Scheduled Leadership Behaviors Scale for School Administrators: Validity and Reliability Study

Seda ŞAYAN KÖSEM¹
Ministry of Education

Mustafa Aydın BAŞAR²
Canakkale Onsekiz Mart University

Abstract

Scheduled leadership can be defined as empowering individuals with the exception of the team's top manager with ‘freedom of acting and decision making.’ A wide range of measurement tools have been developed with the aim of measuring planned private leadership. In Turkey, the studies have begun to adapt it to our language and have continued to develop an appropriate scale for the Turkish management structure and operation. The planned leadership scales that have been developed in the field of education are not adequate and the relevant scale development studies are required. The main objective of this study is to re-approach the behavior of school administrators of planned leadership and to develop a scale within this framework. In Canakkale, a sample group, 360 individuals who were identified using a cluster sampling method were studied. SPPS 23.0 and AMOS 24.0 statistical packaged software were used for data analysis. Explanatory factor analysis and confirmatory factor analysis were calculated for the suitability of the data set for factor analysis, sample efficiency and validation studies; Cronbach Alpha internal consistency was calculated for the reliability studies. With the actions being carried out, the scale of 30 items is such that the 'School Manager's planned leadership behaviors' are presented. In conclusion, the scale developed has a four-factor structure, “Development and Cooperation”, “Culture”, “Vision and Responsibility” and “Chances and Opportunities” and is characterized by a high degree of validity and reliability.

Keywords: Scheduled leadership, developing a scale, school manager, validity, reliability

DOI: 10.29329/epasr.2020.323.15

¹ Technology and design teacher, Ministry of Education, Çanakkale, TURKEY, ORCID: 0000-0002-3799-7006
² Assist. Prof. Dr., Education Faculty, Canakkale Onsekiz Mart University, Çanakkale, TURKEY, ORCID: 0000-0003-3678-4647
**Introduction**

Social institutions have an open understanding of the system, resulting from its multi-directional interaction. Educational organizations acting with contemporary understanding and having individuals at the heart of themselves are effective in having a qualitative and active management understanding structure. This aspect of educational institutions requires a strong structure and interaction in itself and with other social institutions. It is important for the administrations to closely follow the developments and innovations in order to create this power in education and school organizations.

Bursalıoğlu (2013) emphasized that running an organization in the monotony of a machine like a clock is impossible and drew attention to the hardness of managing an organization. It is the duty of the administration to sustain the school in the direction of its own objectives. Beycioğlu and Aslan (2010) stated that the managers of the organization must be experienced in the structure and operation of the organization and must also be innovative. School administrators are expected to adopt and reflect on developments and innovations in the understanding of management as implementations.

In our globalizing world, school administrators should be followers of the developments and environments that technology has provided, as well as transfer their skills of effective management and leadership to employees. In order to do this, instead of ordering employees what to do, employees need to take part in the decision-making process and see the broad picture.

Güçlüol (1985) claimed that the tenancy aspect of the school administrators predominates because they are busy with red tape. Açıkgöz (1986) and Açıkalın (1998) emphasized that as the period of democratization in education began after the 1980s, the democratization of school administration is also inevitable. With the development of the bureaucratic structure, there was a focus on the physical improvement of schools and the inclusion of many centers in the new schools (Balci, 2000).

The democratic approach of the superseding traditional organization has broken the central structure and brought functionality, development and change to the definition of duty and authority (Gümüşeli, 2001) as well as a management case based on a sense of leadership.

Leadership, in the simplest form, is to lead one or more individuals with different methods. There are two types of leadership, formal and informal, in terms of power and authority. While formal leaders have an impact on the group with authority, informal leaders are trying to consolidate with the group. The school administrator, in addition to being a formal leader, both motivates the informal leadership organization and forms an interaction in the direction of a common goal of unity (Bursaloğlu, 2013). Apart from the educational, transformational and visionary leadership that brings more than one aspect of the school organization into being, the leadership features that predominate
the planned understanding are to be adopted by the institution's manager. Contemporary management understanding predicts that school administrators will have a manager profile that can act in the direction of planned leadership by leaving aside traditional management styles.

