Investigation of the Relationship between Organizational Democracy and Job Stress Level Perceptions of Administrators and Teachers

Aytekin Tokgöz  
Principal, Bahçelievler Secondary School, Isparta, Turkey  
https://orcid.org/0000-0002-9143-4626

Özgür Önen  
Assistant Professor, Burdur Mehmet Akif Ersoy University, Burdur, Turkey  
https://orcid.org/0000-0002-3715-7488

Abstract

This study aims to determine the relationship between the levels of work stress and the democratic perceptions of principals and teachers. The research was conducted in public schools located in Isparta. Correlational research design is followed. Interestingly, participants’ perceptions of accountability for their superiors significantly predict the job stress levels of administrators and teachers positively. This can be interpreted as the perception of accountability increases, job stress increases. The fact that principals and teachers are supervised frequently by their managers, who give importance to accountability, may cause pressure them. Additionally, it was observed that the perception of justice and equality significantly predicted the stress levels of teachers and administrators negatively. This finding can be interpreted that the increase in the fair attitude of the managers towards the employees and demonstrating equal behaviors cause a lower level of work stress.

Moreover, the gender of principals and teachers predicted work stress significantly. It was determined that male participants’ perception of job stress was higher than female participants. However, the seniority of administrators and teachers did not significantly predict the perception of work stress. Finally, the transparency and participation dimension of the organizational democracy did not significantly predict the job stress levels of administrators and teachers. This may be a result of a centralized organizational structure.

Based on the research findings, recommendations were given to reduce the work stress experienced by principals and teachers and develop a culture of democracy in educational organizations.

Keywords: Democratic attitude, Management, Organizational democracy, Work stress, Accountability, Justice perception

Introduction

People have to use all their abilities to maintain their work and private lives successfully. This causes stress in the daily life of people, including children to senior managers (Okutan & Tengilimoğlu, 2002). Nowadays, rapid changes in technology and work procedures, the increase in customers’ demands, and competitive market conditions make the work environment much more stressful (Avey, Luthans & Jensen, 2009). Adaptation to those rapid changes is hard for people (Okutan & Tengilimoğlu, 2002) and this lead to physical, (Hughes & Boothroyd, 2002; Erkuş & Findik, 2013), psychological (Baltaş & Baltaş, 2002) and behavioral (Cooper & Marshall, 1978) health issues.
Work-related stress is defined as physiologic and psychologic reactions to the events and conditions around the (Klarreich, 1996). Stress is related to many factors in peoples’ lives and may change according to organizational conditions, family life, social environment, subordinates or seniors, colleagues, and life style (Aktaş, 2001). Stress may arise from individual, work and one’s environment (Eren, 2012). In work life, increased responsibilities, high-performance expectations, long work hours, problems related to living in city centers and the lifestyle are the main reasons for work-related stress (Bamba, 2016).

Stress is an important concept for organizations as of economic consequences. Okutan & Tengilimoğlu (2002) argue that stress causes accidents, illnesses in work settings, which in turn leads to health expenditures and loss of labor force. Health and Safety Executive report (2018) indicates that in England, as a result of work-related stress or anxiety, 595 thousand people had health problems between 2017 and 2018, causing a loss of 15.4 million workdays. Additionally, stress is among the leading factors in quitting a job (Stranks, 2005).

Surveys conducted by American Psychological Association (APA) (2017) generally show work as one of the main stressors among Americans. In the 2017 survey report, work is the second main stressor (61 %) after money (62 %), which is also related to work (American Psychological Association, 2017). More importantly, this amount is higher (77 %) among generation Zs, young adults (APA, 2018), which is an indicator that works related stress is getting higher.

Stress has many negative effects on an organizational level, either public or private (Aktaş, 2001). However, managers and senior colleagues’ positive attitudes and behaviors may reduce the stress levels to a manageable point (Aktaş, 2001). Aytürk (2015) recommends managers to behave their subordinates friendly and fairly, and make them feel like a valuable team member for to….

