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Job stress and job performance among employees in public sector in Istanbul: examining the moderating role of emotional intelligence

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Abstract

This study was conducted among 424 public sector employees to examine the relationship between job stress and job performance considering emotional intelligence as a moderating variable. It was also intended to be a replication of a previous study on job stress and job performance which was conducted in the Taiwanese Finance industry. The result pattern across both samples was similar. While a negative relationship was found between job stress and job performance, it was reported that emotional intelligence had a positive impact on job performance and moderated this relationship.

Keywords: Job stress, Job performance, Emotional Intelligence

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1. Introduction

Job stress is one of the common problems that employees confront with increasing frequency. Recently job stress is becoming an epidemic in the work environment. Therefore a large number of researches have focused on job stress and its effects on the various aspects of the organizational output. Due to the fact that job stress has become a common negative outcome of today's dynamic work life, growing number of people complain about stress as a result of work overload, job insecurity and increasing pace of life. Beehr and Newman (1978) declare that job stress is generally defined as follows: "Job stress refers to a situation wherein job-related factors interact with a worker to change (i.e., disrupt or enhance) his or her psychological and/or physiological condition such that the person (i.e., mind-body) is forced to deviate from normal functioning." Researches support the idea that the higher the imbalance between demands and the individual's abilities, the higher job stress experienced will be (Jamal, 2005).

Job performance, which can be affected by job stress as well as other numerous factors, can be viewed as an activity in which an individual is able to accomplish successfully the task assigned to him or her, subject to the normal constraints of the reasonable utilization of available resources (Jamal, 1984). In order to be competitive in a rapidly changing economic and work environment, increasing the job performance of the employees and consequently the performance of the companies has become more crucial. Therefore it is necessary for the companies to analyze the issues that are related with job performance. In recent researches, it has been found out that there are four types of relationship between the measures of job stress and job performance: a negative linear relationship, a positive linear

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relationship, a curvilinear/U-shaped relationship, and no relationship between the two at the conceptual level (Jamal, 1984). The findings obtained from the previous researches regarding this relationship are considered as inconsistent. In order to clarify the theoretical issues related to stress and performance relationship, this study aims to find out the possible existence of a moderator such as emotional intelligence.

2. Literature Review and Hypotheses

2.1. Job Stress

Sager (1991) defined job stress as a psychological state perceived by individuals when faced with demands, constraints, and opportunities that have important but uncertain outcomes. Job stress is very much an individual reaction, and differs from general stress as it is also organization, and job-related (Chen & Silverthorne, 2008) Based on these definitions job stress can produce adverse consequences for both the individual and the company since it has the effect of lowering motivation levels and performance, and increases turnover intentions (Montgomery, Blodgett & Barnes, 1996). With the below stated hypothesis this study will be examining the relationship between job stress and job performance.

H1: There is a negative relationship between job stress and job performance in public sector.

2.2. Job Performance

Murphy and Kroker (1988) defines job performance as a function of the individual's performances on the specific tasks that comprise standard job descriptions, and declares that it is also affected by variables such as maintaining good interpersonal relations, absenteeism, and withdrawal behaviors, substance abuse and other behaviors that increase hazards at the workplace (Murphy, 1989). Befort and Hatrup (2003) indicate that the essence of job performance relies on the demands of the job, the goals and the mission of the organization and the beliefs of the organization about which behavior are mostly valued. Carmeli (2003) emphasized that employees with a high level of intelligence can manage their emotions in terms of retaining a positive mental state which can lead to improved job performance. Based on these we researches would like to propose the following hypothesis

H2: There is a positive relationship between emotional intelligence and job performance in public sector.

2.3. Emotional Intelligence

Mayer and Salovey view emotional intelligence (EI) as ability, that is, a set of skills for processing emotion-relevant information. This model is the only one for which an objective, ability measure has been developed (Mayer, Salovey, & Caruso, 2004; Mayer, Salovey, Caruso, & Sitarenios, 2003). Other models assess self-perceived EI. Research on the relation between objective EI and stress as feelings of control is scarce (Ciarrochi, Dean, & Anderson, 2002). Here we would like to propose the following hypothesis:

H3: Emotional intelligence moderates the relationship between job stress and job performance.

3. Method

The research of Wu "Job Stress and Job Performance among Employees in The Taiwanese Finance Sector: The Role of Emotional Intelligence" (2011) is used in this study with the researcher's permission. Just like his study we used the same model and hypothesizes intended to find out the relationship between job stress and job performance and the moderating role of emotional intelligence on this relationship. Different from the original study we have chosen a branch of the public sector in Istanbul for conducting our study. Employees in the public sector have tasks with deadlines and high stress owing to time pressure.

3.1. Sampling Design

A branch of the public sector in Istanbul was chosen for conducting this study. Among its 9460 employees, 500 questionnaires were distributed to several departments and 424 were returned. Out of the 424 responses that were obtained, 35 were found to be unusable due to either incomplete questionnaires or having sections with non-response items. The sample consists of 184 female and 205 male employees with a mean age of 38.12 (Standard Deviation: 8.49) and with an average tenure of 11.96 years (Standard Deviation: 9.88) in the current position or sector. The sample included both managers and non-managers.