Scheduled leadership, which is the period of all partners achieving a common objective on a self-sufficient scale with a sense of responsibility, voluntary collaboration and social interaction (Ağıroğlu Bakır, 2013; Fullan, 2001; Harris, 2003, 2006; Kılınç & Recepoğlu, 2013) is a leadership style that makes cooperation and social interaction more prominent (Bolden, 2004; Gibb, 1954; Hoy & Miskel, 2). With this aspect, scheduled leadership can be seen as an interactive period that distributes power and responsibilities among the members of the organization to carry out the organization’s objectives (D’Innocenzo, Mathieu & Kukenber, 2016). In addition, it is not only the distribution of leadership, contribution and skills of the other partners in the organization that requires leaders to be successful in the organization and to realize the objective of the organization (Carson et al., 2007).

According to Baloğlu (2011) planned leadership, rather than concerning the characteristics and characteristics of leaders as individuals, sees leadership from a more taxonomic point of view by separating leadership responsibilities from formal organizational roles and disseminating it to the actions and effects of the organizational partners. Other administrators, school teachers, parents and students play roles during the leadership period and are not considered passive members of the organization. Scheduled leadership, regardless of position difference, brings together organizational partners’ knowledge, skills and expertise.

It is usually based on an approach to placing leadership in the understanding of the system in organizations where a shared sense of leadership is adopted, rather than placing one or more individuals at the top and applying their decisions only. From these points of view it can be argued that new measuring tools should be developed in relation to these leadership practices and perceptions. The main objective of this study is to develop and incorporate into the literature a new measuring tool that examines the subject of shared leadership in many dimensions and from different angles, which has applicability at all educational levels.

**Previous Studies on Leadership Scale Development**

The first tools used to define shared leadership behaviors and attitudes of education managers in Turkey are scales developed in different countries and adapted to Turkish. Adaptation studies on this subject have shown that scale development studies are carried out in accordance with the structure and functioning of the Turkish education system (Bursalioğlu, 2013).

The scale developed by Hulpia, Devos and Rosseel (2009) has been adapted in Turkish by Özdemir (2012). In this study, the researcher considered shared leadership in the Distributive Leadership Inventory, which he prepared, on two sub-scales: “Leadership Functions” and “Leadership
Team Harmony”. Taşdan and Oğuz (2013) formed a Distributive Leadership Theory based on Davis (2009) education organizations and Spillane’s (2006) Distributive Leadership Theory. In the development of scale items; Connecticut Distributive Leadership Attendance Scale (Elmore, 2000; Gordon, 2005), Teacher School Leadership Scale (Katzenmeyer & Moller, 2001) and School Leadership Scale (University of Michigan, 2001) tool was utilized. The scale in question consists of 37 substances and 7 dimensions, and the test-re-test reliability coefficient r= .93 (p<.001) was determined to be [.95]. Davis (2009)’s Distributive Leadership Scale has also been adapted to Turkish by many other researchers (Şahin et al. 2014). In view of the fact that the adapted scale does not have sufficient valid values, it was considered appropriate to use it in one dimension.

The shared leadership scale developed by Özer & Beycioğlu (2013) was determined to have a ten-point and one-factor structure. The coefficient of internal consistency of the cronbach-Alpha scale was calculated as [.92]. The test-retest correlation coefficient between two different applications with a nine-day deceleration was calculated as [.82] in order to determine the consistency of the scale against time. The ‘Shared Leadership Perception Scale for the Parent’ developed by Erol (2016) was calculated as [.89] for the whole, [.90] for the first factor, [.84] for the second factor and [.76] for the third factor in the three-dimensional data collection tool consisting of 23 items. The internal consistency of the scale is acceptable. The Shared Leadership Perception Scale was developed by Wood (2005). The adaptation of the scale to Turkish was done by Bostancı Bozkurt (2012). The Shared Leadership Perception Scale consists of 18 items and 4 dimensions and is a 4-point likert scale.

In an exploratory factor analysis study conducted on the ‘Shared Leadership Scale in School Organizations’ developed by Aslan & Ağiroğlu-Bakır (2015), KMO (Kaiser Mayer Olkin) coefficient and Bartlett-Sphericity (Globality) and (KMO= .96) data based on factor analysis (χ² = 9580.635, sd= 1485 p<.05), confirmatory factor analysis revealed that the scale was well-compatible. Thereafter the reliability studies of the scale (α = .98), a data tool consisting of five factors and a total of 55 items was obtained.

