

DISTRIBUTED LEADERSHIP BEHAVIOURS AMONG ELEMENTARY SCHOOL TEACHERS

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ABSTRACT

This study aimed to determine the level of distributed leadership behaviours of the elementary school teachers in Turkey. In this study, surveying was used as the quantitative data gathering method and focus group was used as the qualitative one. To gather quantitative data, *The Distributed Leadership Scale- DLS* developed by Özer and Beycioğlu (2013) was used. To analyze the data, mean, standard deviation, frequency, *t*-test and one-way ANOVA were used. An interview form including two questions transformed from inventory questions was used to get qualitative data. For qualitative analysis, audio-taped sounds were transcribed. Then, the transcribed texts were coded. The results showed that the participating elementary school teachers displayed distributed leadership behaviours and they were enthusiastic about creating and taking part in an atmosphere which power is distributed. Most of the quantitative findings were in line with the qualitative ones. The interviews also revealed that elementary school teachers had the opinion that they were considerably supportive to cooperate and collaborate with both their principals and colleagues. The results also revealed that the differences among the participants working in schools that had up to fifty teachers and the ones that had fifty-one teachers or more were statistically significant. The result suggests that teachers consider small groups as an advantage to provide an effective contribution for leadership skills. On the contrary, qualitative results showed that most of the participants had positive attitudes and took responsibility collectively regardless of the number of teachers.

Keywords: Distributed leadership; Elementary schools; Elementary school teachers; Leadership.

INTRODUCTION

Distributed leadership (henceforth, DL), proposed by Gronn (2000) offers a convenient and practical new perspective for teachers to re-examine leadership roles within schools. Since schools are places where many actors have critical roles, DL could be a potential solution to the tendency to think of leadership as two distinctive categories: one describing it along conventional understanding in which an organization is run single-handedly and the other viewing it as a system in which responsibilities are delegated to different individuals (Bolden, 2011). As Gross et al. (2015) point out leadership practices could certainly go beyond conventional boundaries and foster profoundly all students and variety of partners in schools by means of an excellent utilization of working cooperatively with a shared vision.

Schools exist within “the current constantly evolving and fluid educational landscape” (O’Donovan, 2015, p. 244). Improving schools in such a climate requires performing various administrative tasks and some work day responsibilities. Leadership is

essential in planning, organizing, administering, and overseeing how tasks are performed in such an environment. In addition, being a school leader necessitates the completion of some routine compulsory activities like dealing with the school finances, social organizations of the school and classrooms, relationship between the school and students' families, teacher professional development, curriculum, and assessment (Rielh, 2000). As schools are becoming more responsive to the demands made by a rapidly changing society, a growing consciousness of the limitations of conventional forms of leadership, performed by a single person, develops (Davison et al., 2013). As Hughes (2009) stated: "leadership is not confined to the top of the decision-making tree, but instead is often required at lower-down levels to shake the branches" (p.1029). This reformed conceptualization of leadership appears more sustainable and seems to have replaced the conventional single leadership model today. The DL model, in which leadership is recognized not as an individual act, but as a system, involving networks of leaders and others engaging in all levels by going beyond the conventional boundaries, is increasingly approved by more organizations (Deborah & Backman, 2010). In DL, leadership is the process of ongoing interaction among multiple members who have power in their hands to produce the best possible results for an educational institution (Crevani, Lindgren & Packendorff, 2007; Timperley, 2005). In view of this, there is considerable focus on the reciprocal nature of liability of handing over one's power (Corrigan, 2013).

According to Jones (2014), DL essentially emerged from attempts to improve primary and secondary school systems in the United States, but can provide substantial groundwork across educational contexts. Thus, through DL's applicability to any educational context, it may transform leadership into a web of interpersonal relationships that allows all participants to utilize the opportunities it provides to achieve their desired goals (Davison et al., 2013). In this model, collaboration, trust, commitment, and alternating leadership roles are necessities (Deborah & Backman, 2010). Similarly, in this model, teachers are able to achieve results beyond those that could be accomplished by individuals alone. The ongoing movement in the field of leadership practices indicates that DL takes place both in theory and in practice, with an increasing interest (Bolden, 2011; Crevani et al., 2007). DL practices contrast with the practices of heroic leadership and emphasize collaboration, mutual influence, shared goals and approaches by members (Day, Gronn & Sallas, 2004; Hallinger, 2003). Thus, DL focuses on the activities acted in unison and the nature of the social process, which is not a mere transmission of messages but a key component that contributes to the process (Harris, 2009). The flexibility that arises from the interaction in the nature of DL practices has allowed educators to overcome barriers and prevent participants from being passive followers (Davison et al., 2013). Current debates in DL convey a change in the distinctive power relations in schools where sharp boundaries between followers and leaders begin to blur (Frost & Harris, 2003). These blurring lines, however vague they may be at present, are critical components of DL and provide opportunities for all teachers to be leaders at different times and in different ways.

In terms of its origins, the distribution of leadership idea is based on a broad and miscellaneous background. One theory is not capable of explaining DL as it has a variety of meanings and includes more than one point of view (Wood, Bennet, Harvey & Wise, 2004). To elaborate on the concept, Deborah and Backman (2010) discuss the five common elements of DL, which clearly indicate that it cannot be the summation of one theory.

