The Effect of Bureaucratic School Structure on Teacher Leadership Culture: A Mixed Study*

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Abstract

The aim of this study is to examine the relationship between the effective functioning of the bureaucratic school structure and the teacher leadership culture. The study was carried out with the sequential mixed model approach, which is one of the mixed method designs. A total of 492 teachers working in primary, secondary and high schools located in Beyoğlu district of Istanbul province in the 2016-2017 academic year were included in the quantitative section of the study, and 20 teachers from the same district were included in the qualitative section. The “Effectiveness of the School Structure Scale” and the “Teacher Leadership Culture Scale” were used in collecting the quantitative data of the study. Descriptive analysis, correlation analysis and regression analysis were used in the analysis of quantitative data. In the qualitative section of the study, data were collected through semi-structured questions. The content analysis was used in their analysis. In the study, it was determined that the effectiveness of the bureaucratic structure of schools was at the moderate level and the schools’ levels of having teacher leadership culture were above the moderate level. The quantitative results of the study showed that the effectiveness level of the bureaucratic school structure had positive and significant relationships with the dimensions of occupational cooperation, school administrator's support and supportive working environment, which are the dimensions of teacher leadership culture. It was observed that the effectiveness of the bureaucratic school structure explained the behavior of school administrator's support, the supportive working conditions and the occupational cooperation environment that are the dimensions of teacher leadership culture, by 43%, 26% and 9%, respectively. Based on the interviews held with the participants, it was revealed that teacher leadership behaviors could be developed by school principals' constructive and cooperative behaviors and the occupational, administrative and institutional supports, which will enable the roles of teachers. Furthermore, it was shown that culture in which teachers could exhibit leadership behaviors could be strengthened by the enabling structuring of the bureaucratic school structure.

Keywords
Bureaucratic school structure • Effective bureaucratic culture • Teacher leadership • Coercive bureaucracy • Enabling bureaucracy

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Teacher leadership is the capability to improve the quality related to education and training and to exhibit occupational behaviors (Can, 2014; Danielson, 2006). It can be observed as formal or informal (Fullan, 1993). Teacher leaders are involved in decision-making processes and practices in school, renew themselves from the occupational aspect and enable the structuring of schools as learning communities (Beycioğlu, 2009). Furthermore, they establish rich learning environments in schools (Lumpkin, Claxton, & Wilson, 2014). Therefore, it can be stated that leader teacher behaviors are important in that they increase student learning and the quality of education in school to a more qualified level.

The leadership behaviors of teachers are affected by individual and organizational variables (Danielson, 2006; Katzenmeyer & Moller, 2001). In this context, the relationships between the effectiveness of the bureaucratic school structure and different variables have been among the important research subjects in recent years (Cerit, 2012; Geist, 2002; Karaca, 2015; Messick, 2012; Özdemir & Kilinc, 2014). In this context, it is stated that teacher leadership behaviors are also related to the bureaucratic structure (Balıkcı, 2016; Hoy & Sweetland, 2001; Sweetland, 2001). In this regard, the effects of a bureaucratic school structure on a school environment that supports teacher leadership were discussed in this study.

**Bureaucratic School Structure**

Schools are the organizations in which there is an intense bureaucracy in terms of functioning and the fulfillment of different tasks. The things to be done by teachers and students are determined by certain rules and procedures (McGuigan & Hoy, 2006). Depending on these rules and procedures, formal structurings and the behavior of controlling the employees and activities are frequently observed in the bureaucratic structure. It is important to comply with standards, and school administrators intensely conduct inspections. The limitations of predetermined application are mentioned (Cameron & Quinn, 2006; Terzi, 2005). Expertise, status, responsibility, rules, rationality and roles are emphasized (Harrison, 1972). Certain behaviors of people take place under the control of an organizer who ensures coordination within the framework of official rules, and some routines are followed (Lund, 2003; Murat & Açıkgöz, 2007). In this respect, teachers are expected to conduct their activities for student learning and education in a controlled manner. Thus, the bureaucratic structure can directly or indirectly affect the behaviors of teachers and students depending on the importance given to hierarchy and rules by it.

Depending on the forms of applying the rules and procedures, some classifications are used for the bureaucratic structure. Among them, Hoy and Sweetland (2000; 2001) used the concepts of coercive bureaucracy and enabling bureaucracy to reveal the bureaucratic effectiveness level in school structures. The coercive bureaucracy or
enabling bureaucracy is related to the outcomes of formalization and centralization in the organization in practice (Hoy & Sweetland, 2001). In schools with effective formalization, the procedures in practice are enabling and ensure that problems in school are solved in harmony, and the rules can be stretched in case of need (Hoy & Miskel, 2010). Effective centralization is an indication of the extent to which employees in the organization are involved in decision-making processes (Cerit, 2012). Depending on the level of centralization, decision-making processes in the organization vary by the hierarchy. Employees are also involved in decision-making processes actively as the level of centralization decreases (Hoy & Sweetland, 2001). Thus, effective centralization allows for the solution of problems due to its enabling characteristic (Sinden, Hoy, & Sweetland, 2004). Rules and regulations strengthen teachers (Hoy & Miskel, 2010). Therefore, it can be stated that the bureaucratic structure will positively or negatively affect the works of teachers or daily routines in school, depending on its functioning form. More precisely, the effectiveness of the bureaucratic school structure may appear through flexible and encouraging applications that enable the works of teachers in rules, procedures and decision-making processes.

On the other hand, it can be said that the adhocracy culture is related to the perception of bureaucratic structure in school because the results in practice may change by the fact that bureaucratic practices are either supportive or coercive. Innovation, entrepreneurship and taking the initiative are supported in the adhocracy culture (Lund, 2003; Murat & Açıkgöz, 2007). Rules and regulations ensure adaptation to environmental needs in a short time rather than respect to the authority. The adhocracy culture brings a dynamic structure, an entrepreneurial approach and productivity into the forefront. It encourages leadership with respect to innovation (Cameron & Quinn, 2006). In this context, it can be expected that the fact that the perspective on the rules in school and the forms of applying them also changes the bureaucratic effectiveness leads to different outcomes for the school.

