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## Using Job Resources and Job Demands in Predicting Burnout

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### Abstract

The relationship between the individual and his/her work sometimes become complex and in some cases the relationship become a serious problem. One of the problems in today's highly demanding working life is the phenomenon called burnout (Maslach, Schaufeli, and Leiter, 2001). Our study focuses on the relationship between job demands, job resources and the perceived burnout levels of municipality workers.

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*Keywords:* Burnout, organizational justice, social support, work overload, job autonomy, personal development opportunities

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### I. Introduction

The relationship people have with their work, and the difficulties that can arise when that relationship goes awry, have been long recognized as a significant phenomenon of the modern age. The use of the term burnout for this phenomenon began to appear with some regularity in the 1970s in the United States, especially among people working in the human services (Maslach, Schaufeli, and Leiter, 2001).

The competitive environment of working life creates an imbalance in terms of job demands and job resources. This imbalance can have an influence in determining the attachment of an individual to his/her work. The imbalance that can stem from various causes of demands and resources in work life is the main reason of occupational stress. Working conditions such as workload, working time, social support and care from supervisors and coworkers, or money that are not distributed with justice impair the well-being of employees. The lack of certain resources and high job demands can also result in deterioration of employees' attitudes and behaviors towards their work, in other words in their attachment level can be damaged that results in burnout syndrome.

Burnout has been observed in a large variety of job-domains, especially in jobs which presume a relationship between the professional and other persons: education (teacher-student), health care (doctor, nurses - patients), sales (agent-buyers), public services (municipality workers- citizens) etc. (Vladut and Kallay, 2010).

Workers in human services organizations (e.g. police officers, social workers, nurses, and teachers), and those workers who have extensive interaction with demanding subpopulations, are more vulnerable to high degrees of

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burnout (Weisberg, 1994). There are numerous reasons why burnout research is important and has the potential to contribute to understanding the health and performance consequences of stress at work (Shirom, 2005). Harmful effects of burnout are not limited to the individual's personal life. Burnout may impact the person's physical, emotional, and social life. (Vladut and Kallay, 2010). Burnout appears to be quite prevalent in the developed and developing countries and probably represents considerable economic, social and psychological costs to employees and employers in these countries (Shirom, 2005). Empirical evidence has shown that burnout has important dysfunctional consequences implying substantial costs for both organizations and individuals (Cordes and Dougherty, 1993). Burnout is a general term that describes the feelings of people in the helping professions who find that the stress involved in their work environment has altered their original feelings about themselves and their work (Schwab, 1983). Employees experiencing these feelings of burnout can have harmful effects on their coworkers, citizens, and the reputation of the organization where they work for.

## **2. Literature Review and Hypotheses**

### **2.1. Burnout**

The dictionary defines "to burn out" as "to cause to fail, wear out, or become exhausted especially from overwork or overuse" (Encyclopedia Britannica eb.com 30<sup>th</sup> October 2011) The use of burnout term has been present since the 1970s (Maslach, Schaufeli, Leiter, 2001). Herbert Freudenberger (1974) brought the concept of burnout to professional and public awareness and generally is considered to be the founding father of the burnout syndrome (Schaufeli and Buunk, 1996). According to Leiter (1991) burnout is a reaction to chronic stress experienced by people who provide services to other people. Studies of burnout found that increased burnout is associated with higher levels of demand and lower levels of resources necessary to fulfill this demands. "Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach, Jackson, and Leiter, 1996, p. 4).

#### **2.1.1. Emotional Exhaustion**

Emotional exhaustion is regarded as the basic individual energy component of the syndrome, burnout (Maslach, Schaufeli, & Leiter, 2001). depersonalization as representing the interpersonal component of burnout and coping style after exhaustion (Moore, 2000); self evaluation component of burnout (Maslach, 1998, as cited in Melamed, Shirom, Toker, Berliner, and Shapira, 2006, p. 330).

