

Secondary School Teachers' Effective School Perception: The Role of School Culture and Teacher Empowerment

Fatma Uslu Gülşenⁱ
Mersin University

Özge Çelikⁱⁱ
Ministry of National Education

Abstract

This study investigates the extent to which school culture and teacher empowerment dimensions predict the effective school perceptions of secondary school teachers. The sample of the study includes 363 teachers [120 male (33.1%), 243 (66.9 %) female] from 24 secondary schools in four central districts (Mezitli, Yenişehir, Toroslar, Akdeniz) in Mersin. The data of the study was collected via the Personal Information Form, School Culture Inventory, the School Effectiveness Index, and the School Participant Empowerment Scale. The data was analysed through stepwise regression analysis statistical method. The alpha value of 0.01 was established as a level of significance. The results revealed that professional development which is a dimension of school culture is the most important predictive variable, and it was followed by collegial support, collegial leadership, unity of purpose, self-efficacy, decision making and teacher collaboration. Together, these seven significant predictors explained 59.1% of the variance in the teacher perception of school effectiveness. Moreover, learning partnership dimension of school culture and status, impact, autonomy and professional growth dimensions of school participant empowerment were not statistically significant in explaining the school effectiveness. According to the results of this study, school culture has stronger relations with school effectiveness than the teacher empowerment has. This may mean that a school should have a culture that values professional development of its teachers, collegiality, collaborative leadership and teamwork in order to be effective.

Keywords: School Effectiveness, School Culture, School Participant Empowerment, Teacher Collaboration.

DOI: 10.29329/ijpe.2021.375.21

*This study was presented to the VIIth International Eurasian Educational Research Congress Online in Turkey, September, 10-13 2020.

ⁱ **Fatma Uslu Gülşen**, Lecturer Dr., Educational Administration, Mersin University, ORCID: 0000-0001-6847-9271

ⁱⁱ **Özge Çelik**, Elt, Ministry of National Education, ORCID: 0000-0002-4964-6967

Correspondence: celikozge1987@gmail.com

INTRODUCTION

Schools are organizations whose goals tend to change over time and the focus is on the administrator's goals rather than those set by clients or the public (Hoy & Ferguson 1985). Because schools have a huge responsibility for using the resources and materials right without wasting them, it can be said that they must have accountability. As a result of the increasing interest in schools, school effectiveness researches span several decades and disciplines. The term effective school has been a desire for researchers to demonstrate it matters for children, especially after the Equality of Educational Opportunity Report (EEOR) (Coleman et al., 1966). Although it dates back to the 1960s, effective school studies started in the early 2000s in Turkey. They are initially focused on examining the characteristics of effective schools from the stakeholders' perceptions and also determining to what degree schools have them (Çubukçu and Girmen, 2006; Gündüz, 2015; Kuşaksız, 2010; Yağız, 2016, Yaralı, 2002). There are also studies investigating the effective school perceptions of teachers and managers who work in private and public primary schools (Söğüt, 2003). Then the correlational studies follow them, which mainly concentrate on the correlation between the effective school perceptions of the stakeholders (students, teachers, parents, etc.) and various leadership styles of the school principals (Şahin Dinçsoy, 2011; Tuncel, 2013). The school culture and effective schools also take place in the correlational studies in the literature (Ayık and Ada; 2009; Cheng, 1993; Chrispeels, 1992; Olivier, 2001). On the other hand, teacher empowerment has been an isolated research area from those variables. Although there are some defining and modeling studies (Short, 1994; Wan, 2005; Zembylas & Papanastasiou; 2005) and following correlational studies with some school characteristics and organizational variables (Bogler & Somech, 2004; Short & Johnson, 1994; Short & Rinehart, 1992; Thornburg & Mungai, 2011), it can be said that teacher empowerment has not been a matter of effective school research combining with the school culture.

Klopf, Schelden & Brennan (1982), who make the most comprehensive definitions for effective school, describe it as a school that enables each student with particular intellect and ability to develop cognitive, psychomotor, affective, and social aspects. Similarly, Sammons & Bakkum (2011) define an effective school as the school where students' cognitive, psychomotor, and social development is supported and an appropriate learning environment is created. In addition to these definitions, according to Lee & Smith (1995) effective schools are the schools that maximize student learning no matter the students' ability level or background advantages and disadvantages. Despite all these definitions, some researchers pointed out that the difficulties and limitations of the definition of the term. Similarly, Harnes (2000) explains that school effectiveness is a difficult concept to define, and in its nature, it is difficult to measure. Sammons et al. (1995), by centralizing the teaching processes, define eleven key characteristics of the effective school as professional leadership, shared vision and goals, a learning environment, concentration on teaching and learning, purposeful teaching, high expectations, positive reinforcement, monitoring progress, pupil rights and responsibilities, home-school partnership, and a learning organization. Hence, thanks to the diversity of effectiveness definitions in organizational behavior, school effectiveness is not likely to have a universal meaning.

