The Relationship Between Bureaucratic School Structures and Teacher Self-Efficacy
Relations entre les structures administratives d’une école et le sentiment d’efficacité de l’enseignement

Ali Çağatay Kilinç, Serkan Koşar, Emre Er et Zeki Öğdem

Résumé de l'article
Le but de ce projet de recherche était d'examiner les relations existant entre les structures administratives d'un établissement scolaire et le sentiment d'efficacité des enseignants. 252 enseignants œuvrant au sein de 15 écoles primaires situées à Ankara (en Turquie) ont participé à cette étude. Pour les fins de cette enquête, les auteurs ont effectué des analyses de la moyenne et de l'écart-type. Ils ont aussi analysé la corrélation et la régression entre les deux facteurs étudiés. Les résultats ont démontré que les structures administratives en place dans une institution scolaire et le sentiment d'efficacité d'un enseignant sont positivement corrélés et que la structure bureaucratique prévalant dans une école est un indicateur significatif du sentiment d'efficacité d'un enseignant. Cet article présente les résultats de cette étude en mettant l'emphasis sur l'amélioration du sentiment d'efficacité de l'enseignant.
THE RELATIONSHIP BETWEEN BUREAUCRATIC SCHOOL STRUCTURES AND TEACHER SELF-EFFICACY

ALI ÇAĞATAY KILINÇ Karabuk University

 SERKAN KOŞAR & EMRE ER Gazi University

 ZEKI ÖĞDEM Ahi Evran University

ABSTRACT. The purpose of this study was to examine the relationship between bureaucratic school structures and teachers’ self-efficacy. Participants included 252 teachers from 15 primary schools in Ankara, Turkey. Mean, standard deviation, correlation, and regression analyses were conducted. Results indicated that bureaucratic school structures and teacher self-efficacy were positively and significantly correlated and a bureaucratic school structure was a significant indicator of teacher self-efficacy. The results of the study are discussed with a focus on improving teacher self-efficacy.

RECENTLY, there has been a significant increase in educational science studies focusing on teacher self-efficacy. These studies have focused on the importance of perceptions of teachers’ self-efficacy at schools (Bitto & Butler, 2010; Dembo & Gibson, 1985; Leithwood, 2006; Schwartz, 2010; Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk-Hoy, 2001; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998; Usher & Pajares, 2008). One of the fundamental reasons for this
expanding interest has been the critical role of teachers’ self-efficacy for improvements in learning and teaching environments (Leithwood, 2006; Tschannen-Moran & Woolfolk-Hoy, 2007; Woolfolk-Hoy, 2000; Woolfolk-Hoy & Davis, 2006). Teachers’ self-efficacy, which is defined as the teacher’s perceptions of their skills to improve student learning (Woolfolk-Hoy & Spero, 2005), is an important influential factor for teaching quality (Hoy & Miskel, 2004/2010). According to Goddard, Hoy, and Woolfolk-Hoy (2004), teachers’ preferences regarding classroom practices are affected by their self-efficacy perceptions. In addition, teacher self-efficacy perceptions are closely associated with the efforts they undertake for improving their teaching and the challenging goals they set within the context of student learning (Tschannen-Moran et al., 1998). In this regard, the relationships between teacher self-efficacy and different organizational and individual factors need to be investigated so that they can be better understood and the reflections on practice can be effectively analyzed.

A review of related literature revealed that there were national and international studies focusing on the relationship between the self-efficacy of teachers and organizational health (Hoy & Woolfolk, 1993), school climate (Weisel & Dror, 2006), instructional leadership (Çalık, Sezgin, Kavgacı, & Kılınç, 2012), transformational leadership (Kurt, 2009), resistance to change (Çalık, Koşar, Kılınç, & Er, 2013), burnout (Evers, Brouwers, & Tomic, 2002; Skaalvik & Skaalvik, 2007), job satisfaction (Gençtürk & Memiş, 2010), organizational citizenship (Yücel, Yalçın, & Ay, 2009), attitude towards the profession (Demirtaş, Cömert, & Özer, 2011), commitment to teaching (Coladarci, 1992), student achievement (Allinder, 1995; Anderson, Greene, & Loewen, 1988; Caprara, Barnabelli, Steca, & Malone, 2006; Domsch, 2009), job stress and burnout (Betoret, 2009), collective teacher efficacy (Goddard & Goddard, 2001; Rhoads, 2009), and demographic characteristics (Akbaş & Çelikkaleli, 2006; Ekici, 2006; Özdemir, 2008; Üstüner, Demirtaş, Cömert, & Özer, 2009; Senemoğlu, Demirel, Yaşıcı, & Üstündoğ, 2009; Yılmaz & Çokluk-Bökeoğlu, 2008). However, research on teacher self-efficacy has generally associated self-efficacy with personal characteristics, but there have been only a limited number of studies that have investigated the relationship between the concept and the organizational characteristics (Newmann, Rutter, & Smith, 1989; Tschannen-Moran & Woolfolk-Hoy, 2007). According to Tschannen-Moran and Woolfolk-Hoy (2007), findings dealing with relationships between teacher self-efficacy and organizational and personal factors are important for making inferences about the potential of teacher performance. In this respect, it was considered that the present study, which investigates the relationships between teacher self-efficacy and bureaucratic school structures, could yield significant findings for teacher self-efficacy improvements.
The Relationship Between Bureaucratic School Structures and Teacher Self-Efficacy

