ORGANIZATIONAL CULTURE'S ROLE IN THE RELATIONSHIP BETWEEN POWER BASES AND JOB STRESS

GÜÇ KAYNAKLARI VE İŞ STRESİ ARASINDAKİ İLİŞKİDE ÖRGÜT KÜLTÜRÜNÜN ROLÜ

Hakan ERKUTLU[*], Jamel CHAFRA[**], Birol BUMİN[***]

ABSTRACT: The purpose of this research is to examine the moderating role of organizational culture in the relationship between leader's power bases and subordinate's job stress. Totally 622 lecturers and their superiors (deans) from 13 state universities chosen by random method in Ankara, İstanbul, İzmir, Antalya, Samsun, Erzurum and Gaziantep in 2008-2009 fall semester, constitute sample of the research. Dean's power bases were measured using the Interpersonal Power Inventory (IPI). Job Stress Survey and The Organizational Culture Profile (OCP) were used to assess job stress and organizational culture respectively. In the study, the hypotheses were tested by using moderated hierarchical regression. The results of this study reveal that *aggressiveness* dimension of culture from the OCP, strengthened the positive relationship between harsh power bases and job stress and another dimension, *respect for people*, weakened that relationship. Furthermore, *respect for people* dimension strengthened the negative relationship between soft power bases and job stress.

Keywords: Leader's power bases, job stress, organizational culture

ÖZET: Bu çalışmanın amacı örgüt kültürünün liderin güç kaynakları ve astın iş stresi arasındaki ilişkideki düzenleyici rolünü araştırmaktır. Bu çalışmanın örneklemini 2008-2009 güz döneminde Ankara, İstanbul, İzmir, Antalya, Samsun, Erzurum ve Gaziantep'te rassal metotla seçilen 13 devlet üniversitesindeki 622 öğretim elemanı ve üst (dekanlar) oluşturmaktadır. Dekanın güç kaynakları Kişilerarası Güç Envanteri kullanılarak ölçülmüştür. İş stresini ve örgüt kültürünü değerlendirmek için İş Stresi Anketi ve Örgüt Kültürü Profili kullanılmıştır. Bu çalışmada, hipotezlerin test edilmesinde düzenlenmiş hiyerarşik regresyon analizi kullanılmıştır. Bu çalışmanın sonuçları, Örgüt Kültürü Profilinden saldırganlığın, sert güç kaynakları ile iş stresi arasındaki olumlu ilişkiyi kuvvetlendirdiğini ve diğer bir boyut olan *bireylere saygının* bu ilişkiyi azalttığını ortaya çıkartmıştır. Ayrıca bireylere saygı boyutu yumuşak güç kaynakları ve iş stresi arasındaki olumsuz ilişkiyi zayıflatmıştır.

Anahtar Sözcükler: Liderin güç kaynakları, iş stresi, örgüt kültürü

1. INTRODUCTION

Universities are under pressure to improve their performance, to anticipate change, and develop new structures. Effective leadership is essential to ensure that change leads to increased efficiency and quality of education (Bryman, 2007). The education sector tends to be labor intensive and has increasingly harsh environmental demands imposed upon it. Leadership skills may help organizations to utilize the available human resources more effectively and to deal successfully with environmental pressures. Effective leader behavior will increase the effectiveness of both the leader and the organization.

Although universities are the favorite institutions of education system, there is no study of the influence of leadership behaviors on job stress at universities. That is why universities were the focus of this study. It is expected that the results of this study might be a starting point for researchers and practitioners who are interested in effective leadership styles in universities.

[*] Assistant professor, Adiyaman University, e-mail: herkutlu@adiyaman.edu.tr

[**] Lecturer, Bilkent University, e-mail: jamel@tourism.bilkent.edu.tr

[***] Professor, Gazi University, e-mail: bumin@gazi.edu.tr

This study makes three contributions to the literature on job stress in higher education. First, a contingency perspective on employee's job stress by examining the organizational culture as a moderator was followed. If the degrees to which different factors are associated with job stress vary across organizations, then it follows that leaders may adopt a situational approach to reduce employees' job stress levels. Second, this examination addresses the call for research incorporating context into social power studies (Kark et al., 2003). Third, because high job stress leads to low job performance (Oi-ling 2003), organizations have an incentive to create environments conducive to high-quality relationships. Thus, understanding the relationship between leader's power bases and job stress would point out ways in which organizations can foster high-quality exchanges to reduce employees' stress levels.