Both the researchs and the researchers’s observations are included as a new concept and practice of shared leadership in the management of the school organisation. A participatory and shared understanding that is formed for common purposes takes the place of traditional leadership models that gather power from one side. Perceptions are being developed that are in an appropriate place within the school organization system, serve the purpose, volunteer and work open to cooperation. In addition to the status and career similarity of employees in the school organisation, their proximity in this direction reveals the inevitability of more shared management ideas. It is seen as an important requirement to know how much school administration has implemented its understanding of sharing leadership in decision-making processes and practices, and to identify and develop new approaches to
this aspect of competence and inadequacies. It raises a requirement to identify the shared leadership behaviors of teachers and the level at which school principals demonstrate these leadership roles.

The main aim of this study is to develop a measuring tool that is applicable to all levels of education in our country and to analyze planned leadership in many dimensions and different aspects. In this sense, it has been established that the development of a reliable and valid scale to analyze the subject on the basis of the schools and overlap with the structure and functioning of the schools. It is assumed that such a scale will provide Turkish researchers with an opportunity to analyze this subject closely, thereby determining at what rate the planned leadership will take part in the current applications and also in the direction of the results achieved, providing possible solutions to be offered.

**Research Aims**

The main aim of this study is to develop a scale that has a high level of validity and reliability by analyzing the planned leadership behavior of school administrators. Based on research aims, the research questions are stated as follows:

1. In the direction of the conduct of validity and the planned behavior of leadership;
   a) What are the results of the analysis of the explanatory factor?
   b) What are the results of the analysis of the confirmatory factor?

2. What is the level of reliability of the “Scheduled Leadership Behaviors Scale for School Administrators” (SLBSSA) which is the subject of the study?

Also in the direction of the results achieved, providing possible solutions to be offered.

**Method**

Current scales which are prepared on the basis of a literature review of planned leadership have been studied; the size and the items relating to planned leadership behaviors have been re-organised, taking into account the structure and operation of the Turkish education system. Question items were examined by two experts in the field of education administration and a Turkish language teacher, and their opinions were received. For analysis and opinions, a five-point Likert tool including 32 items has been developed (5-always, 4-most of the time, 3-sometimes, 2-rarely, 1-never). The measuring tool titled “School Administrators Scheduled Leadership Behaviors Scale” was applied to the group of teachers in the sample.

**Sampling**

The sample group that collected data from the study aimed at developing a scale to show the planned leadership behavior of the school administration in a valid and reliable manner was
determined using the proportional cluster sampling method. This type of sampling is not the target population or the members who have a fair chance of being selected as a sub-population have their own groups with their members (Karasar, 2006). Since the study population is made up of similar working groups, the grouping was made by determining the schools where the teachers work, not by determining the teachers who would participate in the research. The data of the Canakkale Provincial Directorate of National Education and the data of the “DPT Socio-Economic Development of Provinces Ordering Research” were based on the period of identification of districts and schools. The sample size of the study was calculated on the basis of a tolerance level of 0.05 and was found to be valid at 360 (Balcı, 2010). The research group, consisting of 360 teachers working in kindergarten, primary, secondary and secondary schools in the Canakkale Center and district government schools, participates in the research on a voluntary basis. The schools, which does not have a separate school administration, has been left out of the scope. In terms of sample size, the data set is perfectly suitable for factor analysis (Çokluk et al., 2016; Kalaycı, 2010; Karagöz, 2016). The personal and professional characteristics of the teachers involved in the study are presented in Table 1.

Table 1. Personal and professional characteristics of the teachers involved in the research (n=360)

| Groups                | f  | %   |
|-----------------------|----|-----|
| Gender                |    |     |
| Female                | 194| 53.89 |
| Male                  | 166| 46.11 |
| Professional Seniority|    |     |
| 0 - 5 years           | 56 | 15.56 |
| 6 - 10 years          | 83 | 23.06 |
| 11 - 15 years         | 97 | 26.94 |
| 16 - 20 years         | 65 | 18.06 |
| 21 -25 years          | 34 | 9.44 |
| 26 and over           | 25 | 6.94 |
| School Level          |    |     |
| Pre-school            | 34 | 8.94 |
| Primary school        | 81 | 22.50 |
| School                | 148| 41.11 |
| High school           | 97 | 26.95 |

53.89 percent of the participants in the study sample were female and 46.11 percent were male. 15.56 per cent are between 0-5 years, 23.6 per cent are between 6-10 years, 26.94 per cent are between 11-15 years, 18.06 per cent are between 16-20 years, 9.44 per cent are between 21-25 years, and 6.94 per cent are between 26 years of seniority and more. In addition, 8.94 percent of teachers are working in preschool, 22.50 percent in primary school, 41.11 percent in middle school, and 2695 percent in high school and equivalent levels.

