2017

Shifting Teachers’ Perceptions of School Culture in Turkey: A Mixed Methods Study

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Shifting Teachers’ Perceptions of School Culture in Turkey: A Mixed Methods Study

Abstract
The purpose of the present study was to examine the effects of school culture training on teachers’ perceptions of school culture. The sample consisted of thirty-six primary, middle, and secondary school teachers working at schools in a large city in South-eastern Turkey. A mixed research methodology was used in the study. A one-group pre- and post-test experimental design was employed in the quantitative strand of the research. A training program on school culture including four sessions was implemented by the researchers. A descriptive qualitative study was conducted following the completion of the training. Pre- and post-training data were gathered using the School Culture Scale. Furthermore, focus group discussions were used to obtain qualitative data. The results indicated that the training led to positive changes in teachers’ perceptions of school culture. Significant differences were detected in teacher perceptions of leadership based on cooperation, common goals, and cooperative learning dimensions of school culture. However, there were not statistically significant differences in teacher cooperation, professional development, and collegial support. Qualitative findings were consistent with the quantitative ones. It is suggested that changing teacher perceptions of school culture must be prioritized in the construction of positive and strong school cultures.

Keywords
School Culture, Training, Teacher Perceptions, Perceptual Change, Mixed Research
SHIFTING TEACHERS’ PERCEPTIONS OF SCHOOL CULTURE IN TURKEY: A MIXED METHODS STUDY

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Introduction
Perceiving and understanding the complex nature of organizational phenomena is required for organizational analysis (Jelinek, Smircich, & Hirsch, 1983). Organizational culture is one of the organizational phenomena which examine the subjective, interpretive aspects of organizational life (Smircich, 1983). Organizational culture has been investigated as a concept since the late 1980s (Şahin, 2010) and refuses to fade away as a research interest for both managers and researchers (De Witte & van Muijen, 1999). According to Morrill (2008:16), “From the 1980s to the present, cultural arguments and questions in organization theory have increasingly focused on the constitutive effects of culture with respect to organizational members’ inner lives, the meanings they attribute to organizational life, and the construction and maintenance of instrumental social structures”.

It is difficult to define culture since it is rooted in the fields of anthropology, psychology, and sociology (Dumay, 2009; Goldring, 2002; Hoy, 1990) and is an intangible concept (Taormina, 2008). This has led to divergent definitions and conceptions of culture across various research streams. Although there are differences in the conceptions and definitions regarding organizational culture, it is possible to detect some common aspects. Organizational culture can be defined as a system of shared orientations that hold the organization together and give it a peculiar identity (Hoy, 1990) or personality which forms how its members perform their tasks (Armenakis & Lang, 2014), which offers a guide for members of an organization in what to perceive, think, and feel about the issues facing the organization, and how to make decisions (Armenakis, Brown, & Mehta, 2011).

Schein (1990:111) defines culture as “(a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well

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enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems”. Viewing organizational culture as a regular element of the theory and practice of management of organizations, Hofstede, Neuijen, Ohayv, and Sanders (1990) asserted that organizational culture is collective characteristic of organizations, rather than individuals, at whose core are the shared perceptions of daily practices.

Balthazard, Cooke, and Potter (2006) suggested that normative beliefs and shared behavioral expectations can also be among the indicators of the culture of an organization. In sum, culture is the underground stream of norms, values, beliefs, and traditions (Peterson & Deal, 1998) which give information about the deep structure of the organization (Denison, 1996). Hofstede, Hofstede, and Minkov (2010) suggest that culture is the collective programming of the mind. As put by Weber and Dacin (2011), the current approach to cultural analysis in organization studies regards culture as a strategic resource and as more constitutive in nature. No matter how culture is treated in organizational theory, e.g. as a background factor, an organizational variable or a metaphor for conceptualizing organization, cultural analysis regarding organizations stresses the expressive, non-rational qualities of the experiences of organizations (Smircich, 1983:355).

The following parts illustrate the concept of school culture and related outcomes as revealed in the literature, in general information about the Turkish education system, and in the conceptual framework.

School Culture and Related Outcomes

A number of studies have attempted to define or clarify the concept of culture, i.e. school culture, in the field of education (see Glover & Coleman, 2005; Stolp & Smith, 1995; van Houtte, 2005), but there is still not a consensus what culture means for schools (Louis & Lee, 2016) and it still remains as a complicated concept (James & Connolly, 2009). In fact, definitions of school culture are nearly the same with those of organizational culture since the concept of school culture is a derivative of organizational culture (Aslan, Özer, & Bakır, 2008). The concept of school culture can be defined as a system of norms, values, and meanings shared by members of a school (Sadeghi, Amani, & Mahmudi, 2013); it includes myths, heroes, symbols, practices and rituals within the school (Maslowski, 2001). School culture gives information about how people feel about their schools, the assumptions, values, and beliefs shaping the school’s identity and specific standards for behavior (Stolp & Smith, 1995).

School culture is influential on how school staff, students, and other school actors render schooling into meaningful and actionable practices, and it rests on the social structures in schools (Rhodes, Stevens, & Hemmings, 2011). The interactions among individuals and groups in schools form one of the essential aspects of school culture (Zhu, Devos, & Li, 2011). Abawi (2013) emphasizes the significance of meaning system which is specific to each school. This meaning system works to establish and reinforce norms, assumptions, and ways of working in schools. Consistently, in their ethnographic research on school culture, Aydoğdu-Özoğlu and Turan (2015) found that each physical, verbal or functional symbol existent in a school is structured in the meaning world of the school members. Therefore, efforts to understand and analyze an organization must focus on organizational culture in that each organization has a unique culture (Gizir, 2008).

Research investigating the concept of culture in educational settings has revealed some key aspects and features to describe school culture. Communication, interaction, commitment, success, responsibility, motivation, stories, and ceremonies are the factors and features which describe school culture (Doğan, 2014). School culture is closely related to work climate, leadership styles, work strategies, organizational
behavior and the way things are done in organizations (İpek, 2010). The related literature demonstrates the links between school culture and various factors and outcomes in education. For example, Zhu, Devos, and Li (2011) found school culture to be linked with a school’s healthy and sustainable development, school members’ growth and well-being, and the goals of the school and education.

According to Ayık and Fidan (2014), collegial support, leadership based on cooperation and teacher collaboration are important elements of the organizational culture of schools. The characteristics of school culture, as Zhu and Engels (2014) suggested, affect the perceived need for innovation in instruction and students’ and teachers’ responsiveness to instructional innovations and the perceived implementation level of educational innovations. MacNeil, Prater, and Busch (2009) emphasized the relationship between students’ test scores and organizational culture of schools. The Marcoulides, Heck, and Papanastasiou (2005) study demonstrated that student perceptions of the cultural environment of the school can explain the achievement scores. Carpenter (2015) argues that continuous improvement and effective collaboration are essential components of a positive school culture. Jurasaite-Harbison and Rex (2010) found that organizational culture is important in teachers’ efforts to grow professionally. Karadağ (2009) revealed a positive and statistically important relationship between organizational culture, performance, and peace in schools.

