



An Organizational Factor Predicting School Effectiveness: School Climate

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ABSTRACT

The purpose of this study is to determine whether the school climate affects school effectiveness. For this purpose, quantitative research relational screening model was used in the study. The research was conducted in 2018-2019 academic year and 341 teachers participated voluntarily. In the research, The Organizational Description Climate Scale for Elementary Schools (OCDQ-REJ) developed by Hoy and Tarter (1997) and adapted to Turkish culture by Yilmaz and Altinkurt (2013) was used together with The School Effectiveness Index, which was developed by Hoy (2014) and adapted to Turkish culture by Yildirim (2015). The data were analyzed by correlation and regression analysis. According to the findings, school climate predicts school effectiveness. The findings were discussed with the results of other researches in the literature and suggestions were made to the administrators and teachers.

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1. Introduction

Education plays a vital role in promoting the development of human capital necessary for economic growth, as well as supporting the individual and society to develop their social, economic and cultural aspects. Especially modern education and schools aims to communicate the knowledge, skills and behaviors that young people need to be functional in society. Basically, schools are expected to contribute to the progress and development of society (Rapti, 2012). However, the level of service quality, effectiveness and efficiency produced by schools; in other words, it is a matter of curiosity about how effective it is on school outcomes / student acquisitions. Because governments make large amounts of investments and expenditures for the education offered by schools. For this reason, it is inevitable that the effectiveness of schools will be questioned by policy makers, researchers and the society and become a subject of research. Attempts to determine the effectiveness of a school are central to ensuring that the school has the desired impact at the student level and to improve schools' teaching and learning environment (Ramberg, Laftman, Almquist, & Modin, 2019).

In order to say that an organization is effective, empirical evidence of effectiveness is required. When literature is examined, important studies to determine the effectiveness of schools are found (Averch, Carroll, Donaldson, Kiesling, & Pincus, 1972; Coleman, Campell, Hobson, McPartlana, Mood, Weinfeld, & York, 1966; Jencks et al., 1972; Purkey and Smith, 1983; Weber, 1971). The first research to determine school effectiveness was conducted by Coleman et al. (1966). Coleman et al. (1966) found that student background characteristics (family history and socioeconomic status) were more powerful than school-level factors in determining student achievement. Other studies in this area include extensive research to determine the impact of schools

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on students' academic performance (D'Amico, 1982). However, many subsequent studies have proved a significant impact of the school on student achievement (D'Amico, 1982; Doran, 2004; Whetten & Cameron, 1984). For example, Edmonds (1979) found that the reasons for the success difference between the two schools were the behavior, policies and practices of school management. In this sense, the main purpose of school effectiveness research is to find out the factors that affect the education aimed by the school (Creemers, Stoll, Reezigt, & ESI Team, 2007), to focus on what can be done at organizational level instead of the effects of individual characteristics and to improve school outcomes (Ramberg, Laftman, Almquist, & Modin, 2019). Lezotte (1991) stated that effective school research is based on two assumptions. The first assumption is that school development is an endless journey. Second, effective schoolwork serves the mission that every student can learn.

Today, discussions and studies on what constitutes school effectiveness are continuing. School effectiveness can be expressed as the degree to which the educational, organizational and administrative goals of the school are achieved. Although school effectiveness is very much in the field of education administration and is the subject of research, the uncertainty of the factors that affect school effectiveness and the uncertainty caused by continuous change still necessitates researching school effectiveness. Because, as an indicator of success of education systems, school outcomes are taken as criteria. Various indicators have been identified to determine whether a school is effective. In this sense, success levels and student achievements in standardized tests, teaching and learning processes in the classroom, schooling rate, social cohesion and citizenship, moral and ethical values, leadership behaviors, confidence level, culture and climate, parental participation, teacher effectiveness/performance, teachers' organizational and occupational commitment, loyalty and satisfaction are accepted as the most important characteristics of effective schools (Bridgall, Caines, & Chatterji, 2014; Mendro, 1998; Özgenel & Mert, 2019; Özgenel & Topal, 2019; Uline, Miller, & Tschannen-Moran, 1998). In summary, effective school variables characteristics were identified as school success factors (Çobanoğlu & Badavan, 2017). Creemers et al. (2007) considers these factors in two dimensions as at school (positive attitude towards change, school culture, shared values, educational vision and mission, leadership, parental involvement, etc.) and class (teacher motivation, participation in processes and decisions, professional development and education, etc.).

The first study to determine the characteristics of effective schools was made by Edmonds (1979), and then by Lezotte (1991, 2001) 7 characteristics / characteristics of effective schools were determined. These are: (i) a safe and orderly environment, (ii) a climate of high expectation for success, (iii) an open and focused mission, (iv) learning opportunities and effective use of time, (v) continuous monitoring of student development; family relations; and (vii) instructional leadership. Doran (2004) revealed in his literature review that many researchers made different classifications about effective school characteristics and collected these characteristics in 13 themes. These; leadership, high expectations, rules and discipline, mission focus, monitoring process (assessment and evaluation), positive / supportive climate, time emphasis on duty, parent/community participation, staff development, basic skills, teacher participation in decisions, grouping procedures, teacher quality and other elements. Etxeberria, Intxausti and Azpillaga (2017), in their study, reported that high-impact schools in general have teachers live together in a safe, peaceful and conflict-free environment of the school community with a set of democratic rules, conflict resolution attitudes characterized by reconciliation and agreement, and a sense of mutual support of the teacher-management team, and that each school has agreed on its own vision. In summary, they have a good / positive climate. They emphasized the importance of having a stable team of teachers in order to create a positive/good climate. Although different characteristics have been proposed as to the characteristics of effective schools, many researchers agree on the "school climate" characteristics (Doran, 2004; Etxeberria, Intxausti, & Azpillaga, 2017; Scheerens, & Creemers, 1989; Sişman, 1996; Turhan, Şener, & Gündüzalp, 2017; Uline, Miller, & Tschannen-Moran, 1998; Whetten & Cameron, 1984). In other words, effective schools, administrators, teachers and other employees have a climate that believes that all students can learn and reflects this on their behavior (Lezotte 1991). Since qualified education is accepted as important and valuable, nowadays, the necessity to improve and improve the quality/effectiveness of schools has emerged. One key to developing schools is the creation of a positive school environment / climate, which is directly stated to have an impact on students, teachers and other employees and indirectly on school outcomes. The rationale behind this view is the expectation that the school environment / climate will positively affect the performance of administrators, teachers and other employees, and ultimately lead to improvements in student attainment.

