

Teachers' Self-Efficacy Perceptions in Terms of School Principal's Instructional Leadership Behaviours

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Abstract

The aim of this study is to analyse the effects of principals' instructional leadership on the teachers' perceptions of their self-efficacy. Mixed method, in which quantitative and qualitative techniques are employed together, was used in order to analyse the data obtained. The sample for quantitative analysis included 435 teachers working in schools in Şahinbey Province and study group for qualitative analysis included 24 teachers working in these schools. For the quantitative data, regression and correlation analysis were done; for the qualitative data, descriptive and content analysis were done. Data were obtained using Instructional Leadership Behaviours Scale (Hallinger, 2011) and Teachers' Self-Efficacy Perception Scale (Tschannen-Moran ve Woolfolk Hoy, 2001). According to the result of the study, there is a significant medium level relationship between principals' instructional behaviours and teachers' self-efficacy. In addition, instructional leadership behaviours displayed by principals contribute positively to teachers' motivation and task focality, the development of learners' ability to learn, and the self-evaluation skills of the teachers about themselves and students.

Keywords: Instructional Leadership, Teachers' Self-efficacy, Primary School, Secondary School.

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INTRODUCTION

Leadership has been one of the most researched issues in the field of educational administration, starting from the last quarter of the 20th century to the present. When researches in the field are reviewed, although there are many studies on leadership, it cannot be said that the concept is completely understood (Evers and Lakomski, 1996: 77). In particular, leadership is a very important concept in terms of the functioning of the organizational structure, varying roles in this structure, reaching organizational goals and making an impact on the followers. In terms of educational administration, especially since the 1980s, leadership has become a subject to be remarkably worked on. Today, when organizational changes are happening rapidly, leadership behaviours of administrators in educational organizations have an important place in the process of promoting the school's improvement and academic success. Lee, Dedrick and Smith (1991) emphasize that school principals' leadership behaviour is a significant influence on the structure and functioning of schools which constitute one of the key components of social construction. Focusing on school leadership behaviours is a result of foreign policy reforms aimed at promoting school development by changing the practices of school leaders. Grunert (2005) stated that school principals' leadership behaviours cover collaborative leadership, teacher collaboration, professional development, goal association, vocational support and learning partnership. As a leader, school principals are responsible for everything, positive and negative, in school. Therefore, school principals are influential on many organizational components, from the development of school cultures, to the determination of working conditions, to the enhancement of student academic success, to the increase of teacher self-efficacy. In this regard, instructional leadership behaviours, which are frequently found in effective school activities, come to the forefront in leadership behaviours expected from school principals.

Instructional Leadership

The expectations from school principals who have many different roles within the school are increasing day by day. In the context of performing the roles and responsibilities anticipated by school principals, the point of emphasis, especially in school effectiveness researches, has been instructional leadership behaviour in recent years (Hallinger, 2011). Instructional leadership has become a subject that has always made its importance understood in educational researches, politics, administrative processes and practices. The increasing global emphasis particularly on accountability has further increased the interest in this leadership style. Although there are many leadership styles in the organizational field, the most important feature distinguishing instructional leadership from others is that it is a type of leadership peculiar to educational organizations. Instructional leadership is the act of aiming to achieve success in the teaching-learning process (Steel, 2013) and raising successful students for the society, providing the desired conditions for learning and teaching, increasing the satisfaction of school staff and transforming the school into a productive environment (Gorton and Schneider, 1991). By another definition, instructional leadership means the direction, resources and support given by principals to teachers and students for the improvement of teaching and learning (Rossouw, 1990; Tan, 2012). Instructional leaders are those who act in concert with teachers, students and parents, pave the way for teachers' development and guide them, regularly visit classes, and check what is going on by constantly showing up in school (Blase and Blase, 1999) as well as being energetic people who struggle to reach instructional aims and have the necessary knowledge, technical, conceptual and humanitarian qualifications about teaching which is the most important part of the educational process. In addition, instructional leaders are strong and guiding leaders in making their schools successful. As Hallinger (2005) noted, effective instructional leader is the one who has accomplished to align the school's strategies and activities with the school's academic mission. An effective instructional leader is someone who guides teachers in improving and implementing the school curriculum and has an influence on teachers, students, and parents to improve the school's goals.

When the definitions of instructional leadership are examined, it seems that, in order to create an effective school environment, school administrators have to both fulfil their own responsibilities

and affect teachers and other stakeholders. The features that instructional leaders must have in reaching the aims of the school are classified in various ways. Danley and Burch (1978) classified the features of the instructional leader as personal, administrative and professional. Being reliable, transparent and fair are included in personal attributes of the leader while holding meetings periodically to keep teaching-learning process under control is of their administrative features, and making the school in harmony with the environment and society, following social events, endeavouring for teachers' improvement and regularly observing the classes are among their professional features. It is concluded from this point of view that, as one of the most important factors in reaching the goal of learning-teaching process successfully, the instructional leadership behaviours of the school administrators have effect on the self-efficacy of the teachers. As Özdemir and Sezgin (2002) pointed out, an effective instructional leadership will contribute to the quality of education given in the school and to the fulfilment of the mission expected from the schools by increasing student achievement. For the continuity and success of the teaching process, instructional leaders need to encourage teachers, monitor their professional development, extend and implement academic standards by keeping visibility high, and promote a positive learning climate. Akram, Kiran and İlgün (2017) emphasized that, to develop ILQ for instructional leadership, seven inventories were selected as instructional leader as a resource provider, instructional leader for continuity of visibility, instructional leader for teacher professional development, instructional leader for maximizing instructional time, instructional leader for student tracking, instructional leader for giving feedback on teaching and learning, and instructional leader as a practitioner of curriculum. The most powerful way to achieve school development is that school principals as instructional leaders need to focus on the pedagogical development of teachers and students because increasing school performance, supporting teacher professional development and improving the quality of student outcomes are involved in the roles and responsibilities expected of school principals. Emphasizing that instructional leadership has three dimensions: "recognition of the school's mission," "managing the curriculum and instruction," and "creating a positive learning climate", Hallinger and Murphy (1985) state that a school principal should determine school objectives and share them with stakeholders, coordinate educational programs, monitor structured processes knowing how to supervise and evaluate, set standards for teachers, identify their expectations, check teacher progress, and use time well. Similarly, Şişman (2004) discusses educational leadership in five dimensions: identification and sharing of school objectives, management of educational program and teaching process, evaluation of teaching process and students, support and development of teachers, creation of a proper teaching-learning environment and climate.