1.1. Conceptual Background and Hypotheses

1.1.1. Bases of a leader's power

Bases of power can be defined as the resources and characteristics a person has in order to be able to influence others. French and Raven (1959) classified bases of power into five categories, namely reward, coercive, referent, expert, and legitimate power. Later, Raven (1993) added information power as a new basis of power. Raven (1993) extended and reworked the original bases of power into power/interaction model of interpersonal influence. The power/interaction model reclassified the original bases of power by subdividing reward and coercive powers into two types: 'personal' (intangible forms of reward and coercive power) and 'impersonal' (tangible forms of reward and coercive power). Legitimate power was divided into four categories: Legitimate reciprocity-based on the agent having done something positive for the target; Legitimate equity-based on compensating for either (a) hard work or sufferance by the agent or (b) harm inflicted by the target; Legitimate dependence-based on social responsibility, to assist another who is in need; and Legitimate position-attributed to the right one has because of status or position.

In one of the first empirical studies of Raven's new taxonomy, Raven, Schwarzwald, and Koslowsky (1998) developed a scale, the Interpersonal Power Inventory (IPI), for measuring compliance with the 11 power bases. Their analysis revealed that power bases are not independent and they identified two underlying structures or factors, 'soft' and 'harsh'. The soft factor includes expert, referent, information, and dependence legitimacy. The harsh factor incorporates personal and impersonal coercion, personal and impersonal reward, position legitimacy, equity legitimacy, and reciprocity legitimacy (Schwarzwald and Koslowsky, 2001).

1.1.2. Job stress

Stress can defined as the reaction of individuals to demands (stressors) imposed upon them. Contrary to popular belief, stress can be associated with both pleasant and unpleasant events and only becomes problematic when it remains unresolved because of lapses in the individual's adaptive capacity. When this happens, the individual becomes disorganized, disoriented and therefore less able to cope; stress related health problems may result (Selye, 1976).

The relevance of workplace stress to well-being has been recognized (Cooper et al., 1988), but little attention has been given to the incidence of this problem in the service industry, despite the growth of this sector, and the obvious relevance of stress to fluid situations where much depends on interpersonal relations (Law et al., 1995).

Four main considerations make the incidence of work-related stress highly relevant to educational administration. Firstly, the emphasis on face to face contact with students and the real time nature of service delivery means that lecturers are required to respond promptly and they are ''subject to a mass of competing, often contradictory or conflicting demands and expectations from a multiplicity of sources'' (Hales and Nightingale, 1986). Secondly, if lecturers are unduly stressed and therefore unhappy, this will be reflected in their dealings with

students, and the quality of the service provided will suffer consequently (Brymer, 1982). Thirdly, high stress levels have the potential to result in high levels of staff turnover and this will, in turn, result in higher training costs and problems in service quality maintenance. This can be a particularly significant problem in a labor-intensive sector such as the education sector. Finally, university administrators have a moral obligation to protect the welfare of their staff by adopting management practices that reduce their employees' exposure to situations where stress may become a problem.

1.1.3. Subordinate's job stress and leadership power bases

Not only is the subordinate highly dependent on the supervisor, but also the administration of the reward or punishment by the supervisor lies beyond the subordinate's direct control. The perceived lack of control and the anxiety associated with the need to satisfy the supervisor are likely to provoke subordinate stress (Elangovan and Xie, 2000). Therefore, perceived supervisor reward and coercive power will be positively related to subordinate stress. Similarly, perceived legitimate power of the supervisor would be positively related to stress, because the subordinate is reminded of responsibilities to be fulfilled and realizes that his or her performance will be monitored and evaluated. Expert power and referent power of the supervisor, on the other hand, were hypothesized to have a negative relationship with subordinate stress. Several researchers have noted the significant benefits of having strong social support in dealing with stress (e.g. Cohen and Wills, 1985). Strong social support helps people cope positively with stressful events by acting as a buffer against stress as well as contributing to their psychological and physical well-being. More specifically, expert power of the supervisor serves to reassure the subordinate in terms of reducing job uncertainty, handling task complexity, enabling role, and goal clarity (Busch, 1980), thus leading to lower stress. Referent power of the supervisor increases the attraction and acceptance of the supervisor by the subordinate thus enhancing the pleasantness of the work and lowering stress. Previous research has showed that expert power and referent power are positively correlated with subordinate affect (Podsakoff and Schriesheim, 1985), and expert power is negatively associated with subordinate job tension (Sheridan and Vredenburgh, 1978). It could be said that harsh power bases increase job stress whereas soft power bases reduce it.

1.1.4. Moderating Effects of Organizational culture

Organizational culture encompasses the values and norms shared by members of a social unit. These values and norms indicate correct ways of relating to others (Schein, 1990). Cultural values are in turn reflected in actual behavioral patterns. In this regard, culture is expected to moderate the relationship between leader's power bases and subordinate's job stress for two reasons. First, culture has been conceptualized as schemata (Bartunek and Moch, 1987), the subjective theories regarding how the world operates. Because culture guides the search for and interpretation of information (Harris, 1994), organization members pay more attention to the presence and absence of behaviors that are at the core of its culture. Second, culture acts as a social control mechanism (O'Reilly et al., 1991). Deviations from cultural norms are soon noticed and corrected (Sorensen, 2002). Thus, if culture emphasizes relationship development, individuals feel motivated to reduce their job stress levels, even in the presence of factors that are associated with low-quality exchanges.