School culture is highly significant for school improvement and successful implementation of change (Recepoglu, 2013; Zhu, Devos, & Li, 2011; Zhu, Devos, & Tondeur, 2014). Organizational health of schools (Özdemir, 2012), academic achievement of the students (MacNeil, Prater, & Busch, 2009), school effectiveness (Cheng, 1993), and teachers’ capacity for organizational learning (Louis & Lee, 2016) are affected by school culture, which requires a close delineation of culture in schools and its aspects and even attempts to change or shift school culture and/or perceptions of school culture. As suggested by Kaplan and Owings (2013:7), “culture reboot is essential to ensure that the schools’ orientation, assumptions, norms, and practices are still- or become- effective means to pursue the current vision, values, and goals”.

Shifting or transforming school culture for attaining better outcomes and healthy work environments is feasible because school culture has an alterable nature (van Houtte, 2005). Drawing on the research in the related literature, the present study assumes that teachers’ perceptions of school culture play a dominant role in school effectiveness and improvement as they are among the major actors who form and operate assumptions, values, and beliefs and display behavior in schools. This is significant in that orienting leading perceptions and behaviors towards a common ground can help organizational members to strive for reaching desired ends, which is to enhance student learning by making schools effective and improved.

General Information on the Turkish Education System

The structure of the Turkish education system was determined by the Basic Law for National Education (No: 1739) (MoNE, 2017). Turkey has a centralized educational system (Aksit, 2007) which has a central organizational structure containing within itself tied local organizations. The Ministry of National Education (MoNE) holds the responsibility for the education system from preschool to secondary school levels (Aslan, 2013; Lindquist, 2017). The MoNE is authorized to make decisions regarding system-wide reforms, the appointment of staff, professional development, school facilities, curriculum, and student placement at K-12 public schools etc. The local organizations act as provincial and district directorates and coordinate all of the tasks prescribed by regulations and laws and directives of the MoNE. The National Board of
Education, an organization tied to the MoNE, plays a cross-division coordinating role on developing or revising curricula (OECD, 2007).

The Turkish education system has been restructured several times since the establishment of the state (Ergün & Keskin, 2014). The last radical change in the system was launched in 2012; the new initiative restructured the school system as fragmented primary, middle and secondary school levels, and compulsory education was expanded to 12 years nationwide (Gür, Özöglu, Coşkun, & Görmez, 2012). The new change which has been in effect so far aims at educating individuals to cultivate required skills and knowledge of the information age with an intention to make Turkish education more democratic and flexible (MoNE, 2012).

**Conceptual Framework**

In this study, the theoretical framework was laid on the non-static view of culture proposed by Kaplan and Owings (2013). The idea that culture is affected and shifts in accordance with the interactions between individuals and external reflections of life and the world (Kaplan & Owings, 2013) led the researchers to adopt a malleable conceptualization regarding the culture of schools, and they, therefore, attempted to see how culture may change through a school culture training. As specified in Bolman and Deal’s (2008) symbolic frame related to organizations, culture serves as a superglue bonding the organization, connecting people, and helping them achieve desired ends. Reaching common desired ends is one of the highly significant reasons behind the existence of organizations (Şimşek, 2010). As known, organizational effectiveness simply means the degree to which an organization can reach desired ends (Şişman, 2002). Fullan (2016) asserts that the success of whole system improvement depends on changing the culture of schools and their relationship to the infrastructure of policies and regulation. In this sense, it may be asserted that culture is an inherent element in accomplishing desired ends by helping organizational members to remain adhered to making the organization effective and improvement-oriented.

The first way to change the culture of an organization is to change perceptions regarding organizational culture. Culture mostly changes through learning in general terms (Gagliardi, 1986). Drawing on the idea that culture may alter via learning, it can be argued that perceptions about organizational culture can also change through learning. It is significant to ensure that organizational members have positive perceptions regarding organizational culture so as to build a culture which can contribute to school effectiveness and improvement. Therefore, making use of training programs to facilitate this perceptual change regarding school culture can be employed as a tool for improving schools. In their study, Shachar, Gavin, and Shlomo (2010) detected that teachers’ perceptions of school culture changed in a positive way in the school improvement project they implemented.

In order for building a positive school culture, inter-organizational support systems which consolidate the collaboration among the school staff are needed (Rhodes, Stevens, & Hemmings, 2011). Training programs which may enhance the collaboration and interaction between teachers may constitute a supporting structure for changing teachers’ perceptions about school culture in a positive way. Such training programs structure perceptions about school culture by helping teachers to gain individual experiences and develop a sense of collective ownership. Given et al. (2009:48) argued that the activities related to “developing intentional experiences and cultivating collective ownership” can be used in changing perception towards constructing a learning culture. For this reason, the training provided in this study aimed at cultivating a positive change in teachers’ perceptions of school culture by forming an
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opportunity for learning and constructing an interactive environment, which may be beneficent for school improvement and effectiveness.

**Purpose of the Study**

The present study attempted to examine the changes in the school culture perceptions of teachers as a result of the training they received about school culture using a mixed research methodology. In line with this aim, the research questions guiding the research were, “What are the effects of school culture training on the school culture perceptions of teachers?”, and “How do the participating teachers describe their perceptions of school culture both prior to and after receiving the training?”

**Significance of the Study**

School culture is undoubtedly among the factors that ensure that schools are effective both academically and socially. School culture is a factor that increases or decreases the commitment of teachers to the schools and thus shapes their occupational performance as well. The increase in teacher commitment as a result of school culture depends on the positive perception of school culture by teachers. Hence, much importance should be attached to the formation of a school culture that is perceived as positive by teachers in order to increase the commitment and performance of both teachers and schools.

Teachers first need to evaluate school culture in a positive way in order to render it into a positive one. At this point, it is necessary to know what teachers understand from the concept of school culture and what they evaluate as the part of school culture. Changing teachers’ perceptions in a positive way may help facilitate the establishment of a positive school culture.

By putting forth the changes in the perceptions of teachers related to school culture as a result of a training on school culture, this study may shed light on the type of training on school culture that should be given in order to ensure that teachers have a positive perception of school culture. At the same time, this study adds to the existing knowledge base by emphasizing the fact that the training on school culture contributes to the proper interpretation of school culture.

It may, of course, be thought that providing training on school culture can alter teachers’ perceptions of school culture. However, determining how such a perceptual change about school culture, which happens in a positive way, consolidates social relationships within the school and enhances teachers’ professional development is an issue requiring further investigation in school improvement research. For this very reason, the study is significant in terms of raising awareness about how a school culture training which facilitates the aforementioned perceptual change in teachers can be designed and implemented. Certainly, there are some aspects which need to be improved by conducting further research on the same training.

**Method**

This research is a mixed methods study. The research incorporated an experimental quantitative analysis of the effects of the training on school culture and a qualitative analysis of the detailed delineation of the change occurred in teacher perceptions. The rationale behind preferring the use of a mixed research design was that using either qualitative or quantitative research designs could not help researchers to make a thorough evaluation of the perceptual change about school culture. Unearthing the role that the training played in the perceptual change necessitated holding interviews with the participants. Therefore, the quantitative research was used to reveal the perceptual change, and the qualitative research was employed to examine in which aspects and how the perceptual change occurred in-depth.
The one-group pre-test/post-test design was used in the quantitative strand of the study. In this design, a single group of research participants is measured on the dependent variable both prior to and after the administration of the treatment condition (Christensen, Johnson, & Turner, 2014; Fraenkel, Wallen, & Hyun, 2012). The training on school culture was taken as the independent variable, while the perceptions of teachers on school culture were taken as the dependent variable. Furthermore, the qualitative strand of the research was a qualitative descriptive study which covered focus group interviews with the participants.