Bureaucratic school structure

Educational administration researchers tend to consider schools as bureaucratic institutions. Organizational structure, rules, and regulations define school life for teachers, students, and administrators. Accordingly, schools are characterized by the rules controlling and directing student and teacher behavior, as well as the standard procedures shaping organizational behavior (McGuigan, 2005; McGuigan & Hoy, 2006). Bureaucratic school structures have both positive and negative aspects (Hoy & Sweetland, 2001). However, this construct is not static and can be examined from different aspects. In a bureaucratic school structure, the authority is generally concentrated at the top management, and information usually flows from top to down, encouraging a school culture focused on control and command, where operational processes are rigidly controlled and closely supervised.

Both positive and significant relationships have been found between bureaucratic school structures and organizational citizenship (Messick, 2012), teacher professionalism (Cerit, 2013), academic optimism (Anderson, 2012; McGuigan, 2005; McGuigan & Hoy, 2006; Messick, 2012), and teachers’ academic optimism (Beard, 2008; Beard, Hoy, & Woolfolk-Hoy, 2010). Research has also found, however, that teachers were unable to adequately collaborate with colleagues, had low collective efficacy and self-efficacy levels, and it was difficult for a common learning and teaching culture to emerge in schools with bureaucratic structures (Hoy & Sweetland, 2001). Hoy and Miskel (2004/2010) stated that teachers may experience a sense of powerlessness and role conflict in bureaucratic school structures. Sinden, Hoy, and Sweetland (2004) pointed out that there was a negative perception regarding innovative employee behavior and that organizational members had low motivation levels in bureaucratic organizations where employees are expected to abide by rules without questioning them. Adler and Borys (1996) further argued that bureaucracy ignored the individual autonomy of organizational members.

A considerable number of the studies have addressed bureaucratic school structures (Adams, 1999; Anderson, 2012; Beard et al., 2010; Cerit, 2013; Lennon, 2010; Mayerson, 2010; McGuigan, 2005; McGuigan & Hoy, 2006; Messick, 2012; Sinden et al., 2004; Watts, 2009) by employing Hoy and Sweetland’s (2000, 2001) classification of bureaucratic organizational structures. With this in mind, the present study also employed Hoy and Sweetland’s (2001) classification concerning bureaucratic organizational structures (formalization and centralization).

Formalization

Formalization refers to the management of an organization through written rules, regulations, and procedures (Hoy & Miskel, 2004/2010). Hoy and Sweetland (2001) divided formalization into two aspects: coercive and enabling. The
The coercive nature of bureaucratic school structures is associated with bureaucratic rules, procedures, and regulations which restrict employee autonomy by forcing them to display compliance behaviors, and punishing those who do not comply (Adler & Borys, 1996). Hoy (2003) stated that the dominance of coercive rules and procedures in bureaucratic organizations could have a negative impact on collaboration, motivation, communication, and organizational trust. Therefore, it is safe to argue that organizational rules in coercive formalization reinforce employee compliance behavior, punish those who do not abide by the rules, and closely control employee behavior (Hoy & Sweetland, 2001). Kimbrough and Todd (1967) criticized bureaucratic structures in schools and stated nine claims as to why schools should not be bureaucratic organizations:

(a) The inability to legitimize differences in ideas among the personnel depresses creativity;

(b) New ideas generated from within would possibly be subject to scrutiny by the official hierarchy, especially if those ideas were in conflict with perceived rational teaching behavior;

(c) Bureaucracy does not adequately allow for personal growth and the development of mature healthy personalities;

(d) Bureaucratic organizations do not have adequate structures or processes for the review of decisions;

(e) Bureaucratic organizations are unable to accommodate the diversity of external inputs needed for democratic school systems;

(f) The extrinsic reward system stimulates conformity rather than innovation;

(g) Prior organizational resource commitments to subunits within the organization make it difficult to develop innovative solutions to new problems;

(h) Bureaucracy does not take the informal organization into account; and

(i) lines of communication are often closed because of hierarchical divisions. (pp. 221-222)