International Labour Organization (ILO), states, in violence and stress reports in educational settings; teachers are the primary victims of the violence and stressors (International Labour Organization, 2007).

Previous studies suggest that organizational justice and organizational citizenship are related to stress (e.g., Greenberg, 1987; Tang & İbrahim, 1998). Organizational democracy is a highly related concept with organizational justice related to employees’ stress levels.

Organizational democracy can be defined as members’ participation in administration processes (Harrison & Freeman, 2004; Coşan & Güllova, 2014; Geckil, 2017). Organizational democracy makes employees commit to organizational targets and is satisfied (Harrison & Freeman, 2004). Employees feel happier and are loyal to the organization more if they fell a democratic climate in their organizations (Geckil, 2017).

The purpose of this study is to understand if there is any relation between teachers’ and principals’ work-related stress levels and their organizational democracy perceptions as exhibited by their administrators. However, as gender and seniority may be affecting their stress levels, they were also added to the study as control variables.

Literature Review

Organizational democracy, although there is no exact consensus even on term democracy (Cheney, 1995), can be defined as stakeholders’ participation in organization and management processes (Harrison & Freeman 2004; Coşan & Güllova, 2014; Geckil, 2017). Organizational democracy is positively related to employee commitment and satisfaction (Miller & Monge, 1986; Harrison & Freeman, 2004). It also has a positive effect on employee behaviors and motivation (Geckil, 2017). These positive effect may also lead employees to create new ideas for reaching organizational aims (Harrison & Freeman, 2004). Democratic understanding whit in an organization is generally thought of as a booster of performance and effectiveness (Miller & Monge, 1986; Harrison & Freeman, 2004; Geckil, 2017).

Study results also support these views. Previous studies report that organizational democracy is an important factor in employees’ performance (Yazdani, 2010). Additionally, organizational democracy was found related to organizational identification (Kesen, 2015) and job satisfaction (Özer & Urtekin, 2007; Çankaya, 2018).
Work-related stress, on the other hand, can be defined as the employees’ reactions to factors that can be seen as an emotional and physical threat around work settings (Jamal, 2011). It can also be defined as a tension state in the work setting due to incompatibility between work requirements and employee competencies (Efeoğlu & Özgen, 2007). Aktaş argues that there are many factors in work settings leading to stress and argues that not all the employees are affected in the same way and amount (2001).

Previous literature suggests that ambiguity in role definitions, pressure, high workload and work hours, very little work, change, decrease in income, the dispute between colleagues and superiors, dealing with offensive people, short death lines (Klarreich, 1996; Baltaş & Baltaş, 2002; Mentor, 2008; Yüksel, 2003). Stressors in work settings can be grouped into two; work content factors and organizational culture and aim factors. Work settings and equipment, work distribution, workload, work plan can be defined as work content factors are. While factors related to culture and aim are the role of the organization, decision-making processes and control factors, quality of relationships with others (Hoel, et al., 2001). As a result, organizational democracy perceptions’ of employees should be related to organizational stress since collaboration, participation, reconciliation are main indicators of democracy (Gürkaynak, 1989).

Consequences of work-related stress, even in a private or public organization, can be seen in organizational performance and achievements, in addition to these, alienation can be seen among employees (Aktaş, 2001; Okutan & Tengilimoğlu, 2002; Aksoy, 2005; Keshavarza & Mohammadb, 2011). It also causes employee absenteeism, quitting jobs and some health issues (Şimşek, Çelik & Akgenc, 2014). It is also found related to job satisfaction (Karadal, 2001; Keshavarza & Mohammadb, 2011; Xiang, et al., 2014; Büté, 2015) and organizational identification (Turunç & Çelik, 2010).

By considering the previous literature, it can be said that for achieving the organizational aim and keeping employees satisfied and healthy, taking precautions to lower their work-related stress is important. To achieve this goal, increasing their democracy perceptions may be helpful. Some concepts of democracy seem to be related to the factors causing or lowering stress in work settings.