**Study Group and Its Characteristics**

The study group consisted of 36 primary, middle and secondary school teachers. The study group was determined via maximum variation sampling. It was assumed in the study that teachers can evaluate school cultures differently according to the teaching level and their professional seniority. It is suggested in the relevant literature that the cultures of primary and secondary education institutions are determined by different variables (Hargreaves, Earl, & Ryan, 1996), and hence they differ (Cooper, 1988; Çetin & Güven, 2015). Furthermore, there are also studies which put forth that the school culture perception of teachers differs depending on their professional seniority (Çetin & Güven, 2015; Gılıç, 2015; Öztürk, 2015; Şirin, 2011). Therefore, it was intended to show variation with regard to both the level at which the teachers work and their professional seniority.

The participants of the research were employed at five different schools (one primary school, two middle schools, and two secondary schools). Of the participants, five teachers were working at the primary school, 15 at the middle schools and 16 at the secondary schools. The schools were moderate in terms of their socio-economic status. The number of teachers working at these schools ranged between 35 and 48. Thus, these schools can be said to be middle-sized schools. Of the teachers in the study group; 16 were female, and 20 were male. 30 of them had bachelor's degree, and 6 teachers had master’s degree. The professional seniority of 18 teachers varied between 1-5 years; that of 8 teachers varied between 6-10 years; that of 4 teachers varied between 11-15 years, and that of 6 teachers varied between 16-20 years. 32 teachers’ work experience at the same school varied between 1-2 years and the work experience of 4 teachers varied between 3-4 years. 5 were classroom teachers, 4 were Turkish teachers, 2 were Social Sciences teachers, 4 were Science teachers, 3 were English teachers, 2 were History teachers, 5 were Mathematics teachers and 11 were vocational course teachers.

**Data Collection Instrument and Collection of Data**

The measurement tools in the literature were examined in order to determine which scale to use in this study. The School Culture Scale, which was developed by Gruenert and Valentine (1998) and adapted to Turkish by Ayık (2007), was used in the study to gather data. This scale examines behavior at school, relationship structures as well as shared values and beliefs. This scale was preferred to be used in the research as it included the situations that can be observed in the school environment and has a structure which can reveal teachers’ perceptual change based on the practices in different contexts. The scale used was given to an expert for examination of its content validity in accordance with the purpose of the study, and it was decided in the light of the expert’s views that the scale was valid.

The inventory consists of a total of 6 dimensions which are leadership based on cooperation (11 items), teacher cooperation (5 items), professional development (5 items), common goals (5 items), collegial support (4 items) and cooperative learning (4 items). There is a total of 35 items in the 5-point Likert-type scale (1 – I strongly disagree, 5 – I strongly agree). Ayık (2007) proposed in his study that the Cronbach’s
alpha internal consistency coefficient related to the dimensions of the scale varied between 0.625 and 0.897. The research was conducted on primary, middle and secondary school teachers, which shows that the study group reflected variation in terms of school types. For this reason, it was hard to reach a sample size which could represent the population for each of the school type in terms of time and related costs, and it was, therefore, not possible to carry out reliability and validity study of the scale. The scale was used both by its developers and other researchers (e.g. Ayık & Şayir, 2015) in the studies conducted in Turkey, and it was reported that the values regarding the reliability and validity of the scale were acceptable and satisfactory.

The School Culture Scale was administered to the 36 teachers in the study group prior to providing them with the training on school culture (pre-test). Following the administration of the scale, a four-session training was implemented for the teachers in the study group for a period of two weeks. The first two sessions took place in one week, and the last two sessions took place during the second week. Following the completion of the training on school culture, the School Culture Scale was administered to the same study group once again (post-test).

To collect qualitative data, six focus group interviews were conducted with the teachers after the training. Each focus group included six teachers (6X6). By using focus group discussions, the researchers hoped to explore how the training on school culture led to a change in teacher perceptions, in what way the change occurred, and what the reasons behind the change in perceptions were in detail. The duration of the focus group interviews ranged between 25 to 37 minutes in total. The questions posed to the participants during the interviews were as follows:

1. How did you define the concept of school culture before receiving the training?
   1.1. What does the concept of school culture mean for you after the training?
2. Could you compare your ideal school culture profile both prior to and after participating in the training?
3. Have you experienced any changes in your perceptions of your school’s culture? How?
   3.1. What dimension of school culture was more dominant for you prior to the training? Has anything changed in your perceptions regarding this issue?
   3.2. Do you think that you had negative evaluations pertaining to your school’s culture prior to the training? What were the reasons behind these negative evaluations?

The Training on School Culture

The first session: The training on the “definition of organizational culture, historical development, the importance of organizational culture and the elements that make up organizational culture” was given during the first session. This session lasted 64 minutes. During the training, the concept of organizational culture was introduced using a cognitive lens rather than a structural or symbolic one as it was aimed to change teachers’ perceptions of the organizational culture of schools. More clearly, it was treated as a shared system of knowledge and values and a type of behavior. In this way, the message that culture is a phenomenon produced by people was conveyed; and it was implied that the construction of culture means individuals’ defining their own world and determining the rules related to this world (Şişman, 1993). With regard to the historical development of the concept of culture, it was delineated that countries started to give importance to the concept of organizational culture as a solution because they had economic and social problems, and societal problems were mostly culture-related. In fact, it was suggested that the reasons behind the countries’ performance differences in
economic and societal platforms were attributed to culture (Yağmurlu, 2001; Schein, 1990). Drawing on these issues, it was argued that teachers and schools' underperformance may relate to the cultural problems at schools.

It was also stated that organizational culture is significant as it is a means of forming a control mechanism and how organizational practices must be (Deal & Kennedy, 1982) a motivational tool enhancing organizational members' energy (Wiener & Vardi, 1990), a means for socialization of organizational members (Schein, 1984) and a medium for organizational effectiveness (Wilkins & Ouchi, 1983). Thus, it was tried to construct an idea that organizational culture of schools is a power which can alter the mode of work life, human relations, and school effectiveness. In the discussions with the participants, it was concluded that school culture is a factor which affects teachers' motivation, increases their enthusiasm to carry out the tasks/duties and thereby facilitates the formation of an effective school.

The basic elements constructing organizational culture were presented in terms of values, norms, and attitudes. It was emphasized that values shape individuals' behaviors and determine how works should be done at schools. The fact that organizational values are created as a result of school members' interactions with the school environment (Schein, 1984) was stressed in particular. Norms were told to demonstrate which behaviors would be accepted by the majority of people in the organization. It was noted that attitudes resemble values, but they may vary. It was suggested that the similarity between school staff's attitudes is an outcome of a strong school culture (Ataman, 1995). In the discussions with teachers regarding these aspects and the things presented in the training, the researchers and participants arrived at the opinion that individual and organizational values are the determinant factor over norms and attitudes. Thus, it was highlighted that thinking system of the individuals influences school culture.

At the end of the first session, the participants were divided into six groups, each of which included six teachers, and they were asked to prepare a concept map of the components of the organizational culture that they wanted to prevail in their schools. In this way, the participants formed the culture profile that they wanted to prevail in their schools after discussing with their group members. The researchers also wanted them to identify the threatening factors that may impede the construction of their ideal school culture. After completing their maps, one member from each group told the components of their ideal school culture and the threatening factors regarding the culture to the other groups' members. Thus, each group developed a list of desired components and threatening factors after exchanging their ideas with others. The concept maps related to the ideal culture profiles were saved by the researchers to use in the third session of the training. This activity lasted about 45 minutes.