According to Cordes and Dougherty (1993) Emotional exhaustion is characterized by a lack of energy and a feeling that one's emotional resources are used up.

#### **2.1.2. Depersonalization**

According to Wright and Bonett (1997) depersonalization refers to the employee's negative perception of his or her recipients, and is an attempt to cope with the emotional stresses of one's work. Based on conservation of resources (COR) theory, depersonalization can be viewed as an attempt to minimize the emotional resources loss that results from the constant need to solve intense client problem situations (Wright and Bonett, 1997). Development of depersonalization (cynicism) represents the interpersonal context dimension of burnout and refers to a negative, callous, or excessively detached response to various aspects of the job (Maslach and Leiter, 2008).

#### **2.1.3. Reduced Personal Accomplishment**

A third aspect of the burnout syndrome, reduced personal accomplishment, refers to the tendency to evaluate oneself negatively (Maslach et al., 2009). It represents the self-evaluation dimension of burnout and refers to feeling of incompetence and a lack of achievement and productivity at work (Maslach and Leiter, 2008).

## **2.2. Job demands and job resources**

### **Conservation of resource theory**

The basic tenet of COR theory is that individuals strive to obtain, retain, protect, and foster those things that they have (Hobfoll, 2001, p. 341). Conservation of resources theory suggests that burnout occurs when certain valued resources are lost, are inadequate to meet demands, or do not yield the anticipated returns. The major demands of work

include role ambiguity, role conflict, stressful events, heavy workload and pressure. The major resources include social support from various sources; job enhancement opportunities, such as control, participation in decision making, and autonomy; and reinforcement contingencies (Cordes and Dougherty, 1993; Lee and Ashforth, 1996).

Previous studies in literature showed that badly designed jobs or high job demands exhaust employees' mental and physical resources and lead to the depletion of energy (emotional exhaustion) and health problems (health impairment process), whereas the absence of job resources decreases motivation that leads to cynicism (depersonalization) and reduced performance (reduced personal accomplishment (Bakker, Demerouti, and Euwena, 2005; Bakker, Demerouti, and Schaufeli, 2003; Bakker, Demerouti, and Verbeke, 2004; Demerouti et al., 2001).

In this study role conflict, role ambiguity and work overload considered as job demand that leads to higher levels of perceived burnout syndrome whereas social support, job autonomy, personal development opportunities and fairness perceptions considered as job resources that leads to lower levels of perceived burnout syndrome.

H1: There is a negative relationship between job resources and perceived burnout levels' of employees.

H2: There is a positive relationship between job demands and perceived burnout levels' of employees.

H3: There is a negative relationship between coworker support and perceived burnout levels' of employees.

H4: There is a negative relationship between supervisors support perceived burnout levels' of employees.

H5: There is a negative relationship between job autonomy and perceived burnout levels' of employees.

H6: There is a negative relationship between personal development opportunities and perceived burnout levels' of employees.

H7: There is a negative relationship between perceived procedural justice of employees perceived burnout levels' of employees.

H8: There is a negative relationship between perceived distributive justice of employees and perceived burnout levels' of employees

H9: There is a positive relationship between work overload and perceived burnout levels' of employees.

H10: There is a positive relationship between role conflict and perceived burnout levels' of employees.

H11: There is a positive relationship between role ambiguity and perceived burnout levels' of employees.

### 3. Methodology

#### 3.1. Research Goal

In this survey we aim to examine whether job demands and job resources can be used in predicting employees' perceived level of burnout or not. To test the hypotheses, a field survey using questionnaires has been conducted. The number of returned questionnaires was 318. Data obtained from the survey will be analyzed through the SPSS 13.0. and proposed relations will be tested through regression analyses.

#### 3.2. Sample and Data Collection

The survey was conducted on 318 employees working in a local municipality in İstanbul, Turkey at June 2011. All the questionnaires conducted by hand and the return rate of the survey was 90.8 %.

