The Effect of Burnout on Organizational Citizenship Behaviour: The Mediating Role of Job Satisfaction

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Abstract

The purpose of this study was to investigate the effect of burnout on organizational citizenship behavior (OCB) in a mediating model in which the job satisfaction was contextual state. Data were obtained from 257 nurses from three university hospitals. While the data involving burnout and job satisfaction were gathered from the nurses, OCB data were obtained from supervisors. The findings of hierarchical regression analysis demonstrated that the only contributor burnout dimension on OCB-O (ODB toward organization) was the reduced personal accomplishment while emotional exhaustion and depersonalization had no effect. Also the findings of mediation analysis showed that job satisfaction is a mediator in the relation between reduced personal accomplishment and OCB-O and it is not a mediating factor in relation between all three burnout dimensions and OCB-I (OCB toward individuals).

Keywords: *Burnout, Organizational Citizenship Behavior, Job Satisfaction, Mediating Role.*

JEL Codes: *M10, M12*

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1. Introduction

Burnout is a stress-related syndrome that occurs as a response to work-related stress. Burnout is very common among people who work predominantly with other people (i.e., policemen, nurses, teachers, and doctors) and those whose jobs require great effort and time in continually dealing with problems. With recent studies, researchers have paid attention on the negative effects of burnout to organizational factors. Many studies have revealed the negative effects of burnout on turnover intention (Huang et al., 2003), job performance (Cropanzano et al., 2003; Wright & Bonett, 1997; Van Der Linden et al., 2005), and job satisfaction (Abu-Bader, 2000; Brewer & Clippard, 2002; Haj-Yahia et al., 2000; Maslach & Schaufeli, 2000; Oncel et al., 2007; Schaufeli & Enzmann, 1998; Van Humbeck et al., 2004; Renzi et al., 2005) with particular attention being paid to the investigation of burnout.

Organizational citizenship behavior (OCB) has been a popular organizational factor in organizational literature in recent years (Podsakoff et al., 2000). The term, OCB was conceptualized by Organ and colleagues (Bateman & Organ, 1983; Smith et al., 1983) and described as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Organ, 1988). These behaviors are not compulsory in job definitions, not rewarded or punished by organization management, and are discretionary (Greenberg & Baron, 2000; Podsakoff et al., 2000; Tang & Ibrahim, 1998).

Despite the importance of burnout in terms of organizational performance, studies that explore the relationship between burnout and OCB are scarce. Moreover, no research has mentioned the mediating role of job satisfaction yet, despite the significant relation of job satisfaction with both burnout (Belicki & Woolcott, 1996; Singh et al., 1994; Van Humbeck et al., 2004) and OCB (Organ & Konovsky, 1989; Williams & Anderson, 1991; Lapierre & Hackett, 2007).

For instance, in their study Cropanzano et al. (2003) investigated the relationship between burnout and OCB, but focused only on a single burnout dimension (emotional exhaustion) and not on any mediating role. In a later study Van Emmerik et al. (2005), fragmenting the concept, treated OCB as only

a helping behavior and they searched only correlational interactions between burnout and OCB. However Chiu & Tsai (2006), the most recent study, considered OCB and burnout in the same context and investigated the mediating role of job involvement in burnout OCB relation.

With regard to the above studies, the main objective of the present study is to examine the interaction between burnout and OCB via their most commonly accepted conceptualizations and to improve the understanding of the interaction in a mediating model. In order to examine the relation between burnout and OCB, we will follow a model from burnout (independent variable) to OCB (dependent variable) in which job satisfaction will be the mediator. As Whetten (1989) suggested that exploring the psychological process between a predictor and outcome variables in a relational construct is important in order to extend the theory, thus, we hypothesized that when employees experience burnout it affects not only their performance and motivation as detailed in previous literature, but also results in a decrease in their OCB, and a contextual state (i.e. job satisfaction) mediates the relation between burnout and OCB.

2. Organizational Citizenship Behavior

Discretional behaviors that promote the effectiveness of the organization differ from formal role behaviors. These informal behaviors have been termed prosocial organizational behavior (Brief & Motowidlo, 1986), extrarole behavior (Van Dyne et al., 1994), good soldier syndrome (Turnipseed & Murkison, 1996), and organizational citizenship behavior (Bateman & Organ, 1983; Organ, 1988; Smith et al., 1983;). OCB includes some social behaviors, such as being sensitive concerning the mistakes of others, discussing problems if necessary, finishing work on time, being innovative, helping others, and acting voluntarily (Kidwell et al., 1997; Podsakoff et al., 2000).