Enabling formalization refers to the construction of rules, regulations, and procedures in such a way that enable employees to solve the problems they encounter, to take initiative in organizational processes, and to continue professional improvement (Adler & Borys, 1996). According to Hoy and Miskel (2004/2010), in enabling formalization, the bureaucratic rules are more flexible and the employee needs are taken into consideration. Hoy and Sweetland (2001) also argued that enabling formalization assists in encouraging employee collaboration in organizational processes and creates a working environment based on mutual trust and respect.
Centralization

Centralization in bureaucratic organizations refers to how organizational decisions are made and to what degree employees have a say in decision-making processes. While only senior executives participate in decision-making processes in organizations with intense centralization, in less centralized organizations, organizational decisions are more participatory and the responsibility for such decisions is shared (Hoy & Sweetland, 2001). In bureaucratic organizations, the main emphasis is on sustaining the unity of command. Authority is concentrated at the top level of the hierarchy, and descends within a chain of command (Hoy, 2003). There are two types of centralization in bureaucratic organizations: hindering and enabling.

Hindering centralization refers to an organizational structure where innovative employee behavior is hindered, administrators control the employee behavior to ensure discipline, uncertainty and difference are not accepted, and compliance behaviors are in the foreground (Hoy & Sweetland, 2001). Hoy and Miskel (2004/2010) stated that hindering organizational structures prevent employees from problem solving and effective performance. Enabling centralization, on the other hand, is characterized by an organizational administration which provides employees with the autonomy they need, an organizational management which assists employees solve problems and conflicts, and employees who participate in decision-making processes and effectively collaborate and cooperate with their colleagues (Hoy, 2003; Hoy & Sweetland, 2001; Sinden et al., 2004).

Since schools are bureaucratic organizations, rules, regulations, procedures, and a hierarchical structure are the main elements of a school structure (Hoy & Sweetland, 2001). Thus, it is likely that the hindering or enabling nature of a school structure has a potential impact on the general functioning of a school and on organizational behavior. It has been reported that in hindering school structures, if teacher behavior is intensely controlled, teachers are not encouraged to take responsibility for improvements in the learning and teaching process, and are only expected to strictly comply with the bureaucratic rules (Hoy, 2003). Hindering school structures also have a negative impact on the processes of change, innovation, collaboration, and communication, thereby negatively affecting school improvement (Hoy & Sweetland, 2001). On the other hand, teachers in enabling school structures collaborate to improve the school teaching quality, resulting in better student achievement, and more effective teaching practice design (Hoy, 2003). In addition, principals in such schools make things easier for teachers, support their professional improvement, and include teachers in decision-making processes (Anderson, 2012).

Teacher self-efficacy

Self-efficacy is defined as “the belief of a person in their capability to fulfill the tasks and responsibilities which they are expected to do” (Bandura, 1977, p. 1982). The related literature gives a wide coverage to the concept of teacher
self-efficacy as teachers have many different responsibilities, and the expectations and beliefs of teachers regarding themselves and their students are considered important. Teacher self-efficacy is an important construct as it has a significant impact on student learning capacity, increases the students’ expectations of their teachers, and has a leading role in improving the academic achievement of school as a whole (Bandura, 1995).

By first examining the social self-efficacy levels of individuals, Bandura (1995) attempted to extend the concept to teachers. The review of related literature indicated that early studies on teacher self-efficacy conducted by the RAND Corporation (see Armor et al., 1976) were influential in the emergence of the concept. A scale was developed and administered by researchers to teachers in a study on teacher reading skills, which included the statements: a) “I believe that teachers have a limited role in the motivation and performance of students, because both of them generally depend on extra-scholastic factors,” and b) “I can bring even the most reluctant and poor-performing student to achievement if I work enough” (Armor et al., 1976). The above-mentioned two items (5-point Likert-type) were significant because they were the first measurement tools aimed at measuring teacher self-efficacy, and because they described the teachers’ assumptions about themselves and their students. Approaches and scales for self-efficacy across different dimensions were developed as teacher self-efficacy was considered a very complex issue, needed to be addressed in a multifaceted manner, and measurement tool reliability needed to be increased (Guskey & Passaro, 1993).

Teacher self-efficacy is the belief of teachers in their capability to make a positive contribution to student performance (Hoa & Hau, 2004). Stating that self-efficacy was an important determinant of teacher behavior, Gibbs (2003) laid emphasis on the behavioral, cognitive, affective, and cultural aspects of teacher self-efficacy. He emphasized that, besides teacher experience and knowledge, culture played an influential and determining role in the teacher self-efficacy perceptions. A conceptual study which addressed teacher self-efficacy perceptions in different cultural contexts based on the Hofstede’s cultural classification (Oettingen, 1995) highlighted the value society attached to teachers, and stated that self-efficacy, independent of culture, made positive contributions to teacher performance.