In general terms, school climate is defined as the sum of the beliefs, values and behaviors of students, teachers, leaders and parents (Rapti, 2012), the spirit of the school (Austin, O'Malley, & Izu, 2011) and personality (Brown et al., 2004; Cohen et al., 2009; Halpin & Croft 1963; Hoy & Miskel, 2010; Rapti, 2012; Welsh, 2000). School climate refers to the conditions or quality of the learning environment (Austin, O'Malley, & Izu, 2011). According to Rapti (2012), the school climate affects the individual's feelings and the desire for commitment. School climate is the sum of organizational values, cultures, educational practices and the relationships of school stakeholders within a school. In another perspective, the school climate is likened to a mythological monster (unicorn) that is metaphorically imagined but not found. Given the subjective nature of school climate, organizational climate researchers have similar ideas that it is very difficult to yak capture the beast ((Anderson, 1982). "Subjectivity" in this analogy refers to the fact that each school has different climatic characteristics. Purkey and Smith (1983) stated that a regular school climate has clear, reasonable and consistent rules. In fact, such a school climate emphasizes the potential of the school to help even at-risk students succeed, help them socialize, and make a difference (Austin, O'Malley, & Izu, 2011).

What kind of climate each school has and what kind of characteristics these climates show attracted the attention of researchers? The first study to determine /classify school climate dimensions/types was made by Halpin and Croft (1963). They have differentiated different climatic types in schools and identified 6 different climatic types. These; open climate, controlled climate, autonomous climate, paternal climate, intimate and closed climate. In other words, Halpin and Croft have classified the school climate from an open climate to a closed climate. According to Halpin and Croft (1963), the open climate is an energetic and lively organization advancing towards its goals and meeting the social needs of group members. In a closed climate, the organization is stagnant, the members of the group are not sincere and the spirit of unity in the organization is low. In other words, the open school climate is a sincere climate in the behavior of both the principal and all staff. Teachers work well together and are committed to their tasks. Leadership actions occur easily and appropriately as needed. In an open school, the success of the task or the satisfaction of social needs emerges spontaneously. On the other side, indoor climate is the antithesis of open climate (Hoy, 1990). Hoy Tarter and Kottkamp (1991) determined the dimensions of school climate as supportive, mandatory and restrictive principal behaviors and sincere, cooperative and unconcerned teacher behaviors:

- ✓ *Supportive principal behavior* reflects the manager's interest in teachers. The principal listens to the teachers, is open to the suggestions of the teachers, makes criticism constructively, praises the employees frequently, respects the competence of the employees, supports both the personal and professional development of the teachers.
- ✓ *Directive principal behavior* is strict and control oriented. The Principal seeks to provide continuous monitoring and control over all teachers and school activities to the smallest detail.
- ✓ *Restrictive principal behavior* is more than facilitating the teacher's work. Principal assigns unnecessary tasks to teachers other than their basic duties and responsibilities.
- ✓ *Collegial teacher behavior* supports communication and professional interaction between teachers. Teachers are proud of their schools, enjoy working with their colleagues and respect each other.
- ✓ *Intimate teacher behavior*, teachers know their colleagues very well and friendship ties are strong. They socialize by providing social support to each other.
- ✓ *Disengaged teacher behavior* means unwillingness to participate in professional activities. Although teachers are reluctant to participate in group work, they do not have common goals and productivity, their behavior in school is often negative.

In the context of school climate, the school's goal is to create an open / positive climate. However, how to create this is another problem. According to Austin, O'Malley and Izu (2011), in order to create a positive school climate, schools recruit qualified teachers and strive to stay in school. Students are provided with a safe learning environment for learning and development. Differences between socio-economic status, ethnicity, race, gender and / or sexual orientation are recognized and respected. Continuously high expectations for success are targeted. Students are offered engaging and meaningful learning opportunities (Austin, O'Malley, & Izu, 2011).

Freiberg and Stein (1999) compare the positive school climate to the "preservation of the beauty of a garden". They stated that motivation, evaluation, development of teachers and teamwork are necessary for the protection of this garden. Thus, a positive school climate achieves two goals. First, it motivates staff to teach

and learn students with the goal of creating a positive school environment. Second, a positive school climate creates conditions that reduce or eliminate students' learning disabilities. These schools support the physical, social, emotional and intellectual development of students (Austin, O'Malley, & Izu, 2011). However, there are many factors that play a role in creating a positive school climate. These are: the quality of the interaction/communication of the school community, the personality of the school, environmental factors, academic performance / achievement, school safety and size, the level of trust and respect of the groups in the school (quality of interaction, personality of school, environmental factors, academic performance, safety and school size) (Trust and respect) (Rapti, 2012). Researchers examined the organizational climate in four dimensions. Ecology focuses on the overall physical nature of buildings, the surrounding neighborhood and the school. Environment is the school-related individuals and groups such as teachers, students, administrators and parents. The social system is the relationship, communication and interaction of stakeholders in a school. Culture is related to the groups and individuals in the school (Anderson, 1982).