In examining the literature, it appears that scholars cannot agree on the particular dimensions of OCB; for example, Podsakoff et al. (2000) defined 30 different citizenship behaviors in their review study, whereas Smith et al. (1983), the first scholars to focus on OCB dimensions, conducted structured interviews with managers to define helpful and discretionary behaviors in organizations, thereby identifying two factors: altruism and generalized compliance. Following on from these efforts, Organ (1988) proposed five OCB

dimensions: altruism, conscientiousness, courtesy, civic virtue, and sportsmanship.

After Organ's five-dimension model, many authors have defined different OCB dimensions claiming that these dimensions were related with each other. For instance, while Van Dyne et al. (1994), Van Dyne and LePine (1998) and Coleman and Borman (2000) defined three dimensions by combining some Organ's dimensions with each other; Williams and Anderson (1991) and Van Scotter and Motowidlo (1996) described two different dimensions such that the OCB dimensions altruism and courtesy served as indicators of OCB-I (OCBs toward individuals), and the dimensions conscientiousness, civic virtue, and sportsmanship served as indicators of OCB-O (OCBs toward organization).

Though there were noticeable correlations between the five OCB dimensions, proposed OCB constructs did not have empirical support in the literature (LePine et al., 2002; Organ et al., 2006; Schnake & Dumler, 2003). But in a recent study, Hoffman and colleagues (2007) reviewed the OCB literature and tested whether the OCB dimensions fitted to five-factor, two-factor or one-factor model; they reported that the one-factor solution was the best model. After evaluating these studies one can easily see that OCB concept is not yet well conceptualized and the dimensions of the concept have not been agreed. Despite this confusion, merging the dimensions is getting more popular in the literature.

OCB is related to employee job satisfaction (Bateman & Organ, 1983), motivation (Rioux & Penner, 2001), organizational justice (Folger, 1993; Martin & Bies, 1991; Moorman et al., 1991, 1993; Niehoff & Moorman, 1993), organizational performance (Podsakoff et al., 2000), and organizational commitment (O'Reilly & Chatman, 1986) within the organizational life. Organizational achievement increases correspondingly when OCBs are increased (Organ, 1988; Podsakoff et al., 2000); moreover, OCB can enhance co-worker and managerial productivity, free resources up for further productive purposes, serve as an effective means of coordinating activities, and enhance the organization's ability to attract and retain the best people (Podsakoff et al., 1997). Thus, when considering the importance of OCB, it will be useful to examine the possible interactions between OCB and burnout.

3. Burnout and Organizational Citizenship Behavior

Burnout can be defined as a state of psychical, emotional, and mental exhaustion that results from long-term involvement in work situations that drain the employees emotionally (Maslach & Jackson, 1981; Schaufeli & Greenglass, 2001); likewise, burnout can be conceptualized as a reaction to the negative psychological experience of job-related stress (Acker, 1999; Daley, 1979; Ratcliff, 1988). Thus, it can be concluded that burnout is not a symptom of work stress: it is the end result of unmanaged work stress (Altun, 2002); therefore, if personal and organizational stress can be successfully managed, the incidence of burnout could be reduced.

The consequences of burnout are very serious for employees, clients, and organizations. Burnout symptoms may include headaches, fatigue, poor self-esteem, difficulty in interpersonal relationships, substance abuse, inability to concentrate, and the tendency to blame others for job-related problems (Cherniss, 1980; Pines & Maslach, 1978). Aside from these symptoms, burnout may lead to a failure in the quality of service, job turnover, absenteeism, low morale, and impaired performance (Acker, 1999; Daley, 1979; Maslach & Jackson, 1981).

Maslach and Jackson (1981) define burnout as "being a syndrome including emotional exhaustion, feeling of depersonalization and low personal accomplishment". Emotional exhaustion refers to feelings of being emotionally overextended and drained by others (Schaufeli & Greenglass, 2001), and is a key aspect of burnout syndrome (Maslach & Jackson, 1981). As emotional resources decline, employees feel they can no longer cope with the psychological demands of their jobs. Depersonalization, a further aspect of burnout, refers to negative attitudes and feelings toward people who are recipients of the given service. These two burnout symptoms appear to be somewhat related (Maslach & Jackson, 1981). This perception may lead employees to view their customers as being the source of their problems (Ryan, 1971). The third aspect of burnout is reduced personal accomplishment. This symptom is defined as a decline in one's feelings of competence (Schaufeli & Greenglass, 2001) and a tendency to evaluate oneself negatively (Maslach & Jackson, 1981). When the employees experience reduced personal accomplishment, they feel unhappy, insufficient and dissatisfied with their job.

