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Eğitim Örgütlerinde Dönüşümcü Liderlik ve Örgütsel Öğrenme Arasındaki İlişki: Bir Meta Analiz Çalışması

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Makale Bilgisi	ÖZET
Geliş Tarihi: 26.08.2019	Bu çalışmanın amacı, eğitim ortamlarında dönüşümcü liderlik ve örgütsel öğrenme arasındaki ilişkiyi meta-analiz ile incelemektir. Ayrıca, bu ilişkide okul türü ve okul büyüklüğünün moderatör olup olmadığı araştırılmaktadır. Bu konuda, Akademik Google, YÖK (Yüksek Öğretim Kurumu), ProQuest ve ULAKBİM arama motorlarından 16 çalışmaya ulaşıldı. Öğrenen örgüt, öğrenci-öğretmen öğrenmesi, liderlik, liderlik stilleri, dönüşümsel liderlik vb. anahtar kelimelerle çalışmalar taranmıştır. Ulaşılan çalışmaların meta-analiz için gerekli ve yeterli özellikte olup olmadıklarından emin olmak için anahtar kelimelerle ulaşılan çalışmalar kontrol edilmiştir. Meta-analiz ile analiz yapmak için, yayın yanlılığı ve etki modeli açısından varsayımlar kontrol edilmiştir. Yayın yanlılığının olmadığı ve modelin rastgele etki modeli olduğu tespit edilmiştir. Sonuç olarak, dönüşümsel liderliğin örgütsel öğrenme üzerinde güçlü bir etkisi olduğu ortaya çıkmıştır. Ayrıca, sadece okul türü değil aynı zamanda okul büyüklüğü de dönüşümsel liderlik ile eğitim kurumlarında öğrenme organizasyonu arasındaki ilişkide bir moderatör olduğu sonuçlanmıştır.
Kabul Tarihi: 03.11.2020	
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The Relationship between Transformational Leadership and Organizational Learning in Educational Organizations: A Meta-Analysis Study

Article Information	ABSTRACT
Received: 26.08.2019	This study aims to determine the relationship between transformational leadership and the learning organization feature of educational organizations through a meta-analysis. Also, it is investigated whether the relationship is a moderator in terms of school type and sample size. On this topic, 16 studies were available on the Scholar Google, YÖK (Higher Education Institution), ProQuest, and ULAKBİM search portals. The studies were scanned with such keywords as <i>learner organization</i> , <i>student-teacher learning</i> , <i>leadership</i> , <i>leadership styles</i> , <i>transformational leadership</i> , and so on. The studies were checked to make sure if they are necessary and sufficient features for meta-analysis. To analyze with meta-analysis, the assumptions were checked for publication bias and effect model. It was found out that there was no publication bias and the model was a random effect model. As a result, it can be said that transformational leadership has a strong impact on learning organization. Furthermore, not only school type but also sample size is a moderator in the relationship between transformational leadership and learning organization in educational organizations.
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1. INTRODUCTION

Schools are the institutions that teach students the desired information and transform the information taught into behaviors among the learners. Teachers can change the quality of teaching work as actors of teaching. Teachers of the 21st century are expected to learn and teach, besides maintaining a high quality of teaching. According to Demirel (2012), today's contemporary education approaches aim to educate individuals who criticize the information, investigate, have logical thinking skills, can cope with the problems they face, and learn to learn.

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Özden (2013) thinks that today the biggest obstacle in front of schools is their inability to educate individuals who learn to think and learn. Despite the potential existence of a large number of reasons for this situation (education policy, educating teachers, school leadership, school climate, etc.), forming organizations that are capable of learning to learn seems to be the most far-reaching intervention in dealing with this problem. A learning organization is a mechanism that adds to the individuals' and organizations' existing knowledge so that they can adjust their capacity to newly emerging situations and respond to change. If schools are not learning organizations, learning, and cultural transfer, which are the basic functions of schools, may be interrupted. Schools that enable change and learning by interacting with their environment can create a flexible, holistic, and sustainable system that adapts to the predicted, uncertain variables of the future.

