A pair-wise scaling study on the missions of education supervisors in Turkey

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Abstract (Genişletilmiş Türkçe özet bu dosyanın sonundadır.)

The purpose of this study is to specify the mission that the education experts consider as preferential by providing a pair-wise comparison of their missions. The study group includes 174 education supervisors who are on duty in the primary school section of 56 different provinces. “Evaluation Form of Education Supervisors’ Mission Priorities” has been used as the data collection tool. Evaluation form of education supervisors’ mission priorities were scaled from complete data matrix with Thurstone’s law of comparative judgment case V. Equation. After the scaling operation, the inner consistency of supervisor judgments, the extent of agreement among supervisors and the significance of these were examined. For this process, two statistics called Kendall’s zeta statistics and Kendall’s U statistics were used. The results of this study have revealed that “counseling and in service training” is considered as a primary mission by education supervisors. Guidance and on site training is followed by “inspection and evaluation”, “research”, and lastly “inquisition”. In addition, the education supervisor can be considered as consistent in her/his judgment and the education supervisors’ judgments are considered in agreement.

Keywords: The education supervisor, supervision, scaling.

1. Introduction

Supervision can be defined as a process that includes items such as state determination in an organization, assessment, and correction/development (Başar, 1993). Supervision is observing the employees’ on duty styles, displaying the errors and missing points, taking the necessary precautions to fix these, introducing the innovations to solve the problems, and enabling the development of methods (Taymaz, 2005). With supervision, it is aimed to prevent

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departures from the planned organizational targets, to observe and fix the organization’s functioning (Başaran, 1994).

When supervision is considered as a process of controlling the behavior for the benefits of the community (Bursalıoğlu, 1994), supervision service is directly related to the structuring of the community educational system which is an inseparable part of national structuring almost in all countries (De Grauwe, 2008). The primary purpose of supervision in education is to establish and maintain the effectiveness of the school that produces educational services (Başaran, 1994). With this purpose, it is necessary to closely observe the outputs and productivity of the schools and to take the precautions that will constantly improve them (Aydınlı, 2005). Glanz (2007) states that supervision in education is open to innovations and it includes the disciplined and standardized ways of education that were created for controlling behaviors of teachers in classroom environment that was arranged according to the rules. Supervision and institutional functioning in education is continuously observed in a planned and programmed way as a whole, missing points are identified and fixed, the repetition of the errors are tried prevented, and a healthier functioning is established (Aydınlı, 2000).

2. Literature Review

2.1. Educational Supervision in Transition

The application and conception of supervision in education has undergone significant changes during the historical process. In the second half of the 19th century, with the industrial revolution, supervision in education included “inspection” applications which reflected the emergence of bureaucracy. Supervision at that time, which comes before the modern period, was a strict method that was based on control and observation and aimed to identify all the errors of teachers in the classroom. However, bureaucratic education perspective, which was based on inspection, looked for productivity in everything and dominated the field before the modern period, was harshly criticized especially by teachers and other educationalists and views against autocratic methods in supervision were developed. As a result, a shift from a controlling perspective to a democratic one was witnessed (Aydınlı, 2005; Glanz, 1997; Hazi and Glanz, 1997; Sullivan and Glanz, 2000).

From 1920’s to 1980’s, the democratic and improvement centered view in education supervision, which emerged in accordance with various needs of the democratic society, argues that educationalists, teachers, program experts and supervisors should cooperate in order to improve teaching (Glanz 1997). In this new democratic perspective, supervisors have primarily
started to use cooperative problem solving methods and other scientific methods to solve
problems related to education (Hazi and Glanz, 1997; Sullivan and Glanz, 2000). After 1980’s,
additional improvements in the democratic perspective of supervision and adaptation for new
meanings of supervision was witnessed. This period can be named as postmodern period in
terms of Glanz (1997). Postmodern view has avoided considering supervision as a definition
that is a reminiscent of observation and control, as for post-modernists supervision hinders a
teacher’s individual autonomy. According to the postmodern view, supervision should be based
on a common perception between colleagues who are not critical and guiding.

