnout. *Academy of Management Review*, vol. 18, no. 4, pp. 621-656.
- CROOM, D.B. (2003). Teacher burnout in agricultural education. *Journal of Agriculture Education*, vol. 44, no. 2, pp. 1-13.
- ÇAM, O. (1992). Tükenmişlik Envanterinin geçerlik ve güvenirliğinin araştırılması
- (Investigation of the validity and reliability of Burnout Inventory). 7th National Psychology Congress, Ankara, Turkey, pp. 155-160.
- ÇAM, O. (2001). The burnout in nursing academicians in Turkey, *International Journal of Nursing Studies*, vol. 38, pp. 201-207.
- ÇAVUŞ, M.F., GÖK, T., KURTAY, F. (2007). Tükenmişlik: meslek yüksekokulu akademik personeli üzerine bir araştırma. Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi, vol. 16, no. 2, , pp. 97-108.
- ÇETÎN Ö., BASÎM, N. (2008). Examination of developmental models of occupational burnout using burnout profiles of nurses. *Journal of Advanced Nursing*, vol. 64, no. 5, pp. 514-523.
- DEMIR, A., ULUSOY, M., ULUSOY, M.F. (2003). Investigation of factors influencing burnout levels in the professional and private lives of nurses. *International Journal of Nursing Studies*, vol. 40, pp. 807-827.
- DICK, V.R., WAGNER, U. (2001). Stress and strain in teaching: a structural equation approach. *British Journal of Educational Psychology*, vol. 71, pp. 243-259.
- DILLON, J.F., TANNER, G.R. (1995). Dimensions of career burnout among educators. *Journal and Mass Communication Educator*, vol. 50, no. 2, pp. 4-13.
- EKER, M., ANBAR, A. (2008). Work related factors that affect burnout among accounting and finance academicians. *İş-Güç, Endüstri İlişkileri ve İnsan Kaynakları Dergisi,* vol. 10 no. 4.
- ERGIN, C. (1992). Doktor ve hemşirelerde tükenmişlik ve Maslach Tükenmişlik Ölçeğinin uyarlanması (Burnout levels of physicians and nurses and adaptation of Maslach Burnout Inventory). *7th National Psychology Congress,* Ankara, Turkey, pp. 143-154.
- ERGIN, C. (1996). Maslach Tükenmişlik Ölçeğinin Türkiye sağlık personeli normları (Turkish health personnel norms of Maslach Burnout Inventory). 3P Dergisi, vol. 4, no. 1, pp. 28-33.
- EVERS, W., TOMIC, W., BROWERS, A. (2005). Does equity sensitivity moderate the relationship between self-efficacy beliefs and teacher burnout?. *Representative Research in Social Psychology*, vol. 28, pp. 35-46.
- FIMIAN, M.J., BLANTON, L.P. (1987). Stress, burnout and role problems among teacher trainees and first year teachers. *Journal of Occupational Behaviour*, vol. 8, pp. 157-165.
- FREUDENBERGER, H. (1980). Burnout. New York: Doubleday.
- FREUDENBERGER, H.J. (1974). Staff burnout. *Journal of Social Issues*, vol. 30, no. 1, pp. 159-165.
- FREUDENBERGER, J.H. (1977). Burnout: Occupational hazard of the child care worker. *Child Care Quarterly*, vol. 6, pp. 90-99.
- FRIEDMAN, I.A. (1991). High and low-burnout schools: school culture aspects of teacher burnout. *Journal of Educational Research*, vol. 84, pp. 325-333.
- FRIEDMAN, I. (1995). Student behaviour patterns contributing to teacher burnout. *The Journal of Educational Research*, vol. 88, pp. 281-289.
- FRIEDMAN, I.A., FARBER, B.A. (1992) Professional self-concept as a predictor of teacher burnout. *Journal of Educational Research*, vol. 86, no. 1, pp. 28-35.
- GARCIA, F. J. C., MUNOZ, E. M. P., ORTIZ, M. A. C. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences*, vol. 38, pp. 929-940.

