School Leadership and Organizational Justice: A Meta-Analysis with Turkey Representative Sample

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Abstract

Purpose of this study is to investigate the relationship between school leadership and organizational justice using meta-analysis. By combining nine independent researches, a sample of 4303 respondents has been obtained, which represent overall Turkey. The results of the analysis, which were conducted using random effects model, showed that school leadership is strongly correlated with organizational justice. It was found that ethical leadership is the style with the biggest effect among the leadership styles covered in the study. Considering how effective the school leadership on the organizational justice is, it has been recommended to investigate the effect of leadership on the other components of the school as well.

Keywords: leadership, organizational justice, schools leadership, meta-analysis
1. Introduction

Leadership is approached at a variety of different perspectives in terms of institutions and organizations, and it is a very popular research subject in the field of education (Krüger & Scheerens, 2012). Leadership is associated with schools and administrators in educational studies. In this case, school administrators are expected to guide all employees and students, support them, undertake all responsibility, and are an inspiration in order to meet the objectives of the school. Furthermore, the school administrators pave the way for curriculum reform and developing a positive learning environment (Cotton, 2003; Hallinger, 2005; Huber, 2004; Nichols, 2011).

The studies on school leaders accelerated with the Effective School Act in the 1970’s. Research done in England and Northern America determined student success in certain schools to be greater compared to other schools. The researchers argued that this situation cannot be explained just by the unique individual and social characteristics of the students, but that the real difference between the schools was due to the leadership behaviors of the school administrators. Hence, school leadership began to be discussed more frequently in educational studies because of this finding (Bamburg & Andrews, 1991; Krüger & Scheerens, 2012; Ross & Gray, 2006).

The school leader is the person who plans and maintains program development, allocates resources, improves the performances of employees and students by encouraging them, and who guides them in order to meet the objectives of the school. Upon determining the objectives of the school, school leaders ensure that these objectives are stated and agreed upon with the students, teachers, and school environment. Furthermore, these leaders manage the out of school activities as well. They direct the employee and student activities in other areas of the school, encourage local organizations to work with with the school, and also collaborate with families and business organizations (Busher, Harris & Wise, 2000). In conclusion, school leaders undertake the main responsibility of ensuring that the student success is at its maximum potential. It can be said that the concept of justice is one of the most important components of this responsibility.

In this context, the concept of organizational justice was complimented by social scientists and therefore it is one of many concepts that are the subject of scientific researches. Organizational justice can be expressed as the perception of justice, developed by the employees, about the situations arising from to the behaviors of the organization or its employees, either individually or as a group (James, 1991; Taştan & Yılmaz, 2008). In addition, it can be seen that organizational justice has an impact on many organizational factors, from the attitude of the employees to their performance (Konovsky, 2000; Yılmaz & Taştan, 2009). Greenberg’ (1987, 1990) thus, organizational justice is a concept concerning the perception of how fairly the employees are treated in an organization and the impact of this perception on the factors such as employees’ commitment to the organization, organizational trust. In other words, organizational justice is related with the rules developed for the distribution of the components such as work, service, reward, punishment, and fee, among the employees who work in the organization and the social norms on which these
It is possible to encounter many researches investigating the relation between leadership and organizational justice. Usually, these studies show that leadership behaviors are positively correlated with organizational justice (Akyüz, 2012; Gefen, Ragowsky & Riding, 2008; Öğuz, 2011; Pillai, Scandura & Williams, 1999). In the light of previous researches, the following hypotheses were tested:

H1. There is a positive correlation between school leadership and organizational justice.

H2. Leadership style is a moderator in the positive correlation between school leadership and organizational justice.

H3. The level of the education (primary school, secondary school and mixed) is a moderator in the positive correlation between school leadership and organizational justice.

2. Method

2.1 Study Design

In this study, the effect of school leadership on organizational justice was tested using meta-analysis design. Meta-analysis is a design used to gather the results of several independent research studies on certain subjects, and applying statistical analysis on the findings acquired (Littel, Corcoran & Pillai, 2008; Petitti, 2000).