The second session: The training on the “dimensions of organizational culture (power dimension, role dimension, achievement dimension, and support dimension)” was given during the second session, and this session lasted 57 minutes. In the second session of the training, the concept of organizational culture was examined in terms of power, role, achievement and support dimensions in accordance with Pheysey’s (1993) classification regarding the dimensions of organizational culture. In the presentations, to sum up, it was highlighted that power culture pays attention to hierarchical structuring and vertical communication; achievement culture gives importance to flexible structuring and appreciation. Support culture regards human relations, participation in decision making and solidarity as significant (Şişman, 2002). Role culture, however, prioritizes organizational goals. In this culture, legal structuring is represented by classical bureaucracy (İpek, 1999). It was stated that any of these cultures may be more dominant in the organization, but this does not mean that other
cultures are not existent. Individual values and relationships were noted to be effective in the individuals’ perceptions of which culture is more dominant.

This session ended with reading stories of the experiences of four different organizations in which a different type of culture was more dominant. The participants were asked to write scenarios regarding the future situations of these organizations. They discussed their ideas of these organizations’ future situations and thereby shared their views about what kind of culture must be prevailing in their schools. This activity lasted about 50 minutes.

The third session: The training on the “transmitters of organizational culture” (rituals, ceremonies, stories, language, myths, heroes, and symbols) was given during the third session, and this session lasted 52 minutes. In the third session, the concepts of ritual, ceremony, story, language, myth, hero and symbol were explained by giving examples for each concept. In the presentations, it was emphasized that individuals’ perceptions of organizational culture become visible through these transmitters and that these transmitters can shape organizational culture. It was agreed in the discussions during the session that the presence of the concepts of ritual, ceremony, story, language, myth, hero and symbol in schools and individuals’ positive perceptions regarding these concepts cause them to perceive school culture as positive. The participants, however, pointed out that not all of these concepts visible at schools.

At the end of this session, six groups, each including six teachers, were formed. They were asked to write two examples for the concepts of ritual, ceremony, story, language, myth, hero and symbol through which the school culture profile they identified in the first session can be transferred. Each group shared what they wrote with other groups. This activity lasted about 35 minutes.

The fourth session: The training on the three levels of culture determined by Schein (2010), 1) Artefacts (Visible and invisible structures and processes and observed behaviours), 2) Accepted beliefs and values (Ideals, goals, values, desires; ideologies; rationalizations), and 3) Basic assumptions (Unconscious, assumed fundamental beliefs and values) was given in the fourth session, and this session lasted 62 minutes. The reason for using the framework related to the three levels of culture by Schein (2010) was that it is a framework that encompasses the subjects examined during the first three sessions, and that it provides the grounds that can enable teachers to express their perceptions related to culture more properly since it handles the observable as well as the unobservable elements related to culture. Therefore, this session was carried out in a more interactive manner and with the participation of teachers. Teachers shared their opinions related to school culture and asked questions to the trainers as well as other teachers.

Observable structures, processes, and behaviors called artifacts in the first level of culture were examined in this session. Later on, teachers expressed their views about the processes and behaviors shaping the culture at their schools. The second level of culture including beliefs, values, goals, desires and how these are rationalized were highlighted. Teachers talked about the values system at their schools and discussed how irrational beliefs are rationalized by individuals at schools. Next, the third level of culture incorporating unconscious beliefs and values affecting individuals’ behaviors and thoughts, namely the basics assumptions was delineated. Lastly, how individually owned beliefs and values and even irrational beliefs and values impact the perceptions of school culture was discussed through case studies.

In this session, teachers were encouraged to reason their own thoughts, values, and beliefs. The reasoning was mostly performed in terms of teachers’ experiences. They discussed how irrational belief structures or making evaluations with deficient knowledge affected the school culture and their perceptions of their schools’ culture.
Data Analysis

Paired-samples t-tests were performed during the study for examining the difference between the pre-test and post-test values of the scale administered to the teachers. The dataset has to put forth a normal distribution (Bhujel, 2008; Shier, 2004), or the sample size should be greater than 30 (Sarstedt & Mooi, 2014) in order to be able to use the paired-samples t-test. The second assumption is met for the paired-samples t-test since the study group consists of 36 people.

Skewness and kurtosis coefficients were examined prior to starting data analysis in order to determine whether the data displayed normal distribution or not, and Shapiro-Wilk test was employed because the number of samples was lower than 50. It was determined that the skewness coefficients of the scale varied between -.93 and .78; whereas the kurtosis coefficients varied between -.92 and .46 (between ±1), and it was also determined that the significance values varied between .06 and .23 (p>.05) thus concluding that the data set was normally distributed. In this way, the first assumption related with the paired-samples t-test was also met.

The data obtained from the focus group discussions were analyzed through descriptive analysis. Descriptive analysis was performed depending on the themes specified in accordance with the questions in the interview protocol. These themes were determined to be “perceptual change for the concept of school culture”, “change in the ideal school culture profile”, and “change in teachers’ evaluation of their school’s culture”.

Findings

The Quantitative Findings Obtained from the Experimental Study

The distribution of the scores that the teachers received from the School Culture Scale in general and its dimensions on the pre-test and post-test measures is presented in Table 1.

<table>
<thead>
<tr>
<th>Dimensions of the Scale</th>
<th>Groups</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>Level on the Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale (35 items)</td>
<td>Pre-test</td>
<td>36</td>
<td>120.50</td>
<td>3*</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>36</td>
<td>131.69</td>
<td>4**</td>
</tr>
<tr>
<td>Leadership Based on</td>
<td>Pre-test</td>
<td>36</td>
<td>39.39</td>
<td>4</td>
</tr>
<tr>
<td>Cooperation (11 items)</td>
<td>Post-test</td>
<td>36</td>
<td>44.00</td>
<td>4</td>
</tr>
<tr>
<td>Teacher Cooperation (5</td>
<td>Pre-test</td>
<td>36</td>
<td>15.39</td>
<td>3</td>
</tr>
<tr>
<td>items)</td>
<td>Post-test</td>
<td>36</td>
<td>17.67</td>
<td>4</td>
</tr>
<tr>
<td>Professional Development</td>
<td>Pre-test</td>
<td>36</td>
<td>18.78</td>
<td>4</td>
</tr>
<tr>
<td>(5 items)</td>
<td>Post-test</td>
<td>36</td>
<td>19.08</td>
<td>4</td>
</tr>
<tr>
<td>Common Goals (5 items)</td>
<td>Pre-test</td>
<td>36</td>
<td>17.94</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>36</td>
<td>19.06</td>
<td>4</td>
</tr>
<tr>
<td>Collegial Support (4</td>
<td>Pre-test</td>
<td>36</td>
<td>13.06</td>
<td>3</td>
</tr>
<tr>
<td>items)</td>
<td>Post-test</td>
<td>36</td>
<td>13.72</td>
<td>3</td>
</tr>
<tr>
<td>Cooperative Learning (4</td>
<td>Pre-test</td>
<td>36</td>
<td>12.83</td>
<td>3</td>
</tr>
<tr>
<td>items)</td>
<td>Post-test</td>
<td>36</td>
<td>14.89</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**“I moderately agree”; **“I strongly agree”</td>
</tr>
</tbody>
</table>

When Table 1 is examined, it can be seen that the arithmetic average of the scores that the teachers received from the pre-test is \( \bar{X} = 120.5 \), and that the arithmetic average for the scores from the post-test is \( \bar{X} = 131.69 \). On the other hand, the scores
that the teachers received for the pre-test corresponded to the 3rd level on the scale; the scores they received for the post-test corresponded to the 4th level on the scale. The perceptions of teachers towards the culture at their schools changed positively following the training on organizational culture.