**School Culture That Supports Teacher Leadership**

In the school culture that supports teacher leadership, the professional developments of teachers are supported, their leadership behaviors are enabled, autonomy is granted, their involvement in the decision-making processes is enabled (Katzenmeyer & Moller, 2001), the cooperation environment is ensured, and teachers are considered as experts in their profession (Danielson, 2006). Teacher leaders ensure the change in school (Harris & Muijs, 2005) and increase all kinds of cooperation in school (Hobson & Moss, 2010). They help socialization in school (Gehrke, 1991) and take an active role in administrative works and decision-making processes (Smylie & Brownlee-Conyers, 1992). They also provide the development of a school curriculum (Paulu & Winters, 1998). They create a vision with effective studies for student learning
(Can, 2006). Therefore, it can be said that the behaviors of teacher leaders will increase student learning and the quality of education to higher levels by encouraging cooperation, solidarity, professional development and ensuring the strengthening of other teachers. In the literature, there are some classifications that schools should have for the development of teacher leadership (Danielson, 2006; Harris & Muijs, 2005). The dimensions of school culture that supports teacher leadership behaviors, proposed by Demir (2014), were discussed within the context of this study.

Demir (2014) states the dimensions of school culture that support teacher leadership as the occupational cooperation, the school administrator’s support and the supportive working environment. Firstly, the dimension of occupational cooperation refers to the studies of teachers for common goals and cooperation. In schools in which occupational cooperation is supported, common goals and vision are created (Chamberland, 2009; Gaffney & Faragher, 2010; Muijs & Harris, 2006), and professional learning communities are developed (Chamberland, 2009; Danielson, 2006; Gaffney & Faragher, 2010; Harris & Muijs, 2005; Hunzicker, 2012; McCay, Flora, Hamilton, & Riley, 2001). Secondly, the school administrator supports teachers. In this context, school administrators share leadership (Brosky, 2009; Chamberland, 2009), improve administrative and organizational processes in school (Beachum & Dentith, 2004), give teachers feedback about their works (Buckner & McDowelle, 2000) and increase the feeling of trust in teachers with the studies they perform (Gehrke, 1991). Finally, the supportive working environment refers to working environments that encourage teacher leadership in which trust is essential, and cooperation and communication are at a good level (Demir, 2014). In this context, in schools in which there is a supportive working environment, teacher autonomy is high (Wenner & Campbell, 2016), time and resources are provided to teachers (Chew & Andrews, 2010; York-Barr & Duke, 2004), team leadership opportunities are offered (Gaffney & Faragher, 2010), and the involvement in the decision-making processes is encouraged (Chew & Andrews, 2010). In addition to these, attention is paid to ethics in schools (Beachum & Dentith, 2004; Gordin, 2010; York-Barr & Duke, 2004), the tasks are well-defined (Muijs & Harris, 2006), the quality of communication is increased (Harris & Muijs, 2005), and learning opportunities are created from mistakes (Barth, 2000).

Therefore, it can be stated that the school culture that supports teacher leadership has school characteristics that focus on the professional development of the teacher, are sensitive and helpful to the areas led by it, provide autonomy, enable occupational cooperation, and support the active involvement of teachers in decision-making processes. In this context, such a school environment can be affected positively or negatively in the functioning of the bureaucratic structure in school.
The Relationship between the Bureaucratic School Structure and the School Culture that Supports Teacher Leadership

It can be stated that there are relationships between a school culture that enables teachers to exhibit leadership behaviors and the effectiveness of the bureaucratic structures of schools. In enabling bureaucracy, teachers are considered as problem solvers, and less importance is given to inspection (Cerit, 2013). An enabling bureaucratic structure results in the fact that teachers are controlled as necessary, thus, their unique behaviors are supported (Dzubay, 2001), and teachers exhibit occupational behaviors (Tschanen-Moran, 2009). Teachers feel strong, they establish sincere relationships with their colleagues and administrators, and they develop cooperation (Sweetland, 2001). At the same time, trust in school increases, and employees focus on common goals (Önal, 2012). On the other hand, a strong belief culture that students can learn arises. For this reason, teachers work in cooperation to improve this achievement and discuss and develop in-class training practices (McGuinan, 2005). Thus, the effectiveness of the bureaucratic structure increases along with its enabling characteristic, cooperation develops among teachers, common goals are protected, and administrators can offer more leadership opportunities to teachers. There are many findings that support this statement. The bureaucratic structure has positive consequences on teacher professionalism (Cerit, 2012; Geist, 2002; Karaca, 2015), teachers’ academic optimism levels (Beard, 2008; Özdemir & Kılınç, 2014) and organizational citizenship level (Messick, 2012). Furthermore, there are positive relationships between the enabling bureaucratic structure and the socialization of teachers (Erdoğan, 2012) and teacher self-efficacy (Kılınç, Koşar, Er, & Öğdem, 2016). On the other hand, teachers exhibit more specialized behaviors as the effectiveness of the bureaucratic structure increases (Tschanen-Moran, 2009). In such an environment, a sincere school atmosphere is created (Sweetland, 2001) and the school culture is positively affected by this (Önal, 2012; Zeytin, 2008).