Ashton, Buhr, and Crocker (1984) took personal characteristics and group norms as the source of teacher self-efficacy, and revealed that there was a high-level relationship between teacher self-efficacy levels and the norms that emerged through teacher-to-teacher interactions at the same school. In other words, teachers had a tendency to set their self-efficacy perceptions based on the performance of other teachers. Therefore, it is possible to argue that organizational factors as well as individual variables need to be focused on when examining teacher self-efficacy beliefs.
Bandura (1997) reported that individuals with a high level of self-efficacy coped well with difficulties, set hard-to-reach goals for themselves, and put great energy into reaching these goals. In this regard, it is more likely that teachers have high self-efficacy levels in enabling school structures where organizational rules and regulations encourage teachers to take individual responsibility and make problem-solving easier (Sinden et al., 2004). Hoy and Sweetland (2001) stated that in schools with an enabling bureaucratic structure, teachers have higher self-efficacy levels as they are regarded as professionals and are given the autonomy to fulfill their tasks effectively. According to Messick (2012), teacher self-efficacy could increase in structures which encourage the establishment of trust-based relationships among school members and support professional improvement. In a study on a higher education institution, Okpogba (2011) determined that “there was a positive and moderate relationship between an instructor’s perception of the degree to which the college’s rules and power structure enable teaching, and his or her beliefs about personal ability to succeed in the classroom” (pp. 72-73). Similarly, Watts (2009) found that there was a positive relationship between enabling bureaucratic school structures and teacher self-efficacy.

Teachers with a higher self-efficacy may have more positive perceptions regarding the use of their knowledge, skills, and specialties to increase student achievement. In other words, teachers who take responsibility for their students’ success and believe the reasons for failure are related to problems in their own teaching-learning activities have a high level of self-efficacy. Yet schools are inherently bureaucratic structures (Hoy & Sweetland, 2001). Therefore, to improve teacher self-efficacy levels, there is a need to make inferences on the relationship between teacher self-efficacy and bureaucratic school structures. Findings obtained from the present study, which investigated the relationship between teacher perceptions about the enabling nature of the bureaucratic school structure and their self-efficacy level, provide an important data source for education decision-makers or policy-makers. In addition, the findings of the present study were considered significant in enabling bureaucratic school structures to develop teacher beliefs in their ability to use their knowledge and skills to positively impact student learning. Therefore, this study focused on answering the following questions:

1. What are the perceptions of primary school teachers concerning bureaucratic school structures and self-efficacy levels?
2. Are there any significant relationships between the perceptions of primary school teachers concerning bureaucratic school structures and their self-efficacy levels?
3. Are the perceptions of primary school teachers concerning bureaucratic school structures a significant predictor of their self-efficacy levels?
METHOD

Model

This study investigated the relationship between the primary school teachers’ perceptions of the bureaucratic school structure and their self-efficacy levels by employing a correlational research model. The dependent variable was self-efficacy, the dimensions of which were student participation self-efficacy, teaching strategy self-efficacy, and classroom management self-efficacy. The independent variable was the bureaucratic school structure.

Sample

This study was conducted in primary schools located in the city center of Ankara, Turkey in the 2013-2014 academic year. 252 teachers (employed in 15 primary schools), who were chosen through a simple random sampling method, participated in the study. Of these, 113 (44.8%) were male and 139 (55.2%) were female; 48 (19.1%) were below the age of 30, 62 (24.6%) were in the 30 to 35 age group, 59 (23.4%) were in the 35 to 40 age group, and 83 (32.9%) were 40 years old or over; and 108 (42.9%) had 1 to 5 years of experience (seniority), 81 (32.1%) had a seniority of 6 to 10 years, and 63 (25%) had a seniority of 11 and more years.

Measures

A three-part questionnaire was used to collect the data. The first part elicited personal data regarding the participants’ demographic characteristics, such as gender, age, years in current school, and years of experience. The second part used the Enabling School Structure Scale (Hoy & Sweetland, 2001) to determine the primary school teachers’ perceptions of the enabling nature of the bureaucratic school structure. The third part used the Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) to measure teachers’ perceptions of their self-efficacy.

Enabling School Structure (ESS) Scale. Having a Likert-type rating (Never = 1, Occasionally = 2, Sometimes = 3, Often = 4, and Always = 5) and composed of 12 items, this scale was originally developed by Hoy and Sweetland (2001), and adapted into Turkish by Buluç (2009). Six of the scale items were reverse coded. Buluç (2009) concluded that the scale items gathered under a single dimension and the 12 items collectively explained 43.27% of the total variance. In addition, the internal consistency coefficient of the scale was estimated to be .88. In the present study, a factor analysis was conducted to determine the scale’s construct validity. The Kaiser-Meyer-Olkin (KMO) and Barlett’s Test of Sphericity were conducted to evaluate the appropriateness of the factor analysis. The KMO value was .90, and Barlett’s Test of Sphericity was determined to be significant, which indicates that data of the study were appropriate for exploratory factor analysis (Field, 2009).
Results of the principal components analysis with a varimax rotation revealed that the scale had a one-dimensional structure, denoting that all the items in the scale loaded under a single component, which supported Buluç’s (2009) results. The total variance explained by one dimension was 39.49%. Factor loading of the items ranged from 0.35 to 0.67. The internal consistency coefficient was 0.72, which indicated that the reliability of the scale was high.