There are some empirical studies that have demonstrated the relation between burnout and OCB. Cropanzano and colleagues (2003) investigated the effects of emotional exhaustion on OCB by treating OCB in two dimensions as proposed by Williams and Anderson (1991). They found that emotional exhaustion only affected OCBO (β=-.19; p<.01) negatively and had no effect on OCBI. In another study Van Emmerik et al. (2005) studied associations between altruism, burnout and OCB. They evaluated the altruism and OCB as different terms and measured them with discrete scales. Although that differentiation seems problematic under the findings of Organ et al. (2006), LePine et al. (2002) and Schnake & Dumler (2003); Van Emmerik et al. reported a negative relation between OCB and reduced personal accomplishment (β=-.45; p<.01) and between altruism and emotional exhaustion (r=-.23; p<.01).

In a recent study Chiu and Tsai (2006) have explored the relationship between burnout and OCB too. They measured OCB with a scale that was adapted from Coleman and Borman (2000). The scale consisted 27 items and OCB was measured in three categories with interpersonal citizenship performance, organizational citizenship performance and work/job citizenship performance. They averaged the items to form a composite score to represent the OCB and found negative correlations between OCB and emotional exhaustion (β=-.19; p<.01) and reduced personal accomplishment (β=-.55; p<.001). Moreover Chiu and Tsai explored the mediating role of job involvement in burnout OCB relation and found strong correlations for proposed mediating model. When we evaluated these preliminary studies, we appraised that in proposed models although they exposed the relation between burnout and OCB, the mediating mechanisms were lacking and OCB construct was missing or different than that of mostly adopted.

As mentioned above, emotional exhaustion refers to feelings of being drained by other people. It can be assumed that emotionally exhausted employees would feel more tired, expend less effort at work and be unwilling to help others; therefore, we can expect less OCBs from emotionally exhausted employees. Depersonalization refers to employees' actions, where they try to distance other people. These actions are likely to result in an unwillingness to help colleagues with problems, poor communication with other employees and a failure to follow up organizational rules. As a result, depersonalization may lessen OCBs within the organization. Reduced personal accomplishment refers to a decline in a person's feelings of achievement. Employees with feelings of

personal accomplishment may feel obligated to help other employees, whereas those with reduced personal accomplishment may not assist others or even themselves.

Since burnout has significant effects on employee job motivation and organizational achievement (Schaufeli & Greenglass, 2001; Deutsch, 1984; Pines & Maslach, 1978), we can expect that employees experiencing greater levels of burnout will exhibit less OCBs; furthermore, it is likely that this decline in OCBs will result in more complex and difficult working conditions, producing greater numbers of unsatisfied, non-motivated, and unhappy employees. Thus, we can develop the following hypothesis:

Hypothesis 1: Burnout will be negatively related to OCB.

4. Job Satisfaction as a Mediating Variable in Burnout-Ocb Relation

4.1 *Relation between Burnout and Job Satisfaction*

The studies of job satisfaction may be dated to Hawthorne studies and Hoppock's evaluation studies of job satisfaction (Dipboye, 1994). Job satisfaction, defined as the degree to which an individual enjoys his or her work (Brewer, 1998), is maybe the mostly studied factor in organizational behavior literature.

Previous studies showed that job satisfaction may affect many employee traits, attitudes, or behaviours in an organization whereas it may be affected by some organizational and individual factors. According to Arnold and Feldman (1986) six principal sets of variables influence employees' positive or negative attitutes toward their jobs: salary, the job itself, promotion, opportunities, management style, the work group, and working conditions. As a work conditional factor and result of unmanaged stress in job, burnout can be an important effective variable on job satisfaction. Numerous studies have linked high burnout to low job satisfaction (i.e. Belicki & Wollcott, 1996; Bewer & Clippard, 2002; Haj Yahia et al., 2000; Oncel et al., 2007; Van Humbeck et al., 2004). Although highly correlated, the two variables are different as Spector (1997: 65) stated:"where job satisfaction is an attitudinal response, burnout is more of an emotional response to the job".

In their preliminary study Singh and colleagues (1994) discussed possible reasons why individuals with high burnout had low job satisfaction. They suggested that employees evaluated demands and compared them to personal coping resources. If the employee noted an imbalance in that relationship, lower job satisfaction resulted. In that case, survellence of the balance is the major concern to control the employee burnout and to provide job satisfaction. Belicki and Wollcott (1996) found that the liked, being able to get changes made within the company, and having their opinions sought out significantly reduced emotional exhaustion and depersonalization while significantly increased job satisfaction.