Here are many studies that reveal that school climate affects students' academic outcomes, behaviors, school commitment and adaptation to school outcomes (Berkowitz et al., 2017; Bosworth, Ford, & Hernandaz, 2011; Brault, Janosz, & Archambault, 2014; Cohen et al., 2009; Calik et al., 2009; Eliot et al., 2010; Gregory et al., 2010; Hopson & Lee, 2011; Hoy, Smith, & Sweetland, 2002; Konold & Cornell, 2015; Kuperminc, Leadbeater, & Blatt, 2001; Kuperminc et al., 1997; Loukas, Suzuki & Horton, 2006; MacNeil, Prater, & Busch, 2009; Martin et al., 2004; Mullis, Martin, & Foy, 2008; Özdemir, 2015; Özgenel, Çalışkan Yılmaz and Baydar, 2018; Ramberg, Laftman, Almquist, & Modin, 2019; Schotland, 2011; Simons-Morton et al., 1999; Thapa et al., 2013; Wang, Chow, Hofkens, & Salmela-Aro, 2015; Wang, Selman Dishion, & Stormshak, 2010; Welsh, 2000). In addition, it is pointed out that there is a relationship between a positive school climate and factors such as teacher competencies, teaching belief, cooperation between teachers, teacher job satisfaction, professional development and adoption of different teaching techniques (OECD [TALIS], 2009). However, it has been observed that there are few studies to determine the level of predicting / influencing school effectiveness of organizational features such as climate. For example, Turhan, Sener and Gündüzalp (2017), especially in our country/acting school in Turkey, school effectiveness and school improvement issues that enough research done and have stated that the need for new research. In line with this proposal, the aim of the study is to determine the extent to which school effectiveness affects the school climate and to provide a better understanding of how school effectiveness can be improved through school climate. In addition, to determine the relationship between these two variables, the change in school climate can lead to change in school effectiveness and to be included in the school effectiveness improvement plans and to provide a proven factor. Thus, a link between school effectiveness and school climate can be established based on research findings. It is argued that the school climate should be positive not only among students but also among teachers in order to provide effective education (Rapti, 2012). Determining the relationship between school climate and school effectiveness can help to improve teachers' performance for more effective possible educational activities and can help administrators solve many school problems. In order to understand why school effectiveness research is needed, in other words, to understand the school environment as a justification, the information gap to determine and control the variables that affect the educational activities in the school, to improve/develop student outcomes / achievements and to ensure the efficient and effective management of the school can be shown. Examining the factors affecting teachers' perceptions/emotions about school effectiveness is important in understanding how schools will be developed. In the study, school climate which is thought to affect school effectiveness was accepted as an independent variable. School climate, as an organizational useful/necessary variable, can have a significant benefit/contribution to school effectiveness. Research in this respect can provide teachers and administrators with a point of view and clues to draw attention to the importance of school climate and to policymakers to consider school climate in implementing school reforms. It is assumed that a positive school environment increases effective teaching and as a result, student learning performs better (Rapti, 2012). The starting point of improving the performance of students and teachers is improving the school environment, in other words, the school climate. For this reason, the school climate can attract the attention of school administrators/leaders who have made or intend to do various initiatives or studies towards becoming an effective school and can give an insight into this path.

2. Methodology

2.1. Research Model

The purpose of this research is to determine the relationship between school climate and school effectiveness and to find out whether the school climate predicts school effectiveness. The study was carried out according to the correlational survey model frequently used in quantitative research methods in accordance with the purpose of the research. The correlational survey model is a research model that measures the degree of change of variables together and how the independent variable (school climate) affects the dependent variable (school effectiveness (Brink & Wood, 1998; Salkind, 2003).

2.2. Study Group

A total of 341 teachers working in public schools in the Anatolian side of Istanbul participated. The demographic information of the volunteer teachers is given in Table 1.

Table 1. Teachers' demographic information frequency and percentage values

	Groups	f	%
Gender	Female	215	63,0
	Male	126	37,0
Graduation	Undergraduate	293	85,9
	Postgraduate	48	14,1
Seniority	5 Years and under	84	24,6
	6-10 Years	82	24,0
	11-15 Years	76	22,3
	16-20 Years	60	17,6
	21 years and above	39	11,4
School Type	Primary	139	40,8
	Secondary	138	40,5
	High School	64	18,8
Total		341	100.0

When Table 1 is examined, 63% of the teachers are female and 37% are male; It is seen that 85% of them are undergraduate and 14% are graduate.

2.3. Data Collection Tools

The *Organizational Climate Scale* (OCS) was developed by Hoy and Tarter (1997), and Yilmaz and Altinkurt (2013) were adapted to Turkish culture. The school climate scale assesses the behavior of school principals and teachers. The scale consists of 6 sub-dimensions (supportive principal, directive principal, restrictive principal, intimate teacher, collegial teacher, disengaged teacher) and 39 items and is graded as a 4-point Likert type (rarely occurs, sometimes occurs, usually occurs, and very often occurs). In this study, Cronbach Alpha reliability coefficient of the scale was calculated as $\alpha=.888$.

The *School Effectiveness Index* (SE Index) was developed by Hoy (2014) and adapted to Turkish culture by Yıldırım (2015). The School Activity Index measures the quantity and quality of a school's product / service, efficiency, adaptability and flexibility. The index is an 8-point 6-point Likert-type instrument that provides a subjective assessment of school effectiveness. The higher the score, the higher the effectiveness of the school (Hoy, 2019). In this study, Cronbach Alpha reliability coefficient of the scale was calculated as $\alpha=.851$.

2.4. Analysis of Data

Mean, standard deviation, skewness and kurtosis were calculated before the data were analyzed (Table 2).