**Measuring enabling school structure**

Hoy and Sweetland (2000, 2001) developed a formula to determine the enabling nature of school bureaucratic structures, and revealed standard scores to enable an interpretation of the scores obtained from the formula:

\[
\text{Standard Score for Enabling School Structure} = \left[ 100 \times \left( \frac{\text{ESS} - 3.74}{0.381} \right) \right] + 500
\]

If a school’s score is:

- 200, its bureaucratic structure is more hindering than 99% of the schools in the sample.
- 300, the bureaucratic structure is hindering by 97%.
- 400, the bureaucratic structure is hindering by 84%.
- 500, the bureaucratic structure is average.
- 600, the bureaucratic structure is more enabling than 84% of the schools in the sample.
- 700, the bureaucratic structure is enabling by 97%.
- 800, the bureaucratic structure is enabling by 99% (Hoy & Sweetland, 2015, Computing a Standardized Score Using the ESS FORM for Purposes of Comparison section, para. 7).

In accordance with the above-mentioned formula, the present study found the following standard score concerning the bureaucratic structures of the primary schools:

\[
\text{Standard Score} = \left[ 100 \times \left( 3.89 - 3.74 \right) \right] / 0.381 + 500
\]

**Teachers’ Sense of Efficacy Scale.** This scale was developed by Tschannen-Moran and Hoy (2001) and adapted into Turkish by Çapa, Çakiroğlu, and Sarıkaya (2005). The scale has a three-dimensional structure: student participation self-efficacy, teaching strategies self-efficacy, and classroom management self-efficacy. The scale consists of 24 items (eight items in each dimension) answered on a rating scale from 1 (inadequate) to 9 (adequate). Data were collected from a sample of 628 students attending the education faculties at six universities in Turkey. The collected data were subjected to confirmatory factor analysis, the results of which showed that the TLI and CFI values were above .95, while the RMSEA value was .065, indicating that the model was fit. Internal
consistency coefficients concerning the sub-dimensions of the scale were as follows: .82 for student participation self-efficacy, .86 for teaching strategies self-efficacy, and .84 for classroom management self-efficacy (Çapa et al., 2005). The internal consistency coefficients for the scale were: .91 for student participation self-efficacy, .94 for teaching strategies self-efficacy, and .94 for classroom management self-efficacy.

Data analysis

The research data were analyzed using SPSS 15.0. First, the dataset was examined for missing or incorrect data and an Expectation-Maximization algorithm was conducted to deal with the missing data. Then, the study sub-problems were analyzed. At this analysis stage, the arithmetic mean values for the scale items included in each sub-dimension were calculated. The related analyses were conducted based on these factor values.

Arithmetic mean and standard deviation values were calculated to determine the primary school teachers’ perceptions concerning the bureaucratic school structure and self-efficacy levels. Pearson’s product-moment correlation coefficient (r) was applied to determine the relationship between the teachers’ perceptions of the bureaucratic school structure and their self-efficacy levels, and multiple linear regression analyses were conducted to predict the teachers’ self-efficacy levels in the bureaucratic school structure. A standardized Beta (β) coefficient and t-test results were used in the regression analysis interpretation.

FINDINGS

As can be seen from Table 1, the primary school teachers’ perceptions regarding the bureaucratic school structure were above average (M = 3.89; Standardized School Score = 539.37). However, the primary school teachers’ perceptions regarding their self-efficacy beliefs were at a high level for student participation (M = 6.68), teaching strategies (M = 7.14), and classroom management (M = 7.07). Further, there were positive and significant relationships between the bureaucratic school structure and the self-efficacy dimensions of student participation (r = .41, p < .01), teaching strategies (r = .28, p < .01), and classroom management (r = .27, p < .01).

TABLE 1. Arithmetic mean and standard deviation values, and relationships between variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bureaucratic school structure</td>
<td>3.89</td>
<td>0.42</td>
<td>-.41 *</td>
<td>.28 **</td>
<td>.27 **</td>
<td></td>
</tr>
<tr>
<td>2. Student participation</td>
<td>6.68</td>
<td>1.13</td>
<td>-</td>
<td>.79 **</td>
<td>.78 **</td>
<td></td>
</tr>
<tr>
<td>3. Teaching strategies</td>
<td>7.14</td>
<td>0.98</td>
<td>-</td>
<td>.85 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Classroom management</td>
<td>7.07</td>
<td>1.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE. *p < .05, **p < .01
The regression analysis results in Table 2 show that the enabling bureaucratic school structure was a positive and significant predictor of the student participation dimension for teacher self-efficacy ($\beta = .42, p < .05$). The enabling bureaucratic school structure explained 17% of the total variance in the student participation dimension for teacher self-efficacy.

