

THE ROLE OF THE CRITICAL LEADERSHIP STYLE OF SCHOOL PRINCIPALS IN SCHOOL EFFECTIVENESS¹

OKUL ETKİLİLİĞİNDE OKUL MÜDÜRLERİNİN ELEŞTİREL LİDERLİK STİLİNİN ROLÜ

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Abstract

The aim of the research is to determine whether the critical leadership styles perceived by teachers are predictive of school effectiveness. In the study, the predictive research pattern, one of the quantitative research patterns, was used. The study group of the research consists of 305 volunteer teachers working in public schools in Üsküdar district of Istanbul Province. Participant Information Form, School Activity Scale and The Critical Leadership Style Scale were used in the study. The data were analyzed by conducting parametric tests. As a result of the research, it was revealed that teachers' perceptions of school effectiveness did not have a significant difference according to their gender, educational status, seniority, and school level. Also, it was determined that teachers' critical leadership style perceptions did not have a significant difference according to their gender, educational status, seniority, and school level. Critical leadership style of school principals perceived by teachers significantly predicts school effectiveness. Another important result of the study is that there is a moderate and positive significant relationship between school principals' critical leadership style perceived by teachers and school effectiveness. Critical leadership style explains 27% of the total variance in school effectiveness.

Keywords: Leadership, Critical leadership, Effective school, School effectiveness.

Öz

Bu araştırmanın amacı, öğretmenler tarafından algılanan eleştirel liderlik stillerinin okul etkililiğini yordayıp yordamadığını belirlemektir. Araştırmada nicel araştırma modellerinden biri olan yordayıcı araştırma modeli kullanılmıştır. Araştırmanın çalışma grubu, İstanbul'un Üsküdar ilçesinde devlet okullarında görev yapan 305 gönüllü öğretmenlerden oluşmaktadır. Araştırmada Katılımcı Bilgi Formu, Okul Etkililiği Ölçeği ve Eleştirel Liderlik Ölçeği kullanılmıştır. Veriler parametrik testler yapılarak analiz edildi. Araştırma sonucunda öğretmenlerin okul etkililiği konusundaki algılarının cinsiyet, eğitim durumu, kıdem yılı ve okul düzeyine göre anlamlı bir farklılık oluşturmadığı ortaya çıkmıştır. Ayrıca, öğretmenlerin eleştirel liderlik tarzı algılarının cinsiyet, eğitim durumu, kıdem yılı ve okul düzeyine göre anlamlı bir farklılık yaratmadığı belirlenmiştir. Araştırmanın bir diğer önemli sonucu, okul müdürlerinin öğretmenler tarafından algılanan eleştirel liderlik stili ile okul etkililiği arasında orta düzeyde ve pozitif yönde anlamlı bir ilişkinin olmasıdır. Eleştirel liderlik stili, okul etkililiğindeki toplam varyansın %27'sini açıklamaktadır.

Anahtar Kelimeler: Liderlik, Eleştirel liderlik, Etkili okul, Okulun etkililiği.

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1. INTRODUCTION

Today, the developments and changes in the fields of science and technology have brought school administrators confronted with complex and uncertain problems, and in these cases the necessity to make an effective decision has emerged. Therefore, leaders need more critical thinking than ever to adapt to rapidly changing environments (Aygün & Özgenel, 2019). According to Watson and Glaser (2008), critical thinking plays a vital role in academic education and professional life in order to understand, solve problems, and make appropriate decisions.

According to Jenkins (2012), leaders should have critical thinking skills. Because the decision-making ability and problem-solving power of the individual affect the quality of life. When the individual uses his critical thinking skills in decision making and problem-solving processes, he probably solves the problem he encounters and makes logical decisions (Paul & Elder, 2013). Critical thinking covers all the decisions we make (Nosich, 2012) and supports the conscious decision-making process (Bruning, Schraw, & Norby, 2014). When critical thinking is used in the decision-making process, it increases the rationality of the decisions taken by ensuring that the process operates consciously and in a planned way (Paul & Elder, 2013). In the problem-solving process, it enables us to determine the components of the problem, the scope, and quality of the problem, and to develop ways and understanding about the solution (Paul & Elder, 2013).