GEZER, E., YENEL, F., ŞAHAN, H. (2009). Öğretim elemanlarının tükenmişlik düzeyleri ile sosyodemografik değişkenleri arasındaki ilişki (Relationship between burnout levels and socio-demographic variables of academicians). *Uluslararası Sosyal Araştırmalar Dergisi (The Journal of International Social Research)*, vol. 2/6, pp. 243-250.

- GHORPADE, J., LACKRITZ J., SINGH, G. (2007). Burnout and Personality: Evidence From Academia. *Journal of Career Assessment*, vol. 15, no. 2, pp. 240-256.
- GMELCH, W.H., LOVRICH, N.P., WILKE, P.K. (1984). Sources of stress in academe: a national perspective. *Research in Higher Education*, vol. 20, no. 4, pp. 477-490.
- GOLEMBIEWSKI, R.T., BOUDREAU, R.A., SUN, B.C., LUO, H. (1998). Estimates of burnout in public agencies: Worldwide, how many employees have which degrees of burnout, and with what consequences?. *Public Administration Review*, vol. 58, pp. 59-65.
- GÜRBÜZ, H. TUTAR, H., BAŞPINAR, N.Ö. (2007). Burnout levels of executive lecturers: a comparative approach in three universities, *Sosyal Bilimler Dergisi*, vol. 18. pp. 65-85.
- HARRINGTON, D., BEAN, N., PINTELLO, D., MATHEWS, D. (2001). Job satisfaction and burnout: predictors of intentions to leave a job in a military setting. *Administration in Social Work*, vol. 25, no. 3, pp. 1-16.
- HARRISON, B.J. (1999). Are you destined to burn out?. Fund Raising Management, vol. 30, no. 3, pp. 25-27.
- iLHAN, M.N., DURUKAN, E., TANER, E., MARAL, I., BUMIN M.A. (2008). Burnout and its correlates among nursing staff: questionnaire survey. *Journal of Advanced Nursing*, vol. 61, no. 1, pp. 100-106.
- JACKSON, S.E., SCHWAB, R.L., SCHULER, R.S. (1986). Towards an understanding of the burnout phenomenon. *Journal of Applied Psychology*, vol. 71, no. 4, pp. 630-640.
- JACKSON, R.A. (1993). An analysis of burnout among school of pharmacy faculty. *American Journal of Pharmaceutical Education*, vol. 57, no. 1, pp. 9-17.
- KOUSTELIOS A., TSIGILIS N. (2005). The relationship between burnout and job satisfaction among physical education teachers: A multivariate approach. *European Physical Education Review*, vol. 11, no. 2, pp. 189-203.
- LACKRITZ, J.R. (2004). Exploring burnout among university faculty: incidence, performance, and demographic issues. *Teaching and Teacher Education*, vol. 20, pp. 713-729.
- LAMUDE, K.G., SCUDDER, J. (1992). Resistance in the college classroom: variations in student's perceived strategies for resistance and teachers' stressors as a function of students' ethnicity. *Perceptual and Motor Skills*, vol. 75, pp. 615-629.
- LEE, R., ASHFORTH, B.E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, vol. 81, pp. 123-133.
- MACDOUGALL, M. (2000). Meltdown: avoiding executive burnout. *Executive Excellence*. vol. 17, no. 1, pp. 14.
- MASLACH, C. (1976). Burned out. Human Behaviour, vol. 5, pp. 16-22.
- MASLACH, C., JACKSON, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, vol. 2, pp. 99-113.
- MASLACH, C., JACKSON, S.E., LEITER, M.P. (1996). *Maslach Burnout Inventory manual.* 3.ed., Palo Alto, CA: Consulting Psychologists Press.
- MASLACH, C., LEITER, M.P. (1999). Take this job and ... love it!. *Psychology Today*, vol. 32, no. 5, pp. 50-53.
- MASLACH, C., PINES, A. (1979). Burnout, the loss of human caring. A. PINES, C. MASLACH (eds.) *Experiencing social psychology*, New York: Random House.