When the dimensions of the scale were examined, it was observed that all of the scores that the teachers received in the post-test were higher in comparison to the pre-test scores. However, the increase in the score resulted in an increase in teacher cooperation and cooperative learning dimensions. The scores for these dimensions increased to the 4th level from the 3rd level. It can be suggested that the training on school culture made a positive impact especially on the teacher cooperation and cooperative learning dimensions.

In addition, the pre-test and post-test scores were at the 4th level for the leadership based on cooperation, professional development, and common goals dimensions; the collegial support dimension remained at the 3rd level. In this case, it can be stated that the most negative perceptions of teachers towards school culture were the part of the collegial support dimension in both the pre-test and the post-test.

The paired-samples t-test comparison results for the pre-test and post-test scores that the teachers received from the School Culture Scale are shown in Table 2.

Table 2. Comparison of the Pre-Test and Post-Test Scores of Teachers’ School Culture Perceptions through the Paired-samples t-test

<table>
<thead>
<tr>
<th>Dimensions of the Scale</th>
<th>Groups</th>
<th>N</th>
<th>sd</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>r</th>
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<tbody>
<tr>
<td>The Whole Scale</td>
<td></td>
<td></td>
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<tr>
<td>Pre-test</td>
<td>36</td>
<td>20.15</td>
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<td>.004</td>
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<td>Post-test</td>
<td>36</td>
<td>17.67</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Leadership Based on Cooperation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
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<tr>
<td>Teacher Cooperation</td>
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<tr>
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<td>.09</td>
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<tr>
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</tr>
<tr>
<td>Pre-test</td>
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<td>2.96</td>
<td>35</td>
<td>-2.44</td>
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<td>-.07</td>
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<tr>
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<td>2.79</td>
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<tr>
<td>Common Goals</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Pre-test</td>
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<td>3.01</td>
<td>35</td>
<td>-2.02</td>
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<td>.24</td>
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<td>Collegial Support</td>
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<td></td>
</tr>
<tr>
<td>Pre-test</td>
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<td>-0.93</td>
<td>.36</td>
<td>.05</td>
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<td>3.08</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
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<td>3.77</td>
<td>35</td>
<td>-2.89</td>
<td>.01</td>
<td>.12</td>
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<td>Post-test</td>
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<td>2.50</td>
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<td></td>
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</table>

As can be seen in Table 2, there was a statistically significant difference between the pre-test and post-test scores of the teachers for their perceptions related to school culture ($t(35) = -2.5$, $p<0.05$). This was a difference that favored the post-test.

However, it was determined as a result of the analysis carried out pertaining to the dimensions of the scale that there were statistically significant differences between the pre-test and post-test scores that the teachers received for the "leadership based on cooperation" ($t(35)= -2.7$, $p<0.05$), "common goals" ($t(35)= -2.02$, $p<0.05$) and "cooperative learning" ($t(35)= -2.89$, $p<0.05$) dimensions. This difference was determined to have favored the post-test.

Table 2 indicates that there was not a statistically significant relationship between the pre-test and post-test scores for the general scale as well as the scores for the sub-dimensions.
The Qualitative Findings Obtained from the Interviews Conducted with Teachers about the Training on School Culture

Perceptual change regarding the concept of school culture

The teachers were asked how they defined the concept of school culture both prior to and after receiving the training, and thus what kind of a change occurred in their general perceptions of the concept of school culture was attempted to be explored. 32 out of 36 teachers stated that the training changed their definitions of the concept of school culture. It was revealed that teachers mostly defined their school culture within the framework of rules, values, and routines, and they believed that culture has a structure which is only affected by the individuals at school prior to the training.

T2 who thought that school culture refers to the rules in school prior to the training commented: “Before the training, in fact, school culture did not mean anything for me. I was perceiving the rules at school as the culture. Thanks to the training, I learned that school culture means more than the rules. It tells about how the tasks are done at schools. To me, it implies the philosophy underlying the events at the school.” By stating his views in this way, he emphasized that it is improper to define school culture by reducing it to the rules. The views of T2 demonstrated that the training on school culture provided a comprehensive perspective on school culture.

T9 stated that she viewed school culture as a values system which denotes what is important at school prior to the training; however, she opined to have understood that the values system is observable in different ways. She went on as follows: “I regarded school culture as a concept which shows what is important and what needs to be paid attention in schools. I realized that I defined school culture in terms of values only before the training. I learned that school culture is a more comprehensive concept. Now, it means, for me, an observable system which is made of teachers’ and school administrators’ attitudes and patterns of relationships. Well, there are still values. But I had never thought how values become visible/observable in school culture”. As understood from her views, the training led T9 to perceive school culture as an observable phenomenon.

T28 characterized school culture as a set of routines/habits before the training. After the training, he noted that he realized school culture is a concept which is affected by teachers’ perceptions. Stressing the connection between school culture and personal opinions, T28 said: “I used to think that school culture is the routines/habits at school. In other words, it is a concept related to how to behave in school, how tasks are carried out, how to communicate with others and how to communicate with the students. I thought that school culture is a concept influencing teachers’ working life. I understood after receiving the training that I was evaluating school culture properly in many aspects. However, I have never thought that school culture is also affected by us. I was thinking that only school culture affects us, that is. I define school culture as a system of values that both affects and is also affected by teachers’ behaviors”.

Prior to the training, T17 believed that school culture is a concept made of the individuals’ behaviors, relationships, and opinions within the school only. However, she opined that other stakeholders out of the school, especially parents, are also involved in school culture after the training. She mentioned: “I would like to touch upon parents. I used to think that school culture is mostly linked with school administrators and teachers. For me, school culture was a phenomenon which affects the people in the school. I have learned that students, parents, and wider school environment are also involved in school culture. Caring and conscious parents are so important for school culture”.

Some teachers accentuated that their perceptions of school culture did not change after the training and they believed that they continued to consider school culture as behavioral patterns to be observed. T1 opined: “Presence of a culture at school
requires us to behave in accordance with a pattern. I still hold the same thought. If there is a culture, then there are patterns and rules”. It was unearthed that the teachers (n=4) stating the same opinion accepted school culture as a means of formalization and their views did not differ after the training. These teachers displayed a more traditional teacher profile by noting that there should be rules and discipline in the classroom culture and that they are principled teachers.

When teachers’ views about the perceptual change towards the concept of school culture theme are considered together, it can be understood that the training led to a change in teachers’ views. After the training, teachers evaluated school culture as a concept which is more comprehensive, includes more actors, is affected by attitudes, values, and opinions of the individuals, and indicates the philosophy of life in schools.

