Eğitim ve Bilim
2013, Cilt 38, Sayı 169

Education and Science
2013, Vol. 38, No 169

A Comparison of Female and Male School Administrators' Burnout Levels Controlling for Perceived Social Support

Algılanan Sosyal Destek Kontrol Edilerek Okul Yöneticilerinin Mesleki Tükenmişlik Düzeylerinin Cinsiyet Değişkenine Göre Karşılaştırılması

Gülşah BAŞOL*

Gaziosmanpaşa Üniversitesi

Abstract

The main purpose of the study was to compare burnout levels of school administrators according to gender variable by using social support as a covariate. The sample of the study was 306 school administrators in downtown Ankara and its seven districts. A factorial ANOVA design with covariates was followed in the study. Maslach Burnout Inventory (MBI) and Multidimensional Scale of Perceived Social Support (MSPSS) were used to gather data along with a brief personal information sheet. Results indicated a negative relationship between occupational burnout and social support levels. Therefore, increased social support level tends to correspond with a decrease in burnout level. In the light of this finding and the related literature, it was decided to control the effect of social support on burnout while we look at the differences by gender. First, the school administrators' burnout levels are searched through One Way Multivariate Analysis of Variance (MANOVA) for gender. According to the findings, the differences in compound burnout scores which were made up of EE, D, and PA were explained by gender. Again, using gender as a moderator, One Way Multivariate Analysis of Covariance (MANCOVA) was conducted to see whether social support would significantly predict the dependent variable (compound burnout level). Results indicated that social support was indeed a significant covariate, including social support in the model, the variation accounted for by the model had increased while the error variance decreased. Also, including social support to see the differences between the compound dependent variable produced more clear differences. Therefore, it can be concluded that social support can be used to explain the differences in school administrators' occupational burnout levels. Suggestions based on the results were provided for administrators and researchers.

Keywords: School administrators, burnout, occupational burnout, Maslach's burnout inventory, perceived social support.

Öz

Faktöriyel desendeki çalışmanın amacı, okul yöneticilerinin mesleki tükenmişlik düzeylerinin (duygusal tükenmişlik, duyarsızlaşma ve kişisel başarı) cinsiyet değişkenine göre farklılaşma gösterip göstermediğini algılanan sosyal destek değişkenini kontrol ederek incelemektir. Araştırma grubunu Ankara il merkezi ve yedi semtinde yer alan ilköğretim okullarında görev yapan 306 okul yöneticisi oluşturmaktadır. Ölçme aracı olarak Maslach Tükenmişlik Ölçeği ve Çok Boyutlu Algılanan Sosyal Destek Ölçeği kullanılmıştır. Sonuçlar, mesleki tükenmişlik ile çok boyutlu algılanan sosyal destek arasında negatif bir ilişki olduğunu ortaya koymuştur. Bu ilişki ve literatür ışığında sosyal desteğin tükenmişlik puanlarındaki etkisi kontrol edilerek tükenmişlik puanlarında cinsiyet değişkenine göre fark olup olmadığına bakılmasına karar verilmiştir. Sosyal destek değişkeni analize katılmaksızın tek yönlü MANOVA yapıldığında, bağımlı değişkenlerin doğrusal kombinasyonunda Cinsiyet değişkenine göre olan farklılıkların anlamlı olduğu görülmüştür. Sosyal destek kontrol edilerek okul yöneticilerinin mesleki tükenmişlik düzeylerindeki farklar tek yönlü MANCOVA ile incelendiğinde sonuç yine

* Doç. Dr. Gülşah BAŞOL, Gaziosmanpaşa Üniversitesi, Eğitim Fakültesi, Eğitim Bilimleri Bölümü, TOKAT gulsah.basol@gop.edu.tr

anlamlı bulunmuştur. Sonuçlara göre sosyal destek modele dahil edildiğinde açıklanan varyans değeri yükselmiş ve model daha anlamlı hale gelmiştir. Dolayısıyla sosyal desteğin etkisi kontrol edildiğinde tükenmişlik ortak değişkeninde cinsiyete göre olan farklılıklar daha belirgin hale gelmiştir. Bu bulgu sosyal desteğin tükenmişliği açıklamadaki önemini bir kez daha ortaya koymaktadır. Sonuçları temel alan öneriler araştırmacılar ve okul yöneticileri için sunulmuştur.

Anahtar Sözcükler: Okul Yöneticileri, Tükenmişlik, Mesleki Tükenmişlik, Maslach Tükenmişlik Envanteri, Algılanan Sosyal Destek.

Introduction

The term "burnout" was first coined by Freudenberger (1974). It is explained as a sense of lack of self-fulfillment caused by a feeling of mental exhaustion and depersonalization (Freudenberger, 1977). Maslach and Jackson (1981) redefined the term as a type of job stress. The main components of burnout among teachers were explained as exhaustion, lacking of a sense of professional fulfillment, and an attitude of depersonalization expressed by blaming students (Friedman, 2000). The factors that triggered occupational burnout were often given as stress and low job satisfaction. Justying this, a simple search on EBSCOHOST for the term "burnout" yielded over 1800 hits, while a search including "job satisfaction and stress" along with the burnout yielded 172 hits.

A person dealing with occupational burnout feels alienated, emotionally worn out, inefficient, useless, ordinary, and unsuccessful. In such a negative state of a mind, it is hard for people to fulfill their professional duties that they are expected to meet on a daily basis. As Güler stated (1990) Maslach studied burn out in three dimensions as Emotional Exhaustion (EE), Depersonalization (D) and Personal Accomplishments (PA). Waking up tired, not wanting to come out of bed, feeling tired during the day, and feeling emotionally exhausted can be signs of emotional exhaustion. A loss of interest and motivation in job can also signal emotionally exhaustion. Emotional exhaustion refers to a depletion of emotional resources and the feeling of nothing left to give other psychologically (Maslach and Jackson, 1985). These conditions may bring an invitation to stress, anxiety and burnout on the final continuum. As burnout progresses, the person starts feeling angry, not appreciated and emotionally drained. It almost feels like s/he has no energy to do anything and feels tired all the time. Just at this stage, burnout starts taking a hold on the productivity of the person and s/he starts having hard time to meet job expectations. People who put their job in the center of their life are more prone to this kind of burnout because of their unreal, high expectations. Overwhelmed with job expectations, s/he starts feeling useless, overwhelmed, and inefficient. People at work may not even recognize the change in the person dealing with emotional exhaustion, since there is not much change in the outlook.