In a more recent study Haj Yahia and colleagues (2000) found a significant relation between personal accomplishment and job satisfaction. They stated that social workers' job satisfaction decreased when they suffered reduced personal accomplishment. In another study Bewer and Clippard (2002) found that when the student support personnel face with emotional exhaustion and reduced personal accomplishment, their job satisfaction decreased. But they could not find any relation between depersonalization and job satisfaction. However, Oncel and colleagues (2007) found a significant and negative correlation between all burnout dimensions and job satifaction on a study on midwives. In the frame of the above mentioned studies we hypothesized that:

Hypothesis 2: Burnout will be negatively related to job satisfaction.

4.2 *Relation between Job Satisfaction and OCB*

Empirical research has focused on four major categories of antecedents of OCB that are individual characteristics, task characteristics, organizational characteristics, and leadership behaviors (Podsakoff et al., 2000). The earliest research to find out the antecedents of OCB (e.g. Bateman & Organ, 1983; O'Reilly & Chatman, 1986; Organ, 1988; Smith et al., 1983) concentrated on employee attitudes, dispositions, and leader supportiveness.

Preliminary research on individual characteristics focused on mostly two main subjects: morale factors and dispositional factors. As a moral factor, job satisfaction is maybe the most examined correlate in OCB studies (Williams and Anderson, 1991). With the conceptualization of OCB, job satisfaction became the favorite factor both affect and affected by OCB. In preliminary

studies, many authors stated the relation between job satisfaction and OCB. For instance Organ and Konovsky (1989) tried to find out the contribution of job satisfaction to predicting OCB performance. They found that in a group of 369 individuals from two hospitals, the pay cognition was a significant predictor of altruistic and compliance dimensions of OCB. In a latter study Williams and Anderson (1991) found that the job cognitions (e.g. managerial and co-worker behaviors, opportunities for advancement, and working conditions) forming employee job satisfaction were more effective than pay cognitions in predicting the OCB.

The results of many following studies mostly supported the early findings of the previous researches exploring the relation between job satisfaction and OCB. Konovsky and Organ (1996), Organ and Ryan (1995) Organ and Lingly (1995), and Kuehn and Al-Busaid (2002) found strong relations between job satisfaction and OCB in their studies.

However, contrary to above mentioned studies, Feather and Rauter (2004) could not find any relation between job satisfaction and OCB in a group of teachers. Moreover, in their study Moorman and colleagues (1993) found no relation between job satisfaction and OCB when the relationships between justice and OCB were controlled. They suggested that satisfaction was important just with justice perception. But in a latter study Rifai (2005) asserted that an individual experiencing positive emotional states or happy with the job, shows a stronger emotional attachment to the organization in a conceptual model in which distributive and procedural justice were antecedents of job satisfaction and job satisfaction had an effect on OCB through affective commitment. To Rifai, attachment to the job leads to more OCB and job satisfaction has a significant and independent effect on OCB differ from justice.

In a more recent study Lapierre and Hackett (2007) found strong relation between job satisfaction and OCB in a structural equation model study. In their study they tested a reciprocal model in which trait conscientiousness affects OCB and job satisfaction, OCB affects LMX quality, LMX quality affects job satisfaction and finally job satisfaction affects OCB. They found strong evidences to support the proposed reciprocal model. The findings of their study indicated the strong relation between job satisfaction and OCB.

In sum, research evidence has shown that job satisfaction is positively related to OCB. Thus the following hypothesis was proposed:

Hypothesis 3: Job satisfaction will be positively related to OCB.

4.3 *Mediating Role of Job Satisfaction*

As argued in previous section, both burnout and job satisfaction had significant relations with OCB. Accordingly, we contend that burnout has a negative relation with both job satisfaction and OCB, and job satisfaction mediates the relation between burnout and OCB, so that the more extensive employees' burnout is, the less extensive their job satisfaction, and resulting in a decrease in OCB. Thus we proposed the following hypothesis:

Hypothesis 4: Job satisfaction will mediate the relation between burnout and OCB.

5. Method

5.1 *Participants*

The participants in the present study consisted of 257 nurses from three university hospitals in Turkey. Questionnaires were treated by researchers to every participant in different sessions in all of the three hospitals. While the data involving burnout and job satisfaction were gathered from the nurses, OCB data were obtained from supervisors in order to decrease the common method variance. 284 nurses and their supervisors completed the questionnaires. When the returned questionnaires were examined, 27 were invalid. As a result, a total of 257 valid responses were used in the research. The sample included 182 (70%) female and 75 (30%) male volunteers; 183 (71%) participants were married, 69 (27%) were single, and 5 (2%) were divorced. The participants' ages ranged from 22 to 57 years of age, with the average age being 34.5 (SD=8.82) years. Participants had been working in their organizations for a minimum of 1 year and a maximum of 33 years, with the average period being 12.82 (SD=10.79) years.