Globally, organizations need critical leaders (Aygün & Özgenel, 2019). According to Jenkins and Cutchens (2011) critical leadership is to use critical thinking skills in different conditions and situations.). Critical leaders are aware of the situation and its context. They evaluate the effects of their decisions, know the strengths and weaknesses of their followers, manage, and employ accordingly, take into account the vision, mission, and values of the organization in decisions and actions. Critical leaders grasp the processes before going to the goal, the decision, and the value of the people and try to understand the diversity of their ideas, are flexible and open-minded in decision-making processes, accept their followers as they are, and they evaluate them constructively. Also, critical leaders listen effectively, encourage critical thinking, applies ideas that arise through critical thinking (Jenkins & Cutchens 2011). In summary, critical leaders show their critical thinking skills and tendencies in all their managerial processes and practices. In this sense, school administrators can contribute to their school positively by using critical leadership skills. In other words, school administrators who have critical thinking skills and use them in their actions can be more successful in reaching the goals (Aygün & Özgenel, 2019). For example, according to the results of Özgenel's (2018) research, school administrators' critical thinking dispositions significantly affect their administrators' rational decision-making and problem-solving skills.

In effective schools, it is aimed to make all students successful by ignoring what kind of family structure they have, and the social environment children come from. Teachers believe that all students will gain targeted behavior. Likewise, teachers are believed to teach these behaviors to all students in the best way (Lezotte, 2001). In this way, the existing "social glass ceiling" will also be broken (Pashiardis & Johansson, 2016). It seems that the characteristics of effective schools differ depending on where researchers and practitioners live and work. However, generally accepted common features are; (i) safe and orderly environment, (ii) instructional leadership, (iii) open and focused mission (iv) school-family relationships, (v) continuous observation of student development, (vi) learning opportunities and effective use of time, and (vii) high expectation climate for the success (Lezotte, 2001, pp. 5-6):

Safe and Regular Environment: Marsden (2005) investigated the relationship between the perceived safe environment and student achievement. At the end of the research,

when students were found in a school environment where they did not feel safe, it was revealed that they were negatively affected academically.

Instructional Leadership: School leaders have an impact on effective schools (Hallinger & Heck, 2010; Hofman & Hofman, 2011; Kazancıoğlu, 2008; Yılmaz, 2010). Effective leaders create a common goal, a system of values, guide all members of the teaching team and prevent them from deviating from the goals (Kirk & Jones, 2004). Musungu and Nasongo (2008) determined that the schools of managers who review the methods and techniques of teachers, get to know the students, organize in-service training for teachers to improve themselves and enable them to participate in the existing training are much more successful.

Open and Focused Mission; In effective schools, all stakeholders who make up the school climate with an open school mission understand and support school goals (Sailer, 1985).

School-family relationships: Steinberg (2016) found that schools were more successful when parents were physically drawn to school, attended meetings, demonstrations, and events, with a research about 12,000 students. Because, when the parents regularly visit the school, it was determined that the school and the house are connected with each other in the child's mind and that the school is an integral part of the whole family's life.

Continuous Observation of Student Development: In effective schools, students are frequently measured with objective measurement tools and the results are evaluated. In this way, while improving student behavior and performance, the education program is improved and developed according to these results (Lezotte, 2001).

Learning Opportunities and Effective Use of Time; Knowing what to teach and taking enough time to teach is very important for effective teaching. Teachers and administrators have to balance the goals in educational programs with increasingly limited teaching time (Kirk & Jones, 2004).

High Expectation Climate for Success; Depending on the learning situation of the students, tasks that will challenge them are given and expected to be successful. In effective schools, each child is seen as a wealth (Bauer, 1997).