When the related studies are examined, it is seen that schools have deficiencies and problems in being a learning school (Bil, 2018; Üstün ve Menteşe, 2013; Yumuşak ve Yıldız, 2011). Besides, considering that 20th-century schools are inadequate to answer the questions of the 21st century (Kış & Konan, 2010) and school principals are not in the desired state in terms of the skills that learning organization leaders should have (Özdemir, Karadağ, & Kılınc, 2013) that is important for school leaders to make progress towards becoming a learning organization.

Schools can turn into learning organizations with the aid of two things. Firstly, teachers, students, and other stakeholders should complete playing their part to this end. Secondly, school principals should choose the right leadership style as a crucial factor (Silins, Mulford & Zarins, 2002). It is already known that there is a relationship between learning organization and principals' leadership styles (Lam, 2002; Leithwood & Menzies, 1998). Kofman and Senge (1993) argue that learning organizations can be built by those leaders who are able to reason, question, and take risks. Specifically, a relation was found between learning organization and the transformational leadership style of principals (Kurland, Peretz & Lazarowitz, 2010; Bass, 2000). However, it was found that transformational leadership lags proving effect in the whole learning and teaching process at school (Robinson, Lloyd & Rowe, 2008). Hallinger (2010) showed that instructional leadership is more effective for student learning. Bearing in mind that the teacher, student, principal, and other stakeholders are open to learning in a learning organization and use their new learnings as contributions to rejuvenate their school; instructional leadership comes to the forefront even more for students in being a learning organization. Hsiao and Chang (2011) concluded that transformational leadership plays an important in creating a learning organization. It was revealed that leaders who put the pressure on learning are influential actors in learning schools (Higgins, Ishimaru, Holcombe, and Fowler, 2012). According to the literature, below are the school leadership and transformational leadership style which play a mediating role in schools as learning organizations.

School leadership means having the skills and characteristics that make educational curricula effective, help schools develop, exhibit supportive behaviours to improve teachers' performance and bring about positive outcomes in student learning. Such activities performed by a school leader were put forward in a meta-analysis carried out by Waters, Marzano, and McNulty (2003) about school leadership. Several kinds of research reveal that school leadership has a part to play in increasing the quality of education in more than one aspect (Bryk, Sebring, Allensworth, Luppescu & Easton, 2010, Branch, Hanushek & Rivkin, 2012; Robinson, Lloyd & Rowe, 2008; Murphy & Louis, 2018; Miller et al., 2016). It is an obvious fact that school leadership brings positive outcomes for the development of the school. Stoll et al. (2006) defend that school principals are potent in ensuring school development successfully by growing a learning culture and laying the foundations of the culture. Hallinger and Heck (2010) reported that leadership has a direct and considerable impact on the school's organizational development and academic capacity. Geijssel, Slegers, Stoel, and Kruger, (2009) found out that school leaders play an important role in teachers' professional development and psychological status. Studies indicating a relationship between school leadership styles and organizational learning predominantly show that transformational leadership is more effective than others (Kurtland et al., 2010; Bass, 2000; Castiglione, 2006; Rijal, 2010). Explanations on the subject of transformational leadership which is the scope of the study and among one of the school leaderships are below:

Transformational Leadership: Introduced by Burns (1978) and extensively addressed by Bass (1990), transformational leadership encompasses ethical standards and long-term goals above interactive leadership. A transformational leader cares about the better status of the organization and the employees and also meets the needs for this purpose. To this end, they lead to commitment and satisfaction by building their leadership potential by focusing on the individual needs and personal development of the employees (Turan & Bektaş, 2014). Bass ve Riggio (2006) listed four components of transformational leadership as idealized influence, inspirational motivation, intellectual stimulation, and individual support. Idealized effect means that the school leader impresses their followers with a perception that is appreciated and trusted by school stakeholders. In this way, the school leader acts consistently, puts ethical standards meticulously, confronts obstacles, and inspires confidence. Secondly, inspirational motivation is the state of energy and enthusiasm reflected by leaders to their followers. Intellectual stimulation means the encouragement of employees by the leader to adopt innovation and change to the organization. Lastly, individual support refers to appreciating differences and maintaining different relationships acknowledging that each individual has distinct expectations and developmental needs.