Contemporary education supervision, which stems from that perception, can be defined as a
democratic and cooperative assistance and guidance process whose purpose is to deal with the
knowledge deficiency of teachers and other educationalists and to constantly improve them
from all directions (Aydın, 2005; Badiali, 1997; Glanz, 1997; Sergiovanni and Starrat, 1993;
Sullivan and Glanz, 2000; Zepeda, 2006). Education supervisors play a key role in making the
contemporary education supervision of that perception reach its goals. However, it is quite
difficult to define the roles and missions of supervisors since different perception of schools,
teachers, and teaching and learning influences the roles of the supervisors. Also, the
supervisors at schools need to heavily deal with both teaching and how organizational
conditions influence school (Badiali, 1997). Furthermore, supervisors are responsible for
helping directors and teachers to find the most effective methods that can be used for forming
learning fields (Hinkle and Washenberger, 1976). With these new responsibilities, supervisors
gain the role of education leader who continually strives for fixing learning-teaching process.
As education leaders, supervisors should be skillful in strategic planning, employee
development, budgeting, (Badiali, 1997; Rutrough, 1967; Sergiovanni and Starrat, 1993),
curriculum development, educational planning, management, educational psychology, learning
theories, research and evaluation (Hinkle and Washenberger, 1976).

2.2. Education Supervisors’ missions in Turkish Education System

In Turkish educational system, the mission of supervision in the country has been given
to Turkish Republic Constitution and with the related laws to the ministry of education.
According to Ministry of National Education’s [MoNE] data (MoNE, 2011a), during 2010-
2011 education year, there were 69.684 schools and associations, 774.363 teachers and
16.845.528 students in formal education (This number does not include higher education
institutions). When these numbers are considered, education supervisors become especially
important in ministry of education’s missions and responsibilities (Bülbül and Göl, 2011). Ministry of National Education supervision mission is carried out by Guidance and Supervision Staff and Internal control unit which includes national education supervisors that are directly connected to the cabinet officer in the central organization. In the province organization, this mission is implemented by Education Supervisors Staff which includes province education supervisors who form the research group of this study. In order for supervision in education to reach its goals, education supervisors need to deal with several duties in numerous fields. Ministry of education has specified the education supervisors’ responsibilities as guidance and in service training, inspection and evaluation, inquisition and others similar duties (MoNE, 2011b). Each of these duties attributes various missions and responsibilities to supervisors (Kaya 1993). While fulfilling the specified tasks, supervisors are expected to play the roles of director, leader, instructor, guide, research specialist, and inquisition judge which form separate competence grounds (Taymaz, 2005).

Guidance and in site training: One of the tasks that education supervisors should fulfill is to provide occupational support to administrators and teachers and train them on site in order to make education and teaching process more effective (MoNE, 2011b). Guidance performed during the supervision includes the activities of self and environmental recognition, individual problem solving, decision making, adapting to the environment where s/he is present, self-improvement, and self-contentment. Moreover, in-service training performed during supervision is a process of making the individual gain the necessary information, skills and attitudes that can be used for solving the problems, failures and application deficiencies which stem from lack of self-improvement (Taymaz, 2005). The occupational assistance and guidance role of supervision is making significant contributions to the education system to reach its aims and serving to the unity of the system. Therefore, in service guidance and training can be accepted as the most important roles of supervisors (Bilir, 1992; Can, 2004; Memişoğlu and Sağır, 2008; Taymaz, 2005; Yağınkaya, 2003).

Inspection and Evaluation Mission: Every organization is responsible for constantly observing and learning the conditions of fulfilling its purposes that constitute the reason for its existence. This is possible through the continuous and planned control and evaluation of the inputs, process and outputs of the organization (Taymaz, 2005). When supervisors inspect and evaluate, they are responsible for 1) control of the performances and regional relations of education, teaching, administration and other employees of schools and institutions according to the legislation, 2) control of and evaluating the proper use of school resources, and 3)
formulating an inspection report in the light of that evaluation. Ministry of education also states that all these steps should be appropriate for the general purposes and primary principles of Turkish National Education (MoNE, 2011b). In Turkey, lesson inspection which is used for evaluating the efficiency of the teacher is performed during the general inspections or through classroom visits (Sağlamer, 1985). Since there is no other method to specify the classroom performance of the teacher, classroom visits as an inspection tool have been used for long time.