#### 3.3. Analyses and Results

To measure burnout The Maslach Burnout Inventory (MBI), was used since it is the most widely used instruments to assess all three components of burnout (Maslach and Jackson, 1981; Maslach, Jackson, and Leiter, 1996) consisting 22 5-point likert type questions and used as a standard tool in Turkey to assess burnout levels of employees. Role conflict and role ambiguity was measured using 14 questionnaires (7-point likert type) inventory of Rizzo, House, Lirtzman (1970). Workload, job autonomy, coworker and supervisor support and personal development opportunity was measured using Xanthopoulou, Bakker, Dollard, Demerouti, Schaufeli, Taris and Schreurs (2007) instrument. Justice perceptions measured using the Organizational Justice Questionnaire (Niehoff & Moorman, 1993). The survey consists of 81 questions which 6 of them are demographic. Table 1, 2 and 3 presents the factor loadings and reliability values. The Cronbach's Alpha values for each factors exceeds 0,60, which indicates the reliability of scales used in that survey.

Table 1: Factor and Reliability Analysis Results for Burnout

Factor name	Question	Factor Loading	Factor Explanation (%)	Reliability
<b>Emotional Exhaustion</b>	I feel emotionally drained from my work	,833	23,905	,842
	I feel fatigued when I get up in the morning and have to face another day on the job	,776		
	I feel used up at the end of the workday	,765		
	I feel burned out from my work	,734		
	I feel like I'm at the end of my rope	,640		
<b>Reduced Personal Accomplishment</b>	I feel frustrated by my job	,631	14,235	,634
	I feel I'm positively influencing other people's lives through my work (R)	,673		
	I feel very energetic about my job (R)	,635		
	I can easily understand how my customers feel about things (R)	,611		
<b>Depersonalization</b>	I deal very effectively with the problems of my customers (R)	,604	13,773	,708
	In my work, I deal with emotional problems very calmly (R)	,602		
	Working with people puts too much stress on me	,738		
	I don't really care what happens to some customers	,687		
<b>Depersonalization</b>	I worry that this job is hardening me emotionally	,656		
	I've become more callous toward people since I took this job	,647		
<b>Total variance explained (%)</b>				51,914
<b>Kaiser Meyer Olkin Measure of Sampling Adequacy</b>				,850
<b>Bartlett's Test of Sphericity</b>				
<b>X<sup>2</sup></b>				1323,128
<b>df</b>				105
<b>P value</b>				,000

Table 2 Factor and Reliability Analysis Results for Job Resources

Factor name	Question	Factor Loading	Factor Explanation (%)	Reliability
<b>Procedural Justice</b>	The general manager offers adequate justification for decisions made about my job	,819	29,492	,967
	When making decisions about my job, the g.m. offers explanations that make sense to me	,812		
	Concerning decisions made about my job, the g.m. discusses the implications of the decisions with me	,805		
	When making decisions about my job, the g.m treats me with respect and dignity	,799		
	G.m. shows me concern for my rights as an employee	,797		
	My g.m. explains very clearly any decision made about mu job	,782		
	G.m. deals with me in a truthful manner	,755		
	All j. d. are applied consistently across all affected employees	,751		
	My g.m. clarifies decisions and provides additional info when requested by employees	,749		
	To make job decisions my g.m. collects accurate and complete info	,735		
	When decisions are made about my job, the g.m. treats me with kindness and consideration	,727		
	My g.m. makes sure that all employees' concerns are heard before decisions are made	,721		
	G.m. is sensitive to my personal needs	,695		
	Employees are allowed to challenge or appeal job decisions made by g.m.	,666		
Job decisions are made by g.m. in an unbiased manner	,587			
<b>Distributive Justice</b>	I get response of the stress and tension that I face	,839	14,383	,943
	I get response of what I do well	,832		
	I get what I deserve in response of my responsibilities	,832		
	I get response of my efforts	,796		
	I get response of my gathered experience	,727		
I get response of my education and qualifications	,663			
<b>Supervisor Support</b>	My supervisor concerns about my problems at work	,724	9,159	,909
	My supervisor informs me whether he/she is satisfied with	,685		
	I feel that my supervisor finds me important	,662		
	My supervisor is friendly and warm to me	,647		
My supervisor uses his or her influence to help me solve my problems at work	,626			
<b>Development Opportunities</b>	At work I constantly develop myself	,829	7,299	,841
	My work offers me the opportunity to learn new things	,804		
I have sufficient possibilities to develop myself at work	,703			
<b>Coworker Support</b>	Can you count on your colleagues to support you, if difficulties arise ?	,789	6,759	,796
	If necessary, can you ask your colleagues for help?	,720		
Do you feel that your coworkers find you important?	,688			
<b>Job Autonomy</b>	Can you decide yourself how to execute your work?	,813	5,743	,689
	Can you participate in decision-making regarding your work?	,764		
Do you have flexibility in the execution of your job?	,655			
<b>Total variance explained (%)</b>				72,837
<b>Kaiser Meyer Olkin Measure of Sampling Adequacy</b>				,953
<b>Bartlett's Test of Sphericity</b>				
<b>X<sup>2</sup></b>				10194,657
<b>df</b>				595
<b>P value</b>				,000