Culture's dimensions vary in their relevance to the leader's power bases and subordinate's job stress. Theoretically, culture is expected to moderate that very relationship only in so far as the culture addresses norms regarding internal constituents, because the social power-job stress relationship is based on the exchange between two internal constituents. This expectation is consistent with Quinn and Rohrbaugh's (1983) distinction between organizational values regarding internal constituents such as employees and external constituents such as customers. These authors termed values relating to cooperation and morale as "internal values," whereas they labeled values related to innovativeness and productivity as "external" values. O'Reilly, Chatman and Caldwell (1991) found that they could represent a wide range of values

with seven dimensions, two of which described norms regarding interpersonal relationships in an organization: respect for people and aggressiveness.

Respect for people is the extent to which fairness, tolerance and respect for individual rights are core values (O'Reilly et al., 1991). A stronger negative relationship between soft power bases and job stress in these cultures is expected, because treating individuals sensitively will be part of organizational schemata and will serve to sustain social exchanges. Conversely, a leader's fair distribution of rewards is expected to be less important in determining job stress, since personal rewards will be less important in cultures stressing respectful treatment of employees. This view is consistent with findings suggesting that rewards are more important to individuals when procedural aspect of decision-making is unfair (Brockner and Wiesenfeld, 1996). Shortly, a "counteractive effect" (Cohen et al., 2003) between respect for people and harsh power bases in which respect for people reduces the importance of perceived distributive and procedural justices within exchanges is expected.

Hypothesis 1a. The respect-for-people dimension of organizational culture moderates the negative relationship between soft power bases and job stress in such a way that the relationship is stronger when respect for people is high than when it is low.

Hypothesis 1b. The respect-for-people dimension of organizational culture moderates the positive relationship between harsh power bases and job stress in such a way that the relationship is weaker when respect for people is high than when it is low.

Aggressiveness is the degree to which competitiveness and taking quick advantage of opportunities are shared values (O'Reilly et al., 1991). Aggressive cultures encourage employees to focus on outcomes and on outperforming others. Therefore, these cultures will increase the focus on tangible resources exchanged in relationships while discounting the value of fair interpersonal treatment, following a pattern that results in less attention paid to interactional leadership behavior (soft power bases). In keeping with Brockner and Wiesenfeld (1996), when competition is the norm, employees are expected to be more cognizant of the fairness of outcomes, and less aware of the fairness of interpersonal relationships. In other words, a synergistic interaction between aggressiveness and harsh power bases is expected.

Hypothesis 2a. The aggressiveness dimension of organizational culture moderates the positive relationship between harsh power bases and job stress in such a way that the relationship is stronger when aggressiveness is high than when it is low.

Hypothesis 2b. The aggressiveness dimension of organizational culture moderates the negative relationship between soft power bases and job stress in such a way that the relationship is weaker when aggressiveness is high than when it is low.

2. METHOD

2.1. Samples

The sample of this study included 622 lecturers along with their superiors (deans) from 13 state universities in Turkey. These universities were randomly selected from a list of 94 state universities in the country (The Higher Education Council of Turkey, 2009).

This study was completed in October - December 2008. Participants were told that the study was designed to collect information on the job stress and their social power bases perceptions in the higher education workforce. They were given confidentially assurances and told that participation was voluntary. The questionnaires were collected immediately.

A randomly selected group of *focal lecturers* completed the job stress and leader's power bases scales (10–62 lecturers per university, totaling 660). A separate group of randomly selected *peers* completed the culture scale (10–60 lecturers per university, totaling 656). Peer reports of culture instead of focal lecture reports were used in order to avoid same-source bias

when examining organizational culture's relationship with job stress and social power bases perceptions. 46 percent of the focal lecturers were women with an average university experience of 3.60 years. Moreover, 86 percent of the peers were women with an average experience of 4.20 years. The response rate was 86 percent in the study.

2.2. Measures

Leader's power bases. It was measured using the Interpersonal Power Inventory (IPI) constructed by Raven et al. (1998). It is a 44-item instrument that measures 11 individual power bases specified by Raven (1993). Respondents use a Likert type scale with anchors of 1 (*Much more likely to comply*) and 7 (*Much less likely to comply*) to indicate the extent to which the supervisor's use of a particular power base may have resulted in his or her compliance with the request. Studies that have used the IPI have shown it to be psychometrically sound, with coefficient alphas for individual factors ranging from .63 to .90 and accounting for approximately 60% of the variance in IPI scores through two-factor solutions using principal components or factor analyses (Schwarzwald and Koslowsky, 2001).