**Inquisition mission:** In Turkey, different from other countries, the inquiry mission which does not directly influence education and teaching processes has been given to supervisors by laws and regulations (Taymaz, 2005). Based on the authorization they have education supervisors are responsible for executing inquisition both during their inspections and during situations which constitutes a crime that they receive through complaint or appeal (Özmen and Şahin, 2010). However, the inquisition mission is the most criticized mission of supervisors in terms of fairness and mission conflict (Bilir, 1992), since it is really hard to examine, search, judge and take objective decisions in order to find the truth. These factors make it difficult for supervisors investigate and cause the supervision mission to be an undesired service (Taymaz, 2005). Moreover, supervision requires special competences. Lack of inquiry education that supervisors with a teacher or administer background receive results in application problems.

**Research and Examination Mission:** One of the missions of supervisors in Turkey is to conduct scientific research on education (Başar, 1993). By closely observing structures and behaviors of education institutions, education supervisors are responsible for conducting research and examination, and benefiting from the research results in order to increase productivity in education and teaching, and establish constant development (Akış, 1999; Atay, 1995). Due to the research missions of supervisors, supervision not only specifies the breakdowns in the system but also serves as a fundamental item that provides information about the reasons of those breakdowns and how they can be prevented (Taymaz, 2005). In Turkey, recent studies that deal with missions of supervisors have mostly focused on how missions such as counseling and in service training (Altındağ, 2007; Balci, 2007; Çiçek Sağlam and Demir, 2009; Danyeri, 2001; Ecevit, 1996; Ergin, 2003; Gün, 2001; Gündüz, 2010; Korkmaz, 2007; Ovalı, 2010; Sabancı and Şahin, 2007), inspection and evaluation (Ciğer, 2006; Dündar, 2005; Gökalp, 2010), research and examination (Eyi, 2006), and inquisition (Altındağ, 2007; Özmen and Şahin, 2010) are evaluated in the light of supervisor, administrator and teacher views and what kind of problems do supervisors face while trying to accomplish these missions (Erdem, 2010; Şahin, Çek and Zeytin, 2011; Şenyüz, 2006; Taşar, 2000; Terzi, 1996; Yılmaz, 2007). In the
study that was conducted by Tutunlu (1992), how much time primary school supervisors spare for their primary missions was identified and their mission priorities were displayed. However, among these studies there is no study that displays the mission priorities of education supervisors in a comparative way. In this context, the purpose of this study is to specify the mission that the education experts consider as preferential by providing a pair-wise comparison of their missions.

3. Method

3.1. Type of research

The purpose of this study is to specify the mission that the education experts consider as referential by providing a pair-wise comparison of their missions. Thus, this study constitutes a descriptive research.

3.2. Study Group

The study group consist of 174 education supervisors who are on duty in the primary school section of 56 different provinces. While 87,93% (153) of education supervisors are male, 12,07% (21) of them are female. In addition to that, 39,66% (69) of the education supervisors have been working for 0-10 years, 45,40% (79) for 11-20 years, 13,22% (23) for 21-30 years, and 1,72% (3) of them have been working for 31-40 years.