Table 3: Factor and Reliability Analysis Results for Job Demands

Factor name	Question	Factor Loading	Factor Explanation (%)	Reliability
<b>Role Ambiguity</b>	I feel certain about how much authority I have	,829	21,961	,859
	I know what my responsibilities are	,815		
	I know exactly what is expected of me	,804		
	I know that I have divided my time properly	,739		
	My job has clear, planned goals and objectives	,689		
	My supervisor's explanation of what has to be done is clear	,674		
<b>Role Conflict</b>	I do things that are apt to be accepted by one person and not accepted by others	,820	20,880	,834
	I have to do things that should be done differently	,771		
	I receive conflicting requests from two or more people	,721		
	I have to buck a rule or policy in order to carry out an assignment	,695		
	I work on unnecessary things	,653		
	I receive an assignment without the manpower to complete it	,617		
	I receive an assignment without adequate resources	,612		
<b>Work Overload</b>	Do you have too much work to do?	,802	12,745	,693
	Do you have to work very fast?	,768		
	How often do you have to work extra hard in order to reach a deadline?	,694		
	Do you feel time pressure on you while working?	,593		
<b>Total variance explained (%)</b>				55,585
<b>Kaiser Meyer Olkin Measure of Sampling Adequacy</b>				,836
<b>Bartlett's Test of Sphericity</b>				
<b>X<sup>2</sup></b>				2003,444
<b>df</b>				136
<b>P value</b>				,000

In this study, regression analysis is also conducted to test the hypotheses and to define the direction of relations. When we examined the Table 4, there is a positive relationship between job demands and level of burnout perceptions of employees ( $\beta$ : ,121 sig: ,016) and negative relationship between job resources and level of burnout perceptions of employees ( $\beta$ : - ,458 sig: ,000); H1 and H2 are supported. As showed in the Table 4 not all the job resources and demands have a significant relationship with burnout levels of employees. Distributive justice ( $\beta$  : - ,208 p : ,001), coworker support ( $\beta$ : - ,131 p : ,022) and development opportunities ( $\beta$ : - ,180 sig: ,003) found to be negatively and significantly related to emotional exhaustion dimension of burnout. Workoverload ( $\beta$ : ,113 p : ,021) and role conflict ( $\beta$ : ,305 sig: ,000) found to be positively and significantly related to emotional exhaustion. Job autonomy found to be negatively ( $\beta$ : - ,162 p : ,009) related to reduced personal accomplishment whereas role ambiguity found to be positively ( $\beta$ : ,260 sig: ,000) related to reduced personal accomplishment. Development opportunities found to be negatively ( $\beta$ : - ,161 p: ,016), workoverload ( $\beta$ : ,185 p : ,001), role conflict ( $\beta$ : ,197 p : ,001) and role ambiguity ( $\beta$ : ,135 p : ,027) positively related to depersonalization dimension of burnout.