**TABLE 2. Regression analysis results regarding the prediction of the student participation dimension for teacher self-efficacy**

<table>
<thead>
<tr>
<th>Variables</th>
<th>$b$</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.10</td>
<td>0.36</td>
<td>11.24</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Bureaucratic school structure</td>
<td>0.66</td>
<td>0.09</td>
<td>.42</td>
<td>7.21</td>
<td>.00</td>
</tr>
</tbody>
</table>

**NOTE.** $R = .27$, $R^2 = .17$, $F(1, 250) = 51.98$, $p < .05$

As can be seen from Table 3, the enabling bureaucratic school structure was a positive and significant predictor of the teaching strategies dimension for teacher self-efficacy ($\beta = .29, p < .05$). A multiple $R$ of .28 explained 8% of the variance in the teaching strategy scores.

**TABLE 3. Regression analysis results regarding the prediction of the teaching strategies dimension for teacher self-efficacy**

<table>
<thead>
<tr>
<th>Variables</th>
<th>$b$</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.57</td>
<td>0.33</td>
<td>16.77</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Bureaucratic school structure</td>
<td>0.40</td>
<td>0.08</td>
<td>.29</td>
<td>4.77</td>
<td>.00</td>
</tr>
</tbody>
</table>

**NOTE.** $R = .28$, $R^2 = .08$, $F(1, 250) = 22.79$, $p < .05$

From the regression analysis results presented in Table 4, the enabling bureaucratic school structure predicted the classroom management dimension for teacher self-efficacy positively and significantly ($\beta = .27, p < .05$). The enabling bureaucratic school structure explained 7% of the total variance in the classroom management dimension for teacher self-efficacy.

**TABLE 4. Regression analysis results regarding the prediction of the classroom management dimension for teacher self-efficacy**

<table>
<thead>
<tr>
<th>Variables</th>
<th>$b$</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>5.48</td>
<td>0.36</td>
<td>15.13</td>
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</tr>
<tr>
<td>Bureaucratic school structure</td>
<td>0.41</td>
<td>0.09</td>
<td>.27</td>
<td>4.48</td>
<td>.00</td>
</tr>
</tbody>
</table>

**NOTE.** $R = .27$, $R^2 = .07$, $F(1, 250) = 20.10$, $p < .05$
DISCUSSION AND CONCLUSION

The present study investigated the relationship between primary school teachers’ perceptions of the bureaucratic school structure and their self-efficacy levels. Due to limited number of national and international studies focusing on the relationship between these constructs, it is difficult to discuss these findings by associating them with findings in previous studies. The Turkish National Education System is centralized — the Ministry of National Education (MoNE) is the only authority that can employ teachers and principals and meet the financial needs of the schools (Korkmaz, 2006).

This study confirmed that bureaucratic school structures are an important influential variable for teacher self-efficacy levels. The results revealed that primary school teachers participating in the study had average perceptions regarding the enabling bureaucratic school structure. This finding implies that although the bureaucratic structures at the schools were not hindering, they were not completely enabling. In enabling bureaucratic school structures, school rules, regulations, and procedures are designed in such a way that it is easier for teachers to solve problems and collaborate with one another as importance is attached to continuity in the professional improvement of the teachers responsible for designing, implementing, and evaluating effective classroom practices. In addition, an effort is made to create a school culture based on collaboration, effective communication, trust, and respect (Hoy & Miskel, 2004/2010; Hoy & Sweetland, 2000, 2001; McGuigan & Hoy, 2006). Therefore, it can be argued that research findings which indicate a middle-level enabling bureaucratic school structure also underscore that there are some negative situations at the school. A review of previous studies in the Turkish educational system context implied contradictory findings. For instance, while Büloğlu (2009) reported that schools had enabling bureaucratic structures, Cerit (2013) indicated that schools had hindering bureaucratic structures. Another study showed that primary school teacher perceptions regarding enabling school structures were below average (Özdemir & Kilinç, 2014). The relevant literature revealed contrasting findings about teacher perceptions of bureaucratic school structures. Therefore, further research will be fruitful to better understand teachers’ perceptions of the bureaucratic school structure in the Turkish educational context.