Change in the ideal school culture profile

Teachers were asked how an ideal school culture must be in both pre- and post-training phases, and it was tried to determine whether the training offered caused any changes in teachers’ ideal school culture profile. 30 out of 36 teachers argued that the ideal school culture profile in their mind changed. It was found that teachers drew a profile based on only happiness and peace; however, they accentuated an ideal school culture profile which also includes discipline, order, and responsibility upon receiving the training.

T14 emphasized how his ideal school profile changed after the training as follows: “I was construing the ideal school culture as a type of culture in which everyone takes his/her responsibilities and respects one another. I thought that it was wrong that the school administration was too strict and attached more importance to the superior-subordinate relationship. But after the training, I started to think that the superior-subordinate relationship does not always make us unhappy. I want everyone to carry out his/her responsibilities. If the superior-subordinate relationship ensures this, then there is no problem. An ideal school culture is a culture in which there is a boundary in the relationship between the administration and teachers, but respect is never lacking.”

T9 had convergent views with T14. T9 stated that a culture which serves the goals of the school is required, and therefore, school culture should serve the construction of the order within the school. He commented: “I believed that an ideal school culture needs to make us happy prior to the training. I was of the opinion that it should help us like the school and come to school happily. I still have the same opinion. However, I have understood that a culture cannot be a good one just because of bringing us happiness. We have learned that school culture must serve the school goals as well. School culture, therefore, should provide discipline and order.”

The teachers (n=6) who asserted that there was no change in their perceptions of an ideal school culture after the training thought that school culture should pave the way for cohesion and collaborative action. Regarding the ideal school culture, T32 commented: “If school culture can facilitate collaboration at school, then it is ideal. If it cannot do this, then is no culture at the school. After participating in the training, I see that my opinion about the ideal school culture is still valid”. The teachers who noted that the ideal school culture profile in their mind did not change suggested that the reason behind this stability in their mind was related to what they learned in the training.

Teachers’ views about the change in the ideal school culture profile demonstrated that the school culture training helped develop a different perspective on school administration in teachers. Teachers began to think that the concepts such as bureaucracy, discipline, and order can take place in school culture soundly without disrupting teachers’ relief. This change indicates that the training on school culture can positively affect the relationship between school administration and teachers.
Change in teachers’ evaluation of their school’s culture

The researchers asked teachers whether their way of evaluating their school’s culture changed after receiving the training and what the reasons underlying the changes were. In this way, the effect of the training on teachers’ perceptions of school culture was tried to be determined. A majority of the teachers (N=29) proposed that their perspective in evaluating their school’s culture differed. Teachers stated that they perceived the power and role dimensions as dominant in their school’s culture, but their views changed upon participating in the training.

T26 noted that she discerned the relationship between the role, support and achievement dimensions of the culture better and stated that the role dimension’s being at the forefront at the school does not bother her anymore. Her views were: “I can say that I am evaluating school culture in a somewhat different way. Initially, I thought that the role dimension was more dominant. But now, I can better see that the support and achievement dimensions are used for the role dimension indeed. When you are stuck with hierarchy solely, you realize the behaviors related to support and achievement to a lesser extent. I had made wrong evaluations in this sense. I always perceived school administration as work-oriented. However, there were no problems with putting forward the role dimension for the school goals.” It is understood from her views that each dimension of school culture is recognized and that an awareness has been raised for the requirement of all of the dimensions.

T13 specified that he perceived the role and power dimensions to be dominant prior to the training, and he believed that this resulted from his negative perceptions regarding the school administration: “My views partly changed. I used to evaluate the power and role dimensions to be more dominant previously. I think the power and role dimensions’ inclusion of support and achievement may have attracted my attention less, or the dominance of other dimensions precluded from seeing this. We’ve learned that our own perceptions and values are influential over our perceptions of the culture. When I learned that, I considered that the fact that I did not really like our school administrators might have affected my negative perceptions of the school’s culture. I accepted that it has good aspects too when thinking impartially.” His views clearly demonstrate the change in his perceptions of his school’s culture.

T34 noted that she perceived the role and power dimensions as the same dimension prior to the training, and regarded putting forward the characteristics related to the role dimension in school culture as the administration’s practicing power. She delineated that the role dimension of school culture stressed the school goals in the post-training interview: “I can say that a change has occurred. I used to think that the role and power dimensions were the same. When the school administration frequently accentuated the things we need to do, I would think that this came from its authority power and got angry. I always thought that there was a culture established on power. After the training, however, I understood that the role dimension, not the power dimension, was more dominant. I made wrong evaluations in this regard completely due to my lack of knowledge on school culture. A school culture which pays attention to the goals and responsibilities of the school develops both teachers and the school.” The views of this teacher showed that the training changed the conceptual framework that teachers used to interpret their schools’ culture.

Some teachers (n=7) stated that their perceptions of school culture did not change because they already evaluated their school culture properly. T23 stated that: “I still evaluate my school’s culture in the same way. I have evaluated my school’s culture based on its supportiveness. This is because both teachers and administrators work in collaboration for common goals. I have seen in the training I received that this should be a feature of school culture”, by linking the reason for no change in his perceptions with the precision of his way of perceiving it. The views of the teachers who evaluated school culture, in the same way, revealed that they had positive perceptions of school culture before the training, and the training consolidated these perceptions.
Based on teachers’ views on the change in their evaluations of their schools’ culture, it may be suggested that the training on school culture eliminated teachers’ lack of knowledge on school culture which caused them to make and hold negative interpretations and perceptions about their schools’ culture. Teachers specified that they began to perceive the culture in their schools and the cultural characteristics stemming from their schools’ administration as more positive in the post-training interviews.

**Discussion**

It was revealed in this research that the training on school culture was effective in terms of changing teachers’ perceptions of school culture in a positive way. As the quantitative findings indicated, the training had a positive impact on teacher perceptions as it led to significant differences in teacher perceptions in the leadership based on cooperation, common goals, and cooperative learning dimensions of school culture. However, teacher cooperation, professional development, and collegial support dimensions were the ones in which statistically significant differences did not occur.

The qualitative findings pointed out that teachers’ definitions of school culture changed after receiving the training. School culture was defined within the framework of rules, values, and routines and confined the interactions related to school culture only to the school itself and individuals within the school. Teachers were seen to have adopted more comprehensive definitions of school culture which included observable as well as unobservable elements specifying the patterns of attitudes and behaviors after the training. Perceptual changes mostly resulted from the changes in teachers’ perceptions of school administration. They used to evaluate the role and power of school administration from a classical bureaucratic perspective. This may have affected their perceptions of and relations with school administration.

Teachers stated that they began to regard bureaucracy, discipline, and order as more positive, unlike the past. It may be drawn from these findings that the training on school culture helped teachers to adopt more comprehensive and proper perceptions of school culture and its elements. The study demonstrated that teachers’ negative perceptions of school culture may be influenced by their lack of knowledge or awareness on school culture. Some negative events or experiences encountered can also cause teachers to develop negative schemas and/or cognitive frameworks in evaluating their school’s culture, which may also bring about some other undesired effects such as disengagement and unwillingness to make efforts to contribute to achieving school goals.

There were some teachers who noted that their perceptions of school culture did not change after receiving the training. Changing schools’ cultural values is challenging if teachers, in particular, do not take part in decision-making (Hammad, 2010). After the training on school culture, the teachers whose perceptions of school culture did not change evaluated culture as a means of formalization and linked culture with the concept of discipline and rules. Consistent with teachers’ views, Schoen and Teddlie (2008) argued in their research that culture formats school rules. The views of the teachers who continued to relate school culture with rules implied that they regarded school culture in a static structure and were on a quest for this static structure in their decisions regarding their schools.