The nurses in Turkey might be male and female. They work under the responsibility of doctors and supervisors of each department as members of a

team. Though their working hours may change from hospital to hospital, approximately they spent 35-45 hours at work. Their annual income is above the country average and they get extra earnings for overwork.

5.2 *Measures*

OCB. OCBs were measured by adapting a scale taken from two different studies: Vey and Campbell (2004) and Williams and Shiaw (1999). In the translation and adaptation process of the measure to Turkish, a method based on a model described by Bristlin et al. (1973) was used, which consisted of five steps: forward translation, assessment of the forward translation, backward translation, assessment of the backward translation, and a discussion with experts.

The scale was designed to measure the five OCB dimensions proposed by Organ (1988), which included 19 items in total. The dimensions were labeled altruism (5 items), conscientiousness (3 items), courtesy (3 items), sportsmanship (4 items), and civic virtue (4 items). Each item was answered via a six-point Likert scale: 'almost never' through to 'almost always'. In the present study, Cronbach's alpha coefficients for each dimension of the scale ranged from .67 to .78 on the questionnaire. Overall, the reliability estimate for the entire scale was .91.

Burnout. To assess the three burnout dimensions, a Turkish translation of Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981) was employed. MBI consists of 22 items and has three subscales: emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items). Each item referred to a 7-point rating scale (0=never; 6=every day), with a high degree of emotional exhaustion, evidence of depersonalization, and low personal accomplishment used to indicate burnout. The Turkish translation and adaptation of the MBI were carried out by Ergin (1992), with a reliability coefficient of .83 for emotional exhaustion, .65 for depersonalization, and .72 for low personal accomplishment. In the present study we found reliability coefficients of .84, .71, and .70, respectively.

Job Satisfaction. We used five items from the Job Diagnostic Survey (Hackman & Oldham, 1975) to measure general job satisfaction. Participants used a 1-5 Likert type rating scale (1=strongly disagree; 5=strongly agree).

Total scores could range from 5 to 25 and higher scores indicate more job satisfaction. The reliability estimate for the scale was .78.

Confirmatory Factor Analysis

To ensure that all the items were loaded on their hypothesized factors, we conducted a confirmatory factor analysis independently on both measures of the questionnaire (see Table 1). On the job satisfaction scale we tested a one-factor model and on burnout scale we tested a three-factor model. As hypothesized, the models fitted the data.

Table 1: Confirmatory Factor Analysis for DLOQ and OCB Scales

Scale/model	$\Delta\chi^2$	*df*	$\Delta\chi^2/df$	RMSEA	CFI	RFI	IFI	GFI
Burnout	676.06*	839	0.80	0.04	0.95	0.85	0.95	0.85
Job Satisfaction	48.99*	23	2.13	0.07	0.91	0.82	0.92	0.93
OCB								
One-factor	732.98*	145	5.04	0.21	0.49	0.34	0.50	0.55
Two-factor	184.30*	142	1.29	0.05	0.96	0.83	0.96	0.84
Five-factor	211.20*	146	1.44	0.06	0.94	0.81	0.94	0.82

Note. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; RFI = Relative Fit Index; IFI = Incremental Fit Index; GFI = Goodness of Fit Index

*p < .001.

To evaluate the factor structure of the OCB scale, we tested three different models, due to the findings of Hoffman et al. (2007). Hoffman and his colleagues reviewed the OCB literature and tested whether the OCB dimensions fitted to five-factor, two-factor or one-factor model; they reported that the one-factor solution was the best model. Therefore, we tested five-factor, two-factor, and one-factor models to find the best fit. The five-factor model was the original one described by Organ (1988). In the two-factor model, two latent variables were operationalized to correspond to the two-factor conceptualization of OCB of Williams and Anderson (1991), such that the OCB dimensions altruism and courtesy served as indicators of OCB-I, and the dimensions

conscientiousness, civic virtue, and sportsmanship served as indicators of OCB-O. Then we tested the one-factor model by corresponding two latent variables, OCB-I and OCB-O. While two-factor and five-factor models fitted the data well, the one-factor model did not produce an acceptable solution (see Table 1). Though they both fitted the data well, the two-factor model produced more acceptable solutions than did the five-factor model. Thus, on the basis of the confirmatory factor analysis results, we used the two-factor model, which was described by Williams and Anderson (1991), as it countenanced the purpose of the study.