2.2 Scanning Strategy and Including/Excluding Criteria

In order to define the type of research that needs to be included into the meta-analysis of this study, an in-depth search was made on Council of Higher Education (YÖK), Turkish National Academic Network and Information Center (ULAKBİM), and Google Academic databases. In this phase, the research process was reduced to only certain key words, titles, and abstracts, based on the terms leadership, and only using organizational justice, vocational justice, and work justice. The latest date of research included in this study is July 2013. In this study, only doctoral and post-graduate dissertations, and articles published in refereed and non-refereed journals were included in the analysis.

Several strategies were used to determine the appropriate research for meta-analysis. First the research process was reduced to certain key words, titles, and abstracts; and the selection of 17 researches was formed upon reviewing all the research done on leadership and organizational justice. Then the research abstracts were reviewed. Upon reviewing the abstracts, 3 of the research articles were excluded according to the criteria stated below. In the second phase, the remaining 9 researches were analyzed in detail, and 5 of these researches were found to be appropriate while the other two were deemed inappropriate. Descriptive statistics on those 9 researches are given in Table 1. Inclusion criteria defined for this study are:
To be carried out between 2000 and 2013,

To include statistical information required for correlational meta-analysis,

To measure school leadership,

To cover sampling groups within the borders of Turkey,

To cover sampling consisting of teachers,

To be published in refereed journals (for articles).

Table 1. Features of the studies included in meta-analysis

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication year of researches</td>
<td>2012</td>
<td>2011</td>
<td>2010</td>
<td>2009</td>
<td>2007</td>
<td>-</td>
</tr>
<tr>
<td><em>n</em></td>
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<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>%</td>
<td>11.1</td>
<td>33.3</td>
<td>22.2</td>
<td>22.2</td>
<td>11.1</td>
<td>100</td>
</tr>
<tr>
<td>Type of researches</td>
<td>Thesis</td>
<td>Article</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>n</em></td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>%</td>
<td>88.9</td>
<td>11.1</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Education level</td>
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<td>Secondary school</td>
<td>Mixed</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>n</em></td>
<td>4</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>%</td>
<td>44.4</td>
<td>44.4</td>
<td>11.1</td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

2.3 Coding

Coding is a data extracting process, during which clear data and data appropriate for research are extracted from the complied information in the studies. A coding form was created before the analysis, and the coding was carried out in accordance with this form. The main objective of this procedure was to develop a special coding system, which is both general, and unique enough not to miss the characteristics of any type of research. In order to determine the reliability of the coding system, two researchers carried out coding process, and Cohen’s kappa reliability coefficient between the coders was determined to be .98. The coding form created for the study included the following components:

- References of the research,
- Information on sampling,
- Data collection tool(s),
- Information on methodology,
- Quantitative values.
2.4 Data Analysis

Impact quantity acquired in meta-analysis is a standard measure value used in the determination of the strength and direction of the relationship in the study (Borenstein, Hedges, Higgins & Rothstein, 2009). In this study, Pearson Correlation Coefficient ($r$) has been calculated to represent the size of the effect. Since the values of the correlation coefficient ($r$) have varied between -1 and +1, this calculated “$r$” value was transformed to the “$z$” value, obtained from the table. In this context, Random effects model was preferred because the researches covered in the study, were not functionally equal and generalization to larger populations were to be made with the calculated effect size.

3. Findings

Table 2 displays the results of meta-analysis between school leadership and organizational justice. The findings have supported H$_1$ hypothesis, the existence of a positive correlation between school leadership and organizational justice. The effect size of the school leadership on the organizational justice is calculated as .75. This value shows that school leadership has a very big effect on the organizational justice perceptions of the teachers (see Cohen, 1988).

The findings of the moderator analysis did not supported H$_2$ hypothesis, which was testing leadership styles being a moderator between school leadership and organizational justice. On the other hand, it has been discovered that all leadership styles have a positive and significant effect on organizational justice. It has been found that among the leadership styles covered in the study, transformational [$r = .70$], ethic [$r = .79$] and servant [$r = .65$] leaderships have quite big effects on the organizational justice. The strongest effect has arisen from ethic leadership. This fact is an indication of how important the ethical behavior of the leaders is for the followers. Although there is a differentiation among the effect sizes between leadership styles and organizational justice, this differentiation was not found to be statistically significant based on the moderator analysis conducted according to random effects model ($Q_b= 2.63, p>.05$).