According to regression analysis distributive justice ( $\beta$  : - ,138 p : ,032), coworker support ( $\beta$ : - ,128 p : ,029) and development opportunities ( $\beta$ : - ,206 sig: ,001), job autonomy found to be negatively related to total burnout level of employees, whereas procedural justice, supervisor support and job autonomy did not have a significant relationship

with burnout. Therefore H3, H6, and H8 are accepted but H4, H5, and H7 are rejected. Workoverload ( $\beta: ,150$  p:  $,003$ ) and role conflict ( $\beta: ,205$  sig:  $,000$ ) and role ambiguity ( $\beta: ,211$  sig:  $,000$ ) found to be positively and significantly related to burnout; H9, H10 and H11 are accepted..

Table 4 :Summary of Regression Analyses between Job Resources&Job Demands and Burnout

Independent Variables	Dependent Variables	Standardized $\beta$	Sig.	Adjusted R <sup>2</sup>	F value	Model sig				
Job Resources	Burnout	<b>-,458*</b>	,000	,222	45,018	,000				
Job Demands		<b>,121*</b>	,016							
Procedural Justice	Emotional Exhaustion	,054	,500	,359	20,722	,000				
Distributive justice		<b>-,208*</b>	,001							
Job autonomy		-,011	,838							
Supervisor support		-,026	,728							
Coworker support		<b>-,131*</b>	,022							
Development opportunities		<b>-,180*</b>	,003							
Workoverload		<b>,113*</b>	,021							
Role conflict		<b>,305*</b>	,000							
Role ambiguity		-,095	,081							
Procedural Justice		Reduced Personal Accomplishment	,048				,606	,109	5,287	,000
Distributive justice			,016				,829			
Job autonomy	<b>-,162*</b>		,009							
Supervisor support	,088		,314							
Coworker support	-,047		,483							
Development opportunities	-,109		,120							
Workoverload	,025		,658							
Role conflict	-,091		,145							
Role ambiguity	<b>,260*</b>		,000							
Procedural Justice	Depersonalization		,062	,198	,189	9,183	,000			
Distributive justice			-,091	,493						
Job autonomy		,020	,730							
Supervisor support		,011	,892							
Coworker support		-,097	,131							
Development opportunities		<b>-,161*</b>	,016							
Workoverload		<b>,185*</b>	,001							
Role conflict		<b>,197*</b>	,001							
Role ambiguity		<b>,135*</b>	,027							
Procedural Justice		Burnout	,074	,366				,347	18,178	,000
Distributive justice			<b>-,138*</b>	,032						
Job autonomy	-,060		,260							
Supervisor support	,053		,486							
Coworker support	<b>-,128*</b>		,029							
Development opportunities	<b>-,206*</b>		,001							
Workoverload	<b>,150</b>		,003							
Role conflict	<b>,205</b>		,000							
Role ambiguity	<b>,211</b>		,000							

#### 4. Conclusion

In accordance with the literature development opportunities and coworkers support found to be negatively related to burnout levels while workoverload and role conflict positively (Sun & Pan, 2008; Courdes & Dougherty, 1993; Lee & Ashforth, 1996; Rothman & Joubert, 2007). Development opportunities as job resources found to be negatively related to depersonalization dimension of burnout in accordance with the results of Rothman & Joubert (2007).

However, this survey is conducted on a local municipality workers in Turkey, findings might not be transferrable to all types of organizations. Thus it is recommended that further researches can be conducted on multiple sectors, more than one organization and also in different cities and countries for the generalizability of the findings. And other factors like family issues, personal characteristics of the respondent can be taken into consideration in studying burnout syndrome.

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