Teacher Self-efficacy

First introduced by Bandura in 1977, the concept of self-efficacy explains the knowledge and skills that individuals possess in the relevant area based on Bandura's theory of social learning (Pajares, 2002). Self-efficacy perception also explains many behaviours such as assertiveness, adaptation to change conditions, using free will, giving effort and making choice (Bandura, 1997; Schunk, 1995). Simply put, it can be expressed as self-assurance of doing something. The concept of self-efficacy is a perception that also occurs with efficacy belief. These beliefs are judgments, evaluations, or competence perceptions that affect thoughts, motivations and behaviours of an individual or a group. Effective beliefs are also the mechanism that regulates human behaviour (Bandura, 1999, 1995, 1993) because the individuals or groups do not act if they do not believe that they will have the authority to produce certain behaviours or actions. Teacher self-efficacy is a proficiency that teachers have gained through education (Tschannen-Moran, 1998: 202). That is, the teacher's self-efficacy perception is referred to the judge for his or her instructional efficacy that the teacher has in order to make the student gain the desired behaviour. Teacher self-efficacy perception can also be explained as the idea that he or she can use his/her own level of competence for directing students to be successful both academically and developmentally. The concept of "self-efficacy" can be used synonymously with the concept of "teacher efficacy" in literature. Teachers' self-efficacy can be defined as their belief and trust in themselves, and their expectations of their students' learning as a result of their teachings. According to the findings of the research by Cambridge University Faculty of Education (2012),

teachers with a sense of self-efficacy are more creative in their work, more committed to achieving performance goals, and more focused on their work to provide sustainability. Many different studies also show that self-efficacy of teachers has a positive relationship with student success, motivation level, teaching practices, teaching desire, commitment, and job satisfaction (Caprara et al., 2006; Mojavezi and Tamiz, 2012; OECD, 2014b; Schleicher, 2014; Tschannen-Moran and Barr, 2004; University of Cambridge Faculty of Education, 2012). On the other hand, teachers with a low level of self-efficacy have more concerns about student learning and increased job stress, which in turn decreases their level of job satisfaction. Also, teachers with high self-efficacy prefer to work in small groups as a teaching strategy in the classroom environment and tend to give constructive feedback rather than making critical corrections to mistakes. This shows that teachers with high self-efficacy are more willing, responsible, and successful in creating and maintaining class discipline, while teachers with low self-efficacy are less willing to take responsibility (Hughes, Grossman and Barker, 1990).

Tschannen-Moran et al. (1998) revealed in their study that teacher self-efficacy has two dimensions as "individual teaching efficacy" and "general teaching efficacy". The teacher's belief in his or her efficacy of enhancing students' academic success and preventing unwanted student behaviours by meeting their needs constitutes individual instructional competence while his/her belief that education at school is more effective than the other external factors on student achievement refers to the general teaching efficacy (Soodak and Podell, 1996). Individual teaching efficacy is shaped by the teachers' judgments of their own abilities; whereas, the general teaching efficacy is the outcome of an evaluation that takes into account the other teachers, the school, and the education system as a whole (Anderson, Greene and Loewen, 1988; Ross, 1994; Tschannen-Moran and Woolfolk-Hoy, 2001: 788-792).

Dibapile (2012) stated that teachers with high self-efficacy tend to use effective teaching strategies, provide effective classroom management and thus reduce the number of students with low level of success. For this reason, school administrators should aim to improve teacher self-efficacy as a tool so that the success of teaching effectiveness can be increased (Hipp, Bredeson, 1996). Another benefit of enhancing teacher self-efficacy by school administrators is that it helps prevent the teachers' feeling of burnout. The leadership behaviours displayed by the school administrators gets important at this point. Despite the fact that there are some studies showing that instructional leadership behaviours of school administrators have impact on teacher self-efficacy (Bellibas and Liu, 2017; McFarlane, 2014; Derbedek, 2008; Howard, 1996), it can be said that the studies conducted in this area fall short in terms of instructional leadership (Çalık, Sezgin, Kavgacı and Kılınç, 2012). Determining the effect of instructional leadership behaviour of school principals on teacher self-efficacy can contribute positively to the professional development of teachers, the effectiveness of school and student success because the researches show that effective instructional leadership behaviours of school administrators have a strong influence on increased student achievement and school environment (Caprara et al., 2012; Knowles et al., 2005; Kurt et al., 2012; Thoonen et al., 2012). In spite of external difficulties, especially the school principals try to shape the school culture in the desired manner in order to provide a convenient environment for everyone to learn. Instructional leadership practices, which are directly and indirectly influential on student achievement through teacher self-efficacy, also have a key role in effective school work (Klein and Rice, 2012; Lezotte 1991). Teddlie, Kirby, and Stringfield (1989) studied the observable differences in effective and ineffective classroom environments in their studies and focused on in-class behaviours of the teacher and found that instructional leadership behaviours of school principals made significant differences in classroom effectiveness of the teacher. Besides, teachers stated that they have a higher perception of motivation, satisfaction, determination and morale when working with school principals considered as instructional leaders (Foundation, 2012).

To sum up, variables related to teachers, class, school management and environmental factors have an impact on teachers' self-efficacy beliefs. In addition, the teachers with higher self-efficacy can better manage the classroom, better identify student needs with self-confidence, and use effective theories of self-efficacy (Kurt et al., 2012; Caprara et al., 2012). In this context, the purpose of this research is to investigate the effects of instructional leadership behaviours of school principals on

school teachers' self-efficacy perceptions according to teachers' perceptions. Answers to the following sub-problems were sought in the study:

- Do instructional leadership behaviours exhibited by school principals have an effect on teachers' self-efficacy perceptions?
- What are the opinions of the teachers on the contribution of instructional leadership behaviours of school principals to teachers' self-efficacy perceptions?