- MASLACH, C., SCHAUFELI, W.B., LEITER, M. (2001). Job burnout. *Annual Review of Psychology*, vol. 52, pp. 397-422.
- NEIDLE, E. A. (1984). Faculty approaches to combating professional burnout. *Journal of Dental Education*, vol. 48, no. 2, pp. 91-94.
- ONCEL, S., OZER, Z.C., EFE, E. (2007). Work-related stress, burnout and job satisfaction in Turkish midwives. *Social Behaviour and Personality*, vol. 35, no. 3, pp. 317-328.
- OZDEMIR, S. (2006). Burnout levels of teachers of students with AD/HD in Turkey: comparison with teachers of non-AD/HD students. *Education and Treatment of Children*, vol. 29, no. 4, pp. 693-709.

- OZYURT, A., HAYRAN, O., SUR, H. (2006). Predictors of burnout and job satisfaction among Turkish physicians. *Journal of the Association of Physicians*, vol. 99, no. 3, pp. 161-169.
- ÖZKANAL, Ü., ARIKAN, N. (2010). Investigation of burnout among instructors working at ESOGU preparatory school. *English Language Teaching*, Vol. 3, no. 1, pp. 166-172.
- RICHARD, G.B., KRIESHOK, T.S. (1989). Occupational stress, strain, and coping in university teachers. *Journal of Vocational Behaviour*, vol. 34, no. 1, pp. 117-132.
- SCHWAB, R.L. (1986). Burnout in education. C. MASLACH, S.E. JACKSON (eds.) *The Maslach Burnout Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- SEILER, R.E., PEARSON, D.A. (1985). Dysfunctional stress among university faculty. *Educational Research Quarterly*, vol. 9, no. 2, pp. 15-26.
- SEKARAN, U. (2000). Research methods for business. New York: John Wiley&Sons.
- SERİNKAN, C., BARDAKCI, A. (2009). Pamukkale Üniversitesi'ndeki akademik personelin iş tatminleri ve tükenmişlik düzeylerine ilişkin bir araştırma (Job satisfaction and burnout levels of academics: an investigation at Pamukkale University). *Sosyal Bilimler Dergisi*, no. 21, pp. 115-132.
- SETHI, V., BARRIER, T.A., KING, R.C. (1999). An examination of the correlates of burnout in information systems professionals. *Information Resources Management Journal*, vol. 12, no. 3, pp. 5-13.
- SINGH, S.N., MISHRA, S., KIM, D. (1998). Research-related burnout among faculty in higher education. *Psychological Reports*, vol. 83, no. 2, pp. 463.
- SMITH, S.L. (1999). Job burnout is a hot topic. *Occupational Hazards*, vol. 61, no. 2, pp. 31-32
- TSIGILIS, N., KOUSTELIOS, A., TOGIA, A. (2004). Multivariate relationship and discriminant validity between job satisfaction and burnout. *Journal of Managerial Psychology*, vol. 19, no. 7, pp. 666-675.
- TOGIA, A. (2005). Measurement of burnout and the influence of background characteristics in Greek academic librarians. *Library Management*, vol. 26, no. 3, pp. 130-138.
- TÜMKAYA, S. (2006). Faculty burnout in relation to work environment and humor as a coping strategy. *Educational Sciences: Theory & Practice*, vol. 6, no. 3, pp. 911-921.
- TYLER, K. (1999). Spinning wheels. HR Magazine, vol. 44, no. 9, pp. 34-40.
- VAN HORN, J.E., SCHAUFELI, W.B., GREENGLASS, E.S., BURKE, R.J. (1997). A Canadian-Dutch Comparison of Teachers Burnout. *Psychological Reports*, vol. 81, no. 2, pp. 371-382.
- WU, S., ZHU, W., WANG, Z., WANG, M., LAN, Y. (2007). Relationship between burnout and occupational stress among nurses in China. *Journal of Advanced Nursing*, vol. 59, no. 3, pp. 233-239.
- ZBAR, J.D. (1999). Burnout warning signs. Computerworld, vol. 33, no. 27, pp. 46.