Communication and motivation skills, two important components of the leadership process, are at the forefront of transformational leadership and form the basic strategies of transformational leadership. Visibility of transformational leadership in education; to initiate the systematic change and transformation process in the school and make it sustainable (Doğan, 2016). It can be stated that leadership that is innovative and facilitating learning is transformational leadership (Çelik, 2011), and transformational leaders prioritize organizational interests, have a visionary personality, and think future-oriented

(Özden, 2013). For this reason, transformational leadership is suitable for school environments as it allows school stakeholders to learn new things, to establish and strengthen new organizational norms, to form new meanings and ways of thinking, and to help leaders break established norms and establish new ones (Şimşek, 2013).

1.1. Organizational Learning

Organizational learning is a dynamic process that includes activities for generation, dissemination, and sharing of knowledge and putting of the knowledge into use (Garcia-Morales, Lopezmartin & Liamassanchez, 2006). As a corporate entity, a learning organization constantly learns from previous and present experiences and thinking about the future and consciously uses such learning for continual change and adaptation with the highest level of gain depending on the specific objectives (Voulalas & Sharpe, 2005). The organizational learning process becomes possible in an organizational culture based on the exchange of views and sharing of perspectives and courage to this end among employees and stakeholders at all levels of the organization (Castiglione, 2006). Senge (1990) describes the basic attitudes and beliefs of the people working in learning organizations as follows. First, learners are not constrained to live and express their ideas as they perceive. In addition, individuals are not expected to give immediate and precise answers. Second, learners take real care of both their own and others' roles. Third, members of the organization feel the unity of organizational purpose that emphasizes the interests of the whole beyond individual situations. Finally, learners are determined to seek the truth, regardless of how much they can threaten the status quo. It is understood that the behaviors and attitudes of the working members are important characteristics of a learning organization.

Different organizations require different conditions for being a learning organization. For example, the prerequisite for creating a learning organization in schools is to review studies about learning and elicit a multidimensional model (teacher-student-school administrator-electronic networks, etc.) (Black, McCormick, James & Pedder, 2006). Senge (2011), who introduced the concept of the learning organization, identified five disciplinary areas for schools that are learning organizations: personal mastery, mental models, shared vision, team learning, and system thinking. Again in the context of educational organizations, Garcia-Morales et al. (2006) explored that the main factors affecting the organizational learning process include shared vision, personal mastery, and team learning. Garcia-Morales et al. (2006) and Senge (2011) have three interdisciplinary areas; personal mastery, shared vision, and team learning.

To start with, personal mastery as a discipline that requires understanding and learning efforts for one's good (Senge, 2011) facilitates personal vision (the goal every individual wants to achieve), managing the creative tension between the future vision and present reality, and reducing structural conflicts (García-Morales, Lopezmartin & Liamassanchez, 2006). In practice, the behaviours that signal personal mastery for teachers, school leaders, students, as well as other stakeholders in learning organizations, including setting a balance between their strengths and weaknesses, investing their energy for successful development, and being more self-conscious (Stierlin, 2010).

Secondly, shared vision, as a compulsory component of the change process in schools, emerges with time and relies on general values and beliefs (Huffman & Hipp, 2003). Developing a shared vision facilitates achievement of the goals set by the school, adoption of the vision by all, and fulfillment of the respective responsibilities by individuals (Huffman, 2003). School leader that initiates a creativity-inspiring atmosphere in a learning organization (Senge, 1990) discloses the facts regarding where they are at a specific time and what their vision is and will be from thereon. Creative tension exists if there is a vision because they together inspire the energy for what we aspire to create (Kurland, Peretz & Hertz-Lazarowitz, 2010). It is seen that shared vision plays a vital role in creating change and becoming a learning organization.

In another area, team learning is about focusing on group interaction through interviews and skillful discussion (Senge et al., 2000). Team learning is based on the encouragement of sensitively expressed conflict and discussion as positive sources of learning (Serrat, 2017). This disciplinary area represents integrity, which is the harmony between people with a range of complementary abilities. Therefore, it depends on a common goal, approach, and objectives for all (Moreno, Morales & Llorens Montes, 2005). Departing from that, creating synergy can provide effects of team learning for a learning organization since synergy allows explicit expression of opinions in the school environment and using different abilities of each individual, depending on the common goals of the school stakeholders.