METHOD

The research was conducted through a mixed method which is a combination of quantitative and qualitative research methods. Tashakkori and Creswell (2007: 4) describe the mixed method research as a research method that reduces the disadvantages of two different research methods (qualitative and quantitative) by strengthening the qualitative data with the quantitative data or vice versa (cited by Dede and Demir, 2014:5). In this study, explanatory sequential design of the mixed method research designs was used to find solutions to the main problem statement and to investigate the subject in more depth through qualitative interviews based on the quantitative data.

Study Group

Study Group for the Quantitative Dimension

Since first quantitatively and then qualitative data collection process was followed in the study, two different sample selection methods were used. Simple random sampling method was chosen for the collection of quantitative data at the beginning of the study. The research population consists of primary and secondary school teachers working in Şahinbey district of Gaziantep province. There are 5237 primary and secondary school teachers in Şahinbey district. In this study, data were collected from 278 primary school teachers and 157 secondary school teachers working in 21 schools selected by simple random sampling method. Demographic information of participants is presented in Table 1.

Table 1. Demographic Information of Teachers Participating in Quantitative Dimension

Variable	Group	N	%
Gender	Male	223	51
	Female	212	49
	Total	435	100
Age	25-35	241	55
	36-45	164	38
	46 and over	30	7
	Total	435	100
Seniority	1-9	167	38
	10-19	209	48
	20 and over	59	14
	Total	435	100
Teachers' School Type	Primary school teachers	278	64
	Secondary school teachers	157	36
	Total	435	100

Study Group for the Qualitative Dimension

Qualitative data were collected by purposeful sampling method in the following step in order to examine the quantitative results of the research more deeply with "why" and "how" questions. According to this sampling method, individuals with different gender, age, professional seniority and school type characteristics were selected as the study group. It was aimed with this to study the situations in depth that were thought to hold rich information. It consists of 18 teachers with different demographic characteristics determined by means of maximum variation sampling from purposeful

sampling types to better explain quantitative results. According to the gender variable, 61% (11) of 18 participants were male and 39% (7) were females. As for the age variable, 39% (7) were between the ages of 25-35, 44% (8) were between 36-45 years and 17% (3) were 46 and over. 33% (6) of 18 participants had 1-9-year professional seniority, 39% (7) had 10-19 year seniority, 28% (5) had 20 or more seniority while 64% were primary school teachers and 36% were of secondary school.

Data Collection Tools

Instructional Leadership Scale

The scale was developed by Şişman (2016). There are a total of 50 items in the scale of instructional leadership behaviours. The items of the scale measure five dimensions. The Cronbach alpha internal consistency coefficient of the scale was found to be .948 and the reliability coefficients of the sub-dimensions are shown in Table 2.

Table 2. Cronbach Alpha Reliability Coefficients for Sub-Dimensions of Instructional Leadership Scale

Dimensions	Cronbach Alpha Reliability Coefficients
Determining and Sharing School Goals	.912
Management of the Curriculum and Teaching Process	.907
Evaluation of Teaching Process and Students	.921
Supporting Teachers and Their Development	.941
Creating a Regular Learning-Teaching Environment and Climate	.936

In order to analyze the factor structure of the scale Lisrel 8.80 program was used and Confirmatory Factor Analysis (CFA) was conducted. In the analysis maximum likelihood method was applied. Goodness of fit index values were given in Table 3.

Table 3. Comparison of Standard Goodness-of-Fit Criteria and Measurement Results

Uyum Ölçüleri	İyi Uyum	Kabul Edilebilir Uyum	Uyum İndeksleri
RMSEA	$0 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$	0.059
NFI	$0.95 \leq NFI \leq 1.00$	$0.90 \leq NFI \leq 0.94$	0.96
NNFI	$0.95 \leq NNFI \leq 1.00$	$0.95 \leq NNFI \leq 0.96$	0.96
CFI	$0.95 \leq CFI \leq 1.00$	$0.95 \leq CFI \leq 0.96$	0.98
GFI	$0.95 \leq GFI \leq 1.00$	$0.90 \leq GFI \leq 0.94$	0.89
AGFI	$0.90 \leq AGFI \leq 1.00$	$0.85 \leq AGFI \leq 0.90$	0.90
RFI	$0.90 < RFI \leq 1.00$	$0.85 < RFI \leq 0.90$	0.94
SRMR	$0 \leq SRMR \leq 0.05$	$0.05 < SRMR \leq 0.10$	0.037
χ^2	$0 \leq \chi^2 \leq 2df$	$2df \leq \chi^2 \leq 3df$	213.78
χ^2/df	$0 < \chi^2/df \leq 2$	$2 \leq \chi^2/df \leq 3$	2.63

As seen in Table 3, the χ^2 / df values are below 3, the RMSEA value is below 0.008, and the CFI, AGFI and GFI values are over 0.90, indicating that the goodness-of-fit values of the tested scales are above the acceptable threshold values. According to Hooper, Caughlan and Muller (2008), acceptable fit value for GFI, CFI, NFI, RFI, IFI and AGFI indices is 0.90 while the value of 0.95 shows the perfect fit. These goodness-of-fit index values prove that model-data fit is ensured for the tested model.