Spontaneous forms of collaboration: The organization that is managed by command and control leadership and the one managed mainly by DL may display considerable collaboration. But when a problem occurs, in the organization with DL, all members gather, analyze the problem, evaluate many different ideas, and take action to solve

the problem. In the organization with command and control leadership, managers come together, discuss the problem, and decide what to do.

Multi-directional influence: In organizations with DL, the person in charge gives up the power to make choices about which approaches or methods would work effectively in the organization. Instead, s/he creates a cross-organizational committee, supplies the necessary items, and enables the staff to choose. While they are deciding, an on-going interaction and multi-directional influences develop, both among the committee members and between the members and the manager.

Local entrepreneurship: Organizations with strong DL offer examples of changes that are initiated by their own members voluntarily with a strong commitment and interest.

Global purpose: In organizations with command and control leadership, the top of the organization determines the path to follow, as well as the rules, while others may simply do their parts determined for them. In organizations with DL, however, there is an extended and full understanding of a shared purpose and vision. Members have a sense of the whole and feel free to contribute to the purpose and even reshape it.

Peer mitigation of risk: In organizations with command and control leadership, members are usually under stress because they feel an obligation to check on the others to be sure that no one is putting the organization in danger. In DL systems, however, as more than one person could be the leader, they engage in a proactive manner and focus and guide the activities for the shared organizational purpose by avoiding stress (Deborah & Backman, 2010, p.11)

It is possible to suggest that DL is a way of dealing with the extensive amount of information, which is produced and moves around freely, and of the increasing possibilities of classifying the most applicable and newest information and putting it into practice (Wood, 2010). In a distributed view of leadership, more input, reflection, and new information is produced by not only the principal but also by the teaching staff, which allows for the contribution of a network of minds rather than the single mind of an individual (Chen, 2007). It can be argued that DL is an umbrella term that includes an extensive number of interpenetrating perspectives.

Based on the available relevant literature, Figure 1 presents the three perspectives underlying DL and some definitions of the term by different authors. Firstly, DL is a viewpoint from which a set of principles, ideas, decisions, and judgments is formed collectively. It is “the idea” of the distribution of leadership practices actively and purposefully within an organization (Harris & Spillane, 2008); yet, as a process, it evolves through interaction. In other words, DL is the minds of several individuals distinctively contributing their expertise and vision to the organization. Secondly, DL represents a system of management in which stakeholders are provided with a permanent share of power in the organization, which enables decentralization of power and decision-making by the involvement of teachers (Sisk, 2003). On this power sharing platform, there is no “the leader” who holds all the power and leads the others. On the contrary, there are leaders who work together. “It is not possible to assign others in distributed leadership, since there are tasks for all and everyone has equal authority and rights to undertake them” (Göksoy, 2015, p.114). Lastly, DL is a management philosophy that includes a set of beliefs and strategies shared by every individual in the organization. It demands the active commitment of every

individual to foster dynamic interaction and mobilize the knowledge that is distributed (Nonaka & Toyama, 2007).

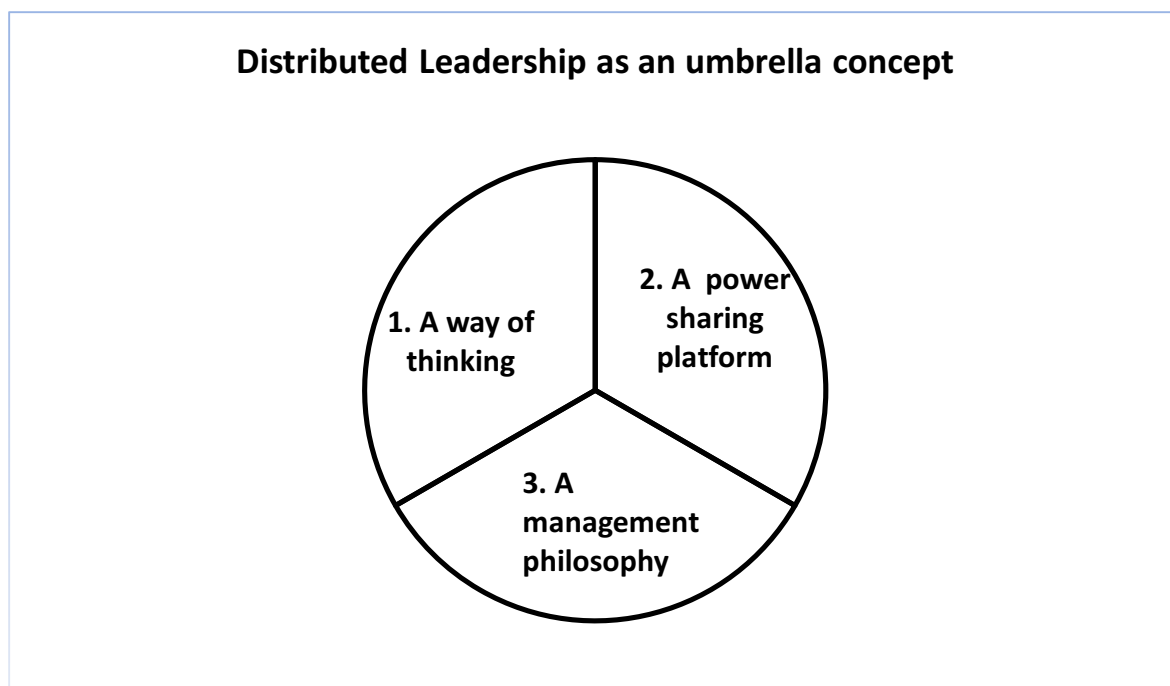


Figure 1: Different approaches of the distributed leadership concept

The review of related literature reveals that various research studies have been carried out to identify the relationship between DL and other components. Researchers have found that DL is significantly related to organizational change (Harris, 2008), schools' academic capacity (Heck & Hallinger, 2009), organizational commitment (Bakır & Aslan, 2014), affective commitment and normative commitment (Uslu & Beycioğlu, 2013), organizational commitment and teachers' job satisfaction (Ulusoy, 2014), the role of administrator, along with well-defined and accountable leadership roles for teachers and trust (Noble, 2014); and teachers' organizational support (Yılmaz, 2014).