6. Results

6.1 *Correlation Analysis*

Table 2 presents the means and standard deviations of all measures, and the correlation coefficients between the variables. These results show statistically significant negative relations between burnout and OCB dimensions (p<.01), except for between emotional exhaustion and OCB-I (r=.04, p>.05) and between depersonalization and OCB-O (r=–.24, p>.05). As expected, there was a strong correlation between emotional exhaustion and depersonalization (r=.54, p<.01), though only moderate correlations between reduced personal accomplishment and emotional exhaustion (r=.38, p<.01) and depersonalization (r=.34, p<.01).

Table 2: Descriptive statistics, reliability scores and intercorrelations between dimensions

Factor	Mean	SD	1	2	3	4	5	6
1. Emotional Exhaustion	2.52	.79	(.84)					
2. Depersonalization	1.80	.69	.54**	(.71)				
3. Reduced Personal Accomplishment	2.72	.73	.38**	.34**	(.70)			
4. Job Satisfaction	3.30	.98	-.57**	-.28**	-.52**	(.78)		
5. OCB-I	4.98	.58	.04	-.28**	-.42**	.03	(.77)	
6. OCB-O	4.57	.68	-.20*	-.24	-.65**	.39**	.51**	(.79)

Note: Cronbach alpha coefficients were given on the diagonal in parentheses.

*p< .05. ** p< .01. (Two-tailed) N=(257)

The relationship between OCB-I and OCB-O was significantly moderate (r=.39, p<.01). While the job satisfaction has significant relations with emotional exhaustion (r=.57, p<.01), depersonalization (r=.28, p<.01), and reduced personal accomplishment (r=.52, p<.01); its relation with OCB-I (r=.03, p>.05) was insignificant and was positively significant with OCB-O (r=.39, p<.01).

6.2 *Hierarchical Regression Analysis*

To explore the most important contributor burnout dimension (emotional exhaustion, depersonalization and reduced personal accomplishment) on OCB, we performed hierarchical regression analyses. Table 3 shows the contributor burnout dimensions for each OCB dimension. In step one, we first entered demographic variables (age and job duration) in order to control their effects and then added the burnout dimensions in step two.

Table 3: Hierarchical regression analysis results for OCB

	β			
	OCB-I		OCB-O	
	Step 1	Step 2	Step 1	Step 2
Age	.03	.06	-.14	-.06
Job Duration	-.05	-.14	.28*	.12
Emotional Exhaustion		.39***		.09
Depersonalization		-.33***		-.05
Reduced Personal Accomplishment		-.47***		-.65***
F	.074	9.774***	2.013	17.193***
ΔR²	.001	.30	.03	.43
R²	.001	.31	.03	.44
Adjusted R²	-.01	.27	.02	.41

The entries in the table are standardized βs.
*p< .05. ***p< .001

After controlling for age and job duration, both of three burnout dimensions had negative effects on OCB-I (emotional exhaustion ($\beta=-.39$, p<.001), depersonalization ($\beta=-.33$, p<.001), and reduced personal accomplishment ($\beta=-.47$, p<.001)). But the only burnout dimension that had a significant negative contribution on OCB-O was reduced personal accomplishment ($\beta=-.65$, p<.001), and neither emotional exhaustion ($\beta=.09$, p>.05) nor depersonalization ($\beta=-.05$, p>.05) had a significant effect on OCB-O. The overall models for OCB-I (F=9.774, p<.001) and OCB-O (F=17.193, p<.001) were also significant. Thus, Hypothesis 1 was partially supported while all of the burnout dimensions had significant negative relations with OCB-I and only reduced personal accomplishment had a significant negative relation with OCB-O.

6.3 *Meditational Analysis*

In order to test the mediating effect, the three-step regression procedure, as suggested by Baron and Kenny (1986), was used to explore whether job satisfaction is mediating the relationship between burnout and OCB. To have a support for meditational relation there must be three conditions: (1) The independent variable (burnout) must affect the mediating variable (job satisfaction); (2) The independent variable (burnout) must affect the dependent variable (OCB); and (3) After including the mediating variable (job satisfaction) in the second regression model, the regression coefficient of the independent variable (burnout) must be decreased and the mediating variable (job satisfaction) must have a significant relationship with dependent variable (OCB). The results of meditational regression analysis was shown in Table 4.