It is stated that administrators who try to maintain the coercive bureaucratic approach further adopt the idea of controlling teachers (Tschanen-Moran, 2009). Furthermore, the administration of schools in parallel with strict rules negatively affects the school atmosphere and leads to formalization in relationships (Karaman, Yücel, & Dönder, 2008). As the pressure on applying the rules in schools as they are increases, the behaviors of individuals in school are negatively affected by this (Dzubay, 2001). Kılınç (2014) revealed that there were negative and significant relationships between the restrictive school climate, indicating that the school administrator exhibits behaviors that hinder the works done by school employees and teacher leadership. Regarding the coercive characteristics of the bureaucratic structure in schools, Kimbrough and Todd (1967) reported the following determinations: It destroys creativity by decreasing differences, new ideas can be rejected if they are in conflict with rational teaching behaviors, the support for personal development may
decrease, and problems are faced in decisions taken, the transition to a democratic school system may become difficult, and communication may become unhealthy. On the other hand, coercive centralization refers to the strict and hierarchical use of authority instead of supporting employees’ studies. In hierarchical structures in this context, individuals adopt an attitude that prevents innovations by using their powers and tend to use force by bringing discipline into the forefront (Hoy & Miskel, 2010). Since coercive hierarchies are focused on rules and procedures, non-functional situations and workload arise in institutions (Sinden, Hoy, & Sweetland, 2004). It is stated that when the bureaucratic structure is ineffective, it leads to problems in achieving organizational goals and individuals’ feeling a responsibility, makes it difficult to be involved in decision-making processes and decreases the employee’s belonging to the organization (Adler & Borys, 1996). Along with these, depression that emerges with objectivity, communication problems, the replacement of goals due to the rigidity of rules, and the conflicts emerging between success and seniority lead to the unexpected negativities of the bureaucratic structure (Aydın, 2007).

As it can be understood from the above-mentioned explanations, it can be stated that the coercive or enabling bureaucratic structures of schools will affect teachers’ levels of exhibiting leadership behaviors. Therefore, it is aimed to reveal the extent to which coercive or enabling behaviors that are considered to be important in the effectiveness of the bureaucratic structure constitute a school atmosphere that supports the development of teacher leadership. Thus, it can be said that the results of this study will present some consequences for practitioners and policymakers. For this purpose, answers to the following questions were sought in the quantitative phase of the study:

1. According to teachers’ perceptions, what are the effectiveness level of the bureaucratic school structure and the schools’ levels of having teacher leadership culture?

2. According to teachers’ perceptions, is there a significant relationship between the effectiveness of the bureaucratic school structure and the occupational cooperation, administrator’s support and the supportive working environment, which are the sub-dimensions of teacher leadership culture?

3. According to teachers’ perceptions, does the effectiveness of the bureaucratic school structure significantly predict the occupational cooperation, administrator’s support and the supportive working environment, which are the sub-dimensions of teacher leadership culture?

Moreover, in the qualitative phase of the study, it is very important to examine in depth the opinions of expert and experienced teachers about the bureaucratic school structure according to their experiences (Van Manen, 1990, p. 9) to increase
the quality of the research and to support the quantitative study carried out by a different method. In this context, in accordance with the main objective of this study, answers to the following questions were sought to receive teachers’ opinions on the bureaucratic school structure with a phenomenological approach, to make sense of them, to reveal them and to interpret them:

1. According to your experiences, which roles and behaviors does the school administrator who takes into account the bureaucratic processes in your school exhibit? Why?

2. What kind of contribution do school administrators make while you are performing your occupational duties? Can you explain with examples?

3. According to your experiences, do you think the bureaucratic structure is effective in this school? How? Why? To what extent?

Method

Model

In this study, qualitative and quantitative methods were used together. The study was carried out with the “Sequential Mixed Model” approach, which is one of the mixed method research designs (Creswell & Plano-Clark, 2007). In this context, this research is a sequential (explanatory) mixed study in which firstly quantitative and then qualitative research methods were used (Creswell, 2012). The relationships with the bureaucratic school structure that will develop teacher leadership were examined in the quantitative section of the study. In the qualitative section of the study, it was examined which characteristics of bureaucratic school structure could form a school culture in which teacher leadership could develop. The quantitative method was prepared in the relational model. In the qualitative section of the study, the phenomenological design “that questions the perceptions and meanings developed by individuals after their experiences” (Ersoy, 2016, p. 104) was used in revealing the experience and the individual’s perceptions of these experiences from their own perspectives and in analyzing the data. (Lester, 1999). In this section, the phenomenology design was preferred because it was intended to understand the behaviors of school principals within the bureaucratic structure, school administrators’ supportive approaches to teachers and whether the bureaucratic structure was effective according to teachers’ experiences in the school with their statements.

Participants

The primary, secondary and high school teachers working in Beyoğlu district of Istanbul province in the 2016-2017 academic year constituted the participants in
the quantitative section of the study. There are 2362 teachers in this district. 492 teachers participated in the study. The sample size was calculated according to the theoretical sample sizes for the populations of different sizes in the study of Balcı (2009) and the sample required for the calculations of 95% precision level. According to this calculation, it was concluded that 492 teachers were sufficient. The simple random sampling method was used in the study. The list given by the District National Education Directorate was used in the selection of schools, and teachers in appropriate schools selected from the list in the study were included in the study. No special selection method was applied while selecting the school levels. It was applied to voluntary teachers in a way not to disturb the program during the course hours of the schools that were included in the study. Of the participants, 302 (61%) were female, and 190 (44%) were male. 185 teachers (37%) from primary schools, 157 teachers (32%) from secondary schools and 150 teachers (30%) from high schools participated in the study. The average age of the participants was 35.6 years. The average term of office of teachers in schools was 4.31 years. Their average seniority was 11.2 years.

The teachers working in Beyoğlu district of Istanbul province in the 2016-2017 academic year constituted the qualitative study group of the study. The study group consisted of 20 teachers. In this context, teachers were selected according to the requirements of having worked with different administrators in different schools and having teaching experiences, being experienced and volunteering to participate in the research process (Kruger, 1988; Moustakas, 1994).

Data Collection Tools

Quantitative dimension: The Teacher Leadership Culture Scale and the Effectiveness of the School Structure Scale were used to collect the data in the study.