The present study indicated that teachers had high level of self-efficacy, which denoted that they had strong belief in their ability to teach effectively. The person with primary responsibility for student learning is the teacher, who is required to plan, implement, and evaluate their classroom teaching. Teachers’ trust in their knowledge and skills and belief in their ability to contribute to student learning (i.e., self-efficacy level) may affect the quality of classroom teaching and student achievement. Teachers who have higher self-efficacy tend to support change, attempt innovation, continuously improve classroom practices to improve student learning, and assist students with learning difficulties.
The Relationship Between Bureaucratic School Structures and Teacher Self-Efficacy

(Jerald, 2007). Furthermore, teachers with high self-efficacy have been observed to possess positive characteristics such as assuming responsibility for both successes and failures (Guskey, 1987), thus contributing to the creation of a school culture that supports learning and professional improvement (Balci, 2001), and adapting to change (Gorozidis & Papaioannou, 2011). Hoy and Woolfolk (1993) claimed that teacher self-efficacy perceptions are an important variable that needs to be considered when seeking to improve school performance and student learning. According to Tschannen-Moran and Woolfolk-Hoy (2001), teachers’ self-efficacy affects the efforts they undertake for improving their teaching, the standards they set for student learning, and their commitment to the profession. From this perspective, teachers need to be encouraged to believe that they can contribute to student learning, and that they can trust the knowledge and skills they have.

This study investigated the relationship between primary school teachers’ perceptions of an enabling bureaucratic school structure and their self-efficacy levels. The research results demonstrated that there were positive and significant relationships between bureaucratic school structures and the teacher self-efficacy levels. These findings were similar to those of Okpogba (2011), who conducted similar research in a higher education institution and observed a positive and moderate relationship between an enabling bureaucratic faculty structure and the self-efficacy levels of faculty members. This study also can draw parallels with the findings of Watts (2009), who demonstrated that there was a positive relationship between an enabling bureaucratic school structure and the self-efficacy levels of teachers. In enabling school structures, teaching is perceived as a professional job, and, therefore, teachers are expected to participate in decision-making processes and to contribute to school improvement using their knowledge and skills (Hoy & Sweetland, 2001). In addition, teachers who work in enabling school structures are given the autonomy they need, are supported in problem-solving processes, and are encouraged to take individual responsibility (Sinden et al., 2004). Therefore, teachers who can make use of their specialization in their plans and designs for classroom processes, participate in decision-making processes in school, and act professionally are likely to have high self-efficacy. Teachers with high self-efficacy strongly believe they are able to contribute significantly to student learning (Hoa & Hau, 2004).

The present study indicated that an enabling bureaucratic school structure was a significant predictor of the self-efficacy level of the teachers. The results demonstrated that the bureaucratic school structure was a positive and significant indicator of student participation, teaching strategies, and classroom management dimensions for teacher self-efficacy. This finding suggests that an enabling school structure allows teachers to make a greater contribution to student learning by motivating student learning, planning the teaching process in such a way that meets the learning needs of students in the most effective way, and by creating a healthy learning environment in the classroom. These
findings are consistent with research that has found that teachers in enabling bureaucratic school structures display more organizational citizenship behavior (Messick, 2012), exhibit more professional behavior, and have greater academic optimism (Beard, 2008; Beard et al., 2010). Hoy (2003) reported that in enabling bureaucratic school structures, school rules and procedures are constructed in a manner that supports collaboration and communication between teachers. Therefore, it is likely that teachers who collaborate efficiently develop more effective teaching strategies and practices and have a greater belief in their contribution to student learning. In addition, these research findings may be associated with the professionalism and autonomy-focused management mentality that is prevalent in enabling bureaucratic school structures. Teachers are perceived as professionals and are provided with the autonomy they need to fulfill their work (Hoy & Miskel, 2004/2010). In other words, teachers who have the primary responsibility for improving classroom teaching process can reflect on their knowledge and skills in the planning, implementation, and evaluation stages of the related process and produce solutions for the problems they encounter through communication and collaboration networks established with other colleagues. In this regard, an enabling school structure is an important variable for the improvement of teacher self-efficacy.

IMPLICATIONS

In light of our research results, it is recommended that more research be undertaken to examine the school structures associated with teacher self-efficacy. As teachers who have higher self-efficacy have been found to be more effective in the classroom, help students more in the learning process, and continuously improve themselves professionally, conducting more effective school-based activities and practices aimed at improving teacher self-efficacy may yield positive results. From the research results, it can be seen that the bureaucratic school structure is an important variable for predicting teacher self-efficacy. In this regard, it is important to develop school structures that enable teachers to have positive perceptions regarding their capability to contribute to student learning and to support the creation of a school culture based on trust and respect. Based on the findings of the present study, there is a positive and significant relationship between enabling bureaucratic school structures and teacher self-efficacy, so school structures based on individual responsibility, participation in decision-making processes, value, and trust may improve teacher self-efficacy levels.