It is very difficult to have a school with “effective school” standards. Because the characteristics and effectiveness levels of each school may differ according to its environment. For this reason, researching factors affecting school effectiveness, administrators, and teachers at school level in understanding how to develop schools is seen important in terms of providing information to policymakers in system size (Özgenel & Mert, 2019). According to Collinson (2011), critical leadership has the potential to ask unexplored questions about leadership, expand the understanding of leadership dynamics, develop new forms of analysis, and open innovative lines of inquiry. Also, we know that the principal has a very important role in school effectiveness (Hallinger & Heck, 1996; Lashway, 2003; Marzano, Waters, & McNulty, 2005). Therefore, examining critical leadership together with school effectiveness is important as it is expected to bring a new perspective to the features that make effective schools effective. From this point of view, the aim of the research is to determine whether the critical leadership styles of administrators perceived by teachers are predictive of school effectiveness. In other words, this research was carried out to make an inference about what the role of critical principals in school effectiveness. For this purpose, the following questions were investigated:

- i. Do the critical leadership style and school effectiveness perceptions of school principals perceived by teachers differ significantly according to their gender, educational status, professional seniority, and the school levels they work at?
- ii. Is there a significant relationship between the critical leadership style of school principals perceived by teachers and their perceptions of school effectiveness?
- iii. Does the critical leadership style of school principals perceived by teachers predict school effectiveness?

2. METHOD

2.1. Research Model

In the study, the predictive research pattern, one of the quantitative research patterns, was used. The predictive research pattern is used to "predict or understand future behavior" (Creswell, 2017). In this study, it was aimed to determine whether the critical leadership style of school administrators perceived by teachers predicted school effectiveness.

2.2. Study Group

The study group of the research consists of 305 volunteer teachers working in public schools in Üsküdar district of Istanbul Province. 195 of the participants are women (93.9%) and 110 are men (36.1%). 257 have undergraduate education and 48 have graduate education. 124 of them work in primary school, 105 in secondary school, and 76 in high school. 48 of them have 5 years of seniority, 78 of them have 6-10 years, 79 of them have 11-15 years, 46 of them have 16-20 years and 54 of them have 21 years of seniority.

2.3. Data Collection Tools

Participant Information Form, The Critical Leadership Style Scale and The School Effectiveness Scale were used in the study.

The Critical Leadership Style Scale: The scale was developed by Aygün and Özgenel (2019) to determine the critical leadership styles of school administrators. The scale consists of 30 items and 4 sub-dimensions. It is a 5-point Likert type scale and is rated as 1 = never, 2 = rarely, 3 = occasionally, 4 = mostly, 5 = always. The high score obtained from the scale is interpreted in the sense that the managers display critical leadership style so high.

The School Effectiveness Scale: The scale was developed by Hoy (2014) and adapted to Turkish by Yıldırım (2015). The scale is determined in five dimensions (quantity of product, quality, efficiency, adaptability, and flexibility) The index is a 6-item Likert-type measurement tool with 8 items that provides a subjective assessment of school effectiveness.

2.4. Data Analysis

Descriptive, skewness, kurtosis and Cronbach Alpha reliability values of the scales were calculated before making the analyzes.

Table 1. Mean, standard deviations, skewness, kurtosis and reliability coefficients of teachers' school effectiveness and critical leadership perceptions

	<i>N</i>	<i>M</i>	<i>SD</i>	Skewness	<i>Kurtosis</i>	Cronbach Alpha <i>a</i>
School Effectiveness	305	4.35	.878	.453	.290	.882
Critical Leadership	305	3.65	.849	.285	.701	.980

When Table 1 is examined, it is seen that the data are normally distributed (skewness and kurtosis) and reliable. The data were analyzed by making parametric tests. Regression analyzes were conducted for compare the averages of binary groups, t test, ANOVA in comparing the averages of more than two groups, correlation to determine whether there is a relationship between the two variables and whether the independent variable (teachers' critical leadership perceptions) predicted the dependent variable (school effectiveness). In addition, teachers 'perceptions of school effectiveness ($M = 4.35$; $SD=.453$) and managers' critical leadership style ($M = 3.65$; $SD=.849$) are high. The significance level was taken as $p < .05$ in all analysis results.

3. RESULTS

The results of the t-test to determine whether teachers' school effectiveness and critical leadership perceptions differ significantly according to their gender are given in Table 2.