Teacher Leadership Culture Scale. This scale was developed by Demir (2014) and measures teachers’ perceptions regarding the schools’ levels of having a culture that supports teacher leadership. 5-point rating expressed between “(1) Strongly Disagree” and “(5) Strongly Agree” was used in the scale consisting of 27 items and 3 sub-dimensions. In the scale, the dimensions of occupational cooperation, administrator’s support and supportive working environment consist of 8 items, 10 items and 9 items, respectively. In his study, Demir (2014) showed that the scale had the construct validity on the teacher sample. The dimension of occupational cooperation refers to the studies of teachers for common goals and cooperation. The characteristics of schools that develop occupational cooperation refer to creating a common vision in school (Chamberland, 2009; Gaffney & Faragher, 2010; Muijs & Harris, 2006). The dimension of school administrator’s support means that the school administrator supports teachers to take the lead, ensures that they improve themselves and creates opportunities for them to
exhibit leadership behaviors (Demir, 2014). The supportive working environment refers to working environments that encourage teacher leadership in which trust is essential, and communication is at a good level (Demir, 2014). Some exemplary items of the dimensions are as follows: Occupational cooperation: “Teachers share course materials in this school”, Administrator’s support: “Administrators work together with teachers in this school “, Supportive working environment: “We congratulate our success in this school”. The occupational cooperation culture, the administrator’s support culture and the supportive working culture in school increase as the scores obtained from the scale increase. This scale has been newly developed and has not yet been adequately tested for validity and reliability in different studies. For this reason, it was checked whether the model in this study complied with the data. According to the fit indices of the 27-item and 3-dimension structure that were calculated as a result of the DFA performed, it was observed that the first level model revealed an acceptable fit with the data ($X^2$ =911.20 ; $p < .05$; $df = 313$; $X^2/df = 2.91$; RMSEA = .062; CFI = .95; GFI = .88, AGFI = .85). The standard factor load values of the items constituting the scale were found to be between .67 and .90. In the study of Demir (2014), the Cronbach’s Alpha coefficients calculated for occupational cooperation were found to be .88 for occupational cooperation, .91 for administrator’s support and .88 for the supportive working environment. The Cronbach’s Alpha coefficient calculated for the reliability of the whole scale for the present study was found to be .97. The Cronbach’s Alpha coefficients calculated for the reliability of sub-dimensions were found to be .92 for occupational cooperation, .97 for administrator’s support and .94 for the supportive working environment.

The Effectiveness of the School Structure Scale. This scale was developed by Hoy and Sweetland (2000; 2001) and measures the effectiveness of the bureaucratic structures of schools. The scale was adapted to the Turkish culture by Buluç (2009). The scale consisting of 12 items was prepared in the form of “(1) Never” and “(5) Always” in the Likert type. The scale has one-dimensional structure, the total variance explained by it is 43.26%, and the Cronbach’s Alpha coefficient calculated for its reliability is .87 (Buluç, 2009). In different studies, the scale was also expressed as one-dimensional (Buluç, 2009; Cerit, 2012; Özdemir & Kılınç, 2014). Since the scale was used in different studies and tested for validity and reliability and it was thought that there was sufficient evidence, only the reliability of the scale was examined in the present study, its DFA was not performed. The Cronbach’s Alpha coefficient for the whole scale was found to be .90. Some examples of the items in the scale are as follows: “The administrative rules are not coercive but helpful”, “The administrative rules in this school provide a reliable communication between teachers and students.” The effectiveness of the bureaucratic structure of schools increases as the score obtained from the scale increases. The fact that communication is healthy in schools and that administrative decisions are open to solution-oriented innovations, and a constructive environment in which teachers are supported and encouraged indicate
effective functioning. In opposite cases, the bureaucratic structure functions in a coercive way. In other words, a solid commitment to centralization and formalization emerges. A moderate-level score indicates that the bureaucratic structure functions at the moderate level. If the school score:

- is 200, the bureaucratic structure functions in a coercive way by 99%.
- is 300, the bureaucratic structure functions in a coercive way by 97%.
- is 400, the bureaucratic structure functions in a coercive way by 84%.
- is 500, the bureaucratic structure functions at the moderate level.
- is 600, the bureaucratic structure functions effectively by 84%.
- is 700, the bureaucratic structure functions effectively by 97%.
- is 800, the bureaucratic structure functions effectively by 99%.

**Qualitative dimension:** In the qualitative section of the study, the research data were collected through a semi-structured interview form. An interview form consisting of three open-ended questions was prepared by the researcher as a result of the literature review.

Within the scope of the validity-reliability studies of the research, receiving the opinions of participants, colleagues and experts plays an important role in increasing the validity of the study. In this context, the interview questions were given to five teachers who were out of the study group before application, the necessary corrections were made by examining the suitability of questions for language and content, and they were presented to two domain experts working in the field of educational sciences for their opinions. The questions were put into final form in line with the opinions and recommendations of the experts. The fact that the researchers conducting the interviews have worked as teachers and school administrators for many years, their experiences in the field, the education they have received in this regard, and the experiences they have gained in qualitative studies that have been previously carried out by them are the factors that support the validity. In the interview form used, there were questions shaped as follows:

1. According to your experiences, which roles and behaviors does the school administrator who takes into account the bureaucratic processes in your school exhibit? Why?

2. What kind of contribution do school administrators make while you are performing your occupational duties? Can you explain with examples?

3. According to your experiences, do you think the bureaucratic structure is effective in this school? How? Why? To what extent?
These questions were given in written to the teachers who voluntarily participated in the study, and the completed forms were received a week later. Within the scope of the researcher’s ethical responsibility, the participants were asked not to write their names on the forms, and it was stated that the information given by them would be used only for this scientific study; moreover, their written permissions were received with a sentence added to the end of the interview questions. Attention was paid to the fact that the data would be consistent to ensure reliability in the study. In this context, questions were asked to colleagues, their opinions were received, and the themes, sub-themes and codes obtained were compared with the similar studies in the literature.