The teachers whose perceptions of the ideal school culture did not change after the training accentuated that school culture is a means of cohesion and collaboration, both prior to and after the training. These teachers noted that they perceived their schools’ culture positively pre- and post-training. The teachers who argued that their perceptions did not change opined that they perceived their schools’ culture as supportive and that the training strengthened their perceptions. Engels et al. (2008) found out that there is a supportive environment in a positive school culture. Therefore,
the fact that there was no change in teachers’ perceptions regarding school culture does not mean that the training was ineffective.

As the quantitative findings indicated teachers’ perceptions of leadership based on cooperation, common goals, and cooperative learning changed in a positive way. The qualitative findings also confirmed the findings about the change in perceptions regarding leadership based on cooperation and common goals. Teachers emphasized the perceptual change related to school administration, school goals, and the relationships between teachers and administrators. The training offered a new way of re-concentrating on the significance of common goals and the actors key to achieving these goals. Having a positive perception of school administration/leadership warrants the development of new and fruitful actions, practices and approaches.

On the other hand, no statistically significant changes were observed in the perceptions of teacher cooperation, professional development and collegial support. The reason behind this finding may be that most of the participating teachers included those who had 1-2 years of work experience at the same school; therefore, they may not have developed shared practices with their colleagues and fully adopted the aspects of school culture featuring cooperation, collaboration, and collegial trust. Consistently, in the interviews, no change was mentioned regarding these issues by teachers. When the related literature is examined, it may be suggested these findings are not surprising as the formation of a collaborative school culture requires the input of every school member, and it usually develops slowly (Lam, Yim, & Lam, 2002).

Collegial trust seems to play a role in this formation because the strength of collegial trust can be effective in determining the nature and level of teachers’ shared practices (Chen, Lee, Lin, & Zhang, 2016). More importantly, schools need to be reconstructed as professional learning communities (PLCs) in which collaboration, collective learning among staff, shared values and vision, a focus on learning rather than teaching, collective responsibility, reflective professional inquiry, joint involvement in practical tasks, and group and individual learning (Dufour, 2004; Hord, 1997; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Owen, 2014), most of which are the aspects of school culture too, are strongly encouraged and practiced. Furthermore, there are some essential building blocks for the construction of professional collaboration in schools such as school leadership (Marks, Louis, & Printy, 2000).

As suggested in the related literature, school leaders act as a facilitator of construction of collaborative school cultures (Leithwood & Jantzi, 1990; Waldron & McLeskey, 2010) and professional learning communities (PLCs) (Balyer, Karataş, & Alçı, 2015; Dufour, 2004; Owen, 2014) which strongly emphasize shared practices, collegial relationships and reflective thinking (Chen, Lee, Lin, & Zhang, 2016). In the Lambersky (2016) study, principals were found to affect teacher performance through impacting teachers’ emotional states across the domains of job satisfaction and morale; burnout, stress and anxiety; self and collective efficacy; and organizational commitment and engagement. Goddard, Goddard, Kim, and Miller (2015) found that the level of collaboration for instructional improvement increases in the schools where principals exhibit strong instructional leadership.

Apart from the factors mentioned above, some other issues count with regard to teachers’ professional learning and establishing a community of practice. Hargreaves (2000) draws attention to creating superb professional learning and working conditions for teachers. A school environment promoting collegial trust, effective communication and collaboration sets up a core condition of teachers’ professional learning (Li, Hallinger, Kennedy, & Walker, 2016). In a similar vein, the value placed on professional development individually and within the context of school culture is another significant factor impacting teachers’ engagement in professional learning (Maloney & Konza, 2011). Establishing a culture of professional collaboration and development requires a
number of other dynamics and elements, and thus it may be difficult to change teachers’ perceptions of school culture unless they do not experience actual changes in these aspects of school culture. More importantly, a lack of shared purpose, goals, and expectations among the teachers may bring about a lack of clarity on how to solve practical problems through collaboration, as found by Szczesiul and Huizenga (2014).

The training provided for teachers was a brief one which targeted to change teachers’ perceptions of school culture, and it served as a tool to concentrate teacher perceptions on the unobservable or, more suitably, the cognitive aspects of school culture. It may be the first step of eliminating the lack of shared purpose, goals, and expectations among teachers to collaborate (Szczesiul & Huizenga, 2014) and get their colleagues’ support and develop collegial relationships. As known, collaboration refers to teachers’ cooperative actions regarding job-related issues (Kelchtermans, 2006) and it takes place on a continuum (Glazier, Boyd, Hughes, Able, & Mallous, 2016). When teachers collaborate they share knowledge and experiences with their colleagues (Goddard, Goddard, & Tschannen-Moran, 2007), learn from each other and feel better about themselves and their work (Johnson, 2003).

The non-significant differences in teacher perceptions of collaboration can be explained by its close link with collegiality. This is because collaboration and collegiality constitute and reflect each other (Kelchtermans, 2006). Teachers’ working together professionally and supporting each other socially and emotionally constitutes the essence of collegiality (Jarzabkowski, 2003). Jarzabkowski (2002) makes a distinction between collaboration and collegiality. She proposed that collaboration generally deals with teachers’ working together for professional issues; while collegiality refers to a broader meaning including both professional and social/emotional interactions in schools. Ensuring collegiality among teachers requires their being convinced to believe that it will result in improved teaching and learning (Shah, 2012a).

Dedicated and intentional efforts of school administrators and the teaching staff, and specifically teachers’ being fully convinced that participating in PLCs will lead to positive improvement in teaching and learning processes (Hairon & Tan, 2016), are required to establish a professional learning community (Morrissey, 2000) in which teacher collaboration, collegiality, and professional development are promoted (Kelly, 2012). Collegial support among teachers or teacher collegiality affects teacher job satisfaction (You, Kim, and Lim, 2015), organizational commitment (Shah, 2012b) and work efficiency (Shah, 2011). Similarly, teacher collaboration positively influences school improvement (Hoque, Alam, & Abdullah, 2011). In Bigsby and Firestone’s (2016) study, it was revealed that collaborative relationships among teachers encouraged them to participate in professional development programs. It is therefore highly critical to constitute collegiality and collaboration among teachers.

The results of this study underscore the importance of shifting or transforming teachers’ perceptions of school culture for “school culture re-boot”, as put by Kaplan and Owings (2013), or transformation when the related literature on school culture and related desired outcomes in educational organizations are taken into consideration. It is clearly demonstrated in the literature that school culture is associated with the development of a school and its members and well-being of the staff (Zhu, Devos, & Li, 2011). It is also significantly related to perceptions of innovativeness in instruction and the perceived implementation level of educational innovations (Zhu & Engels, 2014), and the construction of a climate for innovation in the organization (Sarros, Cooper, & Santora, 2008).