The results of the research study conducted by Uslu and Beycioğlu (2013) reveal that teachers' perceptions about DL roles of principals were well received, but there was a significant difference between the perceptions of teachers about principals' DL roles and instruction branches. In another study, Ulusoy (2014) sought to determine the relationship between DL behaviours in schools with teachers' job satisfaction and organizational commitment. According to the results of the latter study, the level of DL behaviour in schools was average, and there were no significant differences between DL behaviour level in schools and the independent variables of gender, age, years of work in the school, and education level. Çınar (2015) also found that there was no significant relation between perceptions of DL and age, seniority, and educational level in her research, which aimed to investigate secondary school principals', and teachers' perceptions about their principal's practices, for DL.

Of further note is that Bakır and Aslan (2014) found that school type had a direct effect on DL perception. The results showed that private school teachers considered DL to be more favourable than public school teachers.

However, in an action research project that aimed to create a culture of DL from the ground up at Scootney Springs Elementary School, USA, Wayne Street (2011) concluded that a DL

model did not develop. Instead, it was found that four themes emerged that may help explain the relevance of the experience to issues of organizational change, since they comprised commitment, fear, strong beliefs, and ambiguity.

In spite of growing research into various shared leadership models, discussion on DL has primarily been limited to the description of its characteristics (Jones, 2014). Furthermore, while there are research studies that have explored the lineage of DL, relatively less attention has been paid to the voice of elementary school teachers who assume a wide range of roles to support their school and students' success, shape the culture of their schools, and influence practice among their peers (Harrison & Killion, 2007).

Seeing the scarcity of research in the field, this study, thus, aims to investigate teachers' views on DL in elementary schools in Turkey, where elementary school encompasses grades 1-8, and elementary school teachers find themselves in a situation in which they need to interact with students of vastly different age groups. Each grade comes with its own intellectual and social challenges. Elementary school teachers play a fundamental role in consolidating students' significant academic competencies and developing their cognitive portrayal of self as learner, and positive and motivational opinions regarding school (Baker, 2006). They focus on carrying out remarkably different types of work such as planning lessons, delivering curriculum, evaluating students, preparing students for standardized tests, and following students' development closely. They also participate in some activities such as helping the school administration to run the school, being in touch with the parents about students' development, organizing events for social occasions, and working together with colleagues in group activities. Considering the tasks elementary school teachers have to perform and the nature of DL, it is highly plausible to presume that elementary school teachers can duly perform their duties when they adopt DL behaviours. They can benefit from assuming influential roles and responsibility, meeting their own needs and peers' needs by working collaboratively, and continually contributing beyond the class (Lieberman & Friedrich, 2007). These roles can have a significant impact on the performance of teachers who commit themselves to students' intellectual, academic, and social development. Therefore, this paper aims to determine and discuss DL behaviours' applicability and effectiveness from the perspective of elementary school teachers in Turkey by focusing on some decisive factors such as available collaboration, participation in decision-making, and democratic decision-making.

Potter (2001) states that "every leader is a teacher and every teacher is a leader" (p.120). Based on this statement, it is possible to say that to be an effective leader in schools, where circumstances and options are sometimes surely restricted and fear is used as a means of control, is actually a challenge (Potter, 2001). School management is a multifaceted and complex process. Finding out the level of DL among elementary school teachers is important since DL behaviours help to create effective and active schools where power is distributed among the members of the organization, and teachers and principals share a view of leadership practice. Leaders who are the members of schools with DL can "effectively mobilize the collective intelligence, motivation, and creative talent of their partners" (Deborah & Backman, 2010, p.11), which is very significant for school improvement and student success. Consequently, DL behaviours will be encouraged to achieve educational goals and ambitions situated in more accomplished and accountable schools through professionalization, development, and preparation of teachers and principals (Miller, 2015, O'Donovan, 2015). The stimulation of shared vision, development of organizational efficiency, and improvement of the available capacity, which constitutes the basic philosophy underlying this approach, assure happiness and achievement of teachers in the school (Göksoy, 2015).

The significance and originality of this paper lies also in the fact that both qualitative and quantitative research methods were used to study the DL behaviours of elementary school teachers to acquire a deeper understanding of the matter. It is assumed that each method has some limitations and strengths. Therefore, this research includes both the quantitative dimension, which utilizes data collection instruments that can reach relatively large number of participants and lend their results to be easily expressed in quantifiable terms, and the qualitative dimension that focuses on the collection of uniquely individual data in order to combine the strengths of both methods.