Table 2. Comparison of teachers' school effectiveness and critical leadership perceptions by gender

Variables	Groups	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
School Effectiveness	Female	195	4.41	.86	1.76	303	.079
	Male	110	4.23	.89			
Critical Leadership	Female	195	3.65	.86	.172	303	.864
	Male	110	3.67	.82			

When Table 2 is examined, teachers' school effectiveness and critical leadership style perceptions do not make a significant difference according to their gender ($p > .05$).

The results of the t-test to determine whether teachers' professional commitment and perceptions of school effectiveness differ according to their educational status are given in Table 3.

Table 3. Comparison of teachers' school effectiveness and critical leadership perceptions according to their educational status

Variables	Groups	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
School Effectiveness	Undergraduate	257	4.34	.88	.214	303	.831
	Graduate	48	4.37	.86			
Critical Leadership	Undergraduate	257	3.65	.86	.002	303	.998
	Graduate	48	3.65	.76			

According to Table 3, teachers' school effectiveness and critical leadership perceptions do not differ significantly according to their educational status ($p > .05$).

One-way analysis of variance (ANOVA) results are given in Table 4 to determine whether teachers' perceptions of school effectiveness and their critical leadership differ significantly according to their seniority.

Table 4. Comparison of teachers' school effectiveness and critical leadership perceptions according to their seniority

	Seniority	N	\bar{X}	SD	Source of Variance	Sum of Squares	df	Mean Square	F	p
School Effectiveness	A-5 years and under	48	4.41	.85	Between Groups	1.68	4	.421	.542	.705
	B-6-10 years	78	4.27	.87	Within Groups	233	300	.777		
	C-11-15 years	79	4.40	.90	Total	234.6	304			
	D-16-20 years	46	4.24	.94						
	E-21 years +	54	4.41	.82						
	Total	305	4.35	.87						
Critical Leadership	A-5 years and under	48	3.66	.89	Between Groups	1.61	4	.403	.555	.695
	B-6-10 years	78	3.60	.86	Within Groups	217	300	.725		
	C-11-15 years	79	3.77	.76	Total	219.1	304			
	D-16-20 years	46	3.61	.89						
	E-21 years +	54	3.59	.89						
	Total	305	3.65	.86						

According to Table 4, teachers' school effectiveness and critical leadership perceptions do not differ significantly according to their seniority years ($p > .05$). One-way analysis of variance (ANOVA) results are given in Table 5 to determine whether teachers' perceptions of school effectiveness and their critical leadership differ significantly from the level of school they work.

Table 5. Comparison of teachers' school effectiveness and critical leadership perceptions according to their level of school.

	School levels	N	\bar{X}	SD	Source of Variance	Sum of Squares	df	Mean Square	F	p
School Effectiveness	A-Primary School	124	4.43	.84	Between Groups	3.79	2	1.89	2.47	.086
	B-Secondary School	105	4.19	.88	Within Groups	230.8	302	.76		
	C-High S.	76	4.43	.90	Total	234.6	304			
	Total	305	4.35	.87						

Critical L.ship	A- Primary School	124	3.75	.87	Between Groups	2.28	2	1.14		
	B-Secondary School	105	3.55	.87	Within Groups	216.8	302	.71	1.59	.205
	C-High School	76	3.66	.77	Total	219.1	304			
	Total	305	3.65	.84						

According to Table 5, teachers' school effectiveness and critical leadership perceptions do not differ significantly from the school levels they work at ($p > .05$).

Correlation analysis conducted to determine whether there is a relationship between teachers' critical leadership and their perceptions of school effectiveness is shown in Table 6.

Table 6. Correlation analysis results between teachers' school effectiveness and critical leadership perceptions

	<i>School Effectiveness</i>	
	r	.525**
Teachers' critical leadership perceptions	p	.000
	N	305

When Table 6 is examined, it is seen that there is a medium and positive significant relationship between teachers' perceptions of critical leadership and school effectiveness ($r = .525$; $p < .01$).

The results of the simple regression analysis performed to calculate the critical leadership style of school administrators perceived by teachers to predict the level of school effectiveness are shown in Table 7.