A factor analysis for the IPI in this study was conducted. The principal components analysis method was used to extract a set of independent factors. The varimax rotation method was then applied to clarify the underlying factors. Two factors were identified, accounting for 76.7 percent of the total variance for leadership scores. Factor 1 explained 63.9 percent of the variance; factor 2 explained 12.8 percent of the variance. These factors were identified as harsh and soft power bases, respectively.

Job stress. Spielberger and Vagg's (1999) Job Stress Survey was used to assess job stress. Respondents rate the intensity of 30 common workplace stressors on a 9-point scale by comparing each stressor to an event perceived as producing an average amount of stress (i.e., ''Assignment of disagreeable duties''), which has been assigned the midpoint value of 5. Later, respondents report on a scale of 0 to 9+ days how often each stressor has occurred in the past 6 months. The Job Stress Survey consists of three scales. The job stress index (JS-X) measures an individual's overall stress level; the job stress severity (JS-S) represents an individual's average intensity rating for the 30 stressors; and the job stress frequency (JS-F) indicates the average frequency of occurrence for the 30 stressors within the past 6 months.

Spielberger and Vagg reported coefficient alphas ranging from a low of 0.80 for the JP-X and the LS-X to a high of 0.89 for the JS-S and the JS-F. In this study, subordinates' job stress was evaluated utilizing the scale of the JS-X from the Job Stress Survey.

Organizational culture. The Organizational Culture Profile (OCP) developed by O'Reilly, Chatman and Caldwell in 1991 was used to measure culture. Respondents placed 54 items representing unique values into 9 categories (1, "very uncharacteristic of my organization," to 9, "very characteristic of my organization"), following a forced distribution. In the original validation of this scale, which was conducted in U.S. private sector organizations, 26 items represented seven dimensions of culture. As application of OCP for the Turkish case might generate different factor structure, an exploratory factor analysis with orthogonal rotation was performed. Instead of 26 items, 19 items fell under seven dimensions and explained 76.98 percent of the variance, suggesting that fewer items represented each dimension. Two of the seven dimensions, *respect for people and aggressiveness*, which described norms regarding interpersonal relationships in an organization, were chosen for this study.

Control variables. We controlled lecturer's and dean's *university tenure, age and gender*, as these could affect job stress, as well as the culture (Roberts et al, 1997).

3. RESULTS

Tables 1 and 2 show descriptive statistics and correlations. Hypotheses were tested using moderated hierarchical regression, according to the procedure delineated in Cohen and Cohen (1983). The significance of interaction effects was assessed after controlling all main effects. In the models, gender, age and organizational tenure were entered first as control variables. Later, soft power bases (expert, referent, information, and dependence legitimacy) and harsh power bases (personal and impersonal coercion, personal and impersonal reward, position legitimacy, equity legitimacy, and reciprocity legitimacy) were entered as predictor variables followed by moderator variables, i.e., respect for people and aggressiveness, were entered. Last, the interaction terms were entered. In order to avoid multicollinearity problems, the predictor and moderator variables were centered and the standardized scores were used in the regression analyses (Aiken & West, 1991).

Table 1. Means and Standard Deviations

Variable	Min.	Max.	Mean	s.d.
1. The Job Stress Index (JS-X)	1.00	9.00	5.02	1.20
2. Positive expert power	1.00	7.00	2.56	0.63
3. Positive referent power	1.00	7.00	2.78	0.65
4. Direct informational power	1.00	7.00	2.25	0.72
5. Legitimate dependence	1.00	7.00	3.07	0.63
6. Legitimate reciprocity	1.00	7.00	3.13	0.67
7. Impersonal coercive	1.00	7.00	3.76	0.88
8. Legitimate equity	1.00	7.00	3.77	0.79
9. Personal reward power	1.00	7.00	2.84	0.68
10. Impersonal reward	1.00	7.00	3.11	0.93
11. Personal coercive	1.00	7.00	3.82	0.66
12. Legitimate position power	1.00	7.00	4.25	0.79
13. Respect for people	1.00	9.00	5.20	0.64
14. Aggressiveness	1.00	9.00	4.80	0.52
15. Lecturer's university tenure	4.00	14.00	7.69	5.83
16. Gender	0.00	1.00	0.52	0.50
17. University size	300.00	1210.00	485.76	8.06
18. Dean's university tenure	2.00	12.00	7.00	3.02