Research Questions

The study aims to determine the level of DL behaviours of elementary school teachers and obtain a more detailed understanding of DL based on the opinions of teachers. It seeks to gather information on the three major issues that are listed below and answer the associated questions:

1. Determining the level of elementary school teachers' DL behaviours.
 - a. Is there a significant difference between the level of DL behaviours of elementary school teachers and their demographic characteristics such as their gender, field of study, professional seniority and the number of teachers working in the school?
2. Identifying the extent of the collaboration of principals based on teachers' opinions.
 - a. What are your reflections on whether your principal cooperates with the teachers about practices and operations of the school?
 - b. What is your principal's approach on participating with teachers and other partners in administrative tasks?
3. Obtaining teachers' opinions on their collaborative attitudes as partners.
 - a. How do you describe the school atmosphere in terms of sharing and interaction among colleagues?

METHODOLOGY

The purpose of this mixed methods study is to reveal the level of elementary school teachers' DL behaviours by presenting a deeper and more critical analysis through teachers' experience and opinions. The notion that quantitative and qualitative methods are complementary rather than rival parts becomes a tool in order not to suffer from the limitations associated with a single research method (Jick, 1979). This also "ensures that the issue is not explored through one lens, but rather a variety of lenses, which allows for multiple facets of a phenomenon to be revealed and understood" (Baxter & Jack, 2008, p. 544). Explanatory sequential mixed methods in which the researcher first gathers and analyzes the data by using the quantitative method and then follows the qualitative method to get a more detailed understanding is used in this research (Creswell, 2014).

In this research, for the quantitative part of the study, a descriptive survey that deals with the present phenomena in terms of changing conditions, practices, processes, and relationships was used. It is concerned not only with the characteristics of individuals, but with the features of the whole phenomenon by offering useful information for the interpretation and solution of problems (Salaria, 2012). As quantitative methods characteristically depend on larger samples chosen randomly, and as the purpose is

generalization, qualitative methods offer a way out to study relatively small samples and highlight the differences that are not statistically significant (Patton, 1990). In addition, qualitative research methods are known to be more flexible, broader, and less restrictive designs. They enhance the involvement of everyone related to the study by letting them share their experiences (Pathak, Jena & Kalra, 2013). The use of interviews are also highly pertinent as a qualitative research method particularly when boundaries of the phenomenon are not so clear and the researcher believes that going deeper into the context to see the factors that influence causes of behaviours and circumstances is necessary (Baxter & Jack, 2008). Therefore, in this research, a type of interview, namely, semi-structured focus group interviews that allow for dynamic group discussions were used. These interviews were highlighted with key questions to provide the participants with guidance on what to talk about (Gill, Stewart, Treasure & Chadwick, 2008).

Participants

The population of the study comprised of 2,123 elementary school teachers working at fifty elementary schools within the Buca Central District in Izmir, a province in Turkey, during the 2012-2013 school year. The sample in this study consisted of 346 elementary school teachers participating voluntarily and anonymously. Rational sampling method was applied using the subgroups present in the sample. Out of these 346 teachers, 211 (61%) were female and 135 (39%) were male. The sample comprised of 155 classroom teachers (44.8%), 130 (37.6%) social sciences teachers (including history, languages, geography, art, music, physical education, and religious education) and 61 (17.6 %) math and science teachers.

The sample also included 79 teachers (22.8 %) who had 1-10 years of teaching experience and 158 teachers (45.7 %) who had 11-20 years of work experience. One hundred and nine participants (31.5 %) had been working as teachers for 21 years or more. While 111 teachers (32.1 %) had been working in schools that had less than 50 teachers, most of the teachers (n=235; 67.9 %) had been working in schools that had more than 50 teachers. In summary, almost two-thirds of the sample was female and just over two-thirds worked in schools with more than 50 teachers, with approximately 45% being classroom teachers.

To collect qualitative data a subsample of 30 of the teachers were interviewed. These participants were chosen randomly according to their gender and field of study. Of those 30 teachers, 21 were female and 9 were male. While 13 teachers were classroom teachers, 17 teachers taught specific subjects. The semi-structured interviews were conducted by dividing them into five focus groups of six. Focus groups were significant for the quality of the data in terms of eliciting different points of view, and stimulating new ideas and high levels of energy, thus making gender and field of study variables different (Twinn, 1998).

Instruments

The first data collection instrument was a survey questionnaire that had two parts. The first part elicited demographic data such as gender, field of study, and total teaching experience and other data such as the number of teachers working in the schools that participants worked. The second part of the survey included the Distributed Leadership Scale developed by Özer and Beycioğlu (2013), which was used to determine the perceptions of elementary school teachers on distributed leadership. The survey items were scored on a 5 point Likert-rating scale on frequency of activity, ranging from 1 representing 'never' to 5 'always'. As for validity, Kaiser-Meyer-Olkin and Bartlett tests were performed in keeping with the work of Özer and Beycioğlu (2013). Kaiser-Mayer-Olkin's Measure (KMO) of Sampling Adequacy was calculated at ".94", and the Bartlett's Test of Sphericity reached

statistical significance at 3831.061 ($p = .000$). To inform the study's reliability, the Cronbach Alpha and test-retest correlation coefficients were estimated. The Cronbach's Alpha consistency co-efficient showed $r = 0.92$. The analysis of the test-retest scores revealed the score of ".82" which showed that the instrument was reliable. According to these results the "Distributed Leadership Scale" was found to be a valid and reliable instrument.