3.3. Data Collection Tool

“Evaluation Form of Education Supervisors’ Mission Priorities” has been prepared as the data collection tool by the researchers. During the preparation of the form, education supervisors’ five general missions that have been specified in the Ministry of Education’s Education Supervisors Presidency Regulation were selected. Since the study was conducted on education supervisors, only these five missions were considered. The specified five missions were organized in a format that would help the education supervisors to carry out pair-wise comparisons and the data collection tool was formed. The education supervisors were requested to compare the five missions that were presented in a pair-wise comparison format according to what they consider as of top priority.
3.4. Data Analysis

Evaluation form of education supervisors’ mission priorities were scaled from complete data matrix with Thurstone’s law of comparative judgment case V. equation. The application of Thurstone’s law of comparative judgment includes five cases methods which are I., II., III., IV., and V.. Of these cases, III. and V. are the simplified cases of the law. The difference between III. and V. case equations is as follows: While in the V. case equation, separation judgment variances are accepted as equal, in the III. case equation, separation judgment variances are not accepted as equal and they are required to be found one by one.

When the difference between the variances is large, counting the variances as equal and scaling with V. case method is economical (Turgut and Baykul, 1993). Considering this the missions of education supervisors has been scaled according to V. case equation. Primarily, the frequency equation values that belong to education supervisors’ pair-wise comparison of five missions were identified and the frequency matrix was formed with these values. The proportion matrix was found by dividing each element of frequency matrix by the number of total education supervisors who made a pair-wise comparison. The z values that correspond to ratio matrix elements were identified and the formation of unit normal variance matrix was put into effect. Values that belong to each column were added to the bottom line of unit normal variance matrix and the mean of each z value in this column were calculated through the columns. Thus, scale values were found. In order to move the starting point of the axis to the lowest z mean values, the scale values were sequenced by adding the lowest z mean value’s absolute value to all values. Finally, the scale values that had been obtained were shown on the number line. After the scaling operation, the inner consistency of supervisor judgments, the extent of agreement among supervisors and the significance of these were examined. For this process, two statistics called Kendall’s zeta statistics and Kendall’s U statistics were used. Microsoft Excel is used for data analysis.

4. Findings

In this study, education supervisors’ missions were scaled by using pair-wise comparison method which is a scaling technique. Each process of the scaling practice was shown in tables. Essentially, the missions were pair-wisely compared by education supervisors in terms of which mission they consider as primary. The frequency matrix which displays the frequency values that belong to each mission is shown in table 1.
In order to control if an error was done during the organization of the formed frequency matrix, the sums of frequency matrix’s each line and columns are added. These two sums are expected to be equal (Turgut and Baykul, 1992). After this control, no error was found and the operation was continued. Subsequently, the proportions matrix (P) was by dividing each element of F matrix by education supervisors’ number that made the pair-wise comparison. In this study, since the number of education supervisors who made pair-wise comparison was 174, each element of frequency matrix was divided by that number and P matrix was formed. Table 2 shows P matrix.

<table>
<thead>
<tr>
<th>Missions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- Guidance and in service Training</td>
<td>1</td>
<td>118</td>
<td>122</td>
<td>120</td>
<td>120</td>
<td>480</td>
</tr>
<tr>
<td>B- Inspection and Evaluation</td>
<td>56</td>
<td>1</td>
<td>131</td>
<td>141</td>
<td>109</td>
<td>437</td>
</tr>
<tr>
<td>C- Examination</td>
<td>52</td>
<td>43</td>
<td>1</td>
<td>118</td>
<td>52</td>
<td>265</td>
</tr>
<tr>
<td>D- Inquisiton</td>
<td>54</td>
<td>33</td>
<td>56</td>
<td>1</td>
<td>53</td>
<td>196</td>
</tr>
<tr>
<td>E- Research</td>
<td>54</td>
<td>65</td>
<td>122</td>
<td>121</td>
<td>1</td>
<td>362</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>216</td>
<td>259</td>
<td>431</td>
<td>500</td>
<td>334</td>
<td>1740</td>
</tr>
</tbody>
</table>

It is important for the sum of matrix’s elements that are symmetrical to the primary diagonal to be equal to 1 when the proportions matrix is constructed. After that control, the next step was the construction of unit normal variance matrix (Z). Z matrix is shown in Table 3.
Table 3: Unit normal variance matrix of Education supervisors’ missions (Z)