Unlike the others, mental models refer to assumptions and generalizations regarded as barriers before adaptation to change by humans. Working with mental models means being able to define the present reality more clearly and honestly (Senge, 2011). Finally, system thinking allows for a holistic evaluation of the values and implementations concerning education. This helps determine future action and change plans in return (Pedder and MacBeath, 2008).

In the literature, studies examining the relationship between learning organization and different types of leadership in educational organizations show that transformational leadership makes it more likely for schools to be learning organizations. Therefore, an analysis of the studies on the relationship between transformational leadership and learning organization in schools is thought to help generalize. Analyzing studies that examine the relationship between transformational leadership in education and learning organization and statistically determining the overall assessment makes the study important.

1.2. Purpose of the Study

This study aimed at finding out the correlation of learning organization with transformational leadership in schools through meta-analysis of studies at elementary, middle, high schools, and universities. In particular, it was aimed to determine the impacts of transformational leadership on being a learning organization by seeking answers for the following questions:

1. What is the impact of transformational leadership on learning organizations?
2. What is the mediating role in the effect of transformational leadership on being a learning organization according to the school type variable?
3. What is the mediating role in the effect of transformational leadership on being a learning organization according to school size?

2. METHODOLOGY

In this study, a meta-analysis was carried out to identify the relationship between school principals' leadership styles and learning organization status of schools. The meta-analysis method is used to combine the results of quantitative studies on a particular issue to make statistical analysis of the study findings (Littel, Corcoran & Pillai, 2008, Cohen, Manion & Morrison, 2007).

2.1. Data Collection Process

The selection criteria for the studies about the relationship between transformational leadership and educational institutions as a learning organization between years 2000 to 2018 scanned in databases such as Google academic, YÖK (Turkish Higher Education Council Thesis Database), Proquest and ULAKBIM (Turkish National Center of Academic Studies) is below: i) Having the necessary statistical information in the studies (correlation value, sample size); ii) researching the relationship between transformational leadership and learning organization in educational institutions; iii) Articles published in international refereed journals.

The scanning was particularly performed on the abstracts and titles to detect any of the keywords "learning organization", "student-teacher learning", "leadership", "leadership styles", and "transformational leadership". A total of 20 studies were found to match the criteria including 15 papers and 5 research theses. As for meta-analysis, the number of studies to be included was calculated by checking all of the studies to find out whether necessary and sufficient statistical features were available. As a result, 13 papers and 3 theses were included in the analysis as shown in Table 1 below.

Table 1.

Information about the Studies

Year published	2001-2004	2005-2008	2009-2012	2013-2016
	2	3	9	2
Research type	Article		Thesis	
	13		3	
Educational grade	Elementary	Middle	High school	University
	4	5	2	5
School size	Small	Medium	Large	Very large
	(1-200)	(201-400)	(401-600)	(601+)
	3	6	3	4

Note: School sizes are classified by the formula "width of array/number of groups" (Tekin, 2002).

According to Table 1, noteworthy features are as follows; the relevant studies were mostly carried out between 2009-2012, published in more article types, performed in at least high school type schools, and samples are mostly middle-sized schools.

2.2. The Procedure

In a meta-analysis, studies are subjected to an analysis to find out the relationship strength and direction of the studies through an evaluation based on the effect size (Borenstein, Hedges, Higgins and Rothstein, 2011; Schulze, 2004). Our analysis was performed by using the correlation coefficient effect sizes of Cohen et al. (2007). This type of classification refers to values between 0,00 and $\pm 0,10$ as weak; 0,10 and $\pm 0,30$ small; 0,30 and $\pm 0,50$ intermediate; 0,50 and $\pm 0,80$ strong; and those above 0,80 as very strong effect. Apart from that, the random-effects model was employed to estimate the mean effect distributions in the studies (Borenstein et al., 2011).