**Data Analysis**

**Quantitative dimension.** The analysis of quantitative data was basically performed in two steps. In the first step, the data were examined in terms of missing or incorrect value and outliers. In the second step, sub-problems were analyzed. Firstly, average values were assigned to the missing values. The skewness and Q-Q graphic, mode and median values were examined for the normality of the data (Table 1). It is observed that the data have skewness values between (-.73) and (-.35) and kurtosis values between (-.32) and (.01). Furthermore, it was assumed that the data were distributed close to normal by examining the Q-Q plot graphic. Although it is observed that some values in the Q-Q graphic disrupted the normal distribution, the graphics were evaluated together with the skewness and kurtosis values. It can be said that it exhibits normal distribution because the skewness and kurtosis are within the limits of (Büyüköztürk, 2010; Şencan, 2005). In this regard, it was assumed that the data were normally distributed when the results related to normality were considered as a whole.

![Table 1](image)

**Table 1**

*Q-Q Graphics of the Dependent and Independent Variables*

The Pearson Product-Moment Correlation Coefficient (r) was used to determine the relationships between the variables in the study. The Multiple Linear Regression Analysis was performed to determine the predictive power of the bureaucratic structures of schools on the teacher leadership culture of schools. In the interpretation of the regression analyses, the standardized Beta (β) coefficients and t-test results for their significance were examined. The significance of the data was decided according to the .05 level.
**Qualitative dimension.** In the analysis of the qualitative data, the data collected in written were transferred to the electronic environment by the researcher via computer, and the NVivo 9.0 program was used for qualitative analysis. This program helps to define the codes, compare the data, establish relationships between the concepts and provides a systematic approach (Kaya & Bacanak, 2013). The forms collected from the participants were coded in the form of T1,T2,T3,….T20 , and these statements reflecting the participant’s opinions were quoted in accordance with the original using these codes. In the study, the codes were first created and grouped, and the themes were created. Then, these codes and themes were checked by two faculty members working in the field of educational administration. The codings were repeated on different days to reveal reliability in codings. In the study, the codes and themes were checked by two field experts for the second time. Furthermore, teachers’ opinions that were thought to express the essence of a theme were directly quoted (Yin, 1994). The research process and the actions performed in this process were detailed to increase the external availability (transferability) and external reliability (verifiability) of the study.

**Findings**

**Quantitative Findings**

The results of the analysis of the quantitative questions are presented in this section.

**Mean and standard deviation of the variables and the relationships between the variables.**

Table 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>X</th>
<th>S</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Standardized school score (SSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Bureaucratic school structure</td>
<td>3.92</td>
<td>.72</td>
<td>.31</td>
<td>.66</td>
<td>.51</td>
<td></td>
<td>547.24</td>
</tr>
<tr>
<td>2- Occupational cooperation</td>
<td>3.50</td>
<td>.86</td>
<td>.62</td>
<td></td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- School administrator’s support</td>
<td>3.75</td>
<td>.99</td>
<td>1</td>
<td></td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- Supportive working environment</td>
<td>3.47</td>
<td>.92</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hoy and Sweetland (2000; 2001) developed a scoring system to reveal that the school effectiveness was enabling or coercive depending on the score to be obtained from the scale. In this formula, the standard scores for the effectiveness of the school structure are = \[100*(ESS-3.74)/.381+500\]. According to the formula, the standard score for the bureaucratic structures of the schools in this study was found as follows; ESS = 3.92 is the average of the score obtained from the bureaucratic school structure scale. (Standardized school scores = \[100*(3.92-3.74)/.381]+500\). As a result of the calculation, the standardized school scores were found to be = 547.24. When the mean values given in Table 2 are examined, it is observed that the effectiveness level of the
bureaucratic school structure is at the moderate level (SSS=547.24). In the study, the school effectiveness was found to be at the moderate level according to the standard scores of the effectiveness of the school structure determined by Hoy and Sweetland (2000; 2001) according to teachers’ perceptions. Teachers stated that the effectiveness of the bureaucratic school structure in their schools was at the moderate level.

It is observed that the schools’ levels of having teacher leadership culture are above the moderate level in the dimensions of occupational cooperation (X = 3.50), school administrator’s support (X = 3.75) and supportive working environment (X = 3.47) according to teachers’ perceptions.

It was determined that there were positive and significant relationships (r=.31, p<.01) between the effectiveness of the bureaucratic school structure and the occupational cooperation culture, positive and significant relationships (r=.66, p<.01) between it and the school administrator’s support, positive and significant relationships (r=.51, p<.01) between it and the supportive working environment. The effectiveness level of the bureaucratic school structure gave the highest relationship with the dimension of school administrator’s support.

According to the results of the regression analysis in Table 3, it is observed that the effectiveness level of the bureaucratic school structure positively and significantly predicted the schools’ levels of having teacher leadership culture in all dimensions. It was observed that the dimension predicted by the effectiveness level of the bureaucratic structure at the highest level was the dimension of school administrator’s support (t=19.24, β = .65, p < .01), and it was followed by the dimensions of the supportive working environment (t=13.07, β = .51, p < .01) and occupational cooperation (t=7.08, β = .30, p < .01).

**Qualitative Results**

The results of the analysis of the qualitative questions are presented in this section. The data were described and interpreted according to the codes and themes that emerged in the interpretation of the results. The relationships between the results were determined, the cause and effect relationship was established between them, and a number of conclusions were drawn from the results. In addition to the descriptions,
the direct expressions of the participants were extensively included. The themes, sub-themes and codes formed after the analysis of the interview data with the teachers are presented in the following tables. In this section, the information related to the formation of codes and themes is presented in the data analysis part.

**Theme 1: The roles of the school principal.**

*Which roles and behaviors does the school administrator who takes into account the bureaucratic processes in your school exhibit?* The question aimed at getting the behaviors and roles exhibited by school principals who take into account the bureaucratic processes was asked to teachers in the research group. The themes and codes that emerged as a result of the content analysis of teachers’ answers and the participants are presented in table 4.