School culture is commonly defined as the normative adhesive that holds a school together (Barth, 2002; Hoy & Hoy, 2006; Schein, 2004; Sergiovanni, 2000). Gruenert and Valentine (1998) identifies six dimensions which are collaborative leadership, teacher collaboration, professional development, collegial support, unity of purpose, and learning partnership. By analyzing all these dimensions, a deep insight into the shared values/viewpoints, the patterns of activities, and the process of how they function and interact can be asserted (Barth, 2002). So their distinct roles can be seen in detail, at explaining effective school perceptions of the staff at a particular school. As one of the subdimensions of the school culture related to collaboration, collaborative leadership, refers to the extent to which teachers' ideas, suggestions, and contributions are accepted by school leaders, and how much school leaders trust, encourage, and consult teachers in decision-making (Gruenert, 2000). It requires teachers to work, plan, observe, and in cooperation to lead to academic excellence in the long term (Butucha, 2013; Gentzler, 2005; Gruenert, 2000). Professional development refers to the practice of developing one's professional expertise and capability through workshops, professional growth seminars, pieces of training, resource persons, professional publications, and other resources

(Gruenert, 2000). To create such a teamwork harmony between teachers, other subdimensions of the school culture collegial support, unity of purpose, and learning partnership follow them. Collegial support is defined as helping each other reflect on practice and learn ways to work more adequately within the school company to promote the quality of life for students and adults (Krovetz, 1995). Unity of purpose indicates that how teachers centralize on a shared goal, such as the school's mission (Norman, 2019). Finally, as a must for teachers to keep the collaborative hype in the school culture, learning partnership means working cooperatively, trusting, and helping each other focus on improving performance and overcoming school work for teachers, students, and parents (Arthur-Kelly et al., 2006; Butucha, 2013; Gruenert & Valentine, 1998). It is vital to understand what the teachers think about an effective school, especially within the context of the school culture they shape working together. This is also necessary because the school culture is more likely to be taken up by staff if they have the 'power' to form it. At this point, all these efforts need another synchronic process WITH them such as teacher empowerment.

Rappaport and his colleagues (1987) have described empowerment as a construct that personal competencies and abilities to environments that provide opportunities for choice and autonomy in demonstrating those competencies. For schools, teacher empowerment can be defined as making them involved in decision-making processes in a democratic school atmosphere through the sharing of authority and responsibility. Short (1994) identifies six empirically-derived dimensions of teacher empowerment. Involvement in decision making is described as participation in and responsibility for decisions involving budgets, teacher selection, scheduling, curriculum, and other programmatic areas. Teacher impact refers to teachers' perceptions that they have an effect and influence on school life (Short, 1994). Ashton and Webb (1986) regard it as a facilitator on growing teachers' positive self-esteem. Teacher status, which is directly associated with one of the dimensions of the school culture 'collegial support', means that teacher perceptions that they have professional recognition and dignity from colleagues (Short, 1994). It is also associated with the teacher perceptions of the community, which generally depicts a low status. Professional growth, as a dimension of empowerment, refers to teachers' perceptions and beliefs that the school in which they work enables them the convenience to grow and build themselves up professionally, as well as the process of continuous learning and expanding skills (Short, 1994). Firestone (1993), points out that attempts to professionalize teachers (empower) constitute teacher engagement and advance instruction quality by increasing teacher ability. Self-efficacy is explained as teachers' perceptions that they have the skills and ability to help students learn, are competent in building effective programs for students (Short, 1994). The sense of teachers' certainty about their competence is highly tied in with student achievement (Rosenholtz, 1985). Autonomy, as another dimension of empowerment, specifies the teachers' perceptions of their power of control on their work-life, especially on definite parts like scheduling, curriculum, textbooks, and instructional planning (Short, 1994). Empowerment has several dimensions to construct a healthy sharing between the school leader and the teachers. That means it is not only the leader's duty but also the teachers' beliefs and perceptions to maintain the bridges for empowerment. That's why it is important what teachers think and how they feel about empowerment practices.

Issues and Purpose of the Research

Thanks to the diversity of staff duties at secondary schools, it becomes almost impossible for the leader to administrate effectively such a "hot spot" without empowering teachers. By treating them as professionals and sharing authority and responsibilities, a leader can enable teachers to create a culture and work in a climate of trust and open communication (Thornton & Mattocks, 1999). Locating at the very heart of these dimensions, school culture both shapes and is shaped by this atmosphere simultaneously. That means, with a more participatory and democratic workplace, first the collaborative school culture is likely to emerge and then create a professional community (Marks & Louis, 1999). So empowerment is one of the critical variables that can be observed at the differentiation of strong culture-effective schools / weak culture-ineffective schools (Cheng, 1993). In relation, mapping a strong school culture and linking it to the school improvement is not only a must for school effectiveness but also a path to organizational learning (Lee & Louis, 2019; Louis, Marks & Kruse, 1996). As a part of this effort, all variables within the effective school concept, especially the

ones which input (teacher qualifications, school infrastructure, and per-student expenditures) and throughput (support from higher administrative levels and school location, teacher behaviors, orderly atmosphere, and the quality of school curricula, etc.) parts include, are essential to reveal how to function in effective school settings. To operate a secondary school effectively in particular, which includes a wide range of activities in tandem, it is vital to understand and analyze all those variables through its participants' points of view, especially the teachers'. This study specifically aimed at examining the extent to which school culture and teacher empowerment predicted school effectiveness. The primary research questions of this investigation were resolved as follows:

i. Is there a significant relationship between the dimensions of school culture and teacher empowerment and school effectiveness perception of secondary school teachers?

ii. What are the predictive power of the school culture and teacher empowerment dimensions on secondary teachers' perception of school effectiveness?