Teacher Self-Efficacy Scale:

The Teacher Self-Efficacy Scale was developed by Tschannen-Moran and Woolfolk Hoy (2001). The original form of the scale is a five-point Likert-type, consisting of a 24-item long form and a 12-item short form. In this study, the short form consisting of 12 items and three sub-dimensions

was used. Of these sub-dimensions, "Efficacy in Student Engagement" holds 4 items (2, 3, 4, 11), "Efficacy in Instructional Strategies" includes 4 items (5, 9, 10, 12) and the "Efficacy in Classroom Management" covers 4 items (1, 6, 7, 8). It was reported for the reliability of the scale that internal consistency coefficient was found .923 for Efficacy in Student Engagement, .918 for Efficacy in Instructional Strategies, and .935 for Efficacy in Classroom Management. In this adaptation study, a 5-point rating (Never, Very Little, Some, Much, Pretty Much) was adopted. Confirmatory Factor Analysis (CFA) was done via Lisrel 8.80 to examine the factor structure of the scale for the participant group. The Maximum Likelihood (ML) method was used in the analyzes. The goodness-of-fit index (gfi) values are given in Table 4.

Table 4. Comparison of Standard Goodness-of-Fit Criteria and Measurement Results

Fit Measures	Goodness-of-Fit	Acceptable Fit	Fit Index
RMSEA	$0 \leq \text{RMSEA} \leq 0.05$	$0.05 \leq \text{RMSEA} \leq 0.08$	0.062
NFI	$0.95 \leq \text{NFI} \leq 1.00$	$0.90 \leq \text{NFI} \leq 0.94$	0.94
NNFI	$0.95 \leq \text{NNFI} \leq 1.00$	$0.95 \leq \text{NNFI} \leq 0.96$	0.97
CFI	$0.95 \leq \text{CFI} \leq 1.00$	$0.95 \leq \text{CFI} \leq 0.96$	0.97
GFI	$0.95 \leq \text{GFI} \leq 1.00$	$0.90 \leq \text{GFI} \leq 0.94$	0.91
AGFI	$0.90 \leq \text{AGFI} \leq 1.00$	$0.85 \leq \text{AGFI} \leq 0.90$	0.92
RFI	$0.90 < \text{RFI} \leq 1.00$	$0.85 < \text{RFI} \leq 0.90$	0.93
SRMR	$0 \leq \text{SRMR} \leq 0.05$	$0.05 < \text{SRMR} \leq 0.10$	0.042
χ^2	$0 \leq \chi^2 \leq 2df$	$2df \leq \chi^2 \leq 3df$	155.63
χ^2/df	$0 < \chi^2/df \leq 2$	$2 \leq \chi^2/df \leq 3$	2.29

As seen in Table 4, Goodness-of-fit index values prove that model-data fit is ensured for the tested model.

In the data collection of the qualitative dimension, focus group interviews were conducted with 24 participants through a semi-structured interview form. The focus groups were formed according to the wishes of the participants, with each group consisting of 6 people (2 groups of primary school, 2 groups of middle school). Interviews were conducted with 1 group each week and 2 focus group interviews were done with each group in total. The interviews were recorded with voice recorder to increase the quality of the interview process and prevent data loss. During the group meetings lasting about 1.5-2 hours, the instructional leadership behaviours were explained firstly, and then they were asked whether their principals exhibited instructional leadership behaviours and also what kind of contribution these behaviours of the principals made to them. Following the group interviews, the summaries of the interviews were put down on the paper and confirmed by the participants. The thematic coding of the research was carried out according to previously defined concepts after the literature review. Conceptual coding was done according to the concepts derived from the data in line with the data obtained from the teachers. The data obtained from the focus group interview were analyzed under 3 themes.

Analysis of Data

The analysis of the quantitative data obtained through data collection tools was carried out using SPSS.21 software. The data were interpreted at a significance level of 0.05.

By establishing an integrated model for explaining the relationship between instructional leadership behaviours and teacher self-efficacy levels, structural equation modeling (SEM) was used to test the relationship between the variables in the model. Structural Equation Modeling is a comprehensive statistical approach used to test the models which involve causal and mutual relationships between measured (observed) and latent (implicit) variables (factors) (Hoe, 2008: 77). Being used in many scientific fields, SEM has become a popular model in recent years as it provides ease of interpretation and analysis of latent variables. Contrary to structural equation modeling,

traditional regression analysis ignores possible measurement errors in explanatory variables. For this reason, the results of regression analysis can give false and misleading results (Bayram, 2010: 1).

A hierarchical multiple linear regression analysis involving control variables was conducted in order to examine the direct effect of instructional leadership on teacher self-efficacy. Data related to variables and concepts identified as control variables were included in the analysis using the Enter method.

Descriptive and content analysis methods were used to analyze the qualitative data of the study. A summative content analysis method was employed. The summative content analysis begins with the key words identified according to relevant literature or derived from the findings of the research process (Hsieh & Shannon, 2005). In this context, the participants' responses to the questions in the interviews were turned into the text and analyzed in the qualitative analysis program of Atlas.ti. In the data analysis, the responses given to the questions were analyzed by the researchers and the findings emerged as two-level: thematic and conceptual coding. Furthermore, in order to keep the identities of the participants private, each of them was coded as G(1) = PS1, G(2) = SS2 ... etc. and the names of their schools were kept confidential. In order to increase the internal validity of the study, the interviews were prolonged as long as possible and more valid data were collected by establishing a trust atmosphere between the participants and the researchers with long-term interaction. All data for the reliability of the analysis were coded and compared by each of the researchers. A detailed description was made with a direct citation from the participants' views in order to ensure external validity. An agreement of at least 70% is required among coders for the reliability of the research (Yıldırım and Şimşek, 2011: 233). In this study, an agreement of 89% was reached among the researchers who did the coding.

FINDINGS

Findings from quantitative and qualitative data are given in this part.

Findings from Quantitative Data

The mean, standard deviation, correlation values and Cronbach alpha (α) values for the variables of the study are given in Table 5.