Table 4

<table>
<thead>
<tr>
<th>No</th>
<th>Theme</th>
<th>Code</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The roles of the School Principal</td>
<td>Constructive</td>
<td>T1,T4,T10,T15,T20,T11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Authoritarian</td>
<td>T2,T6,T14,T19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legislative</td>
<td>T3,T13,T17,T5,T8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Centralist</td>
<td>T7,T9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cooperative</td>
<td>T12,T16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Situational</td>
<td>T13,T20</td>
</tr>
</tbody>
</table>

The first question asked in the interview form is aimed at revealing the roles and behaviors exhibited by administrators who take into account the bureaucratic processes, according to teachers’ opinions. In this context, the schematic representation of the results obtained by the analysis of teachers’ opinions regarding the question of “Which roles and behaviors does the school administrator who takes into account the bureaucratic processes in your school exhibit?”

![Diagram](image-url)
bureaucratic processes in your school exhibit?” is presented in Figure 1. In this section, the behaviors were determined, and their relationships with the roles were revealed.

When Figure 1 was examined, a participant who described the roles of school principals in the bureaucratic process as constructive and cooperative stated that “Our school principal is more flexible regarding the bureaucratic structure in the decision-making process. He resorts to the solution of a problem without implementing the bureaucratic structure in instant or easily solvable situations. He implements the bureaucratic structure in the works that need to be involved in this process and concludes the issue without dragging out”, another participant who described them as legislative and centralist stated that “My school administrator uses his legitimate power excessively. He announces all kinds of his requests by signature through sub-official writing. He acts with zero flexibility by referring to the provisions of the regulations”, authoritarian “The school administrator usually exhibits a strict attitude towards teachers and students. The reason for this behavior is to make dominance felt in the school and to ensure discipline”.

**Theme 2: School administrator’s support in occupational roles.**

*What kind of contribution do school administrators make while you are performing your occupational duties? Can you explain with examples?* The themes, sub-themes and codes that emerged as a result of the content analysis of teachers’ answers to the question asked to determine the supports and contributions provided by school administrators to teachers are presented in table 5.

**Table 5**

The Emerging Themes, Sub-themes and Codes Related to the Supports Provided by School Administrators while Teachers are Performing their Occupational Duties

<table>
<thead>
<tr>
<th>Theme Code</th>
<th>Sub-theme</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational</td>
<td>Presenting innovation</td>
<td>T4,T7,T11</td>
</tr>
<tr>
<td></td>
<td>Experience sharing</td>
<td>T5,T6,T8,T19</td>
</tr>
<tr>
<td></td>
<td>Guiding</td>
<td>T9,T12,T14, T15,T16,T18,T19, T20</td>
</tr>
<tr>
<td></td>
<td>Encouraging participation in activities</td>
<td>T9,T14,T15</td>
</tr>
<tr>
<td>Administrative</td>
<td>Creating team spirit</td>
<td>T1,T8,T14,T2,T3,T4,T12,T16,T18</td>
</tr>
<tr>
<td></td>
<td>Exhibiting positive behaviors</td>
<td>T3,T6,T8,T11,T16,T19</td>
</tr>
<tr>
<td></td>
<td>Establishing effective communication</td>
<td>T5,T6,T7,T9,T15,T19</td>
</tr>
<tr>
<td></td>
<td>Problem solving</td>
<td>T5,T8,T9,T10,T11</td>
</tr>
<tr>
<td>Institutional</td>
<td>Creating physical opportunities</td>
<td>T4,T5,T7,T9,T10,T12, T16</td>
</tr>
<tr>
<td></td>
<td>Creating organizational culture</td>
<td>T6,T8,T11</td>
</tr>
<tr>
<td></td>
<td>Financial support</td>
<td>T7,T8</td>
</tr>
</tbody>
</table>
In the study, the second question asked to determine the supports and contributions provided by school administrators to teachers was the question of “What kind of contribution do school administrators make while you are performing your occupational duties? Can you explain with examples?” The schematic representation of the results obtained by the analysis of teachers’ opinions in this regard is presented in Figure 2.

When Figure 2 was examined, teachers stated that they received support from administrators under three themes while performing their occupational roles. Teachers stated that they cared about the occupational, administrative and institutional dimensions, school principals should be competent in these fields, and also, they received support and contribution from their administrators in these fields while performing their professions and cared about them.

The codes of exhibiting positive behaviors, creating team spirit, establishing effective communication and problem solving were obtained from their opinions about the administrative support they received. One of the participants stated that “My school administrator is a person who wants his teachers to work, develop themselves and cooperate with other employees. He has a master’s degree and follows the developments or current events related to the teaching profession. He is happy to share the new information he has learned and the experiences that he has previously applied and acquired while performing the teaching profession with his studies. Our administrator exhibits a supportive attitude when we come to him with any project or suggestion. He gives importance to teamwork, but the fellow teachers
in the school are not open to the idea of cooperating and working together”.

The codes of presenting innovation, experience sharing, encouraging participation in activities and guiding were obtained from their opinions about the *occupational* support they received. One of the participants stated that “Our administrators guide us to improve ourselves in the occupational field during our leisure time. They can support us in the studies related to our branch”.

Finally, teachers stated under the *institutional sub-theme* that they were supported by school principals in terms of creating physical opportunities, creating an organizational culture and getting financial support. One of the participants stated that “He can resolve the lack of materials by chairing the group meetings. He can use physical resources within the opportunities of the school. He can increase the motivation of teachers using the rewarding method. During in-class course inspections, he can give advice to the teacher at the points that he considers necessary”.

**Theme 3: Effectiveness of the bureaucratic school structure.**

*Do you think the bureaucratic school structure is effective in this school? How? Why? To what extent?* The questions were asked to teachers to determine whether they considered the bureaucratic school structure in the school where they worked as effective and how they perceived it. The themes and codes that emerged as a result of the content analysis of teachers’ answers and the participants are presented in Table 6.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Code</th>
<th>Sub-theme</th>
<th>Sub-code</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>Effectiveness of the bureaucratic school structure</td>
<td>Negative perceivers</td>
<td>Problems caused by the administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Limitation of entrepreneurship</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Negative working environment</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Normativeness</td>
</tr>
<tr>
<td></td>
<td>Positive perceivers</td>
<td></td>
<td>Administrator’s support</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Flexibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Systemness</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Experience sharing</td>
<td></td>
</tr>
</tbody>
</table>

One of the most important objectives of the study was the question of whether the bureaucratic school structure was a problem according to teachers’ experiences and perceptions. In this context, teachers’ opinions about the question of “Do you think
the bureaucratic school structure is effective in this school? How? Why? To what extent?” are schematically presented in Figure 3.