Based on the findings, H$_3$ hypothesis, which was testing the level of education being a moderator between school leadership and organizational justice, was not supported. According to the moderator analysis, the differentiation of the effect sizes among the level of educations was not statistically significant ($Q_b = 0.20, p>.05$). In this context, it has been found that school leadership has a big effect on the organizational leadership in all education levels (primary school, secondary school and mixed) covered in the study. The biggest effect is found for mixed level [$r = .80$], which covers both primary and secondary educations.
Table 2. Correlations between school leadership and organizational justice: The results of meta-analysis

<table>
<thead>
<tr>
<th>Concepts</th>
<th>k</th>
<th>N</th>
<th>r</th>
<th>CI Lower Limit</th>
<th>CI Upper Limit</th>
<th>Q</th>
<th>Qb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>9</td>
<td>4303</td>
<td>.75*</td>
<td>.67</td>
<td>.81</td>
<td>218.71*</td>
<td></td>
</tr>
<tr>
<td>Moderator [Leadership styles]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>3</td>
<td>960</td>
<td>.70*</td>
<td>.56</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethic</td>
<td>5</td>
<td>2943</td>
<td>.79*</td>
<td>.71</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servant</td>
<td>1</td>
<td>400</td>
<td>.65*</td>
<td>.35</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderator [Education level]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>4</td>
<td>1914</td>
<td>.74*</td>
<td>.58</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary School</td>
<td>1</td>
<td>153</td>
<td>.80*</td>
<td>.48</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td>4</td>
<td>2236</td>
<td>.74*</td>
<td>.59</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Discussion

The objective of this meta-analysis is to quantitatively analyze the relationship results acquired from the research analyzing the relationship between school leadership and organizational justice. The narrow confidence intervals in the meta-analysis indicate that the results of the research included in this study are reliable. This finding can be approached as a significant one in terms of making more reliable decisions on the tendency and strength of the relationship-related results acquired by meta-analysis.

As expected, the results of the meta-analysis showed that school leadership has a big positive effect on the organizational justice perception of the teachers. Since the justice sense perceived by the employees determines their attitudes and behaviors towards their managers or leaders, this was an expected result (Adams, 1965). In this sense, the finding of the study supports the literature (Hoy & Tarter, 2004; Pillai, Scandura & Williams, 1999). All researches included in the study tested the correlation of leadership styles (transformational, ethic, servant) with organizational justice.

As a result of meta-analysis conducted for education level moderator variable, a positive and large scale relationship has been revealed between leadership and organizational justice in primary and secondary education levels. This fact shows that a universal value such as justice cannot be differentiated according to regions or levels.
References


Türkçeye Uyarlanması [Organizational citizenship and organizational justice scales’ adaptation to Turkish]. *Eğitim ve Bilim*, 33(150), 87-96.


Appendix

Summary of studies characteristics in the analysis results

<table>
<thead>
<tr>
<th>Study name</th>
<th>Statistics for each study</th>
<th>Correlation and SRA CI</th>
<th>Weight Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aheko, 2012</td>
<td>0.992 3.588 3.763 19.446 0.000 400</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Opara, 2011</td>
<td>0.910 3.371 3.843 23.994 0.000 390</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Aheko, 2011</td>
<td>0.716 3.659 3.910 19.418 0.009 389</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Yehata, 2015</td>
<td>0.880 3.758 3.881 19.148 0.003 183</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Krepisetti, 2014</td>
<td>0.100 3.483 3.833 17.207 0.000 410</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>S. gu)c, 2009</td>
<td>0.325 3.959 3.999 36.640 0.000 354</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Opara, 2009</td>
<td>0.750 3.551 3.741 14.541 0.000 350</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>T. yehata, 2017</td>
<td>0.890 3.843 3.744 48.194 0.003 1277</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Opara, 20011</td>
<td>0.790 3.985 3.913 11.656 0.000 4303</td>
<td>Relative weight</td>
<td>Standard deviation</td>
</tr>
</tbody>
</table>

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