School principal self-efficacy: a study on self-efficacy levels of the Turkish primary school principals

Auto-efficacité des directeurs d'école: étude sur les niveaux d'auto-efficacité des directeurs d'école primaire Turque

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Abstract

The aim of this study was to determine self-efficacy levels of Turkish primary school principals. The study, designed with survey method, was conducted with 198 (33 principals & 165 vice principals) participants selected through stratified sampling. School Administrator Efficacy Scale (SAES, McCollum, Kajs & Minter, 2006a) was employed as an instrument in this study. Independent samples t-test, Kruskal Wallis-H test and correlation analysis were carried out during data analysis process. The findings of the study indicated that the highest level of school principal self-efficacy was in 'Resource and Facility Management' dimesion and the lowest level was in 'Use of Community Resources' dimension.

Resumé

Le but de cette étude était de déterminer les niveaux d'auto-efficacité des directeurs d'école primaire en Turquie. L'étude, conçue à l'aide d'une méthode d'enquête, a été menée auprès de 198 participants (33 directeurs et 165 directeurs principaux) sélectionnés au moyen d'un échantillonnage stratifié. L'échelle d'efficacité des administrateurs d'école (LDAD, McCollum, Kajs & Minter, 2006a) a été utilisée comme instrument dans cette étude. Un t-test d'échantillons indépendants, un test de Kruskal Wallis-H et une analyse de corrélation ont été effectués au cours du processus d'analyse des données. Les conclusions de l'étude ont montré que le degré le plus élevé d'auto-efficacité de la direction de l'école se situait dans la catégorie 'Gestion des ressources et des installations' et le niveau le plus bas dans la dimension 'Utilisation des ressources communautaires'.

Keywords
Efficacy; Self-efficacy; School principal; Turkey educational system

Mots-clés
Efficacité; Auto-efficacité; Directeur d'école; Système éducatif turc

1. Introduction

Among all aspects of self-knowledge and self-regulation, personal efficacy is probably the most influential in everyday life. Self-efficacy refers to 'beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments' (Bandura, 1997, pp. 41). In other words, it is an individual's overall judgment of his or her perceived capacity for performing a task. For example, the belief of a mathematics teacher that he or she can successfully teach calculus to a class of 12th grade students is an efficacy judgment. Similarly, principals with high self-efficacy might increase the emphasis on academic learning in schools. Note that, in contrast to causal attributions where the focus is on the past, a perception of self-efficacy represents future expectations of being able to attain certain levels of performance (Hoy & Miskel, 2005). Bandura (1977) has defined personal self-efficacy as a person's perception of his or her ability to perform a behavior; in this case, we describe the teacher's ability to teach effectively (Enochs & Riggs, 1990).

Self-efficacy beliefs contribute to motivation by determining the goals that individuals set for themselves, how much effort they expend, how long they persevere in the face of difficulties, and their resilience to failures (Bandura, 1993, 2000; Wood & Bandura, 1989). Bandura (1997) wrote, 'people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true (pp. 51)2. People's efficacy beliefs play a crucial role in their actions, which in turn influence their environments and future thoughts (McCollum & Kans, 2007a). There is also a need for greater understanding about the kinds of context variables linked to a higher self-efficacy (Labone, 2004). Social cognitive theory suggests that personal factors (including self-efficacy beliefs) and behaviors interact with the environment to influence each other through a process of reciprocal determinism (Tschannen-Moran & Woolfolk-Hoy, 2007). The stronger people believe in their capabilities, the greater and more persistent are their efforts. People tend to avoid tasks and situations that exceed their capacity; they seek activities they judge themselves capable of handling. The consequences of high self-efficacy –willingness to approach and persist on tasks, selection of task and situation, a focus on problem-solving strategies, reduced fear and anxiety, positive emotional experiences– effect achievement outcomes (Stipek, 1993). Consequently, people who have the same skills but different levels of personal efficacy may perform at different levels because of the way they use, combine, and sequence their skills in a changing context (Gist & Mitchell, 1992).