Table 2. Correlations among Variables

Var.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1																	
2	-.34**																
3	-.41**	.51**															
4	-.40**	.48**	.42**														
5	-.30*	.44**	.38**	.34**													
6	.40*	-.20*	-.18*	-.19*	-.18*												
7	.42**	-.44**	-.22**	-.24**	-.28*	.44*											
8	.38*	-.26*	-.10*	-.14*	-.18*	.28*	.32*										
9	.22	.20	.12	.18	.22	.32*	.30*	.38*									
10	.16*	.12	.14	.20	.20	.36*	.36*	.33**	.33*								
11	.40**	-.41**	-.42**	-.46**	-.44**	.38**	.34**	.33**	.34**	.38*							
12	.24*	-.38*	-.32*	-.34*	-.36*	.42**	.42**	.44*	.28**	.34**	.44**						
13	-.20*	.16*	.13*	.12*	.04	-.16*	-.28*	-.12	.02	.06	-.18**	-.10					
14	.18**	-.10*	-.44**	.01	-.16	.16	.28**	.18	.02	.06	.28**	.18**	-.12*				
15	.06	.02	.12	.08	.08	.12	.14	.02	.06	.08	.08	.09	.12	.16			
16	.10	.06	.07	.01	.02	.01	.08	.06	.12	.14	.12	.12	.18	.16	.02		
17	.26	-.13	-.18	.04	.02	.12	.03	.04	.18	.14	.16	.18	-.16	.18	.28	.18	
18	.24	-.04	.00	.08	-.01	.19	-.02	.18	-.03	.12	.18	.08	.16	.12	.14	.12	.13

* p <.05.
** p <.01.
*** p <.001.

Results for the moderated hierarchical regression analysis are presented in Table 3. Controlling variables, *gender, age and lecturer's and dean's organizational tenure*, entered in Step 1 were not found to have significant effects on job stress.

The results in model 1 (Table 3) indicate that independent main effects were found for soft and harsh power bases (β =-.24, p <.01 and β =.42, p <.01 respectively) on job stress. Furthermore, model 2 (Table 3) points to significant main effects for respect for people and aggressiveness dimensions (β =-.21, p <.01 and β =.10, p <.01 respectively) on job stress.

Table 3. Results of Hierarchical Moderated Regression Analyses for Job Stress

Steps and Variables	1	2	3	4
Step 2				
Soft power bases	-.24**	-.26**	-.28**	-.24**
Harsh power bases	.42**	.41**	.40**	.40**
Step3				
Respect for people		-.21**	-.21**	-.20**
Aggressiveness		.10**	.11**	.11**
Step4				
Soft power bases x respect for people			-.29***	-.28***
Harsh power bases x respect for people			.44***	.48***
Soft power bases x aggressiveness				-.26***
Harsh power bases x aggressiveness				.48***
R^2	.34***	.41***	.42***	.42***
Adjusted R^2	.33	.40	.41	.41
ΔR^2	.34***	.07***	.01*	.01*

Lecturer's and dean's *university* tenur*e, age and gender* has been entered as a control variable at Step 1.
* p <.05.
** p <.01.
*** p <.001.

Hypotheses 1a and 1b state that respect for people will moderate the relationship between social power bases and job stress. The results of the regression analyses presented in model 3 (Table 3) show a significant interaction between respect for people and social power bases on job stress (ΔR^2=.01, ΔF =5.33, p <.05). Specifically support were found for the interactions between respect for people and soft and harsh power bases (β =-.29, p <.001 and β =.44, p <.001respectively). Therefore, the HLM analyses supported both Hypothesis 1a and 1b. As predicted, when a university's culture was high in respect for people, the negative relationship between soft power bases and job stress was stronger. On the other hand, the positive relationship between harsh power bases and job stress was weaker when respect for people in a university was high.

Hypotheses 2a and 2b state that aggressiveness will moderate the relationship between social power bases and job stress. The results presented in model 4 (Table 3) supported Hypotheses 2a and 2b (ΔR^2=.01, ΔF =4.18, p <.05). The negative relationship between social power bases and job stress was less pronounced when aggressiveness was high. High aggressive culture in a university increases the positive effect of harsh power bases on job stress.

4. DISCUSSION

This study investigated whether organizational culture moderated the relationships between job stress and social power perceptions. It was found that the respect for people and aggressiveness dimensions of organizational culture moderated the relationship between social power bases and job stress. These findings are consistent with previous researches suggesting that respect for people and aggressiveness dimensions have moderating effects (Erdogan et al., 2006; Cohen et al., 2003). In cultures with high respect for people, intangible aspects of communication such as the level of kindness and sensitivity lowered job stress. Individuals pay attention to their managers' expertise to be a source of work support, attraction and acceptance

thus enhancing the pleasantness of the work and lowering stress. In contrast, the level of aggressiveness helped facilitate a competitive atmosphere, which encourages employees to focus on outcomes and on outperforming others, suggesting a synergistic moderating effect for job stress (Cohen et al., 2003). These results highlight how interpersonal relationships are shaped by contextual factors in a work environment and by factors deemed important by the context.