Table 5. Mean, Standard Deviation and Multiple Correlation Matrix of Observed Variables

	\bar{X}	Sd	1	2	3	4	5	6	7	8	9	10
1-Determining and Sharing School Goals	.92	.73	1	.742* *	.715 **	.648* *	.620* *	.340* *	.405* *	.326* *	.763* *	.233**
2-Management of Curriculum and Teaching Process	.03	.98		1	.724 **	.767* *	.740* *	.337* *	.314* *	.307* *	.821* *	.352**
3-Evaluation of Teaching Process and Students	.97	.85			1	.664* *	.580* *	.379* *	.400* *	.386* *	.693* *	.423**
4-Supporting Teachers and Their Development	.68	.67				1	.547* *	.367* *	.374* *	.261* *	.742* *	.260**
5-Creating a Regular Learning-Teaching Environment and Climate	.01	.71					1	.249* *	.309* *	.275* *	.803* *	.374**
6- Efficacy in Student Engagement	.94	.10						1	.625* *	.718* *	.340* *	.871**
7-Efficacy in Instructional Strategies	.16	.18							1	.775* *	.402* *	.840**
8-Efficacy in Classroom Management	.02	.20								1	.411* *	.779**

9-Instructional Leadership (General)	.92	.87	$\alpha=.94$ 8	1	.392**
10-Teacher Self-efficacy (General)	.04	.12	$\alpha=.93$ 2	1	

*p <.05. **p <.01

Structural equation model was conducted between instructional leadership behaviours as independent variable and teacher self-efficacy levels as dependent variable to examine the effects of instructional leadership behaviours exhibited by school principals on self-efficacy perceptions of teachers. The path diagram as a result of the analysis is shown in Figure 1.

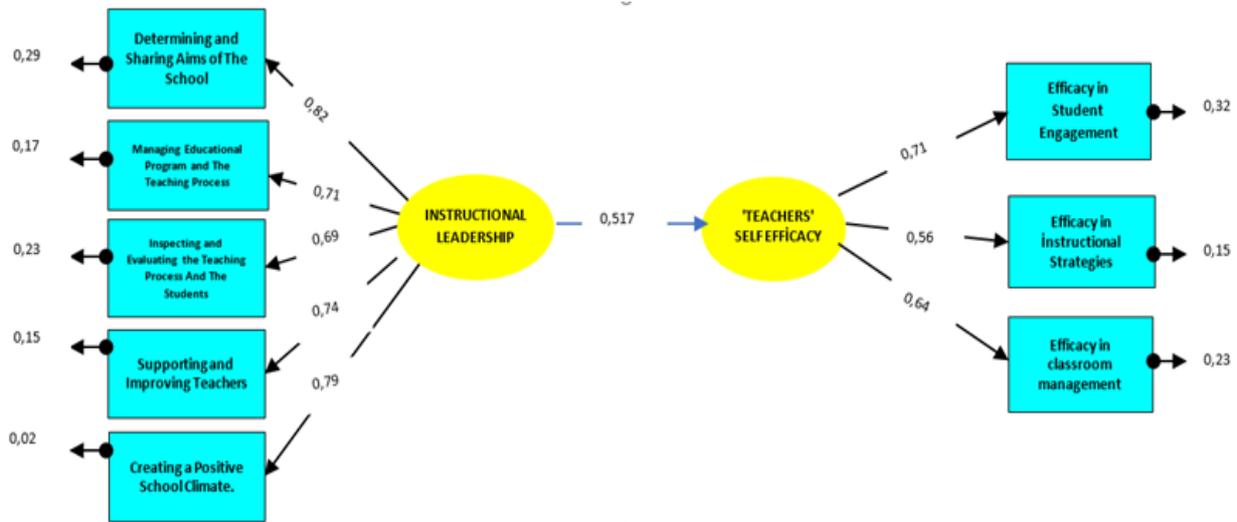


Figure 1. Structural equation modeling between organizational leadership and teacher self-efficacy

As seen in Figure 1, there is a significant relationship between Instructional Leadership and Teacher Self-efficacy ($\beta = 0.517$), and instructional leadership predicts the teacher self-efficacy. 15,4% of the variance in teacher self-efficacy is explained by this model (R^2 model = .154, $p <.001$).

Findings from Qualitative Data

The themes and codes of teachers’ opinions related to contribution of school principals’ instructional leadership behaviors to the competencies of teachers in terms of integration with their students were given in Table 6.

Table 6. Codes for the Teachers' Self-efficacy Engagement with Students

Theme	Sub-theme	Direct Citations	Focal Codes / Concepts
Contributions of Instructional Leadership Behaviours of School Principals to Teachers' Self-efficacy	Efficacy in Student Engagement	G(1) =PS5: When the school principal supports me in instructional matters, I mean, providing all the resources I need, it increases my commitment to work... G(2) =PS2: My principal’s facilitating the instructional process by appreciating me and my students increases my motivation... G(1) =SS3: I think that principals have an important role in the integration of the student and teacher in secondary schools... as my principal forces for the opportunities, so does my enthusiasm for work increase... G (2) –SS4: When I see the instructional effort of our principal, my desire to teach increases, and thus students actively participate in the lesson ...	*Increasing motivation
		G (1) =PS2: When I see the effort of my principal, I want to work harder G (2) =PS3: It contributes to my awareness so that my students will be task-oriented ... G (1) =SS5: It raises willingness for team work... G (2) =SS1: It helps develop my “we-feeling” by doing collective works	*Task-oriented

G(1) =PS3: Since our principal has made the planning of instructional processes very well, my unplanned work is reduced during the school year and the academic success of my class is increasing...	
G (2) =PS4: It supports me in improving my skills of how to create up-to-date instructional environments, which in turn makes student learning more effective...	*Increasing Student Performance
G(1) =SS6: Determining the dimension of the relations between the student and the teacher helps doing effective school activities and thus improving the efficiency of learning...	
G(2) =SS2: Since it supports me in creating an appropriate learning environment, it makes learning outcomes achieved as we wish...	
G(1) =PS1: It offers opportunities for my self-evaluation...	
G(2) =PS5: It enables me to be aware of my skills as to what and to what extent I can do ...	*Doing Self-evaluation
G(1) =SS5: Each teacher is assigned several students, so my students and I have the chance of self-evaluation.	
G(2) =SS1: It offers the opportunity to self-evaluate how well the parents, students and we (<i>teachers</i>) meet our responsibilities...	