The current study was a cross-sectional survey. Therefore, a longitudinal examination of school structures and teacher self-efficacy using other research methods such as interviews and observation would lead to a better understanding of these constructs in the school context. This study also used standard multiple regression analysis to predict teacher self-efficacy based on perceptions of bureaucratic school structures. Further studies are needed to investigate the ways in which bureaucratic school structures might influence teacher self-efficacy.
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REFERENCES


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ALİ ÇAĞATAY KİLİNC received his Bachelor Degree from Gazi University (Faculty of Education, Department of English Language Teaching). He earned his MA in 2010 and PhD in 2013 from Gazi University’s Institute of Educational Sciences. He worked as an English teacher in Tosya Namık Kemal Primary School (2006-2011) and as a research assistant in Gazi University’s Department of Educational Sciences (2011-2013). He is currently employed as a faculty member in Karabuk University (Faculty of Letters, Department of Educational Sciences). His research interests include educational leadership, teacher professionalism, teacher motivation, organizational climate and culture, organizational commitment, and school capacity. cagataykilinc@karabuk.edu.tr

SERKAN KOŞAR received his Bachelor Degree from Gazi University (Faculty of Education, Department of Classroom Teaching). He earned his MA in 2008 and PhD in 2012 from Gazi University’s Institute of Educational Sciences. He worked as a primary school teacher in Saraykent Benli Primary School (2005-2006). He is currently employed as a research assistant in Gazi University (Faculty of Education Department of Educational Sciences). His research interests include power styles, organizational culture, organizational commitment, influences, and political tactics. skosar@gazi.edu.tr

EMRE ER received his Bachelor Degree from Gazi University (Faculty of Education, Department of Chemistry Teaching) in 2010. He earned his MA in 2013 and is a PhD candidate since 2013 in Gazi University’s Institute of Educational Sciences. He is currently employed as a research assistant in Gazi University (Faculty of Education Department of Educational Sciences). His research interests include organizational change, social network theory, school development, and school change capacity. emreer@gazi.edu.tr

ZEĶI ÖĞDEM received his Bachelor Degree from Burdur MAKU University (Faculty of Education, Department of Science Teaching). He earned his MA in 2007 from Suleyman Demirel University and PhD in 2015 from Gazi University’s Institute of Educational Sciences. He is currently employed as a research assistant in Gazi University (Faculty of Education Department of Educational Science). His research interests include educational leadership, professional learning communities, and organizational learning. zekiogdem15@hotmail.com
ALİ ÇAĞATAY KİLİNC détient un baccalauréat de la Gazi University (Faculté de l’éducation, département de l’enseignement de l’anglais). Il a obtenu son diplôme de maîtrise en 2010 et son doctorat en 2013 à l’Institut des sciences de l’éducation de la Gazi University. De 2006 à 2011, il a travaillé comme enseignant de l’anglais à l’école primaire Tosya Namik Kemal, puis a été assistant de recherche au département des sciences de l’éducation de la Gazi University de 2011 à 2013. Kilinc est actuellement à l’emploi de la Karabuk University, en tant que membre du corps professoral de la faculté des lettres (département des sciences de l’éducation). Comme chercheur, il s’intéresse particulièrement au leadership en éducation, au professionnalisme enseignant, à la motivation des enseignants, au climat et à la culture organisationnels, à l’engagement organisationnel et à la capacité des établissements scolaires. cagataykilinc@karabuk.edu.tr

SERKAN KOŞAR a obtenu son baccalauréat à la Gazi University (Faculté de l’éducation, département de l’enseignement en classes). Il a complété sa maîtrise en 2008 et son doctorat en 2012 à l’Institut des sciences de l’éducation de la Gazi University. Enseignant au primaire à l’École élémentaire Saraykent Benli en 2005-2006, il est présentement assistant de recherche au département des sciences de l’éducation de la Gazi University. Ses intérêts de recherche sont les styles de pouvoir, la culture et l’engagement organisationnels, ainsi que les tactiques politiques et d’influence. skosar@gazi.edu.tr

EMRE ER un diplômé de la Gazi University où il a complété son baccalauréat en 2010 (Faculté de l’éducation, département de l’enseignement de la chimie) et sa maîtrise en 2013. Il poursuit des études doctorales à l’Institut des sciences de l’éducation de la Gazi University depuis 2013. Il travaille aussi comme assistant de recherche au département des sciences de l’éducation de la Faculté de l’éducation de la Gazi University. En tant que chercheur, il s’intéresse au changement organisationnel, à la théorie des réseaux sociaux, au développement scolaire et à la capacité de changement des écoles. emreer@gazi.edu.tr

ZEKI ÖĞDEM a obtenu son diplôme de baccalauréat de la Burdur MAKU University (Faculté de l’éducation, département des sciences de l’éducation), sa maîtrise de la Suleyman Demirel University en 2007 et son doctorat de l’Institut des sciences de l’éducation de la Gazi University en 2015. Il est actuellement assistant de recherche au département des sciences de l’éducation de la Gazi University. Ses intérêts de recherche sont le leadership éducationnel, les communautés professionnelles d’apprentissage et l’apprentissage organisationnel. zekioğdem15@hotmail.com