This study examined the relationship between social power bases and job stress from a contingency perspective. If the degrees to which different factors are associated with job stress vary across organizations, then it follows that leaders may adopt a situational approach to lower employees' job stress levels. For example, although managers use the same bases of social power, employees' job stress levels may change depending on the organizational culture. Therefore, organizations can foster high-quality exchanges to reduce employees' stress levels by understanding the moderating effect of organizational culture on the relationship between leader's power bases and job stress.

The results in this study suggest that researchers should continue to investigate culture and other contextual factors in explaining perceptions and behaviors such as an organization's propensity for collaboration or organizational politics. It is plausible that culture was a relevant contextual variable in this setting because it was the main source of macro variation across universities. In other words, the findings in this study may be sample-specific and in need of replication. In different settings, other contextual factors, such as organizational structure or human resource practices, might become relevant. Identifying contextual factors affecting the way employees view their relationships seem to be a promising research area.

5. IMPLICATIONS / CONCLUSIONS

The results offer several implications for practicing managers. Even though selected sample was from the public sector, it involved a flat structure and professional employees with substantial autonomy. In such settings, leaders will find that they are hard pressed to spend long hours with each employee to develop relationships. When the day-to-day interaction with employees is limited, leaders may benefit from this study's findings. Specifically, when working in a culture high in respect for people, leaders may lower job stress quicker by being kind, respectful and sensitive to individual needs. Being forthcoming with information and explanations regarding decisions will also be critical in facilitating lower level of job stress. Finally, aggressive work culture, tremendous pressure to continuously perform and deliver results, lead to work-related stress. Thus, an alternative mechanism to achieve low levels of employees' job stress is to invest in a culture emphasizing conflict resolution, harmonious relationships and mutual support. Although leaders are always advised to be fair to build effective relationships, an aggressive culture hinders leader-member interactions. By cultivating a friendly social climate which provides opportunities for social interaction among employees, share information with employees to reduce uncertainty about their jobs and futures, show that individual workers are valued, praise good work performance verbally and institutionally, organizations may develop relationship-oriented cultures, which lead to reduced job stress.

The main strength of this study was its multilevel research design. Most researches on job stress and leadership (Balcı, 1992; Nelson et al., 1998; Chiu et al., 2005) has been conducted within single organizations, precluding an assessment of the way in which contextual variables influence job stress or social power bases. In fact, reviews of job stress have not identified any studies employing large samples of individuals within a large sample of organizations (Erdogan et al., 2006). The multilevel design was capable of capturing the complexity of individual behaviors by considering different contexts. A second strength was the use of an independent sample to measure organizational culture. Measuring culture from a secondary source allowed to minimize same-source bias, which would have resulted had authors of this study used focal

lecturer reports of organizational culture. Third, the use of a Turkish sample added to the growing literature examining job stress in non-Western settings.

This study has potential limitations as well. First, it is important to recognize limits to generalizability. This study was conducted on a sample of lecturers in universities. The universities were nonprofit, had flat structures, professional employees and wide spans of control. These characteristics may have affected some of the variables, such as culture. For example, in for-profit organizations, it might be possible to observe higher variation in culture dimensions. Additionally, when spans of control are narrower, the observed relationships might be different. Leaders and subordinates might communicate more frequently, providing greater opportunities for observers to assess justice perceptions in dyadic communications.

It is also important to recognize that the universities in the sample were all subject to the regulations of the Turkish Higher Education Council, potentially limiting variability in some university-level practices. Therefore, study results might more readily generalize to different branches of a single organization. Moreover, the nonrandom sampling might also have limited variation in the culture dimensions. To provide evidence of generalizability, future related researches shall need to support study findings within other industries and occupational settings.

Second, we focused on a setting in which leaders (the deans in the study) were the highest-ranking managers and had been working for their universities for a minimum of four years. Therefore, culture may have been at least partly shaped by these leaders. The purpose of this study was to examine the importance of context bearing, at the same time, that leaders had some role in the creation of that context. Culture may set expectations for new leader and member behaviors that may affect the development of the relationships between those two vital elements in an organization. In this regard, study hypotheses could better be tested in settings in which leaders are not only relatively new to the system but also are engaged in the process of developing relationships.

Despite these potential limitations, this study contributes to the research on job stress and leader's power bases screening that organizational culture is a relevant contextual variable in determining the importance of social power perceptions to leader-subordinate relationships. The results of this study support the argument that leader's power bases are socially constructed. Therefore, studies of social powers in relation to outcomes should recognize the organizational context in which individuals operate. We hope that the results will foster future researches to consider other contextual variables in models of social power and job stress.

REFERENCES

Aiken, L. S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions.* Newsbury Park: Sage.

Balcı, A. (1992). Üniversite Öğretim Elemanının İş Stresi Ölçeği. *A.Ü. Eğitim Bilimleri Fakültesi Dergisi, 26*, 315-334.