Material and Methods

The correlational study design is followed in this study (Fraenkel, et al., 2012). The population of the study consists of 3288 primary school teachers and principals who work in Isparta province in educational years 2018-2019. Clustered random sampling method was applied where each school was considered a cluster (Fraenkel, et al., 2012). In this study, 272 male and 350 female participants have taken part voluntarily, in total 622. Before data gathering, all required permissions are gathered from the institutions of the researchers and the Ministry of Education.

Instruments

Job Stress Scale

To measure the work-related stress levels of participants, a five-point Likert type job stress scale developed by House and Rizzo (1972) and adapted to Turkish by Efeoğlu (2006) was used. The scale has 7 items in total. Efeoğlu (2006) reports .84 Cronbach Aplha value for the scale. However, in this study, the Cronbach Alpha value was estimated as .87 and considered satisfactory. Additionally, confirmatory factor analysis was conducted before further inferential analysis.

As can be seen in Table 1, job stress scale confirmatory factor analysis results indicated satisfactory fit. Chi-square/ df is estimated as 2.20, considered a highly satisfying fit (Hooper, et al., 2008; Çokluk, et al., 2010). Additionally, the RMSEA value is estimated as .04, which is also considered a very good fit (Hooper et al., 2008; Çokluk et al., 2010). Moreover, GFI, CFI, and NFI values are all calculated above .90, which are indicating satisfactory fit indices (Schermelleh-Engel, et al, 2003; Hooper et al., 2008).

Table 1: Fit indices for Job Stress Scale

<table>
<thead>
<tr>
<th>χ²</th>
<th>Df</th>
<th>p</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>GFI</th>
<th>CFI</th>
<th>NFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.23</td>
<td>11</td>
<td>.00</td>
<td>2.20</td>
<td>.04</td>
<td>.98</td>
<td>.99</td>
<td>.98</td>
</tr>
</tbody>
</table>
Organizational Democracy

To measure the organizational democracy perceptions of the participants, a scale developed by Geçkil and Tikici (2015) was used, after getting permission. The Scale has 28 items and consists of five dimensions; organizational participation, transparency, justice, equity, and accountability. They have reported Cronbach Alpha value of .95 while was calculated .94 in this study (Geçkil & Tikici, 2015). Confirmatory factor analysis was conducted before further inferential analysis.

As shown in Table 2, organizational democracy scale confirmatory factor analysis results indicated satisfactory fit indices. Chi-square/df is estimated as 2.90, considered a highly satisfying fit (Hooper, et al, 2008; Çokluk et al., 2010). Additionally, the RMSEA value is estimated as .053, which is also considered a very good fit (Hooper et al., 2008; Çokluk et al., 2010). Moreover, GFI, CFI, and NFI values are all calculated above .90, indicating satisfactory fit indices (Schermelleh-Engel, et al., 2003; Hooper et al., 2008).

Table 2: Fit Indices for Organizational Democracy Scale

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>Df</th>
<th>p</th>
<th>$\chi^2 / \text{sd}$</th>
<th>RMSEA</th>
<th>GFI</th>
<th>CFI</th>
<th>NFI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>967,543</td>
<td>333</td>
<td>.000</td>
<td>2.906</td>
<td>.053</td>
<td>.905</td>
<td>.956</td>
<td>.935</td>
</tr>
</tbody>
</table>

In this study, participants’ mean stress levels were found 2.63 with a standard deviation of .94, and organizational democracy perception 3.9 with a standard deviation of .65.

Results and Discussions

To detect the possible relationship between work-related stress and organizational democracy perceptions, regression analysis was conducted. As regression analysis is a parametric statistical test (Field, 2009), first, the assumptions were checked. For that reason, existence of outliers, normality, linearity, homoscedasticity, normal distribution of errors, absence of multi-collinearity, auto correlations. Outlier analysis indicates 41 cases have unusual values; the investigation of the outliers did not show any patterns, so they are removed from the data set.

The normal distribution of errors was checked by P-P plots, and homoscedasticity was checked by scatter plots and it is decided that assumptions were met.