As the second data collection instrument, a semi-structured interview form was developed. This form consisted of two main questions and six sub-questions that transformed the questions used in the scale survey mentioned above. As for validity and reliability, the interview form was presented to experts in the Department of Educational Sciences in Faculty of Education at Dokuz Eylül University and İnönü University in Turkey. Mock interviews were carried out with eight teachers prior to actual interviews to identify problems and take precautions for the study to be properly conducted. The participating teachers were asked to analyze the items in the interview form and state their opinions concerning the clarity of the questions in the form. Specific comments from teachers led to some alterations on the form to make the interview questions more comprehensible, plain, and precise. Interview transcripts were also double checked by the researchers so that there were no obvious mistakes during transcription.

Data Collection and Analysis of Data

Ethical issues have been a priority at all stages of this study. Legal permission was obtained from the Ministry of National Education and the participants. The participants were not pressured into signing the consent forms. Instead, the researchers aimed to build trust and informed the participants about the confidentiality of the data taken from them. This was how the consent of the participants was obtained. In addition, the capturing, analyses, and reporting of the data were conducted objectively and included all perspectives stated by the participants. As mentioned, a scale, which is a type of survey research, was used to collect quantitative data as "survey research is a research method involving the use of standardized questionnaires or interviews to collect data about people and their preferences, thoughts, and behaviours in a systematic manner" (Bhattacharjee, 2012, p.73). The level of DL behaviours of elementary school teachers was revealed by the scores in the scale. For quantitative data analysis, SPSS 15.0 for Windows was used. Using SPSS, the mean, standard deviation, and frequency was calculated, and t -test and ANOVA tests were performed.

To collect qualitative data, focus group interviews were held with thirty elementary school teachers. The teachers were eager to participate and contribute to the study. Some of the interviews were recorded by a tape recorder, and some were recorded as written notes at times when the teachers did not wish to be recorded on tape. The interviews were planned to last approximately 40-60 minutes. For the data analysis of the interviews, audio-taped recordings and written texts were transcribed. The transcribed texts were then coded. Coding that consisted of code numbers and letters were used to provide convenience. The first number (1-5) symbolizes the focus group. The letter that follows is used for the gender of the participant: letter F symbolizes female teachers and M male teachers. The number (1-6) that follows the letter symbolizes the order of the individual teachers in the group. In addition, the abbreviation CT was used for class teachers and BT for branch teachers.

RESULTS

In the following section, the analyses are presented as well as the factors that were taken into consideration for the statistical analysis of the results of the survey and interviews as they apply to the research questions as noted above.

Analysis of survey items

Extent to which elementary school teachers' reported distributed leadership behaviours

According to Table 1, the overall mean for the total sample of teachers was 36.88. This result suggests that DL did occur in the participating schools and was approved by almost three-quarters of elementary school teachers.

Table 1: The level of elementary school teachers' distributed leadership behaviours

Participants	N	Minimum	Maximum	\bar{X}	<i>Sd</i>
Elementary School Teachers	346	12.00	50.00	36.88	7.95

Differences between female and male elementary school teachers' distributed leadership behaviours

One of the purposes of this study was to investigate whether there was a significant difference between female and male elementary school teachers' DL behaviours. In order to verify whether there was a significant difference, a two-tailed *t*-test (at alpha level 0.05) was used. Table 2 reveals that the mean for females was 37.23 and for males it was 36.33. The means are rather close and the difference in the means was not statistically significant.

Table 2: Female and male elementary school teachers' distributed leadership behaviours (t-test results)

Gender	N	\bar{X}	<i>Sd</i>	<i>df</i>	<i>t</i>	<i>p</i>
Female	211	37.23	7.62	344	1.025	.30
Male	135	36.33	8.45			
Total	346					

Differences among elementary school teachers' distributed leadership behaviours from the point of their field of study

To identify whether there were differences among elementary school teachers' distributed leadership behaviours depending on their field of study, an ANOVA test was performed. The findings showed that there was no significant difference. Table 3 demonstrates that the means for classroom teachers, social sciences teachers, and math and science teachers were considerably similar. It was 37.83 for classroom teachers; 36.45 for social sciences teachers; and 35.36 for math and science teachers.

Table 3: Elementary school teachers' distributed leadership behaviours from the point of their field of study (One-way Analysis of Variance (ANOVA) Results)

Field of Study	N	\bar{X}	<i>Sd</i>	<i>f</i>	<i>p</i>
Classroom teachers	155	37.83	8.12	2.443	.088
Social sciences	130	36.45	7.72		
Math and Science	61	35.36	7.82		
Total	346				

Differences among elementary school teachers' distributed leadership behaviours depending on their professional seniority

In order to verify whether there were differences among elementary school teachers' distributed leadership behaviours depending on their professional seniority, an ANOVA test was used. The participants' professional seniority was divided into three time periods: 1-10 years, 11-20 years and 21 years or more. The findings showed that the difference in means was not statistically significant. As seen in Table 4, the means for each one was also considerably close. It was 36.87 for teachers working with up to ten years of teaching experience, for teachers with 11-20 years of teaching experience, the mean was 37.37, and it was 36.16 for teachers working for 21 years or more.