Bartunek, J. M., & Moch, M.K. (1987). First-order, second- order, and third-order change and organizational development interventions: A cognitive approach. *Journal of Applied Behavioral Science, 23*, 483–500.

Brockner, J., & Wiesenfeld, B.M. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin, 120*, 189–208.

Bryman, A. (2007). Effective Leadership in Higher Education. *Studies in Higher Education, 32,* 693-710.

Brymer, R. A. (1982). Stress and your employees. *Cornell Hotel and Restaurant Administration Quarterly, 22,* 6-12.

Busch, P. (1980). The sales manager's bases of social power and influence upon the sales force. *Journal of Marketing, 44*(3), 91-101.

Chiu, C., Chien, C., Lin, C. ve Yun, C. (2005). Understanding hospital employee job stress and turnover intentions in a practical setting: The moderating role of locus of control. *Journal of Management Development, 24,* 837-855.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences.* Hillsdale, NJ: Erlbaum.

Cohen, J., Cohen, P., West, S., & Aiken, L. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.)*. Hillsdale, NJ: Erlbaum.

Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357.

Cooper, C., Sloan, S., & Williams, S. (1988). *Occupational Stress Indicator Management Guide*. Windsor: Nfer-Nelson.

Elangovan, A. R., & Xie, J.L. (2000). Effects of perceived power of supervisor on subordinate work attitudes. *Leadership and Organization Development Journal, 21*(6), 319-328.

Erdogan, B., Liden, R.C., & Kraimer, M.L. (2006). Justice and Leader-Member Exchange: The Moderating Role of Organizational Culture. *Academy of Management Journal, 49*, 395–406.

French, J. R. P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in Social Power* (pp. 150-167). Ann Arbor, MI: University of Michigan Press.

Hales C., & Nightingale, M. (1986). What are unit managers supposed to do? A contingent methodology for investigating managerial role requirements. *International Journal of Hospitality Management, 5*(1), 3-11.

Harris, S. G. (1994). Organizational culture and individual sense making: A schema-based perspective. *Organization Science, 5*, 309–321.

James, L. R., Demaree, R.G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology, 69*, 85–98.

Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology, 88*, 246–255.

Law, J., Pearce, P.L., & Woods, B.A. (1995). Stress and coping in tourist attraction employees. *Tourism Management, 16*(4), 277-284.

Nelson, D., Basu, R. ve Purdie, R. (1998). An Examination of Exchange Quality and Work Stressors in Leader–Follower Dyads. *International Journal of Stress Management*, *5,* 103-112.

O'Reilly, C. A., Chatman, J.A., & Caldwell, D.F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*, 487–516.

Oi-ling, S. (2003). Job stress, job performance among employees in Hong Kong: the role of Chinese work values and original commitment. *International Journal of Psychology, 38*, 337–347.

Podsakoff, P. M., & Schriesheim, C.A. (1985). Field studies of French and Raven's bases of power: critique, reanalysis, and suggestions for future research. *Psychological Bulletin, 97*(3), 387-411.

Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analyses. *Management Science, 29*, 363–377.

Raven, B., Schwarzwald, J., & Koslowsky, M. (1998). Conceptualizing and measuring a power/interaction model of interpersonal influence. *Journal of Applied Social Psychology, 28*, 307-332.

Raven, B. H. (1993). The bases of power: Origins and recent developments. *Journal of Social Behavior and Personality, 49*, 227–251.

Roberts, J. A., Lapidus, R.A., & Chonko, L.B. (1997). Salesperson and Stress: The Moderating Role of Locus of Control on Work Stressors and Felt Stress. *Journal of Marketing Theory and Practice, 5*(3), 93-108.

Schein, E. H. (1990). Organizational culture. *American Psychologist, 45*, 109–119.

Schwarzwald, J., & Koslowsky, M. (2001). Captain's leadership type and police officers' compliance to power bases. *European Journal of Work and Organizational Psychology, 10*, 273-290.

Selye, H. (1976). *The Stress of Life*. New York, NY: McGraw-Hill.

Sheridan, J. E., & Vredenburgh, D.J. (1978). Usefulness of leadership behavior and social power variables in predicting job tension, performance, and turnover of nursing employees. *Journal of Applied Psychology, 63*, 89-95.

Sorensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly, 47*, 70–91.

Spielberger, C. D., & Vagg, P.R. (1999). *Job Stress Survey. Professional Manual*. Odessa: Psychological Assessment Resources.

The Higher Education Council of Turkey. *Universities (n.d.)*. Retrieved February 04, 2009, from http://www.yok.gov.tr/universiteler/uni_web.htm

Extended Abstract

The purpose of this research is to examine whether organizational culture moderates the relationships between leader's power bases and subordinate's job stress. For this purpose, answers of the following questions were searched. 1.İs there any relationship between power bases of university deans' and lecturers' job stress. 2. Does organizational culture moderate the relationship between deans' power bases and lecturers' job stress?