METHOD

Sample and Procedure

According to the report of Mersin Provincial Directorate for National Education, 3.823 secondary school teacher which constitute the sample of this research. The sample of this research was determined by the cluster sampling technique. 24 secondary schools were selected randomly from four central districts of the Mersin province. Later, all teachers working at these schools were included in the sample. Finally, the sample of this research was composed of 354 teachers working in these secondary schools. The sample consisted of 120 male (33.1%), 243 (66.9 %) female teachers from 24 secondary schools. The teachers' professional experience was as follows: 7.7 % between 0-5 years; 16.5 % between 6-10 years; 26.4% between 11-15 years; 21.8% between 16-20 years; 27.5% over 20 years. The average length of teaching experience of teachers at the schools was 2.82 years. When it comes to the education level, 313 teachers got an undergraduate degree, 46 teachers got a master's degree and one teacher got a doctorate. 51.2 % of the teachers teach social science and foreign language, 32.3 % of the teachers teach mathematics, science, and information technology and 16.3 % of the teachers teach physical education and sports, music, and arts. All questionnaires were completed anonymously by paper-pencil and participation in the research was entirely voluntary.

Research Instruments

In addition to demographic characteristics form three data collection instruments were used in the study. Reliability measurement is performed used by Cronbach Alpha. The perception of school effectiveness was assessed by The School Effectiveness Index (SE Index) developed by Hoy (2014), consistently found high reliability with alpha coefficients ranging from 0.87 and 0.89. SE Index has a one-factor structure including an 8-item Likert-type scale that provides a collective judgment of the overall effectiveness of a school. It measures the degree to which a school is perceived to be effective by its teachers. Teachers' responses were scored on a 6-point Likert-type ordinal scale from strongly disagree to strongly agree. The Turkish version of the scale was used in this study. The Turkish adaptation of the scale was conducted by Yıldırım and Ada (2018). The result of the adaptation of the scale showed that the loadings range between .62 and .77 while the internal consistency coefficient was .86. with a one-factor structure. In this study, the Cronbach's alpha value of the scale is determined to be .87.

Gruenert and Valentine (1998) developed the School Culture Inventory (SCI) which consists of 35 items and the items are rated on a 5- Likert-type scale ranging from 5 (strongly agree) to 1 (strongly disagree) to measure school culture perceptions of teachers. The adapted version of the scale which was conducted by Ayık (2007) by test-retest method and construct validity was examined through factor analyses was used in this study. The SCI contains six dimensions that specifically assess teachers' perceptions in the following areas: collaborative leadership (.89), teacher

collaboration (.76), unity of purpose (.78), professional development (.75), collegial support (.67), and learning partnership (.62). Cronbach's alpha coefficient was found as .88 for this research.

Teacher empowerment was measured by using the School Participant Empowerment Scale (SPES) which was developed by Short and Rinehart (1992). The Cronbach's alpha for this scale in their study was .94. The SPES was composed of 38 questions and six dimensions of teacher empowerment. It was adapted to Turkish by Gavuz (2008) and this version of the scale was used in this study. As a result of the analysis, Gavuz (2008) reported that items were loaded to six factors like decision making (.67); professional growth (.70); status (.87); self-efficacy (.87) autonomy (.80); and impact (.80) as in the original version but the questions numbered 1,2,7,11,17,25 were excluded from the scale. This 32-questioned version of the scale was applied in this research. The present study yields a reliability coefficient of 0.86.

Data Analysis Techniques

The data cleaning procedures and regression analyses were both conducted by the SPSS 22 program. Before carrying out the regression analyses, the Mahalanobis distance was calculated to identify anomalous cases. Overall, 16 cases were left out, representing 4.3% of the sample. A final sample of 354 valid questionnaires was used in the analysis. A multiple regression analysis was conducted to check for multivariate normality, linearity, and lack of multicollinearity. The correlation analysis among the variables was computed to determine whether there is a multicollinearity problem by using the variance inflation factor (VIF). None of the VIF values was > 2 and no tolerance value was < 0.2 , indicating no problem with multicollinearity (Akinwande, Dikko, & Samson, 2015; Field, 2016). In addition to this, the Durbin-Watson (DW) test result, which was 1.90, indicating no significant correlations between the residuals (Field, 2009). Finally, stepwise multiple linear regression analyses were applied to determine the predictive power of school effectiveness perception of teachers in other variables.

FINDINGS

Correlation Analysis

To test the relationship between school effectiveness, school culture, and school participants' empowerment, correlation analysis was performed. The finding on the relationship between variables, the correlation matrix is presented in Table 1 which shows that there are significant and positive bivariate correlations among all the variables. Moreover, the bivariate results between the independent variables and dependent variable showed that school effectiveness was positively related to collaborative leadership ($r = .65$), teacher collaboration ($r = .68$), unity of purpose ($r = .66$), professional development ($r = .70$), collegial support ($r = .64$), learning partnership ($r = .55$), decision making ($r = .27$), professional growth ($r = .37$), status ($r = .44$), self-efficacy ($r = .50$), autonomy ($r = .46$) and impact ($r = .42$).