Table 4: Elementary school teachers' distributed leadership behaviours depending on their professional seniority (t-test results)

Professional seniority	N	\bar{X}	Sd	f	p
1 to 10 years	79	36.87	7.62	.750	.473
11-20 years	158	37.37	7.62		
21 years and higher	109	36.16	7.95		
Total	346				

Differences among elementary school teachers' distributed leadership behaviours depending on the number of teachers working in schools

To investigate whether there were differences among elementary school teachers' DL behaviours based on the number of teachers working in schools; a two-tailed *t*-test (at alpha level 0.05) was used. Two categories emerged: schools that had up to fifty teachers and the ones that had fifty-one teachers or more. The findings showed that the difference in means was statistically significant ($p < .001$). As shown in Table 5, the mean for teachers working in schools with up to 50 teachers was 37.92, and for teachers working in schools with 51 and more, it was 36.38. Although the means were close, the former was higher than the latter. This finding illustrated that the number of teachers in schools was an important variable that had an impact on DL behaviours of teachers.

Table 5: Elementary school teachers' distributed leadership behaviours depending on the number of teachers working in schools (t-test results)

N teaching staff in school	N	\bar{X}	Sd	df	T	p
50 and below	111	37.92	6.20	344	1.686	.000
51 and beyond	235	36.38	8.63			
Total	346					

* $p < .001$

Focus group results

Thirty elementary school teachers were interviewed to obtain their opinions on DL behaviours regarding the collaboration of principals and the collaborative attitudes of teachers as partners. They were asked sub-questions when necessary. The interview results

demonstrated that these elementary school teachers thought they displayed DL behaviours and tended to collaborate with their colleagues and principals. The following comments provide support for the results of the survey. For instance, the following teacher's experience is illustrated in her ideas as presented in the following comment:

There may be some tasks which teachers should express their ideas about or which they collaborate with the principal. In such cases, it would not be right to expect the principal to do everything by himself. It is definitely not like this in our school. We are always informed beforehand when something is to be carried out. So, the principal shares the news with us, and everybody tries to take part and help, but sometimes the principal does what makes sense to him in the end. (1F6-CT)

Most of the teachers (28) stated that "cooperation" summarized their opinion about the participative behaviours of their colleagues and school atmosphere. They were of the opinion that sharing and communication among teachers were satisfactory even though there could sometimes be personal problems. They tended to assist and support each other about professional subjects and content they taught. The following teacher's opinion illustrates this situation:

Even though we may have conflicts with each other due to some personal issues, we tend to work together. In addition, there has been a considerable decrease in the number of these personal conflicts. Everyone is usually eager to share his/her knowledge. For instance, we share useful information or application about the course we teach with others by using a USB flash drive. (5F1-CT)

A teacher from a different focus group stated that cooperation and communication among teachers were satisfactory and functional, yet collaboration with parents was not as strong as the collaboration among colleagues. His opinion is reflected by the following comments:

Parents of our students attend only parent-teacher association board meetings. They are considerably reluctant to take part in and let their children attend any kind of cultural or social activities. When we organize a cultural tour or a painting contest, they consider that these activities are futile and pointless. They demand that their children study hard and go to their classes or a private teaching institution, but not take part in any activity to socialize. (3M2-CT)

Female and male elementary school teachers' opinions on distributed leadership behaviours

Both female and male participants' responses revealed that they had a tendency to collaborate and support each other, being in solidarity and working extensively in cooperation on administrative and educational tasks. For example, a female teacher remarked:

I think we have to share information because to be able to complete some tasks we need each other. For example, we talk about the subjects and exam questions in the staffroom as there are some joint exams for which we need to prepare questions together. We ask each other's opinion on such things. (2F3-BT)

Similarly, a male teacher in the same focus group noted:

Actually, teachers who have newly started working in this school become aware of the atmosphere better here in a very short time. They usually say: 'We are glad to work here, it is not hard to socialize'. We think they are one of us and try to help them as if we have been working together for years. (2M2-FT)

Elementary school teachers' opinions on distributed leadership behaviours from the point of field of study

All of the participants stated that although they were teachers in different fields, they used DL as an advantage to cooperate and share their expertise. Their views are represented by the following remark:

We are six people from the same field of study. We have a chairman, and we usually get the news from him. If we learn something new, we usually share it with each other. I think we get along well. The dialogue among us is so good that even a newcomer teacher says, 'I feel like I've been working here for years. (4F4-BT)

Elementary school teachers' opinions on distributed leadership behaviours depending on their professional seniority

The responses of the participants who had been working for many years showed that they were not very willing to cooperate because of some negative experiences they had had previously and because of their personal preferences. Some of them mentioned some unpleasant events they had experienced, and they stated that those events pushed them to be careful when supporting the distributive perspective. One teacher who had worked for many years noted:

The teachers who have just started working here have better communication. We are older than them, and as we have had more unpleasant experiences than them, we think that we should be careful and sometimes stop ourselves from commenting on some cases. (3F1-BT)

On the other hand, the responses of the participating teachers who had worked for less than ten years showed that they could adapt themselves to changes and overcome obstacles more easily. One of the participants who worked for nearly ten years expressed that she had some difficulties when she first came to the school:

Then I realized that the problem was actually me. Since I'd gotten used to my former school, starting work in this school seemed really, hard for me at first. However, everything is fine now. I have learned that it takes time to get used to this environment. Everything is okay now. I have good relations with all of the teachers. I think we have got a really, friendly and sharing atmosphere here, and I'm glad for it. Also, I can do everything to make this last. (1F3-BT)

Elementary school teachers' opinions on distributed leadership behaviours depending on the number of teachers working in schools

The responses of participants showed that most of them were content with the current situation in their schools and had positive relations and attitudes regardless of the number of teachers that worked there. For instance, two teachers who worked in a school with seventy-three teachers reported:

We share lots of things with the other teachers about school subjects. For example, if there is a painting contest, we ask the opinion of a teacher or we guide the student together for the sake of our school. So, I can say that communication among teachers is really, good. For instance, if one of us is in a difficult situation, we always provide support and try to help him or her. (2F4- BT)

Eighty percent of teachers show willingness for changes and improvements, but twenty percent of them are a bit reluctant. I mean, some of us think that if a wrongdoing doesn't affect us, it is not a problem so it is alright to let it continue. But, I can still insist that most of us support useful changes and improvements. (2F1-CT)

Another teacher who worked in a school that had less than fifty teachers was positive in her description of her situation:

I think we have a very good relationship in the school. We always help each other during hard times. We share information with each other and discuss anything in the staffroom. In my opinion, this situation affects the atmosphere in the school positively. (4F6-BT)

DISCUSSION

The results of this study showed that the participating elementary school teachers displayed DL behaviours. Teachers were enthusiastic about taking responsibility in fulfilling administrative tasks. The results obtained by the survey also implied that teachers had the opportunity to create an atmosphere supported and enhanced by the help of the administrators. Correspondingly, it can be stated that engaging teachers in DL behaviours may lead to a trusting school atmosphere (Smith, 2007). As there is substantial support for DL practices, teachers can develop a more sustainable leadership capacity, which is argued to be able to influence dynamic interactions between multiple stakeholders with a shifting emphasis on collective responsibility (O'Donovan, 2015).

Similarly, the results of the focus group interviews showed that teachers were ambitious about interacting with each other on instructional issues to select strategies, facilitate tasks, and utilize each other's expertise. They were of the opinion that school principals could create opportunities that would motivate and influence the behaviours of teachers to encourage them to take responsibility collectively. It can be suggested that the more effective school principals become, the more committed their teachers will be. In addition, teachers will be more open to innovation and be involved in improvement efforts (Burch & Spillane, 2003). Overall, it has been found that teachers could utilize the enrichment of this distributed model of leadership in their own personal and professional development. That the nature of teacher role in DL has been reinforced by the focus on exchange of information and cooperative learning (Cohen, 1994) is one of the noteworthy inferences of the study.

Female and male elementary school teachers' distributed leadership behaviours

One of the aims of this study was to find out whether there were any differences between female and male elementary school teachers. The results of the *t*-test showed that there were no significant differences between female and male elementary school teachers' DL behaviours. This result shows that both female and male teachers working in the schools where the study was conducted took an active role as facilitators in tasks related to schools. As the previously presented means reveal, DL is distinguishably far beyond the autocratic approach, which is closely related to conventionalism.

The focus group interviews showed that the participants' opinions supported the idea that in DL practices there are no structural barriers such as gender. These barriers might

jeopardize the chance of including a wider range of people in leadership, but schools with DL seem to be gender-free and sexless organizations (Lumby, 2013).

Elementary school teachers' distributed leadership behaviors from the point of their field of study

The ANOVA results also demonstrated that there were no significant differences among elementary school teachers' DL behaviours in different fields of study. The focus group interviews showed that the participants agreed that skills and experience of more diverse people were crucial for a successful collective leadership by enabling more fluid division of power and equal opportunities for all (Hulpia & Devos, 2010; Lumby, 2013).

Elementary school teachers' distributed leadership behaviours depending on their professional seniority

Another goal of this study was to find out whether there were any differences among elementary school teachers' DL behaviours that stemmed from their professional seniority. The ANOVA results showed that there were no significant differences. Çınar (2015) obtained similar results in her research. She found that there was not a significant difference between perceptions of DL and seniority.

Although there were no significant differences found in the quantitative results, qualitative analysis showed that teachers' opinions varied based on the number of years that they worked. Teachers who had worked for many years were more reluctant and cautious than others. This may be the result of an unwillingness caused by some negative experiences and the lack of interaction for a sharing climate to occur. Teachers who had worked for less than ten years seemed more eager to communicate, and their responses supported the notion that teachers had the opportunity to increase the effectiveness of collaboration in schools where they could work together to develop goals in a positive and friendly environment (Scribner, Sawyer, Watson & Myers, 2007).

Elementary school teachers' distributed leadership behaviours depending on the number of teachers working in schools

The final aim of this study was to find out whether there were any differences among elementary school teachers' DL behaviours depending on the number of teachers working in their schools. The results of the *t*-test showed that there was a significant difference. The reason for this difference could be that working collaboratively and assisting each other with tasks is more possible in smaller groups owing to the level of higher communication, and the help given and received (Webb, 1989). Teachers communicate and interact more often in small groups which contribute to a higher energy level through a shared expertise (Wood et al., 2004). The result of the test is an indication that teachers may be of the opinion that it is easier and more satisfactory to take part in discussion and exploring ideas in groups with fewer teachers since any decision will depend on the agreement and approval of group members (Enu, Danso & Awortwe, 2015). The result can also mirror the idea that small groups are perceived by teachers as a facilitating and motivating factor to work cooperatively and exchange ideas by means of group discussion (Willis et al., 2002). Teachers are members of a community that naturally emerges in schools. Working in groups has the potential to integrate a variety of skills and expertise. In particular, the results also suggest that teachers consider small groups as an advantage to provide an effective contribution for the improvement of interpersonal communication and leadership skills.