Depersonalization, also called dehumanization, is the second phase of burnout, a person dealing with emotional exhaustion and stress, starts treating people inhuman ways. S/he lacks respect, care, understanding and start using sarcasm or self-centered speech. EE affects the person dealing with more, on the other hand, depersonalization also affects people around the person dealing with depersonalization (Budak & Sürgevil, 2005). Low personal accomplishment sense is another sign of burnout. In other words, people with high self-efficacy sense and success beliefs are less prone to burnout.

Burnout has been tried to be explained by the following two theories, Conservation of Resources (COR) and Social Cognition Theory (SCT). COR is a motivational theory focusing on how people experience burnout instead of finding out why it happens (Gorgievski & Hobfoll, 2008). Resources can be financial, physical or psychological. Burnout develops when people start feeling that they are giving more than they receive and they do not feel recognized or appreciated. The psychological sources such as social support, family ties, friends' circle and a loved one's shelter made up of social support as defined in the current study help people dealing with work related dilemmas. Social support is a main resource that can be in many form to lower

occupational burnout in line with CRT. According to Bandura's Social Cognitive Theory (SCT) self efficacy based interventions can also help people prevent stress and eventually burnout. Self-efficacy beliefs not only help people academically, but also helps psychologically by making them feel less stressful, anxious and tired (Breso, Schaufeli, & Salanova, 2010). Therefore, by increasing the sense of personal accomplishment, occupational burnout can be lowered according to SCT.

As burnout has unpleasant outcomes for people, it also has potential hazardous outcomes for organizations. According to Erçelebi (1997), in organizational management, it is important to fulfill the employee expectations in order to increase the quality and quantity of the products. Because the unfulfilled expectations related to job can be frustrating and consequently may lower the job satisfaction and productivity, maintaining an environment leading to satisfaction and organizational commitment is valued by organizations. Brewer and Clippard (2002) showed job satisfaction's negative relation to emotional burnout and its positive relation to personal accomplishment. According to Cordes and Dougherty (1993), unrealistic expectations from work, work overload, conflict between the expectations of persons and job demands, are some of the factors charging emotional exhaustion. Therefore, burnout can be viewed as a poor fit between the expectations of the teachers and the resources that the school provides (McCarthy, Lambert, O'Donnell, & Melendres, 2009). Job satisfaction is about how satisfied one is with his/her job and whether the job meets the person's expectations. Therefore, simply by fulfilling the needs of people, an organization can lower the chances of workers having job related stress that eventually lead to burnout.

Throughout the literature, the causes of burnout are given as a lack of incentives, feeling helpless and powerless, and learned helplessness (Potter, 2007). Just like the unfit matches between couples, burnout may also be a sign of unfit between the nature of the job and the nature of the person (Maslach & Leiter, 2005). Maslach and Leiter offer six strategies to decide and improve the match between the person and the job. These are workload, control, reward, community, fairness and values (Leiter & Maslach, 2005). According to the results, if there are a couple of mismatches, this can be tolerable, however if the number of the mismatches are more and if these are in the areas important to the person dealing with burnout, then s/he is at stake of a major burnout. In a detailed literature review, Blazer (2010) summarized the consequences of burnout as excessive cost to school districts because of absenteeism, disability claims and high teacher turnover rates, lack of variety of factors-training, recognition, feedback, administrative/ collegial/parent/community support- substandard pay with limited opportunities, disruptive student behavior in the classroom, and parents' demands.

Gender differences in burnout levels have been searched in many studies that indicate conflicting results. Some studies stated that men have higher burnout rates (Başol & Altay, 2009; Maslach, Schaufeli & Leiter, 2001; Labone, 2002). On the other hand, Timms, Graham, and Caltabiano (2006) stated higher burnout rates for women overall. There are also studies stating no differences by gender in burnout levels (Durr, 2008; Farber, 1984; Graf, 1996; Kırılmaz, Çelen, & Sarp, 2002).

Most of the studies compared burnout levels of male and female workers at subscale levels. According to Houkes, Winants, Twellaar and Verdonk (2011) burnout was triggered by depersonalization for men, and the emotional exhaustion for females. Portegijs, Hermans and Lalta (2006) indicated that women have less effective professional networks and confronted with negative consequences of stereotyping, tokenism, and a high workload caused especially by unjust division of labor regarding the household tasks and caring for children (Cited by Houkes et al., 2011). Studies in teacher samples looking for gender differences in burnout indicated that female teachers had higher emotional burnout rates (Antoniou, Polychroni, & Vlachalkis, 2006; Bakker, Demerouti, Schaufeli, 2002; Greenglass, 1991; Kokkinos; 2006; Pastore & Judd, 1993; Shaufeli & Enzman, 1998), while some studies reported higher depersonalization levels for men (Brake, Bloemendal, & Hoogstraten, 2003; Pastore & Judd, 1993; Sarı, 2004). A meta analysis study focusing on the gender differences in burnout indicated higher emotional burnout rates

for women and higher depersonalization rates for men (Purvanova & Muros, 2010). Purvanova and Muros (2010) also stated that the impact gender has on burnout is possibly mediated by other factors, such as one's type of occupation. An interesting finding from the same study is that women in the U.S.A. have higher emotional burnout rates than the women in the E.U. countries possibly because of progressive labor policies. In a study with women managers, Greenglass (1985) found that increased support from the boss was related to lower anxiety, less depressive and psychosomatic symptoms (as cited in Sastry & Pandey, 2000).

The burnout is a phenomenon negatively affecting the performance of workers from a variety of occupations from doctors to nurses. Teachers and school administrators' success and the quality of education they provide have also been affected by this negative situation greatly. On the other hand, no one would deny the importance of perceived social support on the success or failure of individuals both in work and in life. A complicated concept, both to describe and measure; social support was often studied because of its positive influence on many factors affecting people negatively (Hupcey, 1998). While some scholars described social support as knowledge (Cobb, 1976), some others took it as a functional and informative counseling service (Caplan, 1974) (as cited in Altay, 2007). Social support can be described as a complex, emotional, functional and social network of relationships. Being in many forms, such as emotional support of an important person, a friend that talked to or get consulted about work related issues, and a family with unconditional love and support, social support can help people to increase the life quality through a satisfaction driven from these relationships. Zimet, Dahlem, Zimet, & Farley (1988) suggested that perceived social support should be studied according to its sources-family, friends, and significant other-.