3.2. Measures

A multi-item questionnaire used by Wu in his research “Job Stress and Job Performance among Employees in The Taiwanese Finance Sector: The Role of Emotional Intelligence” (2011) is used with the researcher’s permission.

Job Stress: Job Stress is measured using the questionnaire developed by Parker and DeCotiis (1983). Participants are asked to rate each of the 13 items using a 5-point Likert scale so that they can select a numerical score ranging from 1 to 5 for each statement to indicate the degree of agreement or otherwise, where 1, 2, 3, 4, and 5 denote “Strongly Disagree”, “Disagree”, “Neither Agree nor Disagree (Neutral)”, “Agree”, and “Strongly Agree”, respectively.

Emotional Intelligence: Emotional Intelligence is measured by the widely used The Self-Report Emotional Intelligence Test (SREIT) developed by Schutte et al. (1998) Participants are asked to rate each of the 33 items using a 5-point Likert scale (1=strongly disagree, 5= strongly agree) Although the original scale of Schutte has one factor, in different studies three and sometimes four aspects of the scale were explored (Schutte et al. 2009) like emotion perception, utilizing emotions, managing self- relevant emotions and managing others’ emotions. In this study original one factor model is used.

Job Performance: Job performance is measured by the scale developed by Dubinsky and Mattson (1979), and was modified by Singh, Verbeke and Rhoads (1996). Participants were asked to rate each of the 6 items using a 5-point Likert scale (1=poor performance, 5= excellent performance).

Control Variable: Job tenure which is measured by the number of years an employee has worked for his/her company, is controlled due to its positive effects on job performance in many studies. The findings of our study have also shown that job tenure may impact job performance. Just like the study of Wu, we have explained this for the positive impact of job tenure within an organization on job performance, because employees learn and enhance their skills as they gain experience.

4. Findings

As can be seen from the Cronbach Alpha values reported in Table.1, variables of our study are found to be reliable.

Bivariate correlations between the variables involved in this research are reported in Table.1, job stress has a significant negative correlation with job performance ($r = -0.122$, $p < 0.05$), while the EI has a significant positive correlation ($r = 0.446$, $p < 0.001$).

Table 1. Means, standard deviations, alpha coefficients, and correlations among study variables

Variables	<i>M</i>	<i>SD</i>	1	2	3
Job Performance	3.83	.71	(.87)		
Job Stress	2.61	.87	-.122*	(.88)	
Emotional Intelligence	3.67	.63	.446***	0.090	(.92)

Note: Values on the diagonal represent alpha coefficients.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed tests); $N=389$.

In order to test the first two hypothesized the hierarchical regression analysis is conducted. The control variable job tenure was added in Model 1. As shown in Table.2 two variables regressed job performance linearly. Job stress has low, negative significant effect on job performance and EI has moderate positive effect supporting the Hypothesis 1 and 2.

The interaction term was created by multiplying the two main effects and added in Model 2 to test the moderating effect (Hypothesis 3) (Aiken and West, 1991). The results of Model 2 show a significant change in R-squared ($\Delta R = 0.010$, $\Delta F = 5.42$, $p < 0.05$). The moderating effect of emotional intelligence on the relationship between job stress and job performance ($\beta=0.532$, $p<0.05$) is significant but standardized beta value is lower compared to the study of Wu.

Table 2. Hierarchical regression results

Variables	Job Performance	
	Model 1 β	Model 2 β
Control variable		
Job tenure	118***	0.132**
Main effect variables		
Job stress (JS)	-0.170**	-0.629**
Emotional Intelligence (EI)	0.459***	0.248*
Interaction variables		
JS*EI		0.532*
R2	0.240	0.250
$\Delta R2$	0.240***	0.010***

Notes: * $p<0.05$, ** $p <0.01$, *** $p <0.001$

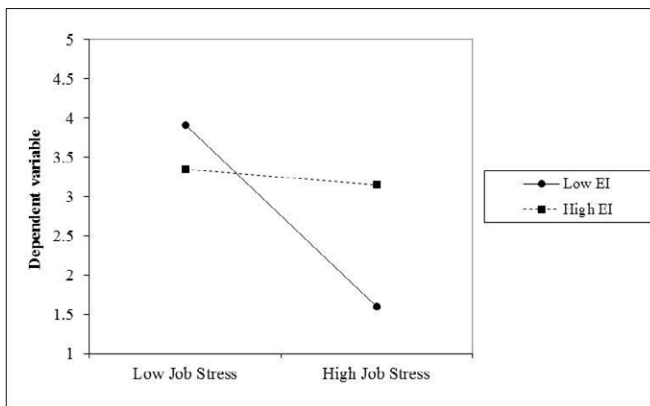


Figure 1. Moderating effect of emotional intelligence on job stress job performance relation

The moderating effect of emotional intelligence on the relationship between job stress and job performance is depicted in Figure.1. As can be seen from the figure low stressed employees has higher job performance levels compared to high job stressed employees whether they have high or low EI (latter having higher performance values). However employees with high EI shows higher performance levels in high job stressed conditions.