A correlation analysis was conducted by continuous variables (Çokluk, et al., 2010). As shown in Table 3, r values are between .12 and .69; there are no extreme correlation values between variables indicating multi-collinearity between variables (Field, 2009; Tabachnick & Fidell, 2014).

Table 3: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Stress</th>
<th>Participation</th>
<th>Transparency</th>
<th>Justice</th>
<th>Equity</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>-.11*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td>-.14**</td>
<td>.76**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justice</td>
<td>-.15**</td>
<td>.69**</td>
<td>.67**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>-.23**</td>
<td>.56**</td>
<td>.68**</td>
<td>.50**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>-.03</td>
<td>.64**</td>
<td>.61**</td>
<td>.63**</td>
<td>.47**</td>
<td></td>
</tr>
<tr>
<td>Seniority</td>
<td>.06</td>
<td>-.00</td>
<td>.00</td>
<td>.02</td>
<td>-.01</td>
<td>.05</td>
</tr>
</tbody>
</table>

n=622, **p<.01, *p<.05

Although correlation analysis is generally enough for multi-collinearity, VIF and Tolerance values were also checked. All the VIF values were below 10 (1.14 and 3.38), indicating satisfactory results for multi-collinearity (Table 5). Additionally, tolerance values were above .10, indicating no multi-collinearity (Field, 2009), auto-correlation, on the other hand, was checked by Durbin Watson statistics. Results indicated 2.03 for Durbin Watson value, indicating no autocorrelation problem (Field, 2009).

After checking for assumptions, a multiple regression analysis was conducted. Organizational participation, transparency, justice, equity, and
accountability as organizational democracy dimensions and demographic variables seniority and gender were treated as predictors variables. In contrast, the job-related stress scale was treated as the outcome variable. As can be seen in Table 4, almost ten per cents of the work-related stress can be explained by the model significantly (F(7-614)=10.11, p=.00).

However, only variables; justice (B=.14, t=-2.4, p<.05), equity (B=.34, t=-4.64, p<.05), accountability (B=.15, t=2.71, p<.05), and gender (B=.34, t=-4.43, p<.05) found to be significant predictors of the work-related stress. As shown in Table 5, the most important predictor of work related stress is the equity perceptions, followed by gender justice and accountability. Participation, transparency and seniority were not found significant (p>.05).

Table 4: Multiple Regression Analysis Results

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Sd</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>.32</td>
<td>.10</td>
<td>.09</td>
<td>.90</td>
<td>2.03</td>
</tr>
</tbody>
</table>

Table 5: Predictors of the Work-related Stress

<table>
<thead>
<tr>
<th>B</th>
<th>Sd</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.00</td>
<td>.07</td>
<td>-.00</td>
<td>-.07</td>
<td>.93</td>
<td>.33</td>
<td>3.01</td>
</tr>
<tr>
<td>.06</td>
<td>.10</td>
<td>.04</td>
<td>.60</td>
<td>.54</td>
<td>.29</td>
<td>3.38</td>
</tr>
<tr>
<td>-.14</td>
<td>.06</td>
<td>-.14</td>
<td>-2.40</td>
<td>.01</td>
<td>.42</td>
<td>2.34</td>
</tr>
<tr>
<td>-.34</td>
<td>.07</td>
<td>-.24</td>
<td>-4.64</td>
<td>.00</td>
<td>.52</td>
<td>1.89</td>
</tr>
<tr>
<td>.15</td>
<td>.05</td>
<td>.14</td>
<td>2.71</td>
<td>.00</td>
<td>.49</td>
<td>2.00</td>
</tr>
<tr>
<td>-.34</td>
<td>.07</td>
<td>-.18</td>
<td>-4.43</td>
<td>.00</td>
<td>.86</td>
<td>1.15</td>
</tr>
<tr>
<td>-.00</td>
<td>.00</td>
<td>-.00</td>
<td>-.20</td>
<td>.83</td>
<td>.87</td>
<td>1.14</td>
</tr>
</tbody>
</table>

The findings of the current study have generally supported by the previous study. However, some research (Günbayı & Tokel, 2012; Merkan, 2011; Serinkan, et al, 2015) has reported contradicting results for gender, indicating no significant difference stress about gender. In this study, male participants have higher levels of work-related stress. Although women were expected to have higher levels of work-related stress due to conflicting roles causing work-family problems, men participants have higher levels of work-related stress. This may be due to generally accepted role definitions for men where they found responsible for keeping family up in Turkish society.