**Constructing the Scale Items**

The following studies have been conducted in developing the scale of teachers to determine the shared leadership behaviors of school principals:
1. First, literature on the subject was reviewed and the written sources reached were examined in-depth.

2. The questions in the measurement tools of the studies were examined one by one and the common and separate points were identified, the theoretical foundations were examined and the methods followed in their development were examined.

3. A question pool related to the scale was created by writing scale articles taking into account the field of theoretical information about shared leadership and related scales.

4. It was examined whether the substances comply with the purpose, structure, process and atmosphere of the Turkish education system (Bursalıoğlu, 2013). Non-appropriate questions are excluded from the scale form.

5. It was examined whether the remaining substances in the pool are suitable in terms of Turkish language and expression. In this regard, a Turkish and a classroom teacher’s assessment was applied and the expressions were corrected by discussing the subject together, trying to achieve the intelligibility of the substances and the integrity of meaning in this manner.

6. Question items in the created scale draft are reorganized according to organizational purpose, structure, process and atmosphere dimensions. Two training management experts have been supported to examine and evaluate these substances in terms of validity of the scope. The scale has been reorganized in line with the opinions and recommendations of field experts.

7. As a result, a tentative 5-point Likert scale created with 32 question items was created by rating between 1-5. Each question item in the tentative scale form was evaluated according to their degree of participation; (5) Always, (4) Most of the time, (3) Sometimes, (2) Rarely (1) Never time intervals. Accordingly, the lowest score that can be obtained from SLBSSA in school organizations is 32 and the highest score is 160. The high scale score of school administrators for shared leadership behavior means high teacher perceptions; and low scores mean low teacher perceptions.

Data Analysis

For data analysis, SPPS 23.0 and AMOS 24.0 statistical packaged software were made use of. Explanatory factor analysis and confirmatory factor analysis were calculated for suitability of data set to factor analysis, sample efficiency and validity studies; for reliability studies, calculation of Cronbach Alpha internal consistency was presented.

Findings

In this part, the validity and reliability studies performed in the direction of development phases of SLBSSA are presented.
Following the pilot scheme, it was confirmed that the Barlett test was found to be significant (p=0.00) by performing an exploratory factor analysis to present the construct validity of the scale and that the Kaiser Meyer – Olkin (KMO) value was found to be above 0.50, acceptable value, 0.96.

For the determination of the factor pattern, the main component analysis was used as the method of making a factor, the maximum variability (varimax), one of the vertical spinning methods, was chosen as the spinning method, and the standard of keeping the variance rate explanation 0.50 and above was based on. For items with a load factor of 0.50, the sample size shall be at least 120. As a result of the analysis of the factor, four factors, of which the own value is 1, 2 and above, were obtained for 32 items based on the analysis. In this framework, the own value, the explained variance ratio and the total variance ratio are shown in Table 3.

### Table 3. Eigen value and Explained Variance Ratio regarding to SLBSSA (%)

| Dimensions | Eigenvalue | Variance Described | Total (cumulative) Variance |
|------------|------------|---------------------|-----------------------------|
| 1. Factor  | 15.09      | 72,68               | 72,68                       |
| 2. Factor  | 1.71       | 14,60               | 87,55                       |
| 3. Factor  | 1.56       | 6,53                | 94,08                       |
| 4. Factor  | 1.20       | 5,91                | 100,00                      |

The factors that were formed as a result of exploratory analysis were named as such:

Factor 1: Improvement and Collaboration

Factor 2: Culture

Factor 3: Vision and Responsibility

Factor 4: Opportunities and Chances

It was found that total contribution of SLBSSA four factors to the total variance was found 69.11. It was seen that the eigen value of “Improvement and Collaboration” factor is 15.0 and the contribution of it to the total variance is 72.68; the eigenvalue of “Culture” factor is 1.71 and its contribution to the total variance is 14.60; the eigenvalue of “Vision and Responsibility” factor is 1.56 and the contribution of it to the total variance is 6.53; the eigenvalue of “Opportunity and Chances” factor is 1.20 and its contribution to the total variance is 5.91.
According to the results of explanatory factor analysis, as a conclusion of necessary picking, “Improvement and Collaboration” factor comprises of 11 items, “Culture” factor comprises of 7 items, “Vision and Responsibility” factor comprises of 7 items and “Opportunities and Chances” factor is 5 items. The results of explanatory factor analysis can be seen in Table 4.