5. Conclusion

Just like the study of Wu, in our study we also have established that job stress was negatively related to job performance. Our results support an impact of emotional intelligence on job performance but it is not as strong as the one in the original study. A plausible reason for that finding may be that we have limited our study only on the people employed in the public sector and bureaucracy is hard to be considered with emotions.

The reason we have surveyed this branch of the public sector as our archetype is because the employees have to meet the citizens who are accepted to be their customers from time to time and have a lot of stress due to the strict deadlines to complete their tasks and the bad habit of the Turkish people to do things on the very last day. Their work environment is much formalized and structured and the branch is very production oriented. Having a hierarchical organizational culture and being governed by the bureaucratic procedures are other contributing factors for their stress. That's why this branch has similar effects to the private sector.

As a result of the global financial crisis in the world where the countries are about to go bankrupt, it's not only the profit making organizations, but also the countries that compete with each other. Job stress is a major problem both for the employees and for the organizations. In order to increase organizational efficiency and organizational effectiveness in the governmental organizations, it is suggested to help the employees to cope with their stress which is an uncomfortable and undesirable to the individual. To make a governmental budget plan for the coaching and training of the employees on stress management can be regarded as a necessary action to help them reduce the stressors without delay or help them be successful in coping with them so that they can reach their full potentials.

Considering the positive impact of job tenure on job performance it is suggested that the government should not make policies on early retirement of the old employees, but support them to work for longer. In evaluation of the employees senior ones should have an advantage to the junior ones regarding their higher job performance or the government can create important incentives on job tenure in order to increase their intent to remain in the organization.

6. Limitation and Future Research

This study was limited and only focused on the role of the job stress among employees of a branch in the public sector in Istanbul. Further research is suggested to collect data over a wider range like the employees of the same branch of the public sector overall in Turkey or all branches of the public sector in general or the employees of the private sector to make sure if the findings of this study can be generalized. A further research can also be conducted on the effect of organizational support, which is found to be effective on job performance in many researches.

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APPENDIX - Questionnaire

Job Stress

- Working here makes it hard to spend enough time my family.
- I spend so much time at work; I can't see the forest for the trees.
- Working here leaves little time for other activities.
- I frequently get the feeling I am married to the company.
- I have too much work and too little time to do it in.
- I sometimes dread the telephone ringing at home because the call might be job-related ^(d).
- I feel like I never have a day off ^(d).
- Too many people at my level in the company get burned out by job demands.
- I have felt fidgety or nervous as a result of my job.
- My job gets me more than it should.
- There are lots of times when my job drives me right up the wall.
- Sometimes when I think about my job I get a tight feeling in my chest.
- I feel guilty when I take time off from job.

Emotional Intelligence

- I know when to speak about my personal problems to others. ^(d)
- When I am faced with obstacles, I remember times I faced similar obstacles and overcame them.
- I expect that I will do well on most things I try.
- Other people find it easy to confide in me.
- I find it hard to understand the non-verbal messages of other people. ^(r,d)
- Some of the major events of my life have led me to re-evaluate what is important and not important.
- When my mood changes, I see new possibilities.
- Emotions are one of the things that make my life worth living.
- I am aware of my emotions as I experience them.
- I expect good things to happen.
- I like to share my emotions with others.
- When I experience a positive emotion, I know how to make it last.
- I arrange events others enjoy.
- I seek out activities that make me happy.
- I am aware of non-verbal messages I send to others.
- I present myself in a way that makes a good impression on others.
- When I am in a positive mood, solving problems is easy for me.
- By looking at their facial expressions, I recognize the emotions people are experiencing.
- I know why my emotions change.

- When I am in a positive mood, I am able to come up with new ideas.
- I have control over my emotions. ^(d)
- I easily recognize my emotions as I experience them.
- I motivate myself by imaging a good outcome to tasks I take on.
- I compliment others when they have done something well.
- I am aware of non-verbal messages other people send.
- When another person tells me about an importance event in his or her life, I almost feel as though I have experienced this event myself.
- When I feel a change in emotions, I tend to come up with new ideas. ^(d)
- When I am faced with a challenge, I give up because I believe I will fail. ^(r,d)
- I know what other people are feeling just by looking at them.
- I help other people feel better when they are down.
- I use good moods to help myself keep trying in the face of obstacles. ^(d)
- I can tell how people are feeling by listening to the tone of their voice.
- It is difficult for me to understand why people feel the way they do. ^(r)

Job Performance

- How would you rate yourself in terms of the quantity of work (e.g., sales) you achieve?
- How do you rate yourself in terms of your ability to reach your goals?
- How do you rate yourself in terms of your performance potential among coworkers in your company?
- How do you rate yourself in terms of quality of your performance in regard to customer relations?
- How do you rate yourself in terms of quality of your performance in regard to management of time, planning ability, and management of expenses?
- How do you rate yourself in terms of quality of your performance in regard to knowledge of your products, company, competitors' products, and customer needs?

(r): Reverse

(d): Deleted due to the low factor loading