Table 1.Means, Standart Deviations and Pearson Correlations of Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1.School Effectiveness	-												
2.Collaborative Leadership	.65**	-											
3.Teacher Collaboration	.68**	.77**	-										
4.Unity of Purpose	.66**	.71**	.69**	-									
5. Professional Development	.70**	.71**	.78**	.76**	-								
6. Collegial Support	.64**	.65**	.75**	.65**	.69**	-							
7.Learning Partnership	.55**	.57**	.67**	.64**	.64**	.59**	-						
8. Decision Making	.27**	.39**	.43**	.37**	.37**	.35**	.36**	-					
9. Professional Growth	.37**	.43**	.47**	.41**	.46**	.39**	.46**	.47**	-				
10. Status	.44**	.54**	.50**	.51**	.49**	.45**	.47**	.41**	.49**	-			
11. Self-Efficacy	.50**	.48**	.50**	.54**	.54**	.50**	.46**	.50**	.57**	.69**	-		
12. Autonomy	.46**	.45**	.49**	.52**	.53**	.42**	.46**	.51**	.53**	.56**	.69**	-	
13. Impact	.42**	.51**	.53**	.48**	.49**	.49**	.49**	.62**	.54**	.55**	.68	.61	-
Mean	34.89	40.66	21.43	19.14	19.00	14.69	14.32	10.14	7.36	27.75	32.90	15.8	18.2
SD	6.72	7.33	3.88	3.11	2.84	2.90	2.62	2.77	1.89	5.09	4.67	2.86	3.72
Alpha	.87	.83	.81	.84	.72	.80	.66	.69	.50	.72	.86	.72	.84

**p < .001

Regression Analysis

According to the predictive power of variables, it is obvious that professional development which is a factor of school culture is the most important predictive variable, and accounted for .49% of the variance, followed by collegial support which accounted for .05% of the variance, collegial leadership which explained an additional .02% of the variance, unity of purpose which accounted for .01%, self-efficacy and decision making which explained an additional .005% of the variance and teacher collaboration which accounted for .006% of the variance as seen Table 2. Together, these seven significant predictors explained 59.1% of the variance in the teacher perception of school effectiveness ($F(7, 346) = 71.570, p < .001$). Moreover, the learning partnership factor of school culture and status, impact, autonomy, and professional growth of school participants' empowerment were not statistically significant in explaining the school effectiveness.

Table 2 Results of Stepwise Regressions for Predictors of School Effectiveness

Model	Variables	B	SE B	β	t	R	R ²	F
1	Constant	3.436	1.725	-	1.991	.701	.490	339.948*
	Professional Development	1.656	.090	.701	18.438			
2	Constant	2.566	1.648	-	1.557	.735	.541	206.614*
	Professional Development	1.148	.119	.486	9.662			
	Collegial Support	.715	.116	.309	6.146			
3	Constant	1.601	1.624	-	.986	.751	.563	150.594*
	Professional Development	.875	.132	.370	6.601			
	Collegial Support	.554	.120	.240	4.631			
	Collaborative Leadership	.210	.049	.228	4.272			
4	Constant	.647	1.634	-	.396	.758	.575	118.101*
	Professional Development	.684	.145	.290	4.726			
	Collegial Support	.488	.120	.211	4.057			
	Collaborative Leadership	.160	.050	.175	3.139			
	Unity of Purpose	.395	.128	.183	3.093			
5	Constant	-1.153	1.854	-	-.622	.762	.580	96.143*
	Professional Development	.642	.146	.272	4.407			
	Collegial Support	.453	.121	.196	3.747			
	Collaborative Leadership	.155	.051	.168	3.036			
	Unity of Purpose	.354	.129	.164	2.747			
	Self-Efficacy	.126	.062	.087	2.026			

6	Constant Professional Development	-1.358	1.848	-	-.735	.765	.585	81.642*
	Collegial Support	.458	.120	.198	3.809			
	Collaborative Leadership	.167	.051	.182	3.280			
	Unity of Purpose	.357	.128	.165	2.787			
	Self-Efficacy	.176	.066	.122	2.654			
	Decision Making	-.208	.099	-.086	-2.102			
	Teacher Collaboration	.278	.122	.160	2.281			
7	Constant Professional Development	-1.223	1.837	-.219	-.665	.769	.591	71.570*
	Collegial Support	.348	.129	.150	2.697			
	Collaborative Leadership	.120	.055	.131	2.188			
	Unity of Purpose	.358	.127	.166	2.812			
	Self-Efficacy	.181	.066	.125	2.746			
	Decision Making	-.245	.100	-.101	-2.453			
	Teacher Collaboration	.278	.122	.160	2.281			

*p < .001

DISCUSSION

The results indicated that the dimensions of the school culture which are professional development, collegial support, collaborative leadership, unity of purpose, and teacher collaboration had a relative power on the teachers' perception of school effectiveness. In terms of teacher empowerment, it was found that while self-efficacy and decision making had a relative power on the teachers' perception of school effectiveness, the dimensions of status, impact, autonomy, and professional growth had no significant predictive role on school effectiveness.