Social support is a resource helping people to cope with stress and burnout. Social support's relation to burnout has been studied throughout the literature (Beehr, 1985; Bonfiglio, 2005; Cheuk, Wong, & Rosen, 1994; Cobe, 1976; Cutrona, 1990; Khan & Achour, 2010; Kim-Wan, 1991; Russell, Altmaier, & Velzen, 1987; Salami, 2011; Sarros & Sarros, 1992; Shao & Gao, 2005; Solomon ,Waysman & Mikulincer,1990; Wong & Cheuk, 2005; Zhongying, 2008). According to these studies, social support has a mediating effect on burnout. As in any occupation in the service sector, there is a lot to deal with for teachers in the school environment. Student-teacher conflicts, crowded classrooms, poor physical conditions, low wages and low social support are just some of these problems. Realistically evaluated, it can easily be seen that a dissatisfied teacher can easily lower his/her work performance by becoming stressful and anxious. Teachers, school administrators, students and families get their share of the problems caused by burnout.

Kyriacou (1987) states the economical and personal implications of teachers' job satisfaction and stress can lead to a negative impact on student outcomes along with employee absenteeism and burnout. In a meta analysis study, Halbesleben (2011) reported that social support did not yield different relationships across burnout dimensions. Furthermore, considering the sourcs of the social support as work versus non-work as a moderator, he found that it was more closely associated with emotional exhaustion than the other two dimensions.

According to Torun (1995) social support has its benefits regardless of the level of stress. It was also reported that social support works well with people with occupational burnout. It is a widely acknowledged fact that having an accessible family member or a friend can decrease one's level of stress and help people with their self-esteem. The less support a person receives from family and friends, the more exhaustion he/she will experience and consequently the ability to meet responsibilities at work and personal life will diminish. According to Maslow's hierarchy of needs (1967), sense of belonging and love is one of the main needs of a person which comes after psychological and safety needs (as cited in McLeod, 2007). Self esteem and self actualization follow these needs. Therefore, it can be concluded that social support is an important resource helping people to adjust the situations better and improve their capabilities of dealing with many problems related to work or personal life.

The Purpose of the Study

Although the relation of social support to burnout in school administrators and teacher samples has been studied often throughout the literature. The relation of social support to the burnout levels of doctors /nurses has been studied in Turkey (Altay, Gonener, Demirkıran, 2010; Sayıl, Haran, Ölçmez, & Özgüven, 1997). Altay (2007) looked at the relationship between the social support and occupational burnout in Turkish school administrators' sample. His findings indicated a negative relationship between social support and occupational burnout levels of school administrators. Through current study, it is aimed to supply an empirical support for the below hypothesized relationship in the context of social support and occupational burnout. As stated many times, differences in occupational burnout by Gender has also been in the interest of many studies abroad, in the current study the relation of perceived social support to occupational burnout levels of male and female school administrators is investigated in Turkish school administrators' sample. Therefore, the purpose of the study was to explain the variation in school administrators' burnout levels by Gender taking social support into consideration.

Research Hypothesis

It was hypothesized that having a happy family environment, good friends, and a special person can improve the life quality of a school administrator as it would everyone's. Starting from this point, two hypotheses were formed as follows:

1. There is a negative relationship between the multi-dimensional perceived social support levels and burnout levels of school administrators.

2. There are differences in school administrators' compound burnout levels by Gender after controlling for social support at multivariate level.

Method

A multivariate factorial design was used in the current study in order to find out whether there was a relationship between school administrators' burnout and perceived social support levels and to identify whether the burnout levels by gender differ among school administrators after controlling for perceived social support. The population of the study was school administrators, employed in downtown Ankara and its seven districts(Büyükşehir, Çankaya, Etimesgut, Keçiören, Mamak, Sincan, ve Yenimahalle). A total of 350 surveys are distributed and after excluding the ones with more than %10 missing answers and the ones showing a pattern, 306 surveys were left (87% Return Rate). Therefore the sample was made up of 306 school administrators.

Instruments: In the study, Maslach Burnout Inventory (Maslach & Jackson, 1981) and Multidimensional Scale of Perceived Social Support (Zimet et. al, 1988) were used. In addition, a brief personal information sheet was applied.

Maslach Burnout Inventory: Maslach Burnout Inventory (MBI) is a well known, cross culturally and cross sample validated instrument which has been in use over 30 years. MBI developed by Maslach and Johnson and measures burnout in three dimensions as Emotional Exhaustion (EE), Depersonalization (D), and Personal Accomplishment (PA). The scale has 22 items, 9 items in EE, 5 items in D, and 8 items in PA subscales. Despite the fact that the original scale was in 7-point scale (0-6); 5-point Likert scale (Never, Rarerly, Sometimes, Often, and Always), the Turkish adaptated form was applied in the current study. The adaptation and the scale validity and reliability studies were carried out by Ergin (1992). It was concluded that the test-retest reliability of the scale was satisfactory with a Cronbach's Alpha internal consistency coefficient of .83 for EE, .65 for D, and .72 for PA subscales. (Ergin, 1992). These Cronbach's Alpha internal consistency coefficients for MBI were regarded as satisfactory (Nunnally, 1978). The higher the scores in EE and D scales, the higher the burnout rate is, on the other hand, low scores in PA corresponds to the high level of burnout because of the reverse meaning of PA items.