When Figure 3 was examined, the sub-themes of positive perceivers and negative perceivers were obtained from teachers’ opinions regarding the bureaucratic school structure. The teachers who perceived the bureaucratic school structure positively stated their reasons as providing administrator’s support, providing flexibility, systemness and experience sharing. One of the participants stated that “I think the bureaucratic structure in a school should not be considered as a problem completely. Bureaucracy, rather than a problem, should be implemented appropriately without disrupting the foundation of bureaucracy. Bureaucracy is necessary in organized societies. Bureaucracy brings order. It does not lead to disorderliness. In the absence of bureaucracy, each administrator acts upon his mood”.

The teachers who perceived the bureaucratic school structure negatively stated their reasons as the negative working environment, the limitation of entrepreneurship, normativeness and the problems caused by the administrator. On the other hand, the reasons for the problems caused by the administrator were determined to be inefficacy and inability to support the employee. In addition to the teachers who perceived the bureaucratic school structure negatively, there were also teachers who perceived it positively without considering it as a problem and stated the necessity of bureaucratic school structure. Some of the opinions that emerged in this theme are presented below. One of the participants stated that “The bureaucratic structure in the institution has a structure that usually constitutes a problem. It leads to the slow operation of the works done or to be done, inability to make correct decisions because the decision mechanism is not competent, and the slow functioning of the institution as well as diverting it to different directions”.
Moreover, some teachers stated that the participatory bureaucratic school structure should be established, the bureaucratic school structure was not a problem, and the problem was caused by school administrators who are practitioners. One of the participants expressed this situation by saying that “I think the current structure is not a problem, and therefore, its execution is problematic. I think that a bureaucratic structure in which parents or local administrators will be included will adapt to our society’s understanding (our culture) in a short time.”

Conclusion, Discussion and Suggestions

In this study, the characteristics of the bureaucratic school structure that will develop teacher leadership were examined by the mixed method. According to the quantitative results of the study, it was observed that a culture that would develop teacher leadership was formed along with the increase in the enabling characteristic and effectiveness of the bureaucratic school structure. According to the qualitative results of the study, teachers mostly stated that school administrators provided occupational, administrative and institutional supports. Furthermore, the flexibility, systemness, experience sharing and administrators’ behaviors in schools are perceived as important factors in the effectiveness of the bureaucratic school structure. It was also concluded that school principals exhibited constructive behaviors and supported cooperation.

In the study, the effectiveness of the bureaucratic school structure according to teachers’ perceptions was found to be at the moderate level. In other words, it can be said that the administrative rules in the schools of the participants enable teachers’ works, are encouraging, care about teachers’ decisions and try to provide a suitable working environment for the employees in the school. Similarly, Buluç (2009), Önal (2012), Özdemir and Kılınç (2014) found in their study that the administrative rules in schools were moderately functional, encouraging and supportive.

According to the qualitative research results, some teachers stated that they were supported by school administrators in terms of occupational, administrative and institutional opportunities. However, some of them stated that the bureaucratic structure could be flexible and administrators could provide support sufficiently. In other words, it can be stated that some of the results obtained from the qualitative results support the results obtained from the quantitative dimension. The fact that the effective functioning of the bureaucratic school structure was perceived at the moderate level can be considered as a positive result because the mutual interaction is cared and mistakes are regarded as an opportunity to learn in an organization along with the effective functioning of the bureaucratic structure. Employees are involved in decision-making processes actively (Hoy & Sweetland, 2001). School administrators use their authority to strengthen their teachers (Sinden, Hoy, & Sweetland, 2004). Sezgin (2010)
states that determining the practices and processes in organizations provides a suitable working environment and increases the organizational productivity. On the other hand, although the effectiveness of the bureaucratic school structure was found to be at a moderate level, it can be stated that increasing this level to higher levels is important to increase the effective functioning of the bureaucratic school structure.

It can be said that some of the qualitative research results provide some results related to the reason for the moderate-level effective functioning of the bureaucratic structures of schools. In this context, some participants stated that they considered school administrators as authoritarian, legislative and centralist while some of them stated that the bureaucratic school structure further emphasizes the rules and decreases entrepreneurship. Therefore, it was observed that there were those who perceived the bureaucratic school structure negatively. Balıkçı (2016) determined in his study that the bureaucratic practices in school decreased the time allocated by administrators to education and teaching, could be coercive and directed administrators to more normative behaviors. The fact that administrators give place to discipline excessively (Hoy & Miskel, 2010) and unnecessarily focus on procedures and rules (Sinden, Hoy, & Sweetland, 2004), and their studies based on continuous control decrease the functionality and effectiveness of the bureaucratic school structure (Karaman, Yücel, & Dönder, 2008). Therefore, it can be said that the application forms of administrative rules and the interpretation forms of rules by school administrators are important for the fact that the bureaucratic school structure is perceived as effective. Then, the approach that decreases the individuality of teachers, is close to innovation, does not use the authority as supportive and uses the rules directly can be said to be a major obstacle to the effective functioning of the bureaucratic school structure. In this context, it may be suggested that the administrator-teacher cooperation could be increased to increase the effectiveness level that is perceived at the moderate level in schools to higher levels, administrators should provide an appropriate working environment for teachers and treat them as professionals.