School culture which is a form of interaction that exists in the school may enhance or hinder school effectiveness. As a result of this study, it was found out that the dimensions of school culture had predictive power on teachers' perception of school effectiveness. This finding is consistent with previous researches, in which the effectiveness of the school in education is significantly influenced by the culture of the school (Frost, 2006; Molaney & Konza, 2011). Enhancing and improving the quality of education, school culture can motivate the entire student achievement in the learning process in schools. The culture of an organization can influence its productivity and performance. Fouts (2002) states that there is no "silver bullet" that schools may employ to ensure school effectiveness and identify the characteristics of effective schools by drawing attention to school culture variables such as effective school leadership, teachers' professional development, levels of collaboration, communication, and learning partnership.

Moreover, it was observed that among other variables, professional development of school culture is the most dominant predictor variable and it contributes .49% toward the teachers' perception of school effectiveness. As an important element of school culture, Avalos (2011) defines teacher professional development as teachers' learning about how they apply their knowledge to support student learning. According to Smith and Gillepsie (2007), professional development is an educational process that improves teachers' abilities in many ways and provides teachers the skills, habits, and knowledge to improve job effectiveness. It may be stated that the finding of this research is consistent with previous research which asserts professional development as a direct outcome of collaboration in school and it determines the level of school effectiveness (Evans, 1991). Similarly, Hargreaves (1995) draws attention to the importance of creating a school environment promoting trust, effective communication, and collaboration to set up superb professional development and working conditions for teachers. It may be claimed that when the teachers were encouraged to be active participants in their learning, provided learning, and are supported, they would be able to manage their class so that students learn at the optimal level and this would be followed by an increase in the effectiveness of schools.

The findings of the stepwise regression analysis also showed that collegial support was the second most predictive variable of the perception of school effectiveness. Collegial support gives information on whether teachers engage in constructive dialogue to work together voluntarily and effectively to ensure the educational efficiency of the school. Gruenert and Valentine (1998) state that

a high score on collegial support means that teachers trust each other, discuss teaching practices, and assist each other to achieve organizational goals. In literature, there are studies which are consistent with the finding of this study, emphasize that the close relationships among school community members contribute to the quality of education and school effectiveness (Fenwick, 2004; Hargreaves, 1994; Quicke, 2000; Tschannen-Moran, 2000). Based on previous literature and findings, it could be claimed that collegial support might be regarded as an indispensable component of school effectiveness among teachers.

Collaborative leadership which was found the other predictive variable on the role of school effectiveness refers to what extent school managers set and maintain collaborative relations with teachers and support them (Gruenert & Valentine, 1998). As suggested in the related literature, school leadership acting a facilitating role in the construction of school culture makes a difference in student achievement and school effectiveness (Ninni, 2010, Owen, 2014; Waldron & McLeskey, 2010). So this part of the results proves that teachers evaluate collaborative leadership as an important element of school culture because of its positive influence on school practices.

Furthermore, the result of this study revealed that unity of purpose is one of the other important variables for teachers' perception of school effectiveness. Gruenert and Valentine (1998) define unity of purpose as the degree to which teachers work toward a common mission for the school. In Sergiovanni's study (2000), it was noted that unity of purpose is a key to success and it provides the school with a sense of direction. In other words, establishing a clear mission and matching it with the teaching performances of teachers, unity of purpose may be a powerful mechanism for school effectiveness. However, if the school culture is lack unity, it may be difficult to create high expectations for all students that they will be successful.

In this study, it was found that not only collegial support had a predictive power on teachers' perception of school effectiveness but also teacher collaboration had predictive power. Collaboration has a close link with collegiality and these terms may reflect each other (Kelchtermans, 2006). Jarzabkowski (2003) makes a distinction between two terms as collaboration deals with teachers working together for professional issues and collegiality has a broader meaning including both professional and social interactions in schools. Whereas collaboration is a descriptive term, referring to cooperative actions, collegiality refers to the quality of the relationships among staff members in a school. In Bigsby and Firestone's study (2017), it was revealed that teacher collaboration positively affects school effectiveness and it encourages teachers to participate in professional development programs. As a result of this study, the predictive power of collegial support was found higher than teacher collaboration on the role of school effectiveness. This finding may be explained that as collegiality implies a normative dimension of school culture, ensuring collegial support among teachers may be harder than ensuring collaboration. Therefore, teachers may appreciate collegial support much more than collaboration as an aspect of school effectiveness.

Teachers play a pivotal role in terms of school effectiveness. They both make the daily decision that directly affects their students' learning and they also contribute to schools' function with their formal or informal leadership roles. Therefore it is important to reveal how much empowered they feel in their classroom and schools. Empowerment is regarded as a process whereby school participants develop the competence to take charge of their growth and resolve their problems (Short, Greer, and Melvin, 1994). Sweetland and Hoy (2000) view teacher empowerment which is the practice that administrators allocate power and encourage teachers, as one of the crucial factors that affects school effectiveness. In this study, it was found that self-efficacy and decision making had a relative power on teachers' perception of school effectiveness. Self-efficacy refers to the extent to which teachers perceive that they have the skills and capacity to help students learn so teachers believe that the ability to perform their job effectively (Short & Johnson, 1994). The finding of this study regarding the significant power of self-efficacy on the perception of school effectiveness is confirmed by previous researches (Sweetland & Hoy, 2000; Short & Rinehart, 1992). Thus, it may be stated that if teachers have high expectations of themselves to perform effectively, they may carry out extra functions beyond the formal ones and will feel more committed to their school. These positive teacher