Multidimensional Scale of Perceived Social Support: Multidimensional Scale of Perceived Social Support, MSPSS, is a 12 item 7- point scale, measuring social support from three different sources, as Family, Friend, and Significant Other (Zimet et al., 1988). Both for the total score and for the subscale levels, the higher the scores are the higher the level of social support meant. The reliability of the scale was found to be .80 and .95 in two different applications. The construct validity of the scale was carried out through its correlation with the Turkish version of the U.C.L.A. Loneliness Scale, Perceived Social Support from Family and Friends Scale, the Symptom Check List-90-R, and the Beck Hopelessness Scale. In the current study the revised Form of the scale by Eker, Arkar, and Yaldız (2001) was used. Eker and his colleagues (2001) studied the reliability and validity of MSPSS in university students and psychiatric patients. Başol (2008) studied the validity and reliability of MSPSS Revised form by Eker, Akrar and Yaldız (2001) on a Turkish school administrators sample. In the revised form, the meaning of the Significant Other was explained as an important person in someone's life other than family and friends. Through and EFA and CFA study, the proposed three-factor model of the scale were confirmed in Turkish school administrators sample (Başol, 2008).

Procedure

The application was carried out right after the Spring Semester of 2010-2011 school year. The sample was elementary school administrators in downtown Ankara and its seven districts (Büyükşehir, Çankaya, Etimesgut, Keçiören, Mamak, Sincan, ve Yenimahalle). The participants were recruited at their workplaces. Participation was voluntary and the confidentiality and anonymity of the research were assured.

Analysis

For the purpose of testing the first hypothesis, Pearson Product Moment Correlation Coefficients were calculated. To test the second hypothesis a One Way MANCOVA was performed. SPSS 15.00 was used for data analyses.

Results

Of 306 elementary school administrators, 200 (65.4%) were male and 106 (34.6%) were female. Most of the participants were over 30 years old and married. As for the age, most of the school administrators in the sample were between 30 and 50 years old (83%). 5.6% of school administrators were between 21 and 30 years old. As far as the marital status is concerned, the most of the participants were married (91,8%). Therefore, there was no use for this variable in the analysis because of the limited number of single subjects in the sample. It is also noteworthy to mention that most of the school administrators were elementary school teachers (45,1%), science and technology teacher and math teachers followed them with 13%.

The descriptive statistics for Burnout and Perceived Social Support Levels of School Administrators are provided for school administrators' sample in Table 1.

Table 1

Descriptive Statistics for the subscales of Burnout and Perceived Social Support Level of School Administrators

	School Administrators			
	$\overline{X}$	SS	Minimum	Maximum
Emotional Exhaustion	21.00	5.69	10	36
Depersonalization	8.8	3.00	5	20
Personal Accomplishment	31.56	4.22	17	40
Total Burnout	46,24	10.13	24	73
Family	24.12	4.99	6	28
Friends	22.78	5.90	4	28
Special Person	19,42	8.06	4	28
Total Social Support	66.31	15.36	21	84

According to the findings, the burnout scores ranged between 24 and 73. The mean and standard deviation were 46.24 and 10.13 for the burnout scores, 66.31 and 15.36 for the total perceived social support scores, respectively.

In order to classify school administrators into one of three-burnout levels as high, medium and low; the cut off points were defined with respect to the highest and lowest point one can receive from the sub-scales. Scores obtained from nine item Emotional Burnout Subscale was considered low between 9 and 18, normal between 19 and 27, and high between 28 and 45. For MBI's subscales five item Depersonalization was considered low between 5 and 10, normal between 11 and 15, and high between 16 and 25. Scores obtained from eight-item Personal Accomplishment subscale considered low between 8 and 16, normal between 17 and 24, and high between 25 and 40. In Table 2 the number and percentage of school administrators for each subscale are provided.

Table 2

School Administrators' Burnout Levels

School Administrators			
	Low	*Medium*	High
Emotional Exhaustion	114 (37%3)	136 (44,4%)	56(18,3%)
Depersonalization	224(%73,2)	65(21,2)	17(5.6%)
Personal Accomplishment	18(5,9%)	110(35,9%)	178(58,2%)
Total Burnout	142(46,4%)	154(50,3)	10(3,3%)

Descriptive analysis indicated that 46.4% of the school administrators had low, 50,3% medium, and 3.3% had high burnout levels. As for emotional burnout, 44,4% of school administrators were at medium level, 18,3% having high emotional burnout rate. Depersonalization level was low at most of the school administrators (%73,3). High scores on personal accomplichment subscale meant higher level of personal accomplishment. According to this, most of the school administrators (58,2%) had high personal accomplishment levels.

The remaining findings of the study were presented in two parts. First, the relationship between the burnout and perceived social support level was provided in subscale levels; second, the results for One Way MANOVA and MANCOVA were provided. Through MANOVA it is possible to evaluate more than one dependent variable on an independent variable(s). One

Way MANCOVA analysis was conducted seeking for the differences between male and female school administrators on the compound variable of three dependent measures of MBI's subscales including social support as a covariate. MANCOVA also utilizing a factorial design makes it possible the use of a covariate(s).

I. The Relationship between Burnout and the Perceived Social Support Level: First, the relationship between occupational burnout and perceived social support level of school administrators was investigated by calculating Pearson Products Moments Correlation Coefficients between MBI and MSPSS and also at subscale level results are as in Table 3.

Table 3

The Relationship among the subscales of Burnout and Perceived Social Support Level of School Administrators

Subscales		EE	D	PA	TOTAL MBI	FA	FR	SP
MBI	EE							
	D	.60**						
	PA	-.30**	-.3**					
	Total MBI	.86**	.77**	-.69**				
MSPSS	FA	-.10	-.02	.16**	-.13**			
	FR	-.19**	-.05	.22**	-.22**	.53**		
	SP	-.08**	.04	.04	-.05	.37**	.53**	
	Total MSPSS	-.15**	-.002	.16**	-.15**	.72**	.84**	.85**

** $p < .01$, * $p < .05$

Table 3 provides correlation coefficients between the dimensions of MSI and MSSPS scales. Both scales, as expected, had significant high correlations with the total score, excluding the medium level negative correlation (nearly high) between PA and MBI Total score. The reverse meaning of PA items with the rest of the MBI scale might have played a part in this result. There was a negative relationship between the burnout and perceived social support levels of school administrators (r = -.15, p< .001), explaining 2.3% of the total variation between occupational burnout and perceived social support levels (r^2 = 0.023).