As seen in Table 6, the instructional leadership behaviours of principals make positive contributions to the increase in the motivation and task orientation of the teachers, to the improvement of the learning ability of the students, and to the self-evaluation skills of the teachers about themselves and the students.

The themes and codes of teacher’s opinions related to contribution of school principals’ instructional leadership behaviours to the competencies of teachers in terms of determining instructional strategies were given in Table 7.

Table 7. Codes for the Teachers' Self-efficacy of Instructional Strategies

Theme	Sub-theme	Direct Citations	Focal Codes / Concepts	Point
Contributions of Instructional Leadership Behaviours of School Principals to Teachers' Self-efficacy	Efficacy in Instructional Strategies	G(1) =PS4: It supports to improve me in vocational issues for changing conditions of the day ... G(2) =PS6: It encourages us particularly to make use of technological tools...	*Professional Efficacy	
		G(1) =SS4: By enabling the peer learning, it opens the way for learning from each other to acquire new skills. ... G(2) =SS5: I receive external support to follow and practise the developments related to our field, which makes me feel adequate...		
		G(1) =PS2: It leads me to create all the resources and environments necessary for students to learn by doing and experience, and this increases my instructional performance ... G(2) =PS3: It encourages all school stakeholders to raise awareness to increase student achievement and work for the school, thus creating opportunities for self-improvement in making the best and forcing the opportunities ...	*Creating supportive environment	
		G(1) =SS1: The adequacy of the classroom is very important for effective learning in secondary school. In this regard, our manager supports us in creating the appropriate classroom environment as much as we can, and I am trying to work on creating different learning environments... G(2) =SS6: It encourages me to do activities to improve student learning outside class hours...		
		G(1) =PS5: I learned that teaching is not unilateral and that all factors affecting learning should be considered as a whole... G(2) =PS2: It helped me gain a different perspective on what I could do to increase my in-class efficacy and I realized that I needed to improve myself in this direction. I also feel very comfortable with applying new techniques... G(1) =SS3: It allowed me to apply different teaching methods and techniques and thus contributed positively to the increase my in-class efficacy... G(2) =SS1: It enables me to realize the importance of student-centered teaching and learn new things about how to do it...	*Flexibility in teaching methods and techniques	

Positive contributions of school principals’ instructional behaviours to teachers’ selecting instructional strategies were in the form of given more importance to their professional development,

providing supportive conditions for learning feeling more comfortable in using different methods and techniques.

The themes and codes of teacher's opinions related to contribution of school principals' instructional leadership behaviours to the classroom management competencies were given in Table 8.

Table 8. Codes for the Teachers' Self-efficacy of Classroom Management

Theme	Sub-theme	Direct Citations	Focal Point Codes / Concepts
Contributions of Instructional Leadership Behaviours of School Principals to Teachers' Self-efficacy	Efficacy in Classroom Management	G(1) =PS6: The fact that our principal cares about the teaching processes and makes all the staff and students feel this contributes to the decline in the undisciplined behaviours of the students, so I feel more comfortable about classroom management...	*Decline in undisciplined student behaviours
		G(2) =PS4: It makes it easier for me to control undisciplined behaviours within the classroom. ...	
		G(1) =SS2: It supports my classroom management..	
		G(1) =PS1: It contributes to the awareness of my own instructional leadership and the increase of my professionalism ...	*Professional efficacy
		G(2) =PS5: As it allows me to realize that the class is not a reflection of my own little world, it helps me do what is required by professionalism without my feelings...	
		G(1) =SS1: It enables me to improve my classroom management skills...	
		G(2) =SS5: It contributes to the fulfillment of the necessities of professional behaviours...	* Increase in sense of responsibility
		G(1) =PS2: As I meet my responsibilities, I help my students develop consciousness in participating the lesson and doing homework...	
		G(2) =PS6: It enables me to be aware of my own shortcomings, and also to ask myself how to be better...	
		G(1) =SS5: I can question myself and learn from my mistakes...	
		G(2) =SS6: It helps to have an understanding that I need to adopt individualization approaches to teaching so that all students can fully develop their potential ...	

As seen in Table 8 the contributions of school principals' instructional behaviours to teachers' classroom management competencies were in the form of decreased misbehaviours through intervening mis behaviours, increased effectiveness and responsibilities of teachers and students

DISCUSSION, CONCLUSION AND SUGGESTIONS

According to the research result, instructional leadership behaviours of school principals have an effect on self-efficacy perceptions of teachers. As a support to this result, Çalık, Sezgin, Kavgacı and Kılınç (2012) also found that the instructional leadership behaviours of the principals have a positive and significant effect on teacher self-efficacy. There are various studies in the field, showing that there is a significant relationship between the teacher self-efficacy and instructional leadership (Duyar et al., 2013, Rew, 2013, RossandGray, 2006, Hipp, 1996, Hippandbredeson, 1995). Researchers consistently provided evidence that the instructional leadership of principals is an important determinant of self-efficacy perceptions of teachers. As all these studies reveal, instructional leadership, which focuses on improving teaching and learning activities in schools, is more effective on teacher self-efficacy than other leadership styles. Instructional leadership behaviours are of great importance in supporting academic success of student and making the school staff adopt the student-centered learning. In his study on instructional leadership and self-efficacy at primary and secondary schools, Derbedek (2008) pointed out that instructional leadership behaviours of principals predicted about 15% of teacher self-efficacy. Similarly, Howard (1996) refers to the existence of a causal relationship between these two variables. In addition, Ross (1994) stated that leadership is an important variable in determining teacher self-efficacy. Instructional leadership behaviours of principals contribute positively to the efforts of teachers to create instructional environments that facilitate student learning, which helps improve student performance. In support of this finding,

Hallinger and Heck (1996) stated in their study that instructional leadership results in teacher effectiveness and increased student performance.