**Table 4.** The results of explanatory factor analysis regarding to SLBSSA (%)

| Factor I                                                                 | Factor II | Factor III | Factor IV |
|------------------------------------------------------------------------|-----------|------------|-----------|
| 1. School principal’s working with the consciousness of being a group member with the other teachers | 0.74      |            |           |
| 2. School principal’s giving opportunity of working together to the related partners in problem solving subject | 0.71      |            |           |
| 3. School principal’s assuming the responsibility of students’ success and failure with school administration and teachers | 0.70      |            |           |
| 4. School principal’s supporting teachers in developing the school, bringing innovation to school and following them | 0.70      |            |           |
| 5. School principal’s paying attention to improving effective communication among the partners | 0.69      |            |           |
| 6 School principal’s adopting the understanding of managing that is open to change and innovate | 0.67      |            |           |
| 7. School principal’s making decisions about school by receiving the opinions of related partners, without discrimination | 0.64      |            |           |
| 8. School principal’s forming an atmosphere based on respect and trust among all partners | 0.63      |            |           |
| 9. School principal’s rendering teachers eager to use new and contemporary teaching methods and technologies | 0.61      |            |           |
| 10. School principal’s encouraging all partners (teachers, students, parents, administrative stuff etc.) to agree with the decisions | 0.61      |            |           |
| 11. School principal’s having an understanding of ‘school improvement’ which is students’ success and learning oriented for school effectiveness | 0.56      |            |           |
| 12. School principal’s sharing the authority and responsibility of works to do at school with the other partners | 0.54      |            |           |
| 13. School principal’s leading the partners (manager, teacher, other staff etc.) to realize the vision and mission of school | 0.52      |            |           |
| 14. School principal’s effort to school resources (library, laboratory etc.) to be sufficient for teachers’ improvement | 0.74      |            |           |
| 15. School principal’s bearing responsibility of infusing school values (respect, caring, collaboration etc.) into students with the help of teachers | 0.74      |            |           |
| 16. School principal’s preventing an atmosphere of chaos and tension at school | 0.73      |            |           |
| 17. School principal’s effort to supply any resources based on environment and parents support for the school | 0.65      |            |           |
| 18. School principal’s forming an environment for free communication that everybody shares their own opinions | 0.65      |            |           |
| 19. School principal’s paving the way of being open to change and innovate for teachers | 0.59      |            |           |
| 20. School principal’s forming an environment to supply teachers to reach the information and documents easily they need | 0.40      |            |           |
| 21. School principal’s preparing teachers to shoulder the responsibility of leadership roles | 0.77      |            |           |
| 22. School principal’s giving a chance to teachers to shoulder the responsibility and authority of making decision in certain subjects | 0.74      |            |           |
| 23. School principal’s rendering teachers eager to share leadership | 0.63      |            |           |
24. School principal’s expecting teachers to behave students in the way of effecting and encouraging them to raise their success 0.60
25. School principal’s shouldering students’ failure beside their success as much as related partners 0.53
26. School principal’s determining vision and mission of school by debating with teachers 0.45
27. School principal’s receiving feedback about how vision and mission of school should be from all partners 0.41
28. School principal’s giving chance to be a leader to newly appointed teachers not just senior teachers 0.66
29. School principal’s wishing to share leadership instead of being the only leader of school 0.65
30. School principal’s allowing immediate surrounding to benefit from resources of school 0.54
31. School principal’s talking about how to improve school in conversations 0.49
32. School principal’s arranging working hours by gathering with teachers to supply them to debate educational issues 0.47

The structure of the factor determined by the explanatory factor analysis was tested using the AMOS 24 package program for confirmatory factor analysis. Confirmatory factor analysis ensures the determination of whether or not the variance groups are sufficiently represented by certain factors to test the suitability of the factors determined by the explanatory factor analysis to the structure of the factors (Karagöz, 2016).

Table 5. Reliability co-efficient regarding to scheduled leadership scale

| Dimensions                        | Cronbach’s alpa reliability coefficient | Number of Items |
|-----------------------------------|----------------------------------------|-----------------|
| Development and cooperation       | 0.92                                   | 11              |
| Culture                           | 0.90                                   | 7               |
| Vision-Responsibility             | 0.89                                   | 7               |
| Opportunities and chances         | 0.70                                   | 5               |
| TOTAL                             | 0.87                                   | 30              |