The dynamics and features of school culture offer a perspective to understand teachers’ efforts to grow professionally (Jurasaite-Harbison & Rex, 2010). Teachers’ job satisfaction (Gligorović, Nikolić, Terek, Glušac, & Ivan Tasić, 2016) and teachers’
professional behaviors are related to school culture (Kılınç, 2014). School culture is also significant for performance (Karadağ, 2009) and teachers’ organizational commitment (İpek, 2010; Ayık & Ataş, 2014). It is a determinant between effective and ineffective schools (Schoen & Teddlie, 2008). Consistently, according to Şahin (2011), the aspects of school culture such as having a common vision and mission, learning by collaborative sharing, principal support for the staff, and adapting to a positive learning environment and change serve as the basis for achievement and effectiveness at schools. Additionally, school culture is effective in teachers’ learning and socialization process at school (Flores, 2004), and it provides a framework for occupational learning (Stoll, 1998).

It has also been revealed that the type of school culture dominating the school, among other things, is of paramount importance. For example, strong, positive, restrictive/circumscribing, empowering and bureaucratic cultures affect schools in different ways. While strong school cultures motivate teachers (MacNeil, Prater, & Busch, 2009), the schools having a circumscribing culture causes teacher burnout (Friedman, 1991). A strong culture is related to positive organizational characteristics, teachers' job attitudes, and students' academic outcomes (Cheng, 1993), and this type of school culture is pivotal for schools which want to be effective and develop (Uğurlu, 2009). Productive and positive school cultures facilitate the establishment of professional learning communities through norms, values, and relationships (Hipp, Huffman, Pankake, & Olivier, 2008). In an empowering school culture, autonomy, teamwork, and collectivism are some of the characteristics which come to the fore (Balkar, 2015). However, a bureaucratic culture has a negative association with teacher professionalism (Kılınç, 2014). The type of school culture that prevails in high-performing and low-performing schools are different (Msila, 2014; van der Westhuizen, Mosoge, Swanepoel, & Coetsee, 2005); and positive relations among teachers and adopting a common orientation towards solution of the problems are some of the salient characteristics of high-performing schools (Negiş-Işık & Gürsel, 2013), which implies that the culture prevailing in schools accounts for school success.

Two studies in the literature reported the results of school culture change. In the first one, it was revealed that the change in school culture led to changes in teacher professionalism, school collaboration, and the use of evidence linked to classroom work (Eilers & Camacho, 2007). In the second study in which a long-term school improvement project was implemented in six schools located in two different districts, it was detected that teachers’ perceptions of school organizational culture changed in a positive way in three out of six schools in which the project was applied (Shachar, Gavin, & Shlomo, 2010). The significance of school culture for school improvement (Zhu, Devos, & Tondeur, 2014), educational change (Recepoglu, 2013; Zhu, Devos, & Li, 2011), organizational health (Özdemir, 2012), academic achievement (MacNeil, Prater, & Busch, 2009; Bektas, Coğaltay, Karadağ, & Ay, 2015; Karadağ, Kılıçoğlu, & Yılmaz, 2014), school effectiveness (Cheng, 1993), and capacity for organizational learning (Louis & Lee, 2016) makes it an imperative to engage in the acts to both update and direct teachers’ perceptions towards the underlying assumptions, goals, mission and vision of the schools.

Culture can increase organizational members’ commitment to the mission and goals set by the organization (Wiener & Vardi, 1990). This will help schools make sure that the existing practices, orientation, and assumptions are congruent with the goals and vision of the school (Kaplan & Owings, 2013). Ensuring this congruence is really significant to meet the new demands for education and prepare students for the changing society (Zhu, Devos, & Li, 2011). Furthermore, culture in organizations maintains and reproduces itself by the coming of new members (Schein, 1990) to the
organization, it is, therefore, significant to hold similar training programs to establish the congruence mentioned above among all of the members from time to time.

Changing teachers’ perceptions of school culture may help gain significant insights in terms of the effects of school culture on school effectiveness. Previous research has shown that school culture and school effectiveness are positively correlated (Ali, 2017; Ali, Sharma, & Zaman, 2017) and that changing the culture of schools is critical for whole system improvement (Fullan, 2016). Believing that change in school culture requires change in perceptions of culture and that this change may generally be achieved by learning (Gagliardi, 1986), the researchers preferred to use the training provided in the study as a tool for ensuring perceptual change. In this sense, it may argued that changing perceptions of school culture may help schools to become effective and improvement-oriented.

Conclusion
It was concluded that the training that the teachers received on school culture had a positive impact on their perceptions of school culture. It can be interpreted that teachers who received training on school culture evaluated organizational culture from a different perspective which in turn led them to perceive school culture in a more positive manner.

The training on school culture caused a statistically significant increase in scores of leadership based on cooperation, common goals, and cooperative learning dimensions, and thereby resulting in a positive change in the perceptions of the teachers with regard to these dimensions. Therefore, it can be considered that training on school culture helped teachers to make more positive evaluations with regard to the behavior and applications of the school managers as well as the school mission, and thus direct their works towards this mission. It was also revealed in the post-training interviews conducted with teachers that the changes in teacher perceptions of school culture stemmed from their views about school administration in general.

Teachers noted that their perceptions of the power and role of the school administration changed positively after the training. At the same time, it was revealed that more importance was attached to the elements related to order and discipline in terms of an ideal school culture profile. Based on these results, it can be stated that it may contribute to ensuring that school managers carry out administrative work for the school in a proper manner and display leadership when teachers have a proper perception of school culture. When the increase in the scores of cooperative learning dimension is considered, the quantitative results of the study indicated that teachers evaluated the cooperation with the students’ parents to be more contributive and that they were more positive about working with the parents of students as a result of the training they received regarding school culture. The qualitative findings of the study supported this result as well. Teachers believed that interactions with parents are required for a strong school culture.

Even though school culture training increased the scores that teachers received from the teacher cooperation, professional development and collegial support dimensions, the increases in these scores were not statistically significant. It was understood that the school culture training provided within the scope of the study could not provide a statistically significant contribution to ensuring that the teachers perceived one another in a positive manner and evaluated their mutual behavior as supportive and cooperative. When pre-test and post-test score averages are examined, it can also be seen that the lowest increase is for the “collegial support” dimension. School culture training did not also lead to a statistically significant change in the perceptions related to the opinion that professional development is supported at school and that the teachers are supported in this regard. In the interviews, teachers did not mention any
change in relations with colleagues and professional development while stating the changes in their perceptions of school culture. This finding confirmed that the training on school culture mainly led to changes in perceptions with regard to the goals of the school and school administration.

Implications
The training on school culture should be carried out at schools within the scope of in-service training in order to ensure that teachers evaluate school culture in a more positive manner. It should be ensured that teachers have a proper conceptual framework related to school culture. Since school culture training causes statistically significant and positive changes especially in the dimensions of leadership based on cooperation, common goals, and cooperative learning, school culture training can be organized especially at schools that seek support for leadership applications in the direction of school mission and schools which need to strengthen teacher-parent cooperation. A more applied and interactive training can help teachers understand each other. Furthermore, a focus on teamwork and professional development can make significant contributions to teachers’ perceptions of school culture and its dimensions.

Limitations
This study has several limitations. The first limitation is about the number of the participants. A total of 36 participants were the sample of the study, which restricts the generalization of the findings. Another limitation is related to the experimental design of the study. The researchers used the one group pre-test/post-test experimental design. The use of this design did not allow to see whether maturation, history, test effects and regression effects might have affected the findings or not (Marsden & Torgerson, 2012). Furthermore, collecting qualitative and quantitative data using different research methods and techniques, such as action research, may provide new insights into benefits of changing teacher perceptions of school culture.

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