and school outcomes may provide a basis for school effectiveness. As one of the other dimensions of empowerment, decision making which is identified as allowing teachers to have a role in deciding their work environment (Hirsch et al., 2006), has also a predictive power on school effectiveness. As a result and in addition to self-efficacy, teachers may feel empowered at school with the joint decision-making practices which allow them to be confident that their decisions impact the real outcomes of school practices. Prior studies indicate that for teachers to feel empowered, they must be involved in the decision making process and given autonomy to make decisions (Davidson & Dell, 2003; Sweetland & Hoy, 2000). It may be noted that involving teachers in decision making may enhance the efficacy of organizational goals. In literature, teacher's participation in decision making is considered as one of the indicators of effective school (Hirsch et al., 2006; Reynolds & Stoll, 2002) in parallel with the results of this study. Therefore if teachers are involved in the decision-making processes, they may get involved in school life, feel a sense of self-efficacy in making personal and organizational decisions.

As a result of this study, only self-efficacy and decision-making dimensions of the teacher empowerment showed significant power on school effectiveness. Surprisingly, it was found that the dimensions which are learning partnership, status, impact, autonomy, and professional growth had no significant power on the teachers' perception of school effectiveness. Even, the correlation between these variables and school effectiveness was positive and significant. While the literature supports relative power between school effectiveness and these variables (Sweetland & Hoy, 2000; Short & Johnson, 1994; Reynolds & Stoll, 2002), this study, however, failed to document that. Difficulty in isolating factors that impact school effectiveness may have contributed to the lack of relative power for these variables. So additional research with a larger and more heterogeneous sample could address the inconsistency between study results and the literature.

CONCLUSION

In conclusion, the present study demonstrated that school culture largely predicts school effectiveness when it was compared with teacher empowerment. As a result of the decisive role it plays, school culture, with a clearer specification of teacher and student cultures and the relationships between them, has become one of the variables within school effectiveness studies due to its significant influence on the operational effectiveness of any school (Butucha, 2013; Hargreaves, 1995). The analysis provides that in the event of improvement of school culture, school effectiveness perception of teachers will increase. This may mean that a school should have a culture that values the professional development of its teachers, collegiality, collaborative leadership, and teamwork to be effective. The explicit relationship between the professional development of teachers and school effectiveness also deserves a closer look to make further documentation. Since teachers are highly active at achieving the organizational goals of the school, it can be said that they are the most critical actors in the core of the activities mentioned. So when the leader increases the involvement in decision making, one of the functional strains in an organization, teachers can firstly evoke, then enhance the sense of a democratic school culture while acting the empowerment itself. Thus, school culture and empowerment may support and also make survive each other continuously.

The findings of this study uncover the need for additional research on the relationship between teacher empowerment and school effectiveness. In addition to this, it would be worthwhile to take into consideration other variables related to teacher empowerment which need a deeper understanding to focus on school effectiveness. Two of the teacher empowerment dimensions, self-efficacy and decision making, predicted school effectiveness significantly. So, school principals should establish working conditions in which teachers perceive themselves a high level of expectation to perform effectively and are confident that their input is valued in decision-making processes in the school. Also, the results provide information about the importance of creating positive school culture to ensure school effectiveness not only to policy-makers but also to school administrators. It may be stated that teachers play a crucial role both in creating and sustaining school effectiveness which is mostly measured by students' academic achievement. In order to improve the quality of education, teachers' participation in professional development activities should be encouraged.

The teachers in this study were from public secondary schools in the southern part of Turkey. Future research might study the relationships among these variables in a larger context and different geographic areas. This research was conducted in secondary school teachers so it may be worthwhile to investigate primary and high schools to determine whether the results of it reflect the perception of the teachers on all levels of education. Besides, longitudinal designs, collecting quantitative and qualitative data using different research methods, may provide new insight into teacher perception of empowerment and school culture and school effectiveness.