This model was preferred because in the other, the fixed effects model, it is assumed that studies are functionally identical; therefore, it is not the best choice for social sciences (Cumming, 2012). In statistical analyses, the significance level of 0.05 was taken as the basis and the meta-analysis statistical package program CMA Ver. 2.0 Comprehensive Meta-Analysis (Borenstein

et al., 2005) was used. According to Cohen, Manion, and Morrison (2007), the effect size values based on correlation are as follows.

Effect size of 0,00≤ to 0,10	very weak
Effect size of 0,10≤ to 0,30	weak
Effect size of 0,30≤ to ≤0,50	intermediate
Effect size of 0,50≤ to ≤0,80	broad
Effect size of 0,80≤	very broad

2.3. Report Bias

Report bias is a factor raised by the fact that not all studies related to the subject cannot be reached, studies with a lower correlation value or with no relationship between the variables may not be found, and some studies may be overlooked. Thus, a lack of report bias increases the reliability of study results in general. For this reason, it was also checked whether the effect size in this study is caused by report bias. For checking report bias, we used the *funnel plot* method. In this method, the distribution of funnels with a heavy concentration on either side is a feature indicating publication bias. On the contrary, the asymmetric distribution of the items around the funnel indicates the lack of publication bias.

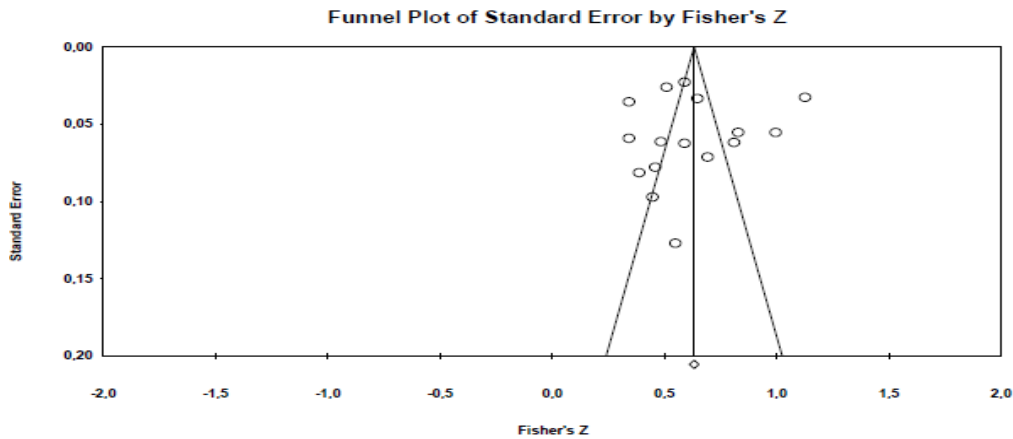


Figure 1. Funnel plot regarding publication bias

The distribution above shows that there is no publication bias in this study. Also, *Duval and Tweedie's trim and fill tests* were performed to evaluate the effect level of the obtained effect size raised by report bias according to the random effect model (Duval & Tweedie, 2000). A difference of zero between the observed effect size value and the virtual effect size applied to adjust the effect size caused by publication bias shows that there is no publication bias in a particular case. When the table 2 is examined, zero difference is proof that the distribution around the central line is symmetrical.

Table 2.

Results of Duval and Tweedie's Trim and Fill Tests

Variable	Difference	Point Estimation	Confidence interval		Q
T-leader.-L organiz.*			Min.	Max.	
Observed values	0	1,3381	1,0728	1,6033	355,39
Adjusted values		1,3381	1,0728	1,6033	355,39

* Transformational leadership-learning organization

3. FINDINGS

3.1. Findings Regarding What Effect Transformational Leadership Have on Learning Organization

The effect of transformational leadership on learning organization was determined in the context of 16 studies by using the random-effects model as a reference. The effect of transformational leadership on learning organization was found to be .54 (q = 255.39; p <.000), which refers to a statistically significant level. This means that transformational leadership has a strong effect on learning organization. In other words, it is an important finding that a high level of relationship between transformational leadership and learning organization is proved statistically.