In addition to the correlations at scale level, the correlations at subscale levels are provided in Table 3. According to Table 3, the highest correlation between MSI total scores and its subcales belongs to EE with a high positive correlation of .86, significant at .01 α level. As expected, PA subscale had significant negative correlations with EE and D subscales of MBI. Not much to a surprise, it also has positive correlations with MSPSS subscales and total MSPSS score, excluding the non-significant correlation of PA with SP(r=.04, p>.05). PA's correlation with the other MSI subscales were relatively low (r=.30 with EE and r=.34 with D) when it is compared to the correlations between EE and D (r=.60)and also their correlation with MSI Total Score. The reverse meaning of PA items might have had an impact on these low correlations.

MSPSS subscales had significant high positive correlations with the total MSPSS score (ranging .72 to .85), at the scale level the correlations were at medium size, excluding FA's low correlations with SP (r=.37, p<.01). Scanning through the bivariate correlations between the subscales of MSI and MSPSS, mostly significant low negative correlations would catch ones' eye. This finding supports the hypothesis of negative correlations between the perceived social support and burnout.

II. Differences in Burnout Levels of School Administrators by Gender After Controlling for Perceived Social Support: The differences in school administrators' burnout levels by Gender is searched through One way MANOVA. It is possible simultaneously compare dependent variables on different levels of an independent variable with MANOVA (Stevens, 1996). Multivariate analysis of variance (MANOVA) is used to compare two or more groups on two or more dependent variables at the same time. It was also decided to run MANCOVA taking Perceived Social Support into the consideration as a covariate. Because of the high correlations among MSPSS' subscales only total perceived support score was decided to be used as a covarite in the current MANCOVA design. Including a covariate helps the researcher reduce the error variance in the design. One way MANCOVA was used in order to see whether there were differences in school administrators' burnout levels by gender variable after controlling for Perceived Social Support. All three of burnout subscales were used as dependent variables. According to Tabachnick and Fidel (2001) there need to be a conceptual similarity and significant moderate correlations among the constructs used as dependent variables. The correlations among subscales ranged from .30 to .60, all significant at .01. A covariate is a variable that is related to the dependent variable. By using a covariate in a design we want to look at the differences on dependent variables for the different levels of independent variable(s) after removing the variation caused by the covariate. Covarite also needs to be related to dependent variable although not as much as the dependent variables. All three bivariate correlations of MSPSS and MBI's subscales were negative, a low non significant correlation of -.002 with D, .16 with PA, and -.15 with EE subscales. Therefore, knowing its negative association with burnout, perceived social support was set as a covariate in the current study. Through this study it will be possible to say whether gender can be taken as a moderator variable after controlling for perceived social support. Since there are one independent variable and a covariate there is one main effect and a covariate effect in the analysis. A fallow up analysis will be reported for the significant main effects of Gender and Perceived Social Support separately for each dependent variable.

Before we go any further, there are some assumptions to check for the appropriateness of data for the multivariate analysis. These are:

- ✓ Level of measurement of the dependent variable and covariate,
- ✓ Independence of observations,
- ✓ Normality of the dependent variables both in multivariate and univariate levels,
- ✓ Homogeneity of population variance/covariance matrices,
- ✓ The correlation between the dependent variables and the covariate.

Both the dependent variables and covariate are in interval scale. Independence of observations was supplied by giving numbers to returned measurement sets to make sure each datum was entered once. Total burnout scores are not used as a dependent variable (it is a compound of the subscales of MBI) against the multi-colinearity problem because this would violate the independence of observations.

Normality of dependent variables is checked through the Kolmogorov Smirnov test at univariate level and was failed for all three subscales. However, visual screening of the box plots and bivariate scatterplots did not indicate a problem with normality. Depersonalization scores seemed to have a slightly right tailed skew. However, there are many sources stating that the Type I error rate is robust against violation of multivariate normality (as cited in Stevens, 1996). The homogeneity of variance-covariance matrices are checked through the Box's M test. The null hypothesis of equality of variance-covariance matrices are not rejected as required (Box's *M* test = 11.87, p >. 05). At the univariate level the homogeneity of variance hypothesis is checked through Levene's F tests and for all three dependent variables, the null hypotheses of equality of variances between groups are not rejected as required. Before running a MANCOVA, it is also important to check the correlations between covariate and dependent variables. Two of the bivariate correlations were significant at alpha .05 while the correlation between social support and D (r = -.002; p = .97) was not significant with a p value over .05. However, because of the importance of this subscale to the burnout concept, it was decided to use it as one of the dependent variables to produce the compound.

First, the difference in the compound variable according to gender was checked through a One Way MANOVA. Including a covariate in the design helps the researchers to reduce the error variance through accounting more variation in burnout. Since the correlation of perceieved social support with dependent variables and also the heavy load of the literature on the relation of burnout and social support, at next level of the analysis it was decided to use perceived social support as a covariate. The results for one way MANOVA, searching for the differences in the compound variable made up of EE, D, and PA by gender and MANCOVA, searching for the differences in the compound variable made up of EE, D, and PA by Gender, holding perceived social support as constant are provided in Table 4.

Table 4.

Multivariate Analysis of Covariance Results for School Administrators' Personal Accomplishment, Emotional Exhaustion and Depersonalization Levels by Gender and by Taking Social Support As a Covariate.

EFFECT	Wilks' λ	F	Hypothesis df	Error df	p	$\eta 2$
Gender	.960	4.21	3	301	.006	.040
Social Support	.939	6.53	3	301	.000	.061

At the multivariate level, the Omnibus test was significant without including social support in design (Wilks' λ = .960; F (3,301) = 4.21, $p < .05$, $\eta 2$ = .040).

The results also indicated a significant multivariate variation for the covariate (Wilks' λ = .939; $F(3,301) = 6.53$, $p < .01$, $\eta 2$ = .061) referring social support is a significant covariate predicting the school administrators burnout levels. Through reducing the error variance, social support help us to have a better model to understand the differences in burnout compound variable. Eta square was used to define the effectiveness of the model based on Cohen's criteria (1988) ($\eta 2$ = .01 "small", $\eta 2$ = .06 "medium" and $\eta 2$ = .14 "big effect"). According to this criteria, the effect size of Perceived Social Support was at medium level, indicating social support as a covariate explaining medium size variation at multivariate level. In other words using multivariate analysis, 6% of variation in the linear compound variable of burnout subscales' levels in school administrators was explained by social support which is the covariate.