Researchers working on teacher self-efficacy, who have developed in a parallel route to the influence of theoretical perspectives of Rotter (1966) identified teacher self-efficacy as the degree of teachers' beliefs that they can control the causes of teachers' actions. Teachers who believed that they could influence student achievement and motivation (internal locus) were more effective than those who thought the external forces could not be overcome (Hoy & Miskel, 2005). Research on teachers' efficacy suggests that behaviors such as persistence on a task, risk taking, and use of innovations are related to degrees of efficacy (Ashton, 1985). For example, highly efficacious teachers have been found to be more likely to use inquiry- and student-centered teaching strategies, whereas teachers with a low sense of efficacy are more likely to use teacher-directed strategies, such as lecture and reading from the text (Czerniak, 1990). A second, more recent and useful conceptual strand of theory and research has evolved from the work of Bandura (1977). Bandura (1977) defined teacher efficacy as a type of self-efficacy –the outcome of a cognitive process in which people construct beliefs about their capacity to reform well. These self-efficacy beliefs effect how much effort people expend, how long they will persist in the face of difficulties, their resilience in dealing with failures, and the stress they experience in coping with demanding situations (Bandura, 1997). The existence of the two separate but intertwined conceptual strands emerging from two theoretical perspectives has contributed some confusion about the nature of teacher efficacy; however, perceived self-efficacy is a much stronger predictor of behavior than locus of control (Bandura, 1997; Tchannen-Moran, Woolfolk-Hoy & Hoy, 1998). From this perspective; the effectiveness (efficacy) sense for the teachers based on inner sense of perception forms a response to the concept of self-efficacy. Perceived self-efficacy can be equivalent to substantial effectiveness level. This perception of self-efficacy could be above or below actual level. The concept of sufficiency for teachers has a task-oriented structure based intrinsically on external control and

environmental factors and constitutes form of competency which is expressed as result capacity by Bandura (Baloğlu & Karadağ, 2008).

In summary, teacher self-efficacy influenced directly or indirectly both Gilbert & Levinson's study in 1957 and Rotter's study on locus of control in 1966, and all studies after those. The findings also showed that views on effectiveness which were stated in Reddin's 3D leadership theory (1970) laid a foundation for Bandura's social learning theory which was developed in 1977. Teacher self-efficacy studies consistently show two distinct factors or dimensions. There is a still-ongoing disagreement on their meanings in terms of established literature, and these discussions still go on (Ashton, et. al., 1982; Gibson & Dembo, 1984; Guskey, 1987; Guskey & Passaro, 1994; Pajares, 1996, 1997; Tchannen-Moran, Woolfolk-Hoy & Hoy, 1998).

During the past two decades, researchers have consistently established strong concoctions between teacher efficacy and teacher behaviors that foster student achievement (Allinder, 1994; Ashton & Webb; Gibson & Dembo, 1984; Hoy & Woolfolk-Hoy, 1990; 1993; Tchannen-Moran, Woolfolk-Hoy & Hoy, 1998; Woolfolk & Hoy, 1990; Woolfolk, Rosoff & Hoy, 1990). Cheng (1994) found that the attitudes of internal control-oriented teachers towards their jobs were more positive in terms of organizational commitment. Besides, their sense of internal, external, social and effective satisfaction and role clarity and job performance were higher. In addition, he suggested that the teachers who have this tendency have more positive perception in terms of leadership of the manager, organizational structure, teachers' social norms and organizational culture and effectiveness. A growing body of empirical evidence supports Bandura's (1977) theory that teachers' self-efficacy beliefs are related to the effort teachers invest in teaching, the goals they set, their persistence when things do not go smoothly and their resilience in the face of setbacks (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Teaching success, effort, and persistence depend on the extent to which a teacher believes he or she has the capability to organize and execute teaching that will lead to successful learning in a specific situation (Hoy & Miskel, 2005). These elements are especially important for carrying out responsibilities of instructional leadership (McCollum, Kans & Minter, 2006b) because the quality of the principal is linked statistically and practically to student achievement (Kaplan, Owings & Nunnery, 2005). In this context self-efficacy research has primarily focused on teachers, with little information on the construct's use to understand behaviors of school principals, e.g., principals and superintendents (McCollum, Kans & Minter, 2006a).