3.2. Findings on the Mediating Effect of Transformational Leadership on Learning Organization by School Type and Sample Size

The mediating effect of transformational leadership on learning organization by school type and school size was determined in the context of 16 studies by using the random-effects model as a reference. Table 3 shows whether transformational leadership has a moderating effect on learning organization by school type (elementary, middle, high school, and university) and sample size (small, intermediate, large, and very large).

Table 3.

The Mediating Effect of Transformational Leadership on Learning Organization by School Type and Sample Size

Variable	k	n	r	Confidence interval		Q _b	I ²
Transformational leadership*learning organization	16 ^a		.53	Mini.	Maxi.		
Mediating variable (school type)						34,289	95,77
Elementary	4	7709	.59	1.13	1.26		
Middle	2	2065	.52	1.56	1.81		
High school	5	869	.57	1.18	1.56		
University	5	927	.52	0.88	1.11		
Mediating effect size (sample size)			.56			25.68	96,77
Small	3	978	.61	0.65	1.13		
Intermediate	6	1203	.43	1.01	1.25		
Large	3	1841	.51	0.99	1.24		
Very large	4	8469	.61	1.28	1.42		

Table 3 shows that the school type plays a mediating role in the relationship between transformational leadership and learning organization ($Q_b=34,28$; $p<.05$). In other words, the relationship between transformational leadership and learning organization shows a significant difference in different school types. To put it more specifically, the relationship in question is stronger in elementary schools than in others.

Also, the sample size was found to play a mediating role in the relationship between transformational leadership and learning organization ($Q_b=25,68$; $p<.05$). The relationship between transformational leadership and learning organization shows a significant difference according to sample size. In small and very large samples, transformational leadership and learning organization has a stronger relation than in other sample groups. To sum up, while the relationship is moderate in medium and large size samples, there is a high level of relationship in small and very large samples.

4. RESULTS, DISCUSSION AND RECOMMENDATIONS

There is a relationship between transformational leadership and learning organization according to the literature. In this study, the overall effect of the study results was examined to reach a general judgment on all the studies dealing with this relationship. Also, school type and school size were discussed as the mediating variables affecting the relationship between transformational leadership and learning organization. For this purpose, it was first made sure that there is no publication bias in the studies utilizing Duval and Tweedie's Trim and Fill tests and funnel plot. Then, the homogeneity test was applied to choose the review model on the studies. Random effects model was preferred as it seemed suitable for a heterogeneous group of studies under examination. A total of 16 studies discussing the relationship between transformational leadership and learning organization were analyzed with the random-effects model.

As a result of the study, it was seen that the relationship between transformational leadership and learning organization is positive and broad. The studies scanned in this meta-analysis (*) suggest that there is a relationship between transformational leadership and learning organization. Similarly, we found out that the overall effect of the correlations of all studies is quite high. This finding implies that transformational leadership in educational organizations has an impact on learning organization. In this case, it can be said that as school leaders adopt transformational leadership more, the more likely the school is to become a learning organization since the success of schools depends mainly on school leaders. School leaders, likewise, play a key role in the effectiveness of teachers and how much students can learn (Dinham, 2005). As regards to the international context, it was found out that the relationship between transformational leadership and learning organization in schools is significant in countries such as Hong Kong, Taiwan, Eastern Australia and Canada (Lam, 2002). The findings concerning the overall effect size support the findings in the literature. It can be argued that it is essential for school leaders to be transformational leaders if they want to turn their schools into learning organizations. More specifically, leadership requirements in learning organizations were seen to fall under transformational leadership characteristics such as creating a vision, building an environment of confidence, watching the environment for threats and opportunities, and developing the employees (Korkmaz, 2008; Silins, Mulford & Zarins (2002). In this case, for a learning school, a school leader is expected to build trust-based relationships (Farnsworth, 2015), set a vision, identify the school's strengths and weaknesses, and work in collaboration with teachers. Besides the foregoing, Higgins et al. (2012) found out that learning organizations are brought through not only learning-related behaviours but also psychological confidence in schools. Such characteristics of transformational leadership as safety, learning-research, improving the status of the school, etc. seem to be substantial factors in becoming a learning organization.