Since the effect of linear combination of DVs was significant both for the gender and for the covariate, univariate analyses for each DVs are checked in order to see which dependent variable has more value to explain the variation in the compound variable both compared for the changes by perceived social support and for by gender separately at univariate level. Findings for between subject analyses for social support and gender are summarized in Table 5.

Table 5.

Univariate Analysis of Covariance Findings for Emotional Exhaustion, Depersonalization, and Personal Accomplishment Levels of School Administrators Holding Social Support Constant

Effect	Dependent Variables	*F*	*p*	*df*	η^2
Gender	EE	5.377	.021	1 / 303	.017
	D	3.165	.076	1 / 303	.010
	PA	10.410	.001	1 / 303	.033
Social Support	EE	7.938	.005	1 / 303	.026
	D	.036	.850	1 / 303	.000
	PA	9.444	.002	1 / 303	.030

According to Table 5, the follow up ANCOVAs for Gender gave significant results for EE and PA scores ($F(1,303) = 5.38$, $p<.01$, $\eta^2 = .017$ for EE; $F(1,303) = 10.41$, $p<.01$ for PA $\eta^2 = .033$) indicating a difference between male and female school administrators' EE levels and PA levels. The mean and standard deviations for EE subscale are 21.92 and 6.04 for female; 20.51 and 5.46 for male school administrators, respectively. The mean and standard deviations for PA subscale are 30.59 and 3.75 for female; 32.07 and 4.38 for male school administrators, respectively. To sum it up, a closer look at the means for EE and PA scores by gender, indicated higher PA values for male and higher EE values for female administrators. While female school administrators had higher EE levels, male school administrators were higher in PA.

Follow ups including the covariate indicated significant differences in Personal Accomplishment and Emotional Exhaustion subscales after removing social support's effect ($F(1,303) = 7,94$, $p<.0,01$ $\eta^2 = .026$ for EE; $F(1,303) = 9.44$, $p<.05$ for PA, $\eta^2 = .030$). The effectiveness of the model is summarized through Eta square according to Cohen's (1988) criteria ($\eta^2 = .01$ "small", $\eta^2 = .06$ "medium" and $\eta^2 = .14$ "big effect"), indicating a small effect size of .03 both for the PA and EE. Therefore social support is a covariate referring almost medium size differences also in the univariate level. Eta square values of .02 and .033 indicated a small effect by gender to explain the variation in EE and PA scores, respectively. Thus gender can be taken as a factor to explain male and female school administrators' differences in Emotional Exhaustion and Personal Accomplishment scores.

Discussion and Conclusion

Results indicated a negative low correlation between the school administrators' burnout and perceived social support levels, suggesting low perceived social support corresponds with higher burnout rate. There are studies supporting this finding (Altay, 2007; Barrera, 1986; Jacobs & Dodd, 2003). Social support as a resource has been studied in context of Conservation of Resources Theory (Bisschop, Kriegsman, Beekman & Deeg, 2004) According to the literature, the psychosocial coping resources can either have a direct impact or a buffering impact on the negative influence of stressors, such as burnout on health (Penninx, Tilburg, Boeke, Deeg, Kriegsman, Eijk, 1998). Either directly or indirectly social support can be taken as one of the psychosocial resources to fight against occupational burnout. Penninx and colleques handled support in two headings as emotional and instrumental support (Penninx, Tilburg, Boeke, Deeg, Kriegsman, & Eijk, 1998). Social support as measured in the current study fits into emotional support category.

At scale level, findings indicated that Turkish school administrators either had low or medium level burnout rates. Half of the sample having medium level burnout can be taken alerting. Big percentage of school administrators having emotional burnout at medium level was also worrying since emotional burnout was accepted as the beginning stage of occupational burnout. Higher scores in Emotional Exhaustion and Depersonalization subscale meant higher

burnout rate, on the other hand the higher scores in Personal Accomplishment subscale meant lower burnout rate. The findings indicated that most of the school administrators had high personal accomplishment sense, indicating no sign of burnout caused by low accomplishment feeling.

According to the results of current study, the emotional exhaustion were higher in the female school administrators which is parallel with the literature (Antoniou, Polychroni, & Vlachalkis, 2006; Bakker, Demerouti, Schaufeli, 2002; Greenglass, 1991; Kokkinos; 2006; Pastore & Judd, 1993; Shaufeli, Shaufeli, & Enzman, 1998). Contrary to the literature, Depersonalization did not differ between male and female school administrators. Men had higher Personal Accomplishment levels in the current study.

Greenglass, Burke, and Konarski (2006) stated that co-worker support led women to have lower emotional exhaustion and higher personal accomplishment levels for men. Maslach and Jakcson (1985) had an interesting explaination on the differences between men and women on emotional exhaustion and depersonalization levels. According to Maslach and Jakcson (1985), low depersonalization level for women had nothing to do with the job, it can be explained by the nurturing, care giver nature of women preventing them to treat people inhuman ways, higher emotional exhaustion rates for women can also be explained by th sex role socialization.

Houkes et al. (2011) suggested that gender and sex differences should be studied together since gender characteristics can vary considerably between the individuals of the same sex. Maslach and Leiter (2008) suggested to detect burnout at early stages in order to prevent its development; emotional exhaustion in women and depersonalization in men should be taken as early warnings of burnout. Therefore, the higher burnout rates for female school administrators can be taken as a warning sign. The lack of significant differences between male and female school administrators were not in line with the literature. However, considering low levels of depersonalization among male and female school administrators, it is conforming that Depersonalization is not an issue for Turkish school administrators.

It can be concluded that through this study the relation of social support to burnout both at multivariate and univariate level in school administrators' sample is extablished. These findings suggest that the effect of social support from family, friends and significant other on burnout should not be overlooked. Especially female school administrators may benefit from social support to descrease the negative outcomes such as anxiety, stress, and burnout. As for male school administrators, increased feeling of personal accomplishments can do the magic.