As seen in Table 4, the results of test 1 showed that while emotional exhaustion ($\beta=-.49$, p<.001) and reduced personal accomplishment ($\beta=-.39$, p<.001) has a significant negative relationship with job satisfaction; the depersonalization ($\beta=.13$, p>.05) did not. Thus, the depersonalization could not be used in mediation analysis.

Table 4: Results of mediation test of variables

	β		
	Job satisfaction	OCB-I	OCB-O
Test 1			
Age	.16		
Job Duration	-.17		
Emotional Exhaustion	-.49***		
Depersonalization	.13		
Reduced Personal Accomplishment	-.39***		
R²	.45		
Adjusted R²	.43		
	*(F=18.276***)*		
Test 2			
Age		.06	-.06
Job Duration		-.14	.12
Emotional Exhaustion		.39***	.09
Depersonalization		-.33***	-.05
Reduced Personal Accomplishment		-.46***	-.65***
R²		.31	.44
Adjusted R²		.27	.41
		*(F=9.774***)*	*(F=17.193***)*
Test 3			
Age		.08	-.08
Job Duration		-.16	.14
Emotional Exhaustion		.32**	.16
Depersonalization		-.31**	-.07
Reduced Personal Accomplishment		-.52***	-.46**
Job Satisfaction		-.15	.34**
R²		.32	.45
Adjusted R²		.28	.42
		*(F=8.545***)*	*(F=14.797***)*

The entries in the table are standardized βs.

**p< .01.   ***p< .001.

In test 2, while the demographic variables (age and job duration) were controlled, reduced personal accomplishment had significant negative relationships with OCB-I (β=–.46, p<.001) and OCB-O (β=–.65, p<.001); emotional exhaustion had a significant negative relationship with OCB-I (β=–.39, p<.001) and insignificant relationship with OCB (β=–.09, p>.05). Thus, emotional exhaustion could not be used in mediation analysis of OCB-O. In test 3, when job satisfaction (the mediator) was included to the test 2 regression model, job satisfaction had a significant positive relation with OCB-O (β=.34, p<.01) and the regression coefficient of reduced personal accomplishment reduced from -.65 to -.46. This decrease demonstrated that job satisfaction was a mediating variable of the relationship between reduced personal accomplishment and OCB-O. Since job satisfaction did not have a significant relationship with OCB-I (β=–.15, p>.05), there is not any mediating role of job satisfaction in the relationship between emotional exhaustion and OCB-I. When the results of mediation tests were evaluated, Hypothesis 2, Hypothesis 3, and Hypothesis 4 were partially supported.

7. *Discussion And Conclusion*

Recent study contributes to the literature by integrating burnout to OCB in a mediating model in which the job satisfaction lies. While previous studies on burnout OCB relation only focused on direct effects, in recent study we tried to extend the literature by treating job satisfaction as a mediating variable. Since the job satisfaction is maybe the one of the most important factors in OCB researches (Podsakoff et al., 2000), its mediating role in burnout OCB relation brings an important contribution to the understanding of the OCB concept.

One of our objectives in the present study was to extend the literature, which had previously mostly examined the relationships between a single burnout dimension (i.e., emotional exhaustion) and OCB via an examination of the intercorrelations among three burnout dimensions and OCB. As expected, all three burnout dimensions had negative relationships with OCB dimensions at univariate levels, supporting the results of Van Emmerik et al. (2005), Chiu and Tsai (2006) and Cropanzano et al. (2003); however, interestingly, emotional

exhaustion failed to show a significant relation with OCB-I (r=.04, p>.05) and depersonalization failed in relation with OCB-O (r=-.24, p>.05).

The hierarchical regression analysis findings demonstrated interesting results at multivariate level. Although emotional exhaustion had not any significant relationship with OCB-I (r=.04, p>.05) at univariate level; at multivariate level there is a significant and positive relationship between emotional exhaustion and OCB-I (β=.39, p<.001), and in addition to this, there is a negative significant relationship between depersonalization and OCB-I (β=−.33, p<.001) and between reduced personal accomplishment and OCB-I (β=−.47, p<.001). One explanation for the positive relationship between emotional exhaustion and OCB-I might be the level of stress. As Maslach and Jackson (1981) suggested, burnout occurs progressively, and one is first exposed to emotional exhaustion and then depersonalization. After these two related stages comes the feeling of reduced personal accomplishment. Since the emotional exhaustion is the first stage of burnout and the level of the stress is still lower than the following stages, the nurses feel themselves more desirous to help others, and when the burnout worsens, their desire to help others turns to a reluctance.