As another result of the study, school type was found to be influential as a mediating variable that varies in the relationship between transformational leadership and learning organization. It was concluded that the relationship between transformational leadership and learning organization in primary schools is stronger than in other schools. Also, the relationship in middle and high schools and universities is high level, too. This might be explained with collaboration between elementary school leaders and classroom teachers. In other words, addressing to a homogenous group of teachers all being classroom teachers might have facilitated principals' exhibiting transformational leadership in elementary schools. Ünal (2006) found out that supervisors possess "supreme" individual characteristics regarding learning and development in primary schools; however, the organizational culture lacks the capabilities to maximize learning in those settings. This mismatch thus seems like a challenge for educational institutions since individual learning capacity is in its place while not supported by the overall setting. In this regard, Knutson, Miranda and Washell (2005) emphasize leaders' responsibility of showing social interest to sustain the organizational culture in learning organizations. It can be suggested that enrichment of the organizational culture in primary schools is likely to improve the organizational learning and transformational leadership. In another study carried out in elementary schools, Ross and Gray (2006) found that the effect of transformational leadership on learning organization is quite large; also, variables such as commitment to the school's mission, profession and organization are related to each other and transformational leadership at the same time. In a different study, Hsiao and Chang (2011) researched tertiary education institutions and reported a broad relation between transformational leadership and learning organization. All of the studies concerned reveal that there is a high relationship between transformational leadership and learning organization in all school types. In another study, Copland (2003) found out that in a school reform model called BASRC (Bay Area School Reform Collaborative) resembling the cognitive theory of organizational learning; leaders of competent schools which focus on distributed leadership, continuous research and collective decision-making at school are influential on organizational effectiveness and student learning. Departing from the abovementioned, it seems plausible to suggest that differences raised by school type as a mediating variable in the relationship between learning school and transformational leaders can be minimized by an effective school leader.

Another result of the present study is that the size of the sample is persuasive as a mediating variable between transformational leadership and learning organization. It is interesting to note that there is a stronger relationship between transformational leadership and learning organization in only small and very large samples compared to other sample groups. However, there was not found a linear relationship between the strength of the relationship of transformational leadership and learning organization and increased size of samples. It can only be said that the small and very large samples as the extremes played a role in the positive and high level of the relationship between these two variables. For this reason, small or large organizations can be outstanding characteristics in the relationship between transformational leadership and learning organization. As no direct research on this subject could be reached, the findings obtained from organizations other than education can be guiding. For instance, Graham and Nafukho (2007) noted a strong relationship between leadership in small businesses and learning organization. Also, Yasir Ali and Ameer (2017) found out that a small organization is a moderator in becoming a learning organization. Moreover, Lousa and Monico (2018) found a significant relationship between transformational leadership and innovation in micro and small organizations, whereas such a relationship was not significant in medium and large-sized organizations. The findings seem to coincide with the foregoing as we found a high level of correlation between transformational leadership and learning organization in small sample studies. On the other side, Google is noted as a learning organization despite its very large size. This can be accounted for by the fact that Larry Page, the administrator and founding partner of the company, was rewarded as the businessman of the year in 2014 thanks to his leadership skills (Blazek, 2015). Consequently, it can be suggested that there is a stronger bond between transformational leadership and learning organization in very large samples compared to samples of medium and large sizes.

In light of the present findings, the following recommendations could be put forth for schools. It has been found that educational administrators, who have transformational leader characteristics, have a positive and high level of influence in making educational institutions a learning organization. Bearing this in mind, both theoretical and applied in-service training can be run for school leaders to this end. Also, school stakeholders can be invited to meetings regularly to undertake responsibilities with the mission of being a learning organization. Furthermore, procedures and practices in example learning organizations can be introduced as roles and responsibilities to the Ministerial (MoNE) school regulations. Last but not least; remembering that school type and school size play a mediating role between transformational leadership and schools being learning organizations, it could be reasonable to keep schools in a smaller size, to locate schools of similar types in the same area, and to build huge zones of schools.

Research and Publication Ethics Statement

This study has been prepared by considering scientific publication ethical rules and principles.

Contribution Rates of Authors to the Article

This study has a single author and each phase has been conducted by F. K. Ş.

Statement of Interest

There is no conflict of interest in this study.

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