The sample of this study included 622 lecturers along with their superiors (deans) from 13 state universities in chosen by random method in Ankara, İstanbul, İzmir, Antalya, Samsun, Erzurum and Gaziantep in 2007-2008 fall semester. These universities were randomly selected from a list of 94 state universities in the country.

This study was completed in October - December 2008. Participants were told that the study was designed to collect information on the job stress and their social power bases perceptions in the higher education workforce. They were given confidentially assurances and told that participation was voluntary. The questionnaires were collected immediately. A randomly selected group of *focal lecturers* completed the job stress and leader's power bases scales (10–62 lecturers per university, totaling 660). A separate group of randomly selected *peers* completed the culture scale (10–60 lecturers per university, totaling 656). Peer reports of culture instead of focal lecture reports were used in order to avoid same-source bias when examining organizational culture's relationship with job stress and social power bases perceptions. Forty-six percent of the focal lecturers were women with an average university experience of 3.60 years. Moreover, 86 percent of the peers were women with an average experience of 4.20 years. The response rate, averaging 86 percent, varied between 70 percent and 100 percent.

In this research, three different questionnaires were used. Required permission were taken while using these questionnaires. In the research, dean's power bases were measured using the Interpersonal Power Inventory (IPI) constructed by Raven et al. (1998). The questionnaire was translated from English to Turkish. It is a 44-item instrument that measures 11 individual power bases specified by Raven (1993). Respondents use a Likert scale with anchors of 1 (*Much more likely to comply*) and 7 (*Much less likely to comply*) to indicate the extent to which the supervisor's use of a particular power base may have resulted in his or her compliance with the request. The principal components analysis method was used to extract a set of independent factors. The varimax rotation method was then applied to clarify the underlying factors. Two factors were identified, accounting for 76.7 percent of the total variance for leadership scores. Factor 1 explained 63.9 percent of the variance; factor 2 explained 12.8 percent of the variance. These factors were identified as harsh and soft power bases, respectively.

Spielberger and Vagg's (1999) Job Stress Survey was used to assess job stress. The Job Stress Survey consists of three scales. The job stress index (JS-X) measures an individual's overall stress level; the job stress severity (JS-S) represents an individual's average intensity rating for the 30 stressors; and the job stress frequency (JS-F) indicates the average frequency of occurrence for the 30 stressors within the past 6 months. Spielberger and Vagg reported coefficient alphas ranging from a low of 0.80 for the JS-X to a high of 0.89 for the JS-S and the JS-F. In this study, subordinates' job stress was evaluated utilizing the scale of the JS-X from the Job Stress Survey.

Finally, the Organizational Culture Profile (OCP) developed by O'Reilly, Chatman and Caldwell in 1991 was used to measure organizational culture. Respondents placed 54 items representing unique values into 9 categories (1, "very uncharacteristic of my organization," to 9, "very characteristic of my organization"). In the original validation of this scale, which was conducted in U.S. private sector organizations, 26 items represented seven dimensions of culture. As application of OCP for the Turkish case might generate different factor structure, an exploratory factor analysis with orthogonal rotation was performed. Instead of 26 items, 19 items fell under seven dimensions and explained 76.98 percent of the variance, suggesting that

fewer items represented each dimension. Two of the seven dimensions, *respect for people and aggressiveness*, which described norms regarding interpersonal relationships in an organization, were chosen for this study.

Hypotheses were tested using moderated hierarchical regression, according to the procedure delineated in Cohen and Cohen (1983). The significance of interaction effects was assessed after controlling all main effects. In the models, gender, age and organizational tenure were entered first as control variables. Later, soft power bases (expert, referent, information, and dependence legitimacy) and harsh power bases (personal and impersonal coercion, personal and impersonal reward, position legitimacy, equity legitimacy, and reciprocity legitimacy) were entered as predictor variables followed by moderator variables, i.e., respect for people and aggressiveness, were entered. Last, the interaction terms were entered. In order to avoid multicollinearity problems, the predictor and moderator variables were centered and the standardized scores were used in the regression analyses (Aiken & West, 1991).

The results of this research reveal that the respect for people and aggressiveness dimensions of organizational culture moderated the relationship between social power bases and job stress. In cultures high in respect, individuals pay attention to their managers' expertise to be a source of work support, attraction and acceptance thus enhancing the pleasantness of the work and lowering stress, whereas in cultures high in aggressiveness, individuals still appreciate the fairness of rewards and of the process used to make allocation decisions, their managers' expertise and charisma, making soft and harsh power bases a relevant correlate of job stress in both cultures.