<table>
<thead>
<tr>
<th>Missions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.000</td>
<td>0.463</td>
<td>0.528</td>
<td>0.495</td>
<td>0.495</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>-0.463</td>
<td>0.000</td>
<td>0.684</td>
<td>0.879</td>
<td>0.322</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-0.528</td>
<td>-0.684</td>
<td>0.000</td>
<td>0.463</td>
<td>-0.528</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>-0.495</td>
<td>-0.879</td>
<td>-0.463</td>
<td>0.000</td>
<td>-0.511</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>-0.495</td>
<td>-0.322</td>
<td>0.528</td>
<td>0.511</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>ΣZj</td>
<td>-1.980</td>
<td>-1.423</td>
<td>1.276</td>
<td>2.348</td>
<td>-0.222</td>
<td>0.000</td>
</tr>
<tr>
<td>Zj,ort</td>
<td>-0.396</td>
<td>-0.285</td>
<td>0.255</td>
<td>0.470</td>
<td>-0.044</td>
<td></td>
</tr>
<tr>
<td>Sj</td>
<td>0.000</td>
<td>0.111</td>
<td>0.651</td>
<td>0.866</td>
<td>0.352</td>
<td></td>
</tr>
</tbody>
</table>

For Z matrix, z values that correspond to P matrix’s elements have been specified. When compare to the main diagonal, Z matrix’s elements are opposite in terms of sign and equal in terms of absolute value. The sums of each column of the matrix at table 3 were calculated and they were written on ΣZj line. ΣZj line’s sums need to be equal to 0. Afterwards, the sum of each column is divided by the stimulus number. In this situation, the stimulus number is the five education supervisor mission. By dividing the ΣZj values by five Z value was found. When table 3 is considered, the smallest of the Zj,mean values that were obtained is -0.396 and that value belongs to education supervisors’ missions that are specified as A. By moving the starting point of the axis Sj values are found. In order to do this, 0.396 which is the absolute value of -0.396 is added to each Zj,mean value. After this addition, the Sj values which are obtained constitute the scale values that belong to five education supervision mission that are named as A, B, C, D, and E. The number line at figure 1 shows that scale value.

A

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>E</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>3.044</td>
<td>3.285</td>
<td>3.583</td>
<td>3.613</td>
</tr>
</tbody>
</table>

Figure 1: The demonstration of scale values that belong to five missions on the number line.

The mission order of education supervisors’ that were demonstrated at figure 1 is also shown at table 4.
When table 4 is considered, the mission that is considered as primary by the education supervisors is “Guidance and in service training”. This mission is followed by “Inspection and evaluation”, “Research”, “Examination”, and lastly “Inquisition”.

Following the scaling operation that was done by using pair-wise comparative judgment V. case equation, it is important to identify the inner consistency in the judgments of education supervisors, the measurements of agreement among supervisors, and their significance. For this process, two statistics called Kendall’s zeta statistics and Kendall’s U statistics can be used.

The consistency coefficient developed by Kendall depends on the number of inconsistency in the judgments of an observer. The zeta statistics which is used as consistency coefficient equals one minus the ratio of the number of inconsistent triads found to the maximum number of inconsistent triads possible. In this respect, this consistency coefficient reflects the reliability in the observer’s judgments (Turgut and Baykul, 1992). In table 5, the consistency coefficient that belongs to an education supervisor is calculated.

<table>
<thead>
<tr>
<th>Missions</th>
<th>Scale Values ($S_j$)</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- Guidance and in service training</td>
<td>0.000</td>
<td>1</td>
</tr>
<tr>
<td>B- Inspection and Evaluation</td>
<td>3.044</td>
<td>2</td>
</tr>
<tr>
<td>E- Research</td>
<td>3.285</td>
<td>3</td>
</tr>
<tr>
<td>C- Examination</td>
<td>3.583</td>
<td>4</td>
</tr>
<tr>
<td>D- Inquisition</td>
<td>3.613</td>
<td>5</td>
</tr>
</tbody>
</table>

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Table 5: The inconsistent triad matrix that belongs to a selected education supervisor.