The data revealed that instructional leadership behaviours positively contributed not only to teachers' behaviours on curriculum implementation and diversification and evaluation of teaching methods, but also their morale, expectations and task-oriented work. In their research that examines the basic behaviours that affect self-efficacy of teachers with various levels of experience, Walker and Slear (2011) identified 11 basic behaviours which are believed to have a positive effect on self-efficacy. According to the results of this study, the instructional leadership behaviours of principals make positive contributions to the teachers' tendency to make more efforts to achieve their morale, expectations and goals. According to the research data, as principals' cooperation with teachers ensures flexibility in teaching practices, it enhances student success and increases their self-efficacy beliefs. Various studies in the field (Goddard, Goddard, 2001; Tschannen, Woolfolk Hoy, 2007) show that, although the ultimate aim of collaborative work with teachers is to improve teaching practices and student achievement, it also increases teacher self-efficacy beliefs.

In his study, Hallinger (2005) noted the importance of principals' leadership behaviours in the development of teaching. In the research, teachers stated that the instructional leadership behaviours of their principals led to an increase in their sense of responsibility. Berry (2010) and Baumgartner (2003) argue that teachers get more responsible when they are guided correctly by their principals and their organizational demands are met. Hoy (2012) and Thoonen et al. (2012) alleged that good principals are the building blocks of good schools and that teachers and students cannot achieve success when the principals do not believe in effective leadership.

In the light of these findings, the following suggestions can be made to practitioners and researchers;

- The principals can create environments in which they can develop communication with teachers to increase teachers' self-efficacy beliefs.
- The principals can provide support for teachers in preparing instructional environments suitable for the purposes of school and education.
- The principals can support teachers in terms of professional development by exhibiting instructional leadership behaviors.
- Further research can be done by establishing different models on the role of instructional leadership in improving student academic success.
- Comparative studies can be made on schools in regions with different socio-economic levels.

REFERENCES

- Akram, M., Kiran, S. & İlğan, A. (2017). Development and validation of instructional leadership questionnaire. *International Journal of Organizational Leadership*, 6, 73-88.
- Anderson, R., Greene, M. & Loewen, P. (1988): Relationships among teachers' and students' thinking skills, sense of efficacy, and student achievement. *Alberta Journal of Educational Research*, 34(2), 148-165.
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84, 191-215.

- Bandura, A. (1993). Perceived self-efficacy in Cognitive Development and Functioning. *Educational Psychologist*, 28(2), 117-148.
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1-45). Cambridge: Cambridge University Press.
- Bandura, A. (1997): *Self-efficacy: The Exercise of Control*. New York: W. H. Freeman and Company.
- Bandura, A. (1999). Social Cognitive Theory: An Agentic Perspective. *Asian Journal of Social Psychology*, 2(1), 21-41.
- Baumgartner, L. M. (2003). Self-directed learning: A goal, process, and personal attribute In L. Baumgartner (Ed.), *Adult learning theory: A primer*. (pp. 23 – 28) Columbus, OH: Center on Education and Training for Employment.
- Blase, J., Blase, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational administration quarterly*, 35(3), 349-378.
- Bellibas, M.S., Liu, Y. (2017). Multilevel analysis of The Relationship Between Principals' Perceived Practices of Instructional Leadership and Teachers' Self-Efficacy Perceptions. *Journal of Educational Administration*, 55 (1): pp. 49-69, DOI 10.1108/JEA-12-2015-0116.
- Berry, B. (2010). *The Teachers of 2030: Creating a Student-Centered Profession for the 21st Century*. Center for Teaching Quality
- Cagle, K., Hopkins, P. (2009). Teacher self-efficacy and the supervision of marginal teachers. *Journal of Cross-Disciplinary Perspectives in Education*, 2(1), 25-31.
- Caprara, G.V., Alessandri, G., Eisenberg, N. (2012). Prosociality: the contribution of traits, values, and self-efficacy beliefs. *Journal of Personal and Social Psychology*, 102(6), 289-303.
- Çalık, T., Sezgin, F., Kavgacı, H., Kılınç, A.Ç. (2012). Okul Müdürlerinin Öğretim Liderliği Davranışları ile Öğretmen Özyeterliliği ve Kolektif Öğretmen Yeterliliği Arasındaki İlişkilerin İncelenmesi. *Kuram ve Uygulamada Eğitim Bilimleri Educational Sciences: Theory&Practice- 12(4) :2487-2504*
- Çelik, V. (2013). *Eğitimsel Liderlik*. Ankara: Pegem Yayıncılık.
- DanleySr, W. E., Burch, B. G. (1978). Teacher perceptions of the effective instructional leader. *Clearing House*, 52(2), 78-79.
- Dede, Y., Demir, S.B. (2014). *Karma Yöntem Araştırmaları*. Nobel Yayıncılık.
- Dibapile, W. (2012). A review of literature on teacher efficacy and classroom management. *Journal of College Teaching & Learning*, 9(2), 79-92.
- Duyar, I., Gumus, S., Bellibas, M.S. (2013). Multilevel analysis of teacher work attitudes: the influence of principal leadership and teacher collaboration. *International Journal of Educational Management*, Vol. 27 No. 7, pp. 700-719.
- Evers, C. W., Lakomski, G. (1996). *Exploring educational administration*. Oxford: Elsevier Science Ltd. UK.