Suggestions

Further studies may focus on the relationship of burnout and perceived social support along with some other variables. It would also be interesting to find out the relation of burnout to outside factors such as work load, class level, parent's education, school or class size. Personal factors such as perfectionalism, workaholism, negativity, impatience, and spirituality also deserve attention to have a better understanding of the topic and furthermore to establish an effective prevention program against burnout. Current study focused on gender differences, future studies can also look at gender identities, as suggested throughout the most recent literature (Houkes, 2011). Self-efficacy was named as personal coping resource in the literature and according to Social Cognitive Theory (SCT) burnout can be explained by self efficacy belief's of a person. Further research may look at self efficacy beliefs' relation to burnout. The sample of the study were elementary school administrators, future research can also focus on different levels, with different samples.

References

Altay, B., Gonener, D., & Demirkıran, C. (2010). Bir Üniversite Hastanesinde Çalışan Hemşirelerin Tükenmişlik Düzeyleri ve Aile Desteğinin Etkisi. Fırat Tıp Dergisi, 15(1), 10-16.

Altay, M (2007). Okul Yöneticilerinin Mesleki Tükenmişlik Düzeyleri ve Çok Boyutlu Algılanan Sosyal Destek Düzeyleri Arasındaki Ilişki. Yayımlanmamış Yüksek Lisans Tezi. Gaziosmanpaşa Üniversitesi Sosyal Bilimler Enstitüsü, Tokat.

Antoniou, A. S., Polychroni, F., & Viachalkis, A. N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high school teachers in Greece, Journal of Managerial Psychology, 21, 682-690.

Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2002). Validation of the Maslach Burnout Inventory- General Survey: An internet study. Anxiety Stress Coping, 15(3), 245-260.

Barrera, M. (1986). Distinctions between social support concepts, measures, and models. American Journal of Community Psychology, 14(4), 413-445.

Başol, G., & Altay, M. (2009). Eğitim Yöneticisi ve Öğretmenlerin Mesleki Tükenmişlik Düzeylerinin Cinsiyet Değişkenine Göre İncelenmesi. Kuram ve Uygulamada Eğitim Yönetimi, 15(58),191-216.

Başol, G. (2008). Validity and reliability of Multidimentional Scale of Perceived Social Support-revisited, with a Turkish sample. Journal of Social Behavior and Personality, 36(1), 1303-1314.

Beehr, T. A. (1985). The role of social support in coping with organizational stress. In R.A Beehr, & R.S. Bhagat (Eds.), Human stress and coping in organizations: An integration perspective. New York: Wiley.

Bisschop, M. I., Kriegsman, D. M., Beekman, A. T., & Deeg, D. J. (2004). Chronic diseases and depression: The modifying role of psychosocial resourse. Social Science Medicine, 59(4), 721-33.

Bonfiglio, D. (2005). The interaction of dispositional optimism and social support in the moderation of cardiovascular responses to acute psychological stress. Unpublished Ph.D. dissertation. Ohio State University, Columbus, OH.

Brake, T. H., Bloemendal. E., & Hoogstraten, J. (2003). Gender differences in burnout among dutch dentists. Community Dental Oral Epidemiol, 31(5), 321-7.

Breso, E., Schaufeli, W., & Salanova, M. (2010). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. Higher Education, 61(4), 339-355.

Brewer, E. W., & Clippard, L. F. (2002). Burnout and job satisfaction among student support services personnal. Human Resource Develeopment Quarterly, 13(2), 169-186.

Budak, G., & Sürgevil, O. (2005). Tükenmişlik ve Tükenmişliği Etkileyen Örgütsel Faktörlerin Analizine Ilişkin Akademik Personel Üzerine Bir Uygulama. Dokuz Eylül Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 20(2), 95-108.

Cheuk, A. W. H., Wong, K. S., & Rosen, S. (1994). The effects of spurning and social support on teacher bournout. Journal of Social Behaviour and Personality, 9(4), 657-664.

Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 5, 300-314.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. Academy of Management Review, 18(4), 621-656.

Durr, A. J. (2008). Identifying teacher capacities that may buffer against teacher burnout. Columbus, OH: The Ohio State University. Retrieved from http://etd.ohiolink.edu/send-

pdf.cgi/Durr%20Anthony%20John.pdf?osu1227554195

Eker, D., Arkar, H., & Yaldız, H. (2001). Çok Boyutlu Algılanan Sosyal Destek Ölçeğinin Gözden Geçirilmiş Formu'nun Fak Tör Yapısı, Geçerlik ve Güvenirliği. Türk Psikiyatri Dergisi, 12(1), 17-25.

Erçelebi, H. (1997). İlkokul Öğretmenlerinin Mesleki Doyumu. Yaşadıkça Eğitim, 50, 13-15.

Ergin, C. (1992). Doktor ve Hemşirelerde Tükenmişlik ve Maslach Tükenmişlik Ölçeğinin Uyarlanması. VII. Ulusal Psikoloji Kongresi Bilimsel Çalışmaları El Kitabı, 143-154.

Farber, B. A. (1984). Stress and burnout in suburban teachers. Journal od Educational Research, 77(6), 325-331.

Freudenberger, H. J. (1977). Burnout: Occupational hazard of the child care worker. Child Care Quarterly, 56, 90-99.

Freudenberger, N. J. (1974). Staff burnout. Journal of Social Issues, 30, 159-165.

Friedman, I. (2000). Burnout: shattered dreams of impeccable professional performance. Journal of Clinical Psychology, 56, 595–606.

Gorgievski, M., & S. Hobfoll (2008). Work can burn us out or fire us up:conservation of resources in burnout and engagement. Handbook of stress and burnout in health care. J. Halbesleben. New York, Nova Science Publishers: 7-22.

Graf, L. W. (1996). Superintendent burnout in the public schools: A study of demographic and enviromental variables and their effects on the school superintendent. Dissertation Abstract International, 57(8), 3337 A.

Graf, L. W. (1996). Superintendent burnout in the public schools: A study of demographic and enviromental variables and their effects on the school superintendent. Dissertation Abstract International, 57(8), 3337 A.

Greenglass, E.R., Burke, R. J., & Konarski, R. (2006). Components of burnout, resources, and gender-related differences. Journal of Applied Psychology, 28(12), 1088-1106.

Greenglass, E.R. (1991). Burnout and gender: The theoretical and organizational implications. Canadian Psychology, 32, 562-74.