Contrary to the quantitative result, the participants' responses in the interviews show that the nature of the group is one of the key elements, as shared emotion and purpose among group members leads to satisfaction, higher morale, and cohesion at individual levels regardless of group size (Kelly & Barsade, 2001). The responses of the participants suggest that they know that schools may have a wide range of tasks, and cooperation is always efficient irrespective of the number of teachers. They tend to create an atmosphere to help each other and be involved in leadership practices (Isaacs & Tang, 1997).

CONCLUSION

In this study, researchers aimed to find out the level at which elementary school teachers displayed DL behaviours. Studies in the field reported that both teachers and principals could participate in administrative and organizational tasks thanks to the perception of a more blurred distinction between leaders and followers (Spillane, Camburn & Pareja, 2007). Like those studies, this study also focused on activities and practices that teachers identified as those that were done through the collaboration of organizational members. The study also aimed to provide a more substantial framework about what the concept of DL required or demanded, and how it was practiced when it came to reality since activities that could actually count as DL behaviours might remain just humble goals, that needed to be put into practice (Mayrowetz, 2008).

The research findings seem to direct the attention of educational researchers to two changes. First, teachers show great interest in the distribution of leadership in schools and how it will be spread through the organization including principals, students and parents. Therefore, DL could suggest a more decentralized management where activities like "building vision and setting the directions, understanding and developing people, redesigning the organization and managing the teaching, and learning programs" (Leithwood, Harris & Hopkins, 2008, p. 29) are not carried out by one person or just a group of people. Second, there is focused attention on the attitudes of elementary school teachers. Previous research has not adequately addressed the effects of DL in an educational context, especially, in elementary schools (Heck & Hallinger, 2009). This study is important as it reveals the contribution of DL behaviours in elementary schools through its focus on measuring personal and professional variables and describing teachers' opinions about DL in a more detailed way.

This study also provides information about the DL behaviours of elementary school teachers using quantitative and qualitative data. Results show the existence of DL behaviours among elementary school teachers and imply that they usually adopt a distributive perspective on activities. It is also remarkable that the qualitative data significantly supports the quantitative data. Regarding this, participating teachers and the schools where they are employed engage in meaningful leadership practices, and they distribute the leadership by agreement, discussion, and consent by means of appreciable and motivating tools (Kilinc, 2014; O'Donovan, 2015).

While reporting these results, the researchers' direct attention to some points that need to be explored in future studies. Based on teachers' demands, it can be suggested that principals may promote a more creative process and provide additional support for encouragement (Camburn, Rowan & Taylor, 2003). In addition, while working together, coordinating the activities, monitoring the improvements, and overcoming deficiencies, teachers should put aside their former negative experiences and be willing to experiment. Those who are members of schools with large groups of teachers may also turn group size into an advantage to cooperate and interact more effectively by making use of multiple

expertise. On the basis of this research, therefore, it seems practical to provide some approaches that can be implemented in the real world to help establish DL in schools:

- Establish a climate of trust and mutual support by a sustainable interaction and empowerment.
- Develop leadership teams and provide formally distributed tasks, for teachers could develop their craft and facilitate the same process for other partners.
- Highlight expertise rather than position by developing groups for a more coordinated process.
- Support teachers to be active both in the classroom and outside the classroom by providing opportunities for them to take both instructional roles and administrative roles.
- Encourage teachers to meet each other to set long term objectives, spend time together to assist each other and organize regular meeting with the principal, who takes the greatest part to guide and support teachers' efforts.
- Provide opportunity for teachers to function as department heads so that they can raise the teaching quality by improving professional development and sharing skills with other colleagues.
- Engage teachers in leadership exercises by forming and supporting communities that include participation of students, teachers, parents and boards of management (Bierly, Doyle & Smith, 2016; Pont, Nusche & Moorman, 2008).

The findings of this study present merely a part of a very complex phenomenon. In order to develop a more in-depth understanding how DL is put into practice in educational contexts and to what extent teachers and principals display DL behaviours, activities can be observed carefully over time by researchers. It is recommended that more research be conducted on how DL is practiced in schools, as well as additional studies on how it affects teaching, learning, and student success. The use of mixed methods research as in this study is also recommended to add to the deepening of the knowledge based on DL.

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APPENDIX 1

THE DISTRIBUTED LEADERSHIP SCALE - Survey

ITEMS OF THE SCALE					
	Always	Frequently	Sometimes	Seldom	Never
1. Our principal includes other partners (for instance; teachers, students, parents etc.) in the decision-making process concerned with the school.	()	()	()	()	()
2. Our principal works in cooperation with other school partners (deputy principal, teachers, students and parents) to achieve the school goals.	()	()	()	()	()
3. Our principal appreciates teachers for their efforts concerned with the instructional practices.	()	()	()	()	()
4. Teachers, students and parents can express their opinions and suggestions to the principal without hesitation.	()	()	()	()	()
5. Teachers are willing to make a contribution to the administrative tasks of the school.	()	()	()	()	()
6. Teachers assist school administrators.	()	()	()	()	()
7. Our principal endeavours to create a school environment based on cooperation and sharing.	()	()	()	()	()
8. Our principal is willing to fulfil the school tasks in interaction with other school members/partners.	()	()	()	()	()
9. Teachers are encouraged to actively participate in all efforts of change and improvement in the school.	()	()	()	()	()
10. Our principal includes other school members (teachers, students and parents etc.) in the process of solving a problem encountered at school taking the quality of the task, knowledge and experience of the school members into consideration.	()	()	()	()	()