By examining Table 2, the skewness and kurtosis values were found to be between -1 and +1 and it was decided to perform parametric tests. Correlation analysis was carried out to determine the relationship between the variables. Multiple regression analysis was used to determine the effect of the independent variable (school climate) on the dependent variable (school effectiveness).

Table 2. Arithmetic mean, standard deviation, skewness and kurtosis values of the scales

Variables	N	X	SD	Skewness	Kurtosis
School Climate	Supportive Principal	341	3.037	.764	-.744
	Directive Principal	341	2.768	.831	.342
	Restrictive Principal	341	2.282	.679	.188
	Intimate Teacher	341	2.772	.730	-.179
	Collegial Teacher	341	2.917	.499	-.105
	Disengaged Teacher	341	1.885	.754	.967
	School Effectiveness	341	4.628	.687	-.451

3. Findings

The results of the correlation analysis to determine whether there is a relationship between teachers' school climate and school effectiveness perceptions are shown in Table 3.

Table 3. The results of correlation analysis between school climate and school effectiveness

	1	2	3	4	5	6	7
1-Supportive Principal	1	.098	-.282**	.305**	.488**	-.021	.481**
2-Directive Principal		1	.422**	.197**	.101	.408**	.204**
3-Restrictive Principal			1	.057	-.138*	.456**	-.004
4-Intimate Teacher				1	.594**	.144**	.366**
5-Collegial Teacher					1	-.125*	.539**
6-Disengaged Teacher						1	.022
7-School Effectiveness							1

When Table 3 is examined, it is seen that there is a significant relationship in a positive direction and mid-level ($r=.481$) between supportive principal behaviors and school effectiveness. There is also a significant relationship in positive direction and low level ($r=.204$) between the behaviors of the principal and the school effectiveness and a positive and mid-level ($r=.366$) significant relationship between the behaviors of the teacher and the school effectiveness. In addition, there is a significant relationship in a positive direction and mid-level ($r=.539$) between collegial teacher behaviors and school effectiveness. However, there was no significant relationship between school effectiveness and the directive principal and disengaged teacher ($p>.05$).

The results of the multiple regression analysis conducted in order to determine the predictive level of school effectiveness of supportive and directive principal behaviors from the school climate sub-dimensions, which are determined as independent variables, are presented in Table 4.

Table 4. Multiple regression analysis of school climate supportive and directive principal behaviors predicting school effectiveness

Independent Variables	Dependent Variable	B	Std. Eror.	(β)	t	p
Constant		2,994	,163		18,378	,000
Supportive Principal	School effectiveness	,418	,042	,465	9,874	,000
Directive Principal		,131	,039	,159	3,370	,001

When Table 4 is examined, it is seen that supportive and directive principal behaviors significantly predict school effectiveness ($R=.506$; $R^2=.256$; $F=58.231$; $p<.01$). In other words, supportive and directive principal behaviors explain 25% of the total variance in school effectiveness.

The results of the multiple regression analysis conducted to determine the level of predicting school effectiveness of intimate and collegial teacher behaviors, one of the sub-dimensions of school climate identified as independent variables, are presented in Table 5.

Table 5. Multiple regression analysis of school climate intimate and collegial teacher behaviors predicting school effectiveness

Independent Variables	Dependent Variable	B	Std. Eror.	(β)	t	p
Constant		2,448	,187		13,117	,000
Intimate Teacher	School effectiveness	,067	,053	,071	1,250	,212
Collegial Teacher		,684	,078	,497	8,746	,000

R=.542; R²=.294; F=70.277; p<.000

When Table 5 is examined, while collegial teacher behaviors significantly predict school climate according to the multiple regression model ($p<.05$); intimate teacher behavior does not significantly predict school climate ($p>.01$). Collegial teacher behaviors explain 29% of the total variance in school effectiveness ($R=.542$; $R^2=.294$; $F=70.277$; $p<.000$).

The results of the multiple regression analysis to determine the predictive level of school effectiveness of supportive and directive principal behaviors and collegial teacher behaviors from the school climate sub-dimensions identified as independent variables are presented in Table 6.

Table 6. Regression analysis of school climate supportive and directive principal behaviors and collegial teacher behaviors predicting school effectiveness

Independent Variables	Dependent Variable	B	Std. Eror.	(β)	t	p
Constant		1,992	,197		10,109	,000
Supportive Principal	School effectiveness	,249	,045	,277	5,593	,000
Directive Principal		,110	,036	,138	3,175	,002
Collegial Teacher		,536	,068	,390	7.862	,000

R=.610; R²=.372; F=66.407; p<.000

When Table 6 is examined, it is seen that supportive and directive principal behaviors and collegial teacher behaviors significantly predict school effectiveness ($R = .610$; $R^2 = .372$; $F = 66.407$; $p <.01$). In other words, supportive and directive principal behaviors and collegial teacher behaviors explain 37% of the total variance in school effectiveness.

4. Conclusion, Discussion and Suggestions

Studies on identifying, intervening, controlling and improving the characteristics of the school environment, which started in the 1960s, are still ongoing. The main purpose of school effectiveness research is to examine the factors that affect students' success. Effective school research for this purpose has shown that the school is effective and important on students' academic and social outcomes (Ramberg, Laftman, Almquist, & Modin, 2019). In the literature, it is seen that the concepts of performance, success, talent, productivity, improvement

or productivity are used instead of the concept of effectiveness (Whetten & Cameron, 1984). In this study, student and teacher performance and success were accepted as indicators of school effectiveness and the aim of this study was to determine the level of school climate influencing/predicting school effectiveness.