<table>
<thead>
<tr>
<th>Missions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>$a_i$</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>$a_i^2$</td>
<td>0</td>
<td>9</td>
<td>4</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>$\Sigma a_i^2$</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$d$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Inconsistent triad number</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconsistent correlation ratio</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>zeta value($\xi$)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>72.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$sd$</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
After the formation of the matrix that belongs to the judgments of an education supervisor, the column sums of this matrix was found and written on a line. By taking the squares of \( a_j^2 \) line was formed and by calculating the sum of this line \( \Sigma a_j^2 \) was found. Afterwards, \( d \) and zeta statistics (\( \zeta \)) was found and in order to understand if \( \zeta \) value is significant, \( \chi^2 \) statistics was calculated. The calculated \( \chi^2 \) value was compared with the value in the \( \chi^2 \) table which belongs to 60 freedom degree, is 79,082 at 0.95 reliable degree. This value is larger than the \( \chi^2 \) value. In this situation, the education supervisor can be considered as consistent in his judgment with a 0.95 reliability.

If all the N observers are separately consistent enough about their judgments on K stimulus, the agreement among observers is considered as high. For this reason, the coefficient of agreement among observers needs to be calculated and the significance of that coefficient needs to be examined. In order to do this, Kendall’s U statistics which is an agreement coefficient that is related to obtained observer judgment frequencies is used (Turgut and Baykul, 1992). In table 6 the agreement coefficient of education supervisors’ judgments is shown.

**Table 6:** The frequency square Matris of education supervisors’ judgements (\( F^2 \))

<table>
<thead>
<tr>
<th>Missions</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>13924</td>
<td>14884</td>
<td>14400</td>
<td>14400</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3136</td>
<td>17161</td>
<td>19881</td>
<td>11881</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2704</td>
<td>1849</td>
<td>13924</td>
<td>2704</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2916</td>
<td>1089</td>
<td>3136</td>
<td>2809</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>2916</td>
<td>4225</td>
<td>14884</td>
<td>14641</td>
<td></td>
</tr>
<tr>
<td>( f_{jk}^2 )</td>
<td>11672</td>
<td>21087</td>
<td>50065</td>
<td>62846</td>
<td>31794</td>
</tr>
<tr>
<td>( \Sigma f_{jk}^2 )</td>
<td>177464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \Sigma f_{jk} )</td>
<td>1740</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \tau )</td>
<td>24344</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>-0.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>-1163.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sd</td>
<td>10.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When table 6 is considered, this matrix was formed by taking the frequency squares of education supervisors missions which was done at the initial stage of scaling. Subsequently, by taking the column sums of the matris \( f_{jk}^2 \) line, by taking the sum of that line \( \Sigma f_{jk}^2 \) and lastly \( \tau \) were found. With the help of the \( \tau \) value, U statistics which shows the agreement coefficient of observer judgments was calculated. In order to test the significance of that value sd and \( \chi^2 \)
values were found. The calculated $\chi^2$ value was compared with the value in $\chi^2$ table which belongs 10 freedom degree, is 18,307 at 0,95 reliability degree. As this value is larger than the calculated $\chi^2$ value, the education supervisors’ judgments are considered in agreement with 0,95 reliability.

5. Discussion

In this study the mission that the education experts consider as referential is specified by providing a pair-wise comparison of their missions. The results of this study have revealed that “counseling and in service training” is considered as a primary mission by education supervisors. Guidance and on site training is followed by “inspection and evaluation”, “research”, and finally “inquisition”. Also, in the study conducted by Atay (1995), which examined the competences of primary school supervisors, it was found that while supervisors considered guidance and leadership as primary, they paid the least attention to inquisition. In the study that was done by Tutumlu (1992), the mission preference of primary school supervisors were listed as inquisition, guidance and in service training, examination and research, and inspection and evaluation.