Greenglass, E.R. (1991). Psyhological implications of sex bias in the work place. Academic Psychology Bulletin, 7, 227-240.

Güler, M. (1990). Endüstri işçilerinin iş doyumu ve iş verimine depresyon, kaygı ve diğer bazı değişkenlerin etkisi. Yayımlanmamış Doktora Tezi, Hacettepe Üniversitesi, Ankara.

Halbesleben, JR. (2011). Sources of social support and burnout: a meta-analytic test of the conservation of resources model. Journal of Applied Psychology, 91(5), 1134-45.

Houkes, I., Winants, W., Twellaar, M., & Verdonk, P. (2011). Development of burnout over time and the causal order of the three dimensions of burnout among male and female Gps. A three way panel study. BMC Public Health, (11), 240. 1-13.

Hupcey, J. E. (1998). Social support: Assessing conceptual coherence. Qualitative Health Research, 8, 304-318.

Jacobs, S. R., & Dodd, D. (2003). Student burnout as a function of personality, social support, and workload. Journal of college Student Development, 44(3), 291-303.

Khan, A., & Achour, M. (2010). Social support and religiosity as coping strategies for reducing job stress. International Conference on Busines and Economics Research. Vol.1 (2011) IACSİT Press Kuala Lumpur, Malasia.

Kırılmaz, A., Çelen, Ü., & Sarp, N. (2002). İlköğretimde Çalışan Bir Öğretmen Grubunda Tükenmişlik Durumu Araştırması. Retrieved on March 25,2013 from http://ilkogretim-online.org.tr/vol2say1/v02s01a.pdf

Kim Wan, M.O. (1991). Teacher burnout: Relations with stress personality, and social support. Educational Journal, 19(1), 3-11.

Kokkinos, C. M. (2006). Factor structure and psychometric properties of the Maslach Burnout Inventory: Educators survey among elementary and secondary school teachers in Cyprus, Stress and Health, 22, 25-33.

Kyriacou, C. (1987), Teacher stress and burnout: An international review. Educational Research, 29, 146-152.

Labone, E. (2002). The Role of Teacher Efficacy in the Development and Prevention of Teacher Burnout.Paper presented at the annual meeting of the Australian Association for Research in Education, Australia. Retrieved on March 20, 2013 from http://www.aare.edu.au/02pap/lab02593.htm.

Leiter, M.P. & Maslach, C. (2005). Banishing Burnout: Six Strategies for Improving Your Relationship With Work (San Francisco: Jossey-Bass).

Maslach, C., & Leiter, M.P. (2008). Early predictors of job burnout and engagement. Journal of Applied Psychology, 93, 498–512.

Maslach, C., & Leiter, M. P. (2005). Reversing burnout: How to rekindle your passion for your work. Stanford Social Innovation Review, Winter 2005. Retrieved from http://wellmd.stanford.edu/documents/Reversing%20Burnout.pdf on March 26, 2013.

Maslach, C., & Jackson, S. E. (1985). The role of sex and family variables in burnout. Sex Roles, 12(7-8), 837-851.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. Journal of Occupational Behavior, 2(1), 99–113.

McCarthy, C. J., Lambert, R. G., O'Donnell, M., & Melendres,L. T. (2009). The relation of elementary Teachers' experience, stress, and coping resources to burnout symptoms. The Elementary School Journal, 109(3), 282-300.

McLeod, S. A. (2007). Maslow's Hierarchy of Needs. Retrieved on March 20, 2013 from http://www.simplypsychology.org/maslow.html

Pastore, D.L. & Judd, M. R. (1993). Gender differences in burnout among coaches of women's athletic teams at 2-year colleges. Sociology of Sport Journal, 10, 205–212.

Penninx, B. W., Tilburg, T., Boeke, A. J., Deeg, D. J., Kriegsman, D. M., & Eijk, J. T. (1998). Effects of social support and personal coping resources on depressive symptoms: Different for various chronic disease. Health Psychology, 17(6), 551-8.

Potter, B. (2005). Symtoms of burnout. Retrieved on March 20, 2013 from http://www.docpotter.com/boclass-2bosymptoms.html

Purvanova, R. K., & Muros, J. P. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. Journal of Vocational Behavior, 76(3), 487-506.

Russell, D. W., Altmaier, E., & Velzen, D. (1987). Job- related stress, social support and burnout among classroom teachers. Journal of Applied Pschology, 72(2), 269-74.

Sari, H. (2004). An analysis of burnout and job satisfaction among Turkish special school head-teachers and teachers, and the factors affecting burnout. Educational Studies, 30, 291-306.

Sarros,J.C., & Sarros, A.M. (1992). Social support and teacher burnout. Journal of Educational Administration, 30(1), 55-70.

Sastry, N, and Pandey, S. (2000). Women employees and human resource management. Hyderabad Thakur, Atanu: University Press,

Sayıl, I., Haran, S., Ölmez, Ş., & Özgüven, H. D. (1997). Burn-out in medical doctors and nurses of Ankara University medical school. Kriz Dergisi, 5(2), 71-77.

Schaufeli, W., Enzmann, D., & Enzmann, D. (1998). The burnout companion to study and practice: A critical analysis. London: Taylor&Francis Group.

Shao, L., & Gao, F. (2005). Research on the relationship between job burnout and social support

among primary and middle school teachers. Journal Shandong Normal University (Social Science Edition).

Stevens, J. (1996). Applied multivariate statistics for social sciences (Third Edition). NJ: Lawrance Erbaum Associates.

Timms, C., Graham, D., & Caltabiano, M. (2006). Gender implications of perceptions of turstworthiness of school administration and teacher burnout/stress. Australian Journal of School Issues, 41(3), 343-358.

Torun, A. (1995). Tükenmişlik, Aile Yapısı ve Sosyal Destek Ilişkileri Üzerine Bir Inceleme. Yayımlanmamış doktora tezi, Marmara Üniversitesi, İstanbul.

Zhongying, S. (2008). Currnet situation of job burnout of junior high school teachers in Shangqiu urban areas and its relationship with social support. Front Education China, 3(2), 295-309.

Zimet, G., Dahlem N., Zimet, S., & Farley, G. (1988). The Multidimensional Scale of Perceived Social Support. The Journal of Personality Assessment, 52(1), 30-41.