Seniority, on the other hand, was not found significant predictors of work-related stress. Although one may expect that increase in expertise on work may lead to lower levels of work-related stress, literature also suggests that seniority do not affect work-related stress (e.g., Merkan, 2011; Turhan, et al, 2018).

When the findings regarding the organizational democracy perceptions are examined, there are some interesting results has encountered. First of all, participation and transparency were not found to significantly predicting work-related stress. It is thought that most of the important decisions in Turkish school setting are decided in central government policy departments. Principals are generally responsible for supervising rather than setting goals for their institutions. Thus, it can be understood as participation does not affect work-related stress as there is no significant decision-making process.

Similarly, transparency does not affect work-related stress. This is also not surprising as the important decision are taken in by the central government. In schools, there is a small budget given for daily expenditures. Salaries and big scale expenditures are handled by the central government or higher managerial boards in the city centers. So, transparency may not be a big concern for the currents study’s participants.

However, justice and equity are significant predictors of work-related stress where an increase in justice and equity decrease work-related stress. When the organizational justice literature is examined, it is easy to find support to these findings, Greenberg (1987), for example, argued that unjust treatment cause stress. Elovainio, et al (2001) and Özgan and Bozbayındır (2011) also reported similar findings as justice perception is significant predictors of work-related stress.
More surprisingly, it is found that accountability has a significantly positive effect on work-related stress, which means an increase in accountability perception also causes an increase in work-related stress. This may be because principals who gave so much importance to accountability, maybe in higher expectations from their subordinates. Principals who are more accountable maybe behaving perfectly and asking their subordinates not to make mistakes. Although being accountable is an important issue for organizational democracy, this also seems to lead to work-related stress.

**Recommendations**

Justice and equity which are found significant predictors of work-related stress, are the concepts that are at the same time related to organizational performance, motivation, job satisfaction, organizational commitment, burnout, mistrust, and so on, which are important for a successful organization (Özgan & Bozbayındır, 2011). However, they must also be very easy for principals to implement.

However, accountability which seems to increase work-related stress, indeed something desirable for administers. Principals should announce their expectations in a fair way that does not cause extra workload and stress. If the principals are aware that so much accountability causes stress, then they may more clearly express their expectations and the reasons. This may, increases mutual understanding and lower the work-related stress symptoms.

The difference related to the gender on work related stress, on the other hand, need some extra investigation. Indeed, there is no such a big race for promotions among teachers; it is hard to say male participants are racing for the promotion that is causing stress. The only possible explanation is the role definition of men in the society which expects male participants to keep the family up. To increase understanding of issue, future researchers conduct some qualitative study, leading to deeper insights.

**Conclusion**

Findings of the current study suggest that justice and equity dimensions of the work-related stress leads to a decrease in work-related stress of the participants, as can be expected. However, accountability seems to increase the stress levels, which may be due to higher expectations of the administer from subordinates to be accountable for uppers. Interestingly, participation and transparency dimensions seem to be not related to work-related stress; this is thought of due to the highly centralized structure of the educational system in Turkey.

From the demographic variables, the seniority of the participants seems to be not related to work related stress, although seniority helps employees learn how things happen in work settings. However, gender has been found significantly predicting work-related stress where male participants indicated higher levels of stress.

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Author Details

Aytekin Tokgöz, Principal, Bahçelievler Secondary School, Isparta, Turkey, Email ID: aytekin.tokgoz@hotmail.com

Özgür Önen, Assistant Professor, Burdur Mehmet Akif Ersoy University, Burdur, Turkey Email ID: ozguronen@mehmetakif.edu.tr