Further, the findings of hierarchical regression analysis demonstrated that the only contributor burnout dimension on OCB-O was the reduced personal accomplishment (β=−.65, p<.001) at multivariate level while emotional exhaustion and depersonalization had no effect. However, emotional exhaustion had a significant relation with OCB-O at univariate level (r=-.20, p<.05); when we treated all three burnout dimensions as independent variables in the regression model (as shown in Table 3), the no significant relation between emotional exhaustion and OCB-O might result from the intense effect of reduced personal accomplishment on OCB-O at multivariate level. Thus, one reason for the fact that reduced personal accomplishment is the only contributing factor at a multivariate level could be its overall position in burnout syndrome. Employees with reduced personal accomplishment cannot help even themselves, let alone others or organization; consequently, there cannot be any expectations of OCB from such employees toward organization.

Few researchers have explored whether a mediating factor may affect the relationship between burnout and OCB. For instance, in their study Chiu and Tsai (2006) explored the mediating role of job involvement in the relation

between burnout and OCB; and they found strong support for the meditational relation. Thus, another purpose of this study was to investigate the mediating role of job satisfaction in the relationship between burnout and OCB. The findings of recent study demonstrated that job satisfaction is a mediator in the relation between reduced personal accomplishment and OCB-O and it is not a mediating factor in relation between all three burnout dimensions and OCB-I. One reason of that meditational role might be that the nurses, took part in this study, evaluate their job satisfactions as a result of organizational factors (i.e., working hours, managerial activities, shift turns or etc.) but not their relations with colleagues and as a result of that evaluation when their job satisfaction decrease, they do not show OCBs toward organization but demonstrate OCBs toward colleagues.

These findings also have some useful implications for managers. To ensure the success of a modern organization, the manager or owner must consider the future of the organization and strategize and manage with the advice of employees. In this regard, voluntary contributions from all employees, without the expectation of managerial rewards, are very important and desirable. One way to achieve such a result may be the increment of displayed OCBs. Since the findings of this study revealed a negative and significant relationship between employee burnout and their OCBs, all necessary managerial precautions should be considered to reduce the burnout levels of employees since the organizational factors are more effective than those of personal characteristics to expose burnout (Lee et al., 2003).

Moreover, although the burnout level of the nurses in recent study was very close to that of Altun (2002) who conducted another study on nurses in Turkey, the findings of burnout studies on nurses in different countries concluded confusing results. In two different Western countries Jenkins and Elliot (2004) and Pinikahana and Happel (2004) reported lower degrees of burnout than our findings; but in another study Greenglass et al. (2001) and in a Korean study Lee et al. (2003) exposed higher scores than ours. We assume that these confusing findings might be a result of cultural differences or working hours. Most of the studies did not give the working hours of the participants and did not evaluate the working hours as an important factor on nurses' burnout in their studies although the overwork in job is one of the most important factor of burnout (Greenglass et al., 2001; Jenkins and Elliot, 2004; Leiter, 1991). But

with the findings of recent study, the importance of work related factors that affect job satisfaction and burnout are clear. In future studies, besides cultural differences, the organizational factors (i.e. working hours, shift turns, number of patients for each nurse and etc.) affecting job satisfaction might be included and be tested. Thus, some managerial precautions could be taken and OCBs toward organization might be increased.

Although the present results indicate a strong relationship between employee burnout and OCBs, two possible limitations of these findings should be noted. First, there exists the issue of generalization with regard to the results. As mentioned above, the participants were from there different university hospitals, and the occupational group (nurses) of the participants is drawn from professions highly susceptible to burnout (Altun, 2002; Greenglass et al., 2001; Jenkins & Elliott, 2004; Lee et al., 2003; Pinikahana & Happell, 2004). Other occupations may not yield the same relationships as those documented in the present study; therefore, in addition to this preliminary study, progressive and comparative investigations into other business sectors may produce greater reliability with regard to relationships between burnout and OCB.

Second, the recent study is not a longitudinal study but a cross-sectional one. The results might be different in a longitudinal study. Moreover, some researchers have suggested that the relationship between job satisfaction and OCB is reciprocal (Lapierre and Hackett, 2007), and in a reciprocal model in which burnout, job satisfaction and OCB affect each other continuously, it might be difficult to find the way of the relationship. In future studies, researchers should consider burnout-OCB relation in a longitudinal and reciprocal model. Nevertheless, the recent study demonstrated only one factor (job satisfaction) as a mediating variable in the relationship between burnout and OCB but there might be some other factors that mediate or moderate the relation between those two variables. Since our understanding of OCB is improving with exploration of mediator or moderator factors in the relation with burnout, in future researches different organizational or attitudinal variables can be the subject.

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