Since the participants in this study consider “Guidance and in service training” as primary, the education supervisors in Turkey can be considered as close to contemporary supervision perspective. Again, according to the results of this study, as supervisors consider “inquisition” as the least important mission they can be considered as far from adopting the necessity and significance of that mission. However, when the application is considered in Turkey, it can be seen that education supervisors implement the “inquisition” and “inspection and evaluation” missions rather than counseling and in service training (Bilir, 1992; Yalçınkaya, 2003). Many studies in the relevant literature (Balcı, 2007; Can, 2004; Çiçek Sağlam and Demir, 2009; Danyeri, 2001; Ecevit, 1996; Ergin, 2003; Gün, 2001; Gündüz, 2010; Ovalı, 2010; Sabancı and Şahin, 2007; Tuncer, 1991; Tunç, 2001; Yılmaz, 2007) support this view and argue that guidance and in service training mission is not sufficiently fulfilled by education supervisors. In the related literature (Badavan, 1994; Bilir, 1992; Söbü, 2005; Taşar, 2000; Tutumlu, 1992), it is implied that the insufficient application of guidance and in service training mission is because of education supervisors’ particular focus on inquisition, inspection, and examination”. The reason for education supervisors not sufficiently applying to guidance and in service training mission, although they consider it important, could be because of high number of mission fields, mission diversity, schools, and teachers that they need to deal with. Also, the
responsibility of two very distinct missions such as inquisition and guidance and the imbalance between the authorization and responsibilities of supervisors negatively influence the level of mission completion (Sabancı and Şahin, 2007; Taymaz, 2005; Terzi, 1996). Several studies also provide supporting results and display that the imbalance between authorization and responsibilities (Şahin, Çek and Zeytin, 2011; Terzi, 1996), mission diversity (Söbü, 2005), the overage of work load and the responsibility of opposite missions (Kayıkçı and Şarlak, 2009; Tuncer, 1991; Taşar, 2000) negatively influence supervision and supervisors.

These results support Bilir’s (1992) view which argues that the supervision sub-system of Turkish Education System mostly depends on control and inquisition, and therefore it continues the classic supervision perception. In contrast, education supervision is a mission that has functions other than control and documentation (Yağmak, 2002). When supervision is kept within the limitation of these functions, corrective and developmental activities such as guidance, training, and program development leaves the role of supervision.

The results of this study display the agreement among supervisors about the priority order of missions within contemporary supervision perspective. However, for an effective supervision system, understanding of the mission priorities only by supervisors will not be enough, because in countries like Turkey, which have centralist education system, only education supervisors’ beliefs and desires will not be sufficient. At this point, central policy makers have important responsibilities. Firstly, in the central structuring of Turkey, the idea of support and guidance rather than control should be adopted as a principle of supervision. Besides, examination and inquisition mission, which causes supervisors to spend most of their time although it does not directly influence education, should be overviewed. One of the suggestions about this subject can be the implementation of inquisition mission with expert education supervisors and other administrators. Also, by decreasing the work load of education supervisors, they should be given the chance to spend more time on research, guidance and in service training missions.

References


Türkiye'de eğitim denetmenlerinin görevleri üzerine ilki karşlaştırma yöntemiyle bir ölçekleme çalışması

Bu araştırmamanın amacı, eğitim denetmenlerinin “görevlerini” ilki karşlaştırma tabi tutarak hangi görevi “daha önceliği” gördüklerini belirleyebilmektir. Bu doğrultuda araştırmaın çalışma grubunu, 56 farklı il ilköğretim kademesinde görev yapmakta olan 174 eğitim denetmeni oluşturmaktadır. Eğitim denetmenlerinin %87,93'ü (153) erkek iken, %12,07'si (21) kadındır. Ayrıca denetmenlerin %39,66'sı (69) 0-10 yıl, %45,40'si (79) 11-20 yıl, %13,22'si (23) 21-30 yıl, %1,72'si (3) ise 31-40 arası görev süresine sahiptir.