In the study, it is observed that the schools’ level of having a culture that will develop teacher leadership is above the moderate level. It is observed that the teacher leadership culture was concentrated in the dimension of school administrator’s support. Some of the qualitative results of the study show that the administrator’s support in the school contributes to a culture in which teacher leadership can develop. Some teachers stated that school administrators were trying to create team spirit, kept communication channels open all the time and cared about them. Furthermore, they also stated that problems were considered as an opportunity to learn and innovation was encouraged. In this context, it can be remarked that the behaviors of school administrators are effective in the formation of teacher leadership culture. School administrators contribute to the development of teacher leadership by sharing their
experiences with teachers, giving feedback to teachers (Buckner & McDowelle, 2000), sharing the authorities and responsibilities, encouraging different studies in the school and rewarding the achievements (Barth, 2000). The fact that school administrators in schools share leadership (Brosky, 2009) and their behaviors for teachers to gain trust are important in the development of teacher leadership (Gehrke, 1991). Another result in the present study shows that occupational cooperation and supportive working conditions that support the development of teacher leadership are at sufficient levels in schools. To encourage teachers in a way that they perform activities around common goals in schools (Harris & Muijs, 2005) and to create environments for teachers to learn together (Gehrke, 1991; Fullan & Hargreaves, 1996) are important in the development of teacher leadership. Based on these statements, it can be said that there is a working environment that is based on trust, is sincere and dominated by mutual understanding in schools, that school administrators attempt to encourage the development of student learning, and that there is an environment based on cooperation and assistance.

In the study, it was determined that the effective functioning of the bureaucratic school structure and the dimensions of school administrator’s support, supportive working environment and occupational cooperation gave positive and significant relationships. It is also observed that the effective bureaucratic school structure significantly and positively predicted a school environment in which teacher leadership can develop. It was observed that the predictive power of the bureaucratic school structure was in the dimension of school administrator’s support, and it was followed by the dimensions of supportive working environment and occupational cooperation. Some of the qualitative results of the study support these results. In this context, in the qualitative section of the study, some teachers stated that administrators supported them, attached importance to make sharing in different subjects and dealt with the problems of students and teachers. Furthermore, they stated that flexibility could be provided in applying the administrative rules in schools, administrators occasionally offered counselling to teachers on different issues and exhibited constructive behaviors. Thus, it can be said that the fact that the administrative rules enable the works of teachers, a communication environment based on trust, experience sharing by administrators and supporting innovations will make positive contributions to teacher leadership. In other words, it is observed that teacher leadership can develop depending on the effective functioning of formalization and centralization in schools.

In the literature, there are findings that the bureaucratic structure, depending on its implementation and interpretation, strengthens the organizational culture (Zeytin, 2008; Önal, 2012), organizational health (Karaman & Akıl, 2005), assistance among teachers (Dönder, 2006), harmony among teachers and with administrators (Ermeç, 2007), collective working and cooperation, common vision (Kalkan, 2016)
and teacher’s professional behaviors (Cerit, 2012; Geist, 2002; Tschannen-Moran, 2009). The fact that the bureaucratic school structure constitutes a positive or negative situation is related to the functioning of this structure in formalization and in the centralist approach. In other words, the bureaucratic school structure can be coercive or enabling depending on the forms of applying the rules and regulations, the approaches to problems in schools, and the behaviors and attitudes in decision-making processes (Hoy & Sweetland, 2001). The fact that the bureaucratic school structure is flexible and enabling values teachers’ expertise and enables them to implement occupational decisions more easily (Tschannen-Moran, 2009). In an effective bureaucratic-functioning school, teachers feel strong and cooperate with their colleagues (Sweetland, 2001). Therefore, it can be interpreted that the facts that teachers are open to innovations in a school, the use of authority to support and encourage teachers on different issues, and the use of hierarchy to enable performing an action will contribute to a culture in which teacher leadership is supported.

The results of the study show that the teacher leadership culture is strengthened along with the enabling, supportive and encouraging characteristics of the bureaucratic school structure. In other words, it can be stated that a teacher leadership culture in which employees in the school can work in a team mentality will arise when the hierarchy culture in the school is replaced by a cooperative and supportive understanding and the adhocracy culture is dominant in the school. Such a culture can provide collective acting in the school by keeping the motivations of teachers and administrators at higher levels to improve the quality of education and training. On the contrary, relationships acquire an official dimension as the compliance with the rules in school increases and the issue of trust arises (Karaman, Yücel, & Dönder, 2008). Such problems may lead to the formation of a coercive environment in the school by damaging the feeling of working collectively of teachers and administrators. On the other hand, variables such as cognitive skills, job performance, the complexity of task and success, determination and talent, job satisfaction and personal attitude, productivity, internal motivation, psychological health, trust, and self-valuing are important on the people’s performances (Dzubay, 2001).

Based on these statements, practitioners should not think of only applying the rules and regulations of the bureaucratic structure in schools as they are. Instead, they should take steps to make the bureaucratic school structure more functional. It is necessary to make an attempt to provide teachers with working conditions in which they can try innovations and take initiatives. At the same time, they should provide support at the occupational, administrative and institutional levels and should encourage teachers to cooperate by exhibiting constructive behaviors. In other words, an enabling, effective and supportive school culture should be established by providing some flexibility in the functioning of the bureaucratic school structure. Thus, the bureaucratic structure in
schools can ensure that teachers take responsibility for teaching and student learning at a higher level through a more effective functioning. Policymakers should take decisions that are aimed at providing the bureaucratic structure in schools with a more effective functioning. In this context, it may be suggested that school administrators make structural changes that will highlight teacher development and student learning instead of making them engaged in the formal pattern of education and daily routines. As a result of the present study, it has been observed that there is a limited number of studies on the bureaucratic school structure and its outcomes in the national literature. Therefore, it is possible to continue to test the relationships between the bureaucratic structure and different variables with different organizational and individual variables within the context of cause and effect relation. Furthermore, since it has been observed that the studies on a school culture in which teacher leadership is supported are not sufficient, which school structures support teacher leadership can be investigated by qualitative and mixed methods. The fact that the study is carried out together with teachers, students and school administrators may provide clearer results regarding the effective functioning and outcomes of the bureaucratic school structure.

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