REFERENCES

- Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance inflation factor: as a condition for the inclusion of suppressor variable (s) in regression analysis. *Open Journal of Statistics*, 5(07), 754.
- Ayık A. & Ada Ş. (2009). İlköğretim okullarında oluşturulan okul kültürü ile okulların etkililiği arasındaki ilişki. *Gaziantep Üniversitesi Sosyal Bilimler Dergisi*, 8(2), 429-446.
- Arthur-Kelly, M., Lyon, G., Butterfield, N., & Gordon, C. (2006). Classroom management (2nd ed.). Melbourne, Australia: Nelson Australia.
- Ashton, P. T., & Webb, B. W. (1986). Making a difference: Teachers' sense of efficacy student achievement. New York: Longman.
- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27 (1), 10–20.
- Ayık, A. (2007). İlköğretim okullarında oluşturulan okul kültürü ile okulların etkililiği arasındaki ilişki (Erzurum ili örneği). *Atatürk Üniversitesi, Erzurum*.
- Balcı, A. (2013). *Etkili okul ve okul geliştirme: Kuram uygulama ve araştırma*. Pegem A Yayıncılık.
- Barth, R. S. (2002). The culture builder. *Educational leadership*, 59 (8), 6-11.
- Baştepe, İ. (2009). Etkili okulun eğitim-öğretim süreci ve ortamı boyutlarının nitelikleri. *Electronic Journal of Social Sciences*, 8(29).
- Bigsby, J. B., & Firestone, W. A. (2017). Why teachers participate in professional development: Lessons from a schoolwide teacher study group. *The New Educator*, 13(1), 72-93.
- Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and teacher education*, 20(3), 277-289.
- Butucha, K. G. (2013). School type and school setting differences in teachers' perceptions of school culture. *International Journal of Education and Research*, 1(12), 1-12.
- Cheng, Y. C. (1993). Profiles of organizational culture and effective schools. *School effectiveness and school improvement*, 4(2), 85-110.
- Chrispeels, J. H. (1992). *Purposeful Restructuring: Creating a Culture for Learning and Achievement in Elementary Schools*. Falmer Press, Taylor and Francis Inc, 1900 Frost Road, 101, Bristol, PA 19007.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., et al. (1966). Equality of educational opportunity. Washington, DC: U.S. Government Printing Office.

- Çubukçu, Z., & Girmen, P. (2006). Ortaöğretim Kurumlarının Etkili Okul Özelliklerine Sahip Olma Düzeyleri. *Manas Üniversitesi Sosyal Bilimler Dergisi*, 8(16), 121-136.
- Evans, S. B. (1991, Summer). A realistic look at the research base for collaboration in special education. *Preventing School Failure*, 35(4), 10.
- Fenwick, T. J. (2004). Teacher learning and professional growth plans: Implementation of a provincial policy. *Journal of Curriculum and Supervision*, 19, 259-282.
- Field, A. (2009). *Discovering statistics using SPSS*. Sage.
- Field, H. (2016). *Science without numbers*. Oxford University Press.
- Firestone, W. A. (1993). Why "professionalizing" teaching is not enough. *Educational Leadership*, 50(6), 6-11.
- Fouts, J. (2002, April). The power of early success: A longitudinal study of student performance on the Washington assessment of student learning, 1998-2001. Access <http://www.spu.edu/orgs/research/currentresearch.html>.
- Frost, D. (2006). The concept of 'agency' in leadership for learning. *Leading and Managing*, 12(2), 19-28.
- Gruenert, S., & Valentine, J. (1998). Development of a school culture survey. Unpublished Doctoral Dissertation. The *University Of Missouri*.
- Gruenert, S. (2000). Shaping a new school culture. *Contemporary Education*, 71(2), 14.
- Gruenert, S. (2005). Correlations of collaborative school cultures with student achievement. *NASSP Bulletin*, 89(645), 43-55.
- Gündüz, S. (2015). *Okul paydaşlarının görüşlerine göre etkili okul geliştirme* (Master's thesis, Hasan Kalyoncu Üniversitesi).
- Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. Teachers College Press.
- Hargreaves, D. H. (1995). School culture, school effectiveness and school improvement, school effectiveness and school improvement. *An International Journal of Research, Policy and Practice*, 6:1, 23-46.
- Harne, G. (2003). Motivational style: A link in the relationship between school effectiveness and children's behaviour. *Educational and Child Psychology*, 11(2), 16-25.
- Hirsch, E., Emerick, S., Church, K., & Fuller, E. (2006). Teaching and learning conditions are critical to the success of students and the retention of teachers: Final report on the 2006 teaching and learning conditions survey to the Clark County school District and Clark County Education Association. Retrieved from Center for Teaching Quality website: <http://www.teachingquality.org>.
- Hoy, W. K., & Ferguson, J. (1985). A theoretical framework and exploration of organizational effectiveness of schools. *Educational Administration Quarterly*, 21(2), 117-134.
- Hoy, A. W., & Hoy, W. K. (2006). *Instructional leadership: A research-based guide to learning in schools* (2nd ed.). Boston: Allyn & Bacon.