In order to understand the school principals' self-efficacy, which represent the basic foundations of this paper, the following questions should be addressed. Do efficacious principals handle job stress, as well as relationships with staff, students, and parents more effectively? Do school principals, who demonstrate high efficacy, employ more effective management practices, e.g., organizational planning, problem solving, and community building? These issues are critical in the face of the changing roles of school principals and recent changes in their preparation (McCollum, Kans & Minter, 2006b).

The self-efficacy construct is important in developing educational leaders, as it is a construct tied to success in learning and work. The more efficacious an educational leadership student, the more likely they will be successful in their classes. Likewise, efficacious school leaders will be successful in their jobs. Without a sense of efficacy, school principals will not pursue challenging goals and will not attempt to surpass obstacles that get in the way of such goals (McCollum, Kans, & Minter, 2006a, 2006b; McCollum & Kans, 2007a). The school principal efficacy contact is one in a set of psychological variables that have recently been explored by McCollum & Kans (2007b) in the context of educational leadership.

What is school principal efficacy? In accordance with Bandura (1986) a school principal's efficacy is the judgment of one's 'capabilities to organize and execute courses of action required' for successful completion of school leadership tasks and reaching desired school outcomes (p.396).

The most important modeling studies about the maturation of the concept of school principal belong to McCollum, Kans & Minter (2006a). The model is based on leadership in education and management effectiveness criteria by Smith, Guarino, Strom & Adams (2006) and national

standards of Educational Leadership Constituent Council (ELCC). ELCC's leadership framework provides a roadmap for university-based educational principal preparation programs regarding specific knowledge, skills, and depositions related to key themes in the development of school principals and superintendents (NPBEA, 2002a). The current ELCC Standards consists of seven standards toward the preparation of school principals (*see*: Table 1, McCollum, Kans & Minter, 2006b).

Table 1.
Seven Standards in Educational Leadership Constituent Council (ELCC)

Standard 1	Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community.
Standard 2	Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff.
Standard 3	Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.
Standard 4	Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.
Standard 5	Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by acting with integrity, fairness, and in an ethical manner.
Standard 6	Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.
Standard 7	The internship provides significant opportunities for candidates to synthesize and apply the knowledge and practice and develop the skills identified in Standards 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.

Fuente: McCollum, Kans & Minter, 2006b

McCollum, Kajs & Minter (2006a) state that this model will be beneficial for the education of current and future school leaders. However, when the related literature is investigated, it is seen that the studies conducted in the concept of self-efficacy are limited to teachers and students. Smith, Guarino, Strom & Adams (2006), which is one of the rare studies on the subject, concluded that quality in teaching and learning was influenced by the directors' competence. Besides, in another study, it was found that high level of self-effectiveness in the school management and the relations with the families was related with the success in the management of student behavior, the ability to cope with the psychological and physical symptoms of stress, the effective use of stress management techniques and the reduction of the stress level (Parkay, Greenwood, Olenjnik & Proller, 1988). In their paper in which they develop a principal's self-efficacy scale in the context of school restructuring, Dimmock and Hattie (1996) found that their highly specific self-efficacy measure (geared only toward actions necessary when a school is restructuring) was positively related to principals' ability to effectively deal with changes in their schools and changes in their role as principals. Because of the benefits of self-efficacy studies for teachers, and especially since studies show that principal leadership is vital to the improvement of schools in preparing students effectively, it is critical that self-efficacy investigation is extended among schools and school principals (Barth, 2001; Lunenburg & Ornstein, 2004).

1.1. Purpose

In recent years, researches in the field of educational sciences and self-efficacy research which constitute an important place in this field have been frequently conducted in teacher and student sample. Although there are studies examining the interactions of teacher self-efficacy with a large number of variables in the literature, no studies have been found to determine the self-efficacies of school administrators. In this respect, in order to gain a high-level of effectiveness, managers need to improve their competencies through a reflective and holistic structure in an integrated process. Within the broad scope of the problem, it is seen that the determining the level of primary school principals' self-effectiveness especially has a great importance in terms of principal training practices