Çalışmada eğitim denetmenlerinin görev önceliklerini değerlendirme formu Thurstone’un karşlaştırma yöntemi yardımıyla rak kanununun V. Hal denklemi ile tam veri matrisinden ölçeklenmiştir. Ölçekleme işleminin ardından denetmenlerin yargalarındaki iç tutarlılık ve denetmenarındaki uyumun ölprüleri ve bunların anlamlılıkları da yoklanmıştır. Bunun için Kendall’ın zeta istatistigi ve Kendall'in U istatistigi olarak adlandırılan ikisi istatistik kullanılmıştır.


Seçilen bir eğitim denetmenine ait tutarlılık ölçüsü Kendall tarafından geliştirilen zeta istatistiği ile hesaplanmıştır. Ardından zeta istatistiğinin (ξ) anlamlı olup olmadığını yoklamak için χ² istatistiği hesaplanmıştır. Hesaplanan bu χ² değeri χ² tablosundan bulunan 60 serbestlik derecesine ait, 0,95 güvenilirlik derecesinde 79,082 olan değer ile karşlaştırılmıştır. Bu değer, hesaplanan χ² değerlerinden büyük olduğu için eğitim denetmenlerin yargılarda tutarlı olduğu 0,95 güvenle söylenilir.

Gözlemciler arası uyumun ölçüsünün hesaplanması ve bu katsayının anlamlı olup olmadığını yoklaması için Kendall tarafından geliştirilen uyum ölçüsü U istatistiği kullanılmıştır. Hesaplanan U istatistiğinin anlamlı olup olmadığını test edilmesi için sd ve χ² değerleri bulunmaktadır. Hesaplanan bu χ² değerleri χ² tablosundan 10 serbestlik derecesine ait, 0,95 güvenilirlik derecesinde 18,307 olan değer ile karşlaştırılmıştır. Bu değer, hesaplanan χ² değerlerinden büyük olduğundan eğitim denetmenlerinin yargılarda uyum içinde oldukları 0,95 güvenle söylenilir.

Bu araştırma boyunca katılan eğitim denetmenlerin görev önceliklerinde “rehberlik ve Işı Başında” görevinin ilk sıradede yer almış, Türkiye’de ki eğitim denetmenlerinin çağdaş denetim anlayışına yakın olduklarının bir kanıt olarak görülebilir. Yine bu araştırma sonuçlarına göre, eğitim denetmenlerinin görev öncelikleri içerisinde “soruşturma” görevini en son sırada gördler denetmenler bu görevin krediğini ve önemini çok fazla benimsmedikleri biçiminde yorumlanabilir.

Bu araştırma sonuçları eğitim denetmenlerinin çağdaş denetim anlayışı içerisinde hangi görevleri önceliği yerine getirilmesi konusunda hemfikir olduklarını ortaya koymmuştur. Ancak etkili bir denetim sistemi için, denetmenlerin önceliği görevlerinin ne olduğunu yalaniza denetmenler tarafından anlaşıması yeterli gözükmemektedir. Çünkü Türkiye gibi, merkeziyetçi bir yapıya sahip eğitim sisteminde, sorunların çözümu için yalanlaca paydaşlardan biri olan eğitim denetmenlerinin...
inanç ve istekleri yeteri olmayacaktır. Bu doğrultuda ilk olarak Türkiye’de merkezi yapılanmda, denetimin temel amacı olarak kontrolden çok yardım ve rehberlik olduğu ilke olarak benimsenmelidir. Ayrıca eğitim denetmenlerinin görevlerinden biri olan ancak eğitim öğretim etkinliklerini doğrudan etkilemeyen ve eğitim denetmenlerinin zaman ve enerjisinin büyük bir kısmının harcanmasına yol açan inceleme ve soruşturma görevi gözden geçirilmelidir. Bu konudaki önerilerden biri özellikle soruşturma görevinin konusunda uzmanlaşmış eğitim denetmenleri veya diğer yöneticiler ile yürütülmesi olabilir. Ayrıca eğitim denetmenlerinin iş yüklerini azaltarak özellikle araştırma, rehberlik ve iş başında yetiştirme görevlerine daha fazla zaman ayırılması sağlanmalıdır.

**Anahtar Kelimeler:** Eğitim denetmeni, denetleme, ölçekleme.