In the research, it was concluded that there is a positive and significant relationship between school effectiveness and supportive and directive principal behaviors, and intimate and collegial teacher behaviors. However, there was no significant relationship between school effectiveness and behaviors of restrictive principals and disengaged teacher behaviors. In addition, it is found that supportive and directive principal behaviors and collegial teacher behaviors, which are defined as components of the school climate, significantly predict school effectiveness. In other words, supportive and directive principals' behaviors and collegial teacher behaviors affected school effectiveness at different levels and positively. However, although intimate teacher behaviors are significant and positively associated with the school climate, it was found that it was not significant when it was added to the regression model along with supportive and directive principal behaviors and collegial teacher behaviors.

Teachers believe that the effectiveness of collegial teachers was most influenced by school effectiveness, followed by supportive principals and directive behaviors respectively. In the literature, there are some studies that determine the relationship between school climate and school effectiveness and teacher practices (Durham, Bettencourt, & Connolly, 2014). If the school climate is more positive and the higher the student success or the lower the school climate, the student success is lower (Cornell, Shukla, & Konold, 2016; Doran, 2004; Lee et al., 2017; Şenel, & Buluç, 2016; Taylor, 2008; Wang, & Eccles, 2013; Wuch, 2013). School climate, which is composed of positive and negative principal and teacher characteristics, has been found to be important predictors of school effectiveness (Reynolds et al., 2000; Ontai-Machado, 2016; Owens & Valesky, 2007). In addition, meta-analysis studies showed a positive relationship between school climate and student success; climate has a moderate impact on student achievement (Dulay & Karadağ, 2017; Montenegro, Labor, Öztekin, & Anar, 2016). It is concluded that the findings of this study show similarity and consistency with the findings of studies in the literature. These results were evaluated together; it can be said that when school principals exhibit behaviors that support and directive and teachers work cooperatively among themselves, a positive school climate is formed, and this positive climate strongly influences the effectiveness of the school.

School principals play an important role in the formation of school climate and this has a positive effect on the school's effectiveness (Gülşen, 2014). A positive correlation between supportive leadership, which is one of the descriptive dimensions of school climate, and teacher performance/effectiveness, may be evidence of this statement (Teel, 2003). However, a positive relationship was found between autocratic, democratic (Tatlah, & Iqbal, 2012), servant (Wuch, 2013), strategic (Deeboonmee, & Ariratana, 2014), transformational and transactional leadership styles and effective school characteristics (Zemba, Koçyiğit, Tuğluk, & Doğan, 2010). In addition, it has been revealed that transformational and transactional leadership styles increase organizational trust (Cemaloğlu & Kılıç, 2012) and affect organizational health (Cemaloğlu, 2007), senior management (Tutar & Altınöz, 2010), and it has been found that there is a significant relationship between servant leadership style and positive school climate (Wuch, 2013).

Research in the literature also raises the quality of the relationship between teacher and student, school climate characteristics such as school leadership, teacher collaboration and school ethics (Ramberg, Laftman, Almquist, & Modin, 2019). Again, organizational climate has a positive and significant effect on employee performance (Contartesi, 2010; Tutar & Altınöz, 2010). In schools where teachers' school effectiveness is considered to be high, the educational services provided to students are equally high (Ramberg, Laftman, Almquist, & Modin, 2019). However, it was observed that the motivation and performance of teachers working in a closed climate were low and their attitudes towards education and training were positive (Owens & Valesky, 2007). On the other hand, teachers stated that consistent administration is necessary for a healthy / positive school climate (Gülşen, 2014). As a result, the development of a positive school climate depends primarily on the supportive behaviors of school principals and the collaborative education of teachers. The combination of the forces of these two actors can be regarded as an important factor of school effectiveness.

School-based reform efforts/initiatives often focus on concrete educational elements such as the education curriculum (Austin, O'Malley, & Izu, 2011). However, organizational elements such as school climate are often ignored. In this sense, the goal of educational reforms, school development efforts and efforts to improve

school effectiveness should be to create a school climate that students enjoy learning (Austin, O'Malley, & Izu, 2011) and to ensure that all students will learn (Parlar, 2012). School leaders, teachers and student behaviors create a school climate. A leader can promote or prevent a positive climate with leadership behavior. Likewise, when school climate characteristics affect teachers' and students' behaviors, feelings and thoughts (Rapti, 2012), it is unlikely that school effectiveness will be improved and maintained if a positive/healthy/open school climate is not established. Accordingly, school administrators should create a positive school climate by supporting and motivating teachers and other staff as natural leaders of their schools; It should combat organizational behaviors that negatively affect the performance, efficiency and effectiveness of the organization and its employees, such as insecurity, inertia, burnout and cynicism, and as a result improve school effectiveness. In this process, school administrators should support and critically criticize the teachers they work with, be open to teachers' suggestions, praise their achievements, support their cooperation and encourage their professional development.

It is seen in the literature that it is difficult to define the school climate, its characteristics or its dimensions. The main reason for this is that the climate is composed of many interrelated elements. However, this means that improving the school climate can strongly influence other factors. For this reason, it is recommended that school administrators/leaders at school level and teachers at the classroom level start work from the school climate to improve school effectiveness. Because small and positive developments and improvements in the school climate can affect other factors significantly/positively and may have a butterfly effect on school outcomes in general. In summary, school administrators, teachers and other employees can tackle adversities by creating a positive school climate and gain success on school/student outcomes/achievements.

References

- Anderson, C. S. (1982). The search for school climate: A review of the research. *Review of Educational Research*, 52(3), 368-420.
- Austin, G., O'Malley, M., & Izu, J. (2011). *Making sense of school climate: using the California school climate, health, and learning (Cal-SCHLS) survey system to inform your school improvement efforts*. Los Alamitos: WestEd. Retrieved from californias3.wested.org/tools in 21.10.2019.
- Averich, H., Carroll, S., Donaldson, T., Kiesling, H., & Pincus, J. (1972). *How effective is schooling? A critical review and synthesis of research findings*. Report R-56-PCSF/RC, Rand Corporation, Santa Monica, CA.
- Berkowitz, R., Moore, H., Astor, R. A., & Benbenishty, R. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research*, 87(2), 425-469. doi: [10.3102/0034654316669821](https://doi.org/10.3102/0034654316669821)
- Bosworth, K., Ford, L., & Hernandaz, D. (2011). School climate factors contributing to student and faculty perceptions of safety in select Arizona schools. *Journal of School Health*, 81(4), 194-201. doi: [10.1111/j.1746-1561.2010.00579.x](https://doi.org/10.1111/j.1746-1561.2010.00579.x)
- Brault, M. C., Janosz, M., & Archambault, I. (2014). Effects of school composition and school climate on teacher expectations of students: A multilevel analysis. *Teaching and Teacher Education*, 44, 148-159.
- Bridgall, L. B., Caines, J., & Chatterji, M. (2014). Understanding validity issues in test-based models of school and teacher evaluation. *Quality Assurance in Education*, 22(1), 19-30.
- Brink, P. J. & Wood, M. J. (1998). *Advanced design in nursing research*. Sage.
- Brown, K. M., Anfara, V.A., & Roney, K. (2004). Student achievement in high performing, suburban middle schools and low performing urban middle schools-plausible explanations for the differences. *Education and Urban Society*, 36(4), 428-456. doi: [10.1177/0013124504263339](https://doi.org/10.1177/0013124504263339)
- Cemaloğlu, N. (2007). *Okul yöneticilerinin liderlik stillerinin örgüt sağlığı üzerindeki etkisi*. [The effect of leadership styles of school administrators on organizational health]. *Türkiye Sosyal Araştırmalar Dergisi*, 11(2), 165-194.
- Cemaloğlu, N., & Kilinç, A. (2012). Okul müdürlerinin liderlik stilleri ile öğretmenlerin örgütsel güven düzeyleri arasındaki ilişki. [The relationship between school principals' leadership styles and teachers' organizational trust levels]. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 1(23), 132-156.

- Cohen, J., McCabe, E. M., Michelli, N. M. & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartlana, J., Mood, S. M., Weinfeld, F. D., & York, R. L. (1966). *Equality of educational opportunity*. Washington, DC: US Department of Health, Education & Welfare, Office of Education. *National Center for Education Statistics*.
- Contartesi, R. A. (2010). *School climate: A correlational analysis of superintendent leadership communication and employee performance* (Doctoral dissertation). University of Phoenix.
- Cornell, D., Shukla, K., & Konold, T. R. (2016). Authoritative school climate and student academic engagement, grades, and aspirations in middle and high schools. *AERA Open*, 2(2), 2332858416633184. doi: [10.1177/2332858416633184](https://doi.org/10.1177/2332858416633184)
- Creemers, B. P., Stoll, L., Reezigt, G., & ESI Team. (2007). Effective school improvement-Ingredients for success: The results of an international comparative study of best practice case studies. In *International handbook of school effectiveness and improvement* (pp. 825-838). Springer, Dordrecht.
- Çalık, T., Özbay, Y., Özer, A., Kurt, T., & Kandemir, M. (2009). İlköğretim okulu öğrencilerinin zorbalık statülerinin okul iklimi, prososyal davranışlar, temel ihtiyaçlar ve cinsiyet değişkenlerine göre incelenmesi. [Examining the bullying status of primary school students according to school climate, prosocial behaviors, basic needs and gender variables]. *Kuram ve Uygulamada Eğitim Yönetimi*, 60(60), 555-576. Retrieved from <http://dergipark.gov.tr/kuey/issue/10337/126668>
- Çobanoğlu, F., & Badavan, Y. (2017). Başarılı okulların anahtarı: etkili okul değişkenleri. [The key to successful schools: effective school variables]. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (26), 114-134.
- D'Amico, J. J. (1982). *The effective schools movement: Studies, issues, and approaches*. Viewpoints (120) -- Reports-Evaluative/Feasibility. Research for Better Schools, Inc., Philadelphia,
- Deeboonmee, W., & Ariratana, W. (2014). Relationship between strategic leadership and school Effectiveness. *Procedia-Social and Behavioral Sciences*, 112, 982-985.
- Doran, J. A. (2004). *Effective school characteristics and student achievement correlates as perceived by teachers in American-style international schools* (Doctoral dissertation). University of Central Florida.
- Dulay, S., & Karadağ, E. (2017). The effect of school climate on student achievement. In *The factors effecting student achievement* (pp. 199-213). Springer, Cham.
- Durham, R. E., Bettencourt, A., & Connolly, F. (2014). Measuring school climate: Using existing data tools on climate and effectiveness to inform school organizational health. *Baltimore Education Research Consortium*.
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, 37(1), 15-24.
- Eliot, M., Cornell, D., Gregory, A., & Fan, X. (2010). Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of school psychology*, 48(6), 533-553. doi: [10.1016/j.jsp.2010.07.001](https://doi.org/10.1016/j.jsp.2010.07.001)
- Etxeberria, F., Intxausti, N., & Azpillaga, V. (2017). School climate in highly effective schools in the Autonomous Region of the Basque Country (Spain). *REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educacion*, 15(4), 5-26.
- Freiberg, H. J. and Stein, T. A. (1999) Measuring, improving and sustaining healthy learning environments, in: H. J. Freiberg (ed.) *School Climate: Measuring, Improving and Sustaining Healthy Learning Environments*. Philadelphia, PA: Falmer Press.
- Gregory, A., Cornell, D., Fan, X., Sheras, P., Shih, T. H., & Huang, F. (2010). Authoritative school discipline: High school practices associated with lower bullying and victimization. *Journal of Educational Psychology*, 102(2), 483. doi: [10.1037/a0018562](https://doi.org/10.1037/a0018562)
- Gülşen, C., & Gülenay, G. B. (2014). The principal and healthy school climate. *Social Behavior and Personality: an international journal*, 42(1), 93-100.

- Halpin, A.W. & Croft, D.B. (1963). *The organizational climate of schools*. Chicago: Midwest Administration Center.
- Hopson, L. M., & Lee, E. (2011). Mitigating the effect of family poverty on academic and behavioral outcomes: The role of school climate in middle and high school. *Children and Youth Services Review*, 33(11), 2221-2229. doi: 10.1016/j.childyouth.2011.07.006
- Hoy, W. K. (2019). *School effectiveness index (SE-Index)*. <https://www.waynekhoy.com/school-effectiveness/> accessed in 09.10.2019.
- Hoy, W. K. & Miskel, C. G. (2010). *Eğitim yönetimi* (S. Turan, Çev. Ed.). [Education Management S. Turan, Trans. Ed.J. Ankara: Nobel.
- Hoy, W. K. (1990). Organizational climate and culture: A conceptual analysis of the school workplace. *Journal of Educational and Psychological Consultation*, 1(2), 149-168.
- Hoy, W. K. (2019). *The organizational climate description for elementary schools (OCDQ-RE)*. Retrieved from <https://www.waynekhoy.com/ocdq-re/> in 21.10.2019.
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal*, 86(2), 38-49. Retrieved from <https://www.jstor.org/stable/40364336>
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools, healthy schools: Measuring organizational climate*. Corwin Press.
- Jencks, C., et al. (1972). Inequality: A reassessment of the effect of family and schooling in America. New York, Basic Books.
- Karadağ, E., İşçi, S., Öztekin, S., & Anar, S. (2016). Okul iklimi ve akademik başarı ilişkisi: bir meta-analiz çalışması. [The relationship between school climate and academic success: a meta-analysis study]. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 17(2).
- Konold, T. R., & Cornell, D. (2015). Measurement and structural relations of an authoritative school climate model: A multi-level latent variable investigation. *Journal of school psychology*, 53(6), 447-461. doi: 10.1016/j.jsp.2015.09.001
- Kuperminc, G. P., Leadbeater, B. J., & Blatt, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School psychology*, 39(2), 141-159. doi: 10.1016/S0022-4405(01)00059-0
- Kuperminc, G. P., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science*, 1(2), 76-88. doi: 10.1207/s1532480xads0102_2
- Lee, E., Reynolds, K. J., Subasic, E., Bromhead, D., Lin, H., Marinov, V., & Smithson, M. (2017). Development of a dual school climate and school identification measure–student (SCASIM-St). *Contemporary Educational Psychology*, 49, 91-106. doi: 10.1016/j.cedpsych.2017.01.003
- Lezotte, L. W. (1991). *Correlates of effective schools: The first and second generation*. Effective Schools Products.
- Lezotte, L. W. (2001). *Revolutionary and evolutionary: The effective school's movement*. Okemos, MI: Effective Schools Products.
- Loukas, A., Suzuki, R. & Horton, K. D. (2006). Examining school connectedness as a mediator of school climate effects. *Journal of Research on Adolescence*, 16(3), 491-502. doi: 10.1111/j.1532-7795.2006.00504.x
- MacNeil, A., Jr., Prater, D. L., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*, 12(1), 73-84. doi: 10.1080/13603120701576241
- Martin, M. O., Mullis, I. V., Gonzalez, E. J., & Chrostowski, S. J. (2004). Findings from IEA's Trends in International Mathematics and Science Study at the Fourth and Eighth Grades. TIMSS 2003

International Science Report. TIMSS & PIRLS International Study Center. Retrieved from <https://eric.ed.gov/?id=ED494651>

Mullis, I. V. S., Martin, M.O., & Foy, P. (2008). *TIMSS 2007 international mathematics report: Findings from IEA's trends in international mathematics and science study at the fourth and eighth grades*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College. Retrieved from <https://eric.ed.gov/?id=ED494650>

OECD (TALIS) (2009). *Creating effective teaching and learning environments: First results from TALIS- Executive Summary*. www.oecd.org/edu/TALIS

Ontai-Machado, D. O. M. (2016). Teachers' perceptions of elementary school principals' leadership attributes and their relationship to school effectiveness (Doctorate dissertation). Walden University.

Owens, R. G., & Valesky, T. C. (2007). *Organizational behavior in education: Adaptive leadership and school reform* (9th ed.). New York, NY: Allyn and Bacon.

Özgenel, M., Caliskan Yilmaz, F., & Baydar, F. (2018). School climate as a predictor of secondary school students' school attachment. *Eurasian Journal of Educational Research*, 78, 87-116, doi: 10.14689/ejer.2018.78.5.

Özgenel, M. & Mert, P. (2019). The Role of teacher performance in school effectiveness. *International Journal of Education Technology and Scientific Researches*, 4(10), 417- 434.

Özgenel, M. & Topal, M. (2019). Okul etkililiği ile öğretmenlerin iş doyum düzeyleri arasındaki ilişki [The relationship between school effectiveness and teachers' job satisfaction levels]. *VIth International Eurasian Educational Research Congress*, 19-22 June 2019, Ankara University, Ankara.

Özdemir, Y. (2015). Ortaokul okul tükenmişliği: Ödev, okula bağlılık ve akademik motivasyonun rolü. [Homework, school commitment and the role of academic motivation]. *Adnan Menderes Üniversitesi Eğitim Bilimleri Dergisi*, 6(1), 27-35. Retrieved from <http://dergipark.gov.tr/download/article-file/399538>

Parlar, H. (2010). Okul geliştirme literatürünün modeller ve yeni yaklaşımlar açısından incelenmesi: kuramsal analitik bir yaklaşım (Doktora tezi). Marmara Üniversitesi, İstanbul.

Purkey, S. C., & Smith, M. S. (1983). Effective schools: A review. *Elementary School Journal*, 4, 427-452. doi: [10.1086/461325](https://doi.org/10.1086/461325)

Ramberg, J., Låftman, S. B., Almquist, Y. B., & Modin, B. (2019). School effectiveness and students' perceptions of teacher caring: A multilevel study. *Improving Schools*, 22(1), 55-71.

Rapti, D. (2013). School climate as an important component in school effectiveness. *Academicus International Scientific Journal*, 4(08), 110-125.

Reynolds, D., Teddlie, C., Creemers, B., Scheerens, J. and Townsend, T. (2000). An introduction to school effectiveness research. (In C. Teddlie and D. Reynolds (eds.). *The International Handbook of School Effectiveness Research*. London: Falmer Press.

Salkind, N. J. (2003). *Exploring research*. Upper Saddle River, NJ: Prentice Hall.

Scheerens, J., & Creemers, B. P. (1989). Conceptualizing school effectiveness. *International Journal of Educational Research*, 13(7), 691-706.

Schotland, M. (2011). *Profiles of perceived school climate: The impact on development for urban youth* (Doctoral dissertation). New York University, New York. Retrieved from <http://www.proquest.com/>

Simons-Morton, B. G., Crump, A. D., Haynie, D. L., & Saylor, K. E. (1999). Student-school bonding and adolescent problem behavior. *Health education research*, 14(1), 99-107. doi: [10.1093/her/14.1.99](https://doi.org/10.1093/her/14.1.99)

Şenel, T., & Buluç, B. (2016). İlkokullarda okul iklimi ile okul etkililiği arasındaki ilişki. [Relationship between school climate and school effectiveness in primary schools]. *TÜBAV Bilim Dergisi*, 9(4), 1-12.

Şışman, M. (1996). *Etkili okul yönetimi: İlkokullarda bir araştırma*. [Etkili okul yönetimi: İlkokullarda bir araştırma]. Eskişehir: Yayınlanmamış Araştırma Raporu.

- Tatlah, I. A., & Iqbal, M. Z. (2012). Leadership styles and school effectiveness: Empirical evidence from secondary level. *Procedia-Social and Behavioral Sciences*, 69, 790-797.
- Taylor, D. E. (2008). *The influence of climate on student achievement in elementary schools* (Doctoral dissertation). The George Washington University.
- Teel, S. R. (2003). *Relationships among perceived organizational support, teacher efficacy and teacher performance* (Doctoral dissertation). Alliant International University, California School of Professional Psychology, San Diego.
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of educational research*, 83(3), 357-385. doi: 10.3102/0034654313483907
- Turhan, N. M., Şener, G., & Gündüzalp, S. (2017). Türkiye'de okul etkililiği araştırmalarına genel bir bakış. [An overview of school effectiveness research in Turkey]. *Turkish Journal of Educational Studies*, 4(2), 103-151.
- Tutar, H., & Altınöz, M. (2010). Örgütsel iklimin iş gören performansı üzerine etkisi: OSTİM imalât işletmeleri çalışanları üzerine bir araştırma. [The effect of organizational climate on working performance: A research on the employees of OSTIM manufacturing enterprises]. *Ankara Üniversitesi SBF Dergisi*, 65(2), 196-218.
- Uline, C. L., Miller, D. M., & Tschannen-Moran, M. (1998). School effectiveness: The underlying dimensions. *Educational Administration Quarterly*, 34(4), 462-483.
- Wang, M. T., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction*, 28, 12-23. doi: 10.1016/j.learninstruc.2013.04.002
- Wang, M. T., Chow, A., Hofkens, T., & Salmela-Aro, K. (2015). The trajectories of student emotional engagement and school burnout with academic and psychological development: Findings from Finnish adolescents. *Learning and Instruction*, 36, 57-65. doi: 10.1016/j.learninstruc.2014.11.004
- Wang, M. T., Selman, R. L., Dishion, T. J., & Stormshak, E. A. (2010). A tobit regression analysis of the covariation between middle school students' perceived school climate and behavioral problems. *Journal of Research on adolescence*, 20(2), 274-286. doi: 10.1111/j.1532-7795.2010.00648.x
- Weber, G. (1971). *Inner-city children can be taught to read: Four successful schools*. Washington, DC: Council for Basic Education.
- Welsh, W. N. (2000). The effects of school climate on school disorder. *The Annals of the American Academy of Political and Social Science*, 567(1), 88-107. doi: 10.1177/000271620056700107
- Whetten, D. A., & Cameron, K. S. (198). Administrative effectiveness in higher education. *The Review of Higher Education*, 9(1), 35-49.
- Wuch, J. (2013). *The Impact of Elementary Principals' Leadership Styles on School Climates and Student Achievement in an Urban Setting: A Mixed-methods Study* (Doctoral dissertation). Missouri Baptist University.
- Yıldırım, İ. (2015). Okul yöneticilerinin kişilik ve denetim odağı özelliklerinin öğretmenlerin iş doyumu ve okul etkililiği açısından incelenmesi [Investigation of personality and locus of control characteristics of school administrators in terms of teachers' job satisfaction and school effectiveness].(Unpublished PhD disseration). Atatürk Üniversitesi, Erzurum.
- Yılmaz, K. ve Altinkurt, Y. (2013). Örgütsel iklim ölçüğünün Türkçeye uyarlanması: Geçerlik ve güvenilirlik çalışması [Adaptation of organizational climate scale into Turkish: The validity and reliability study]. *Trakya University Journal of Education*, 3(1), 1-11.
- Zembat, R., Koçyiğit, S., Tuğluk, M. N., & Doğan, H. (2010). The relationship between the effectiveness of preschools and leadership styles of school managers. *Procedia-Social and Behavioral Sciences*, 2(2), 2269-2276.