- Jarzabkowski, L.M. (2003). Teacher collegiality in a remote Australian school. *Journal of Research in Rural Education*, 18(3), 139-144.
- Kelchtermans, G. (2006). Teacher collaboration and collegiality as workplace conditions. A review. *Zeitschrift für Pädagogik*, 52(2), 220-237.
- Keskin, H., Akgün, A. E., & Koçoğlu, İ. (2016). Örgüt teorisi. *Nobel Dağıtım*, 153-154.
- Klopf, G., Schelden, E., & Brennan, K. (1982). The Essentials of effectiveness: A job description for principals. Principal, March.
- Kuşaksız, N. (2010). *Öğretmen görüşlerine göre ilköğretim okullarının etkili okul özelliklerine sahip olma düzeyleri (Üsküdar ilçesi örneği)* (Doctoral dissertation, Selçuk Üniversitesi Eğitim Bilimleri Enstitüsü).
- Lee, M., & Louis, K. S. (2019). Mapping a strong school culture and linking it to sustainable school improvement. *Teaching and Teacher Education*, 81, 84-96.
- Lee, V. E., & Smith, J. B. (1995). Effects of high school restructuring and size on early gains in achievement and engagement. *Sociology of education*, 241-270.
- Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American educational research journal*, 33(4), 757-798.
- Marks, H. M., & Louis, K. S. (1999). *Teacher Empowerment and the Capacity for Organizational Learning. Educational Administration Quarterly*, 35(5), 707-750.
- Maloney, C. , & Konza, D. M. (2011). A case study of teachers' professional learning: Becoming a community of professional learning or not?. *Issues in Educational Research*, 21(1), 75-87.
- Ninni, K. (2010). *Building level principals as change agents in a response to intervention reform initiative*. (Ph.D. dissertation). Loyola University Chicago, United States -- Illinois. Retrieved July 11, 2010, from Dissertations & Theses: Full Text. (Publication No. AAT 3404166).
- Norman, L. D. (2019). School culture: A correlational study of school culture and student achievement of central Mississippi schools (Order No. 13905803). Available from ProQuest Dissertations & Theses Global. (2248637450). Retrieved from <https://search.proquest.com/docview/2248637450?accountid=12398>.
- Olivier, D. F. (2001). Teacher personal and school culture characteristics in effective schools: Toward a model of a professional learning community.
- Owen, S. (2014). Teacher professional learning communities: Going beyond contrived collegiality toward challenging debate and collegial learning and professional growth. *Australian Journal of Adult Learning*, 54(2), 54-76.
- Quicke, J. (2000). A new professionalism for a collaborative culture of organizational learning in contemporary society. *Educational Management & Administration*, 28(3), 299-315.
- Reynolds, D., & Stoll, L. (2002). Connecting school effectiveness and school improvement: What have we learnt in the last ten years?. In *Restructuring and Quality: Issues for Tomorrow's Schools* (pp. 42-60). Routledge.
- Rosenholtz, S. (1991). Teachers' workplace: the social organization of schools, Teachers College Press, New York.

- Sammons, P., & Bakkum, L. (2011). Effective schools, equity and teacher efficacy: A review of the literature. *Profesorado, revista de curriculum y formacion del profesorado*, 15(3), 9-26.
- Short, P. M., & Johnson, P. E. (1994). Exploring the Links among Teacher Empowerment, Leader Power, and Conflict.
- Short, P. M., Greer, J. T., & Melvin, W. M. (1994). *Creating Empowered Schools. Journal of Educational Administration*, 32(4), 38-52. doi:10.1108/09578239410069106
- Short, P. M., & Rinehart, J. S. (1992). "School participant empowerment scale: Assessment of level of empowerment within the school environment." *Educational and Psychological Measurement* 52.4, 951-960.
- Smith, C., & Gillespie, M. (2007). Research on professional development and teacher change: Implications for adult basic education. *Review of adult learning and literacy*, 7(7), 205-244.
- Söğüt, G. (2003). *Özel ve resmi ilköğretim kurumlarının etkili okulun veliler boyutundaki özelliklerine sahip olma düzeyleri (Bursa ili örneği)* (Master's thesis, Uludağ Üniversitesi).
- Sweetland, Scott R., & Wayne K. Hoy. "School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools." *Educational Administration Quarterly* 36.5 (2000): 703-729.
- Şahin Dinçsoy, B. (2011). *Ortaöğretim okullarının etkili okul olmasında okul müdürlerinin kültürel liderlik rolleri* (Master's thesis, Afyon Kocatepe Üniversitesi, Sosyal Bilimler Enstitüsü).
- Thornburg, D. G., & Mungai, A. (2011). Teacher empowerment and school reform. *Journal of Ethnographic & Qualitative Research*, 5(4).
- Thornton, B., & Mattocks, T. C. (1999, August). Empowerment of teachers fosters school improvement. In *Presentation at annual meeting of the National Council of Professors of Educational Administration, Jackson Hole, WY*.
- Tschannen-Moran, M. (2001). Collaboration and the need for trust. *Journal of Educational Administration*, 39(4), 308-331.
- Tuncel, H. (2013). Etkili okul oluşturmada okul müdürünün dönüştürücü liderlik rolü. (Master's Thesis) Erciyes Üniversitesi. Eğitim Bilimleri Enstitüsü.
- Waldron, N.L., & McLeskey, J. (2010). Establishing a collaborative school culture through comprehensive school reform. *Journal of Educational and Psychological Consultation*, 20(1), 58-74.
- Yaralı, G. (2002). İlköğretim kurumlarının etkili okulun veliler boyutundaki özelliklerine sahip olma düzeyleri. *Eskişehir: Osmangazi Üniversitesi. SBE. (Yayınlanmamış Yüksek Lisans Tezi)*.
- Yağız, M. S. (2016). *İlkokulların etkili okul özelliklerine sahip olma düzeylerinin incelenmesi* (Master's thesis, Hasan Kalyoncu Üniversitesi).
- Yıldırım, İ., & Ada, Ş. (2018). Algılanan Okul Etkililiği Ölçeği'nin (Se-Index) Türkçe'ye Uyarlanması. *Milli Eğitim Dergisi*, 47(219), 19-32.
- Zembylas, M., & Papanastasiou, E. C. (2005). Modeling teacher empowerment: The role of job satisfaction. *Educational Research and Evaluation*, 11(5), 433-459.