- Goddard, R. D., Goddard, Y. L. (2001). A multilevel analysis of the relationship between Teacher and collective efficacy in urban schools. *Teaching and Teacher Education*, 17(7), 807-818.
- Gorton, R. A., Schneider, G. T. (1991). *School-based leadership: Challenges and opportunities*. Wm. C. Brown Publishers.
- Gruenert (2005). Correlations of collaborative school cultures with student achievement. *NASSP Bulletin*, 88(645), 43-53.
- Hallinger, P., J. Murphy. (1985). Assessing the instructional management behavior of principals. *The Elementary School Journal*, 86(2), 217-247.
- Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership & Policy in Schools*, 4(3), 221-239.
- Hallinger, P. (2011). A review of three decades of doctoral studies using the principal instructional management rating scale: A lens on methodological progress in educational leadership. *Educational Administration Quarterly*, 47 (2), 271-306.
- Hipp, K. A. (1995). Exploring the relationship between principals' leadership behaviors and teachers' sense of efficacy in Wisconsin Middle Schools (Doctoral dissertation). Retrieved from ProQuest Dissertations and Thesis database (UMI No: 9527144)
- Hipp, K.A. (1996). Teacher efficacy: influence of principal leadership behavior. Paper presented at the annual meeting of the American Educational Research Association, New York, NY, April.
- Hipp, K.A., Bredeson, P.V. (1995). Exploring connections between teacher efficacy and principals Leadership behaviors. *Journal of School Leadership*, Vol. 5 No. 2, pp. 136-150.
- Hoe, S. L. (2008). Issues and Procedures in Adopting Structural Equation Modeling Technique. *Journal of Applied Quantitative Methods*, 3(1), 76-83.
- Hooper, D.; Coughlan, J., Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, 6 (1), 53-60.
- Hoy, W. (2012) School characteristics that make a difference for the achievement of all students: A 40-year odyssey. *Journal of Educational Administration*, 50(1), 76- 97.
- Hsieh, H. & Shannon, S. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*. DOI: 10.1177/1049732305276687. <http://qhr.sagepub.com/content/15/9/1277>.
- Hughes, J., Grossman, P., & Barker, D. (1990). Teachers' expectancies, participation in consultations, and perceptions of consultant helpfulness. *School Psychology Quarterly*, 5(3), 167-179.
- Klein, J., Rice, C. (2012). U.S. education reform and national security. Task Force Report No. 68. Washington, DC: Council on Foreign Relations.
- Kurt, T., Duyar, I., Çalık, T. (2012). Are we legitimate yet? A closer look at the casual relationship mechanisms among principal leadership, teacher self-efficacy and collective efficacy. *Journal of Management Development*, 31(1) 71-86.
- Knowles, M. S., Holton, E. F., Swanson, R. A. (2005). *The adult learner sixth edition: The definitive classic in adult education and human resource development*. Burlington, MA: Elsevier

- Lee, V. E., Dedrick, R. F., Smith, J. B. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64 (3), 190-208.
- Lezotte, L. (1991). *Correlates of effective schools: The first and second generation*. Okemos, MI: Effective Schools Products.
- Meevan, E. K. (1994). *Steps to Effective Instructional Leadership*: Corwin Pres. USA.
- McFarlann, G., S. (2014). *Secondary Teachers' Perceptions of Principals' Instructional Leadership Behaviors on Self-Efficacy for Teachers of Remedial Students*. Doktora tezi, The Faculty of the College of Graduate Studies Lamar University, Texas.
- Özdemir, S. ve Sezgin, F. (2002). Etkili okullar ve öğretim liderliği. *Kırgızistan Türkiye Manas Üniversitesi Sosyal Bilimler Dergisi*, 3, 266-282.
- Pajares, F. (2002): Overview of social cognitive theory and of self-efficacy. 23 Mart 2017 tarihinde <http://www.des.emory.edu/mfp/eff.html> adresinden erişildi.
- Rew, W.J. (2013). *Instructional Leadership Practices and Teacher Efficacy Beliefs: Cross-National Evidence from Talis (Doctoral dissertation)*. Florida State University: Department of Educational Leadership and Policy Studies. Florida.
- Ross, J. A. (1994): "Beliefs that make a difference: the origins and impacts of teacher efficacy". Paper presented at the Annual Meeting of the Canadian Association for Curriculum Studies, Haziran, 1994.
- Ross, J.A., Gray, P. (2006). School leadership and student achievement: the mediating effects of Teacher beliefs. *Canadian Journal of Education*, Vol. 29 No. 3, pp. 798-822.
- Schunk, D. H. (1995): Self-efficacy and education and instruction. In J. E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment: Theory, research, and application* (pp. 281-303). New York: Plenum Press.
- Soodak, L. ve Podell, D. (1996): "Teaching efficacy: Toward the understanding of a multi-faceted construct". *Teaching and Teacher Education*, 12, 401-412.
- Şişman, M. (2004). *Öğretim Liderliği*. Ankara: Pegem A Yayıncılık.
- Şişman, M. (2016). Şişman, M. (2016). Öğretim Liderliği Davranışları Ölçeği: Geçerlik, Güvenirlik ve Norm Çalışması. *Kuram ve Uygulamada Eğitim Yönetimi* 2016, Cilt 22(3) ss: 375-400.
- Teddlie, C., Kirby, P., Stringfield, S. (1989). Effective versus ineffective schools: Observable differences in the classroom. *American Journal of Education*, 97(3), 221-236.
- Thoonen, E.J., Slegersb, P. J.C., Oorta, F. J., Peetsmaa, T. T.D. (2012). Building school-wide capacity for improvement: the role of leadership, school organizational conditions, and teacher factors. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 23 (4), 441-460.
- Tschannen-Moran, M., Woolfolk Hoy, A., Hoy, W. K. (1998): "Teacher efficacy: Its meaning and measure", *Review of Educational Research*, 68 (2), 202-248.
- Tschannen-Moran, M., Woolfolk Hoy, A. (2001): "Teacher efficacy: capturing an elusive construct", *Teaching and Teacher Education*, 17, 783-805.

Tschannen-Moran, M., Woolfolk Hoy, A. (2002). The influence of resources and support on teachers' efficacy beliefs. Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, LA, Nisan, 2002.

Tschannen-Moran, M., Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6), 944-956.

Walker, J., Slear, S. (2011). The impact of principal leadership behaviors on the efficacy of new and experienced middle school teachers. *NASSP Bulletin*, 95(1), 46-64. doi: 10.1177/0192636511406530

Wallace Foundation. (2012). *The school principal as leader: Guiding schools to better teaching and learning* (p. 20). New York: Author.

Yıldırım, A., Şimşek, H. (2011). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*. Ankara, Seçkin yayıncılık.