Table 7. Regression analysis of the critical leadership style predicting school effectiveness

Independent Variable	Dependent Variable	B	Std. Error.	(β)	t	p	r	r ²	F	p
Constant		2.36	.190		12.44	.000				
Critical Leadership	School Effectiveness	.543	.051	.525	10.77	.000	.525	.275	115.18	.000

When Table 7 is examined, it is seen that the critical leadership style of school principals perceived by teachers significantly predicts school effectiveness ($p < .05$). Critical leadership style explains 27% of the total variance in school effectiveness. In other words, critical leadership style positively affects school effectiveness.

4. DISCUSSION AND CONCLUSION

In the study, it was aimed to determine whether the perceptions of critical leadership and school effectiveness differ significantly according to their gender, educational status, seniority and the level of school they work in, and whether critical leadership predicts school effectiveness.

It was revealed that teachers' perceptions of school effectiveness did not make a significant difference according to their gender, educational status, years of seniority, and

school level in the research. Similarly, the research conducted in the literature revealed that teachers' perceptions of school effectiveness did not make a significant difference according to their gender (Çiftçi, 2019; Çobanoğlu Kasap, 2008; Gökmen, 2011; Özgenel & Koç, 2020; Özgenel & Mert, 2019; Toprak, 2011), educational levels (Özgenel & Topal, 2019), years of seniority (Gökmen, 2011; Lyle, 2018; Özgenel & Mert, 2019; Özgenel & Koç, 2020; Özgenel & Topal, 2019). However, some studies' results are different; school effectiveness and education levels of teachers (Çobanoğlu Kasap, 2008; Ontai-Machado, 2016; Özgenel & Koç, 2020; Özgenel & Mert, 2019), their gender (Akan, 2007; Kuşaksız, 2010; Kanmaz Uyar, 2016; Özgenel & Topal, 2019), their seniority (Akan, 2007; Ayik, 2007; Çobanoğlu Kasap, 2008; Kuşaksız, 2010; Ontai-Machado, 2016; Toprak, 2011) and found that they make a significant difference according to the school levels they work at (Gökmen, 2011; Özgenel & Koç, 2020; Özgenel & Mert, 2019; Özgenel & Topal, 2019). There are many common standards for say that a school is effective. Although most of these standards are generally accepted, some may vary from region to region or even from school to school. These results found by the researchers may also refer to this situation. In a region with different effective school perceptions, there is no difference according to the gender of the teachers, whereas in another school, effective school perceptions can make a difference according to their gender. The reason for the different results of the research may be due to the sample groups or the scales used.

According to another result reached in the research, it was determined that teachers' critical leadership style perceptions did not make a significant difference according to their gender, educational status, years of seniority, and school level. Similarly, Aygün (2018) has not found any difference between educational status, school level, and seniority. According to these results, we can say that a school principal with a critical leadership style has the same effect on female and male teachers, teachers with different educational levels, teachers working at different school levels and working years.

Another important result of the research is that there is a moderate and positive significant relationship between teachers' critical leadership and school effectiveness. Accordingly, teachers' critical leadership perceptions affect school effectiveness positively. In other words, the more critical the school principals show, the effectiveness of the school will also be positively affected. No study has been found that investigates the relationship between effective school and critical leadership. Therefore, this result is very important. Aygün (2018) reported that school principals are highly associated with and positively influenced leadership practices such as modeling, vision building, risk-taking, appreciation, and teamwork when critical leadership style is exhibited. This may be because being open to criticism is a behavior that develops the individual. Leaders, who are open to feedback and deep criticism, identify shortcomings, and work with their community to correct them. The leadership role, which is one of the features of effective schools, comes to the fore at this point. The leader, as a guide to his audience, ensures their development, and make the school effective.

It is very important to design the education system and to make schools more efficient and make schools more efficient. With the results of this research, it can be thought that critical leadership, as well as the basic characteristics of effective schools (instructional leadership, open and focused mission, etc.), can also be counted among these characteristics. Therefore, future studies should focus on this new knowledge. It should involve other school stakeholders (such as parents and students) and make stronger generalizations about the relationship between critical leadership and effective schooling.

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