Confirmatory factor analysis aims to present whether or not the model developed on the basis of the hypothesis is confirmed or not, or to what extent the expected model adjusts the model observed. In the confirmatory factor analysis, which is the most effective analysis in evaluating the alignment of the chosen model with the data, co-efficient (fit indices) are produced with respect to construct validity (Çokluk et al., 2016). For model suitability, CFI (comparative fit index), GFI (good fit index), AGFI (adjusted good fit index), CFI (comparative fit index) and RMSEA (root mean square approximation error) values are generally observed. There is no limitation about the necessity of which fit indices should be studied (Karagöz, 2016). The diagram of confirmatory factor analysis belonging to School Principal’s Scheduled Leadership Scale is in Figure 1.
In the confirmatory factor analysis of the scale of “Scheduled Leadership Behaviors” with the aim of revealing the suitability of the model to the data set, the values of $\Delta^2 / df$, GFI, CFI, RMSEA and AGFI were taken into account. Fit indices and values ($\Delta^2 / df$, GFI, CFI, RMSEA, and AGFI) obtained in the context of this study and the reference values for these fit indices are presented in Table 6 (Çokluk et al., 2016; Karagöz, 2016; Meydan & Şeşen, 2011; Schermelleh-Engel, Moosbrugger & Müller, 2003).

Table 6. Fit Indices of SLBSSA’s confirmatory factor analysis

|                        | $\chi^2$/df | CFI  | RMSEA | GFI   | AGFI   |
|------------------------|-------------|------|-------|-------|--------|
| Proposed Model         | 1107.839  / 435=2.547 | 1.00 | 0.06  | 1.00  | 1.00   |
| Acceptable Compliance  | ≤5          | 0.90 | 0.06-0.08 | 0.85-0.89 | 085-0.89 |
| Good Compatibility     | ≤3          | 0.97 | ≤0.05 | ≥0.90 | ≥0.90 |

Once the results of SLBSSA’s scale confirmatory factor analysis are analysed, the $\Delta^2 / df$ value shows that it has a good fit indices value. Since the values of CFI, GFI, AGFI and RMSEA are within the acceptable range, the confirmatory factor analysis shows that the results are appropriate for the data set of the factor structure.
Discussion, Conclusion and Recommendations

This study has the feature of improving a scale aiming at revealing “School Administrators’ Scheduled Leadership Behaviours”. After adaptation studies about “Scheduled Leadership” in the field of education management (Hulpia, Devos & Rosseel, 2009), development studies were executed by Turkish academicians. In this study, it was aimed at developing “School Administrators’ Scheduled Leadership Behaviours Scale” in order to school principals’ scheduled leadership behaviours are to be determined basing on teachers’ views. The objective of this study is to improve the scale of “School Administrators’ Scheduled Leadership Behaviors.” After adaptation studies on “Scheduled Leadership” in the field of education management (Hulpia, Devos & Rosseel, 2009), development studies were carried out by Turkish academics. The aim of this study was to develop the “School Administrators Scheduled Leadership Behaviour Scale” in order to determine the planned leadership behavior of school principals on the basis of the views of teachers. The scale was composed of 30 items. “Improvement and Collaboration” dimension measures with 11 items, “Culture” dimension does with 7 items, “Vision and Responsibility” dimension measures with 7 items and “Opportunities and Chances” dimension does with 5 items.

The results of the analyses demonstrate that the overall (cumulative) variance rate of the explanatory factor is above the 30% rate accepted in behavioral sciences (69.11 percent) and is therefore sufficient. The variance ratios described by factors have a high distinguishing characteristics. The scale consisted of 30 items. “Improvement and Collaboration” dimension measures with 11 items, “Culture” dimension measures with 7 items, and “Vision and Responsibility” dimension measures with 7 items and ‘Opportunities and Opportunities’ dimension measures with 5 items.

As a result of the study, by means of both factor structure, reliability co-efficient of the scale and the findings about fit indices values obtained by confirmatory factor analysis, it was determined that teachers’ opinions are such as to be used to establish school principals’ scheduled leadership behaviours.

Innovations and changes have taken place every day in the understanding of management and leadership. As a result, many leadership approaches that address leadership in different dimensions and aspects take place in the literature. It is certain that new approaches to developments will take place in the literature. Changes in the validity and reliability of leadership in general and in private in the understanding of planned leadership will influence the results achieved by the scale. By taking these changes into account, it is important to repeat the validation and reliability studies in the use of the scale in the future in terms of the scientific nature of the data.
In the literature, analyzing the scales aimed at measuring the planned leadership behaviors in the school environment and their relationship with the other adapted or non-adapted scales (Özdemir, 2012; Özer and Beycioğlu, 2013; Taştan and Oğuz, 2013), it has been shown that “School Organization Scheduled Leadership Scale” (SOSLS) is applicable to all levels of each school in the education system because it is relevant to all levels of education. Aslan and Ağrıoğlu-Bakır (2015) have added a new scale to the literature with the ‘School Organization Scheduled Leadership Scale’ studies. A scale of high reliability and validity, consisting of 55 items and 5 factors, has been developed in the direction of the study. They were aimed at measuring the planned leadership of the school organization over the perceptions of teachers.

The ‘School Principals' Scheduled Leadership Behaviors Scale’ was developed to show how teachers perceive the school principal in terms of their planned leadership behaviour. Studies on the validity and reliability of the scale may be repeated in different sample groups.

Improvement - collaboration, culture, vision - responsibility and opportunities - chances, subdimensions of Scheduled Leadership Behaviours Scale, can be correlated with the other school organisation subjects and the scale can be benefitted in the future studies.

The aim was to show how teachers view shared leadership behaviors in the school administrator through the 'School Administrators’ Shared Leadership Behaviors Scale' developed. In this way, the scale shows a feature that encompasses the purpose, structure, process and atmosphere of the organization. The scale structure created by the results of the factor analysis has also maintained its quality in terms of scope and has acquired a useful and objective quality.

Studies on the validity and reliability of the scale may be repeated in different sample groups. Shared leadership behaviors can benefit from the scale of advanced studies by associating developmental sub-dimensions-cooperation, culture, vision-responsibility and opportunities-with other issues of school organisation. In addition, validation and reliability studies related to the scale can be repeated in different sample groups and at the higher education level.

References
Açıkalın, A. (1998). Toplumsal kurumsal ve teknik yönleriyle okul yöneticiliği, Ankara: Pegem Akademi.
Açıkgöz, Kemal. (1986). Demokrasi ve eğitimde demokrasi. Abelce Aylık Eğitim Kültür ve Sanat Dergisi. Ankara: Maya Matbaacılık.
Ağrıoğlu-Bakır, A. (2013). Öğretmenlerin paylaşan liderlik ve örgütsel bağlılık algıları arasındaki ilişkinin analizi. [Unpublished doctoral dissertation]. Inonu University, Malatya. (Dissertation no: 333813).
Aslan M. & Ağrıoğlu Bakır, A. (2015). The interaction of distributed leadership and organizational commitment in schools: A qualitative study. Electronic International Journal of Education, Arts, and Science.1(2), 1-30.
Balcı, A. (2000). İkibinli yıllarda Türk milli eğitiminin örgütlenmesi ve yönetimi. Kuram ve Uygulamada Eğitim Yönetimi, 24, 495-508.

Balcı, A. (2010). Sosyal bilimlerde araştırma: Yöntem, teknik ve ilkeler. Ankara: Pegem Akademi.

Baloğlu, N. (2011). Dağıtımcı liderlik: Okullarda dikkate alınması gereken bir liderlik yaklaşımı. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 12(3), 127-148.

Beycioğlu, K. & Aslan, B. (2010). Öğretmen liderliği ölçeği: Geçerlik güvenirlik çalışması. İlköğretim Online, 9(2), 764-775.

Beycioğlu, K ve Aslan, B. (2012). Öğretmen ve yöneticilerin öğretmen liderliğine ilişkin görüşleri: bir karma yöntem çalışması. Kuram Ve Uygulamada Eğitim Yönetimi. 18(2), 191-223.

Bursalıoğlu, Z. (2013). Okul yönetiminde yeni yapı ve davranış. Ankara: Pegem Akademi.

Bolden, R. (2004). What’s leadership?, Shoutwest of England.

Bostancı-Bozkurt, A. (2012). Turkish adaptation of the shared leadership perception scale. Journal of Human Sciences, 9(2), 1619-1632.

Carson, K., D., Carson, P. & Birkenmeier, B., J. (2000). Measuring emotional intelligence: Development and validation of an instrument. Journal of Applied and Behavioral Management. 2(1), 33-46.

Canakkale Directorate of National Education. (2016). https://canakkale.meb.gov.tr/ viewed -06-15-2016.

Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2016). Sosyal Bilimler için çok değişkenli istatistik spss ve lisrel uygulamaları. Ankara: Pegem Akademi.

Davis, M. W. (2009). Distributed leadership and school performance. . [Unpublished doctoral dissertation]. George Washington University.

DPT. (2004). İlçelerin sosyo-ekonomik gelişmişlik sıralaması araştırma (2004). http://www.kalkinma.gov.tr/ Lists/ Yaynlar/Attachments/299/ilce.pdf.

D’Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2016). A meta-analysis of different forms of shared leadership: Team performance relations. Journal of Management, 42(7), 1964-1991. doi:10.1177/0149206314525205

Elmore, R. (2000). Building a new structure for school leadership. Washington, DC: The Albert Shanker Institute

Erol, Y, C. (2016). Paylaşılan liderlik, aile katılımı ve okula bağlılık arasındaki ilişki. (Unpublished master's thesis). Firat University, Institute of Education Sciences. Elazığ. (Dissertation no: 445657).

Fullan, M. (2002). The change. Educational Leadership, 59(8), 16-20.

Gibb, C.A. (1954), Leadership, in Lindzey, G. (Ed.), Handbook of Social Psychology. Addison-Wesley, Reading, MA.2, 877-917

Gordon, Z. V. (2005). The effect of distributed leadership on student achievement. Central Connecticut State University New Britain, Connecticut.

Gümüşeli, A, İ. (2001). Çağdaş okul müdürünün liderlik alanları, Kuram ve Uygulamada Eğitim Yönetimi, 28, 531-548.
Güçlüol, K. (1985). Eğitim yönetiminde karar ve örnek olaylar. Ankara: Kadıoğlu Matbaası.

Harris, A. (2003). Teacher leadership as distributed leadership: Heresy, fantasy or possibility? School Leadership & Management: Formerly School Organisation. 23(3), 313-324.

Hoy, W. K., & Miskel, G., C. (2012). Educational Administration, Theory, Research and Practice. 7th Ed.) (Translation editor: Selahattin Turan) Ankara: Nobel Yayınları.

Hulpia, H., Devos, G. & Rosseel, Y. (2009). The relationship between the perception of distributed leadership in secondary schools and teachers’ and teacher leaders’ job satisfaction and organizational commitment. Article in School Effectiveness and School Improvement · January DOI: 10.1080/09243450902909840

Kalaycı, Ş. (2010). SPSS uygulamalı çok değişkenli istatistik teknikleri. Ankara: Asil Yayın.

Karagöz, Y. (2016). SPPS 23 ve AMOS 23 uygulamalı istatistiksel analizler. Ankara: Nobel Yayın Dağıtım.

Karasar, N. (2006). Bilimsel araştırma yöntemi. Ankara: Nobel Yayın Dağıtım.

Katzenmeyer, M. & Moller, G. (2001) Awakening the sleeping giant. helping teachers develop as leaders. (2nd ed). Thousand Oaks, CA: Corwin.

Kılınç, A. Ç & Recepoğlu, E. (2013). Ortaöğretim okulu öğretmenlerinin öğretmen liderliğine ilişkin algı ve beklentileri, Kalem Eğitim ve İnsan Bilimleri Dergisi. 3 (2), 175-215.

Meydan C. H. & Şeşen H. (2011) Yapısal eşitlik modellemesi AMOS uygulamaları. Ankara: Detay.

Özdemir, M. (2012). Dağıtımcı liderlik envanterinin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. Kuram ve Uygulamada Eğitim Yönetimi. 18(4), 575-598.

Özer, N. & Beycioğlu, K. (2013). Paylaşılan liderlik ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışmaları. İlköğretim Online. 12(1), 77-86.

Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive Goodness-of-fit measures. Methods of Psychological Research Online. 8(2), pp. 23-74.

Spillane, J. P. (2013). Managing instructional quality & leading instructional improvement: Engaging with the essence of school improvement. Australian Educational Leader. 37(1), 22–26.

Şahin, M., Uğur, C., Dinçel, S. Balıkçı, A. & Karadağ, E. (2014). Dağıtımcı liderlik ölçeğinin Türkçe’ye uyarlanması, dil geçerliği ve ön psikometrik incelenmesi, Eğitimde Politika Analizi Dergisi. 3(2), s. 19-30.

Taştan, M. & Oğuz, E. (2013). İlköğretim öğretmenleri için dağıtımcı liderlik ölçeğinin geçerlik ve güvenirlik çalışması. Kafkas Üniversitesi Sosyal Bilimler Enstitüsü Dergisi. 11, 103-124.

Wood, M. S. (2005). Determinants of shared leadership in management teams. International Journal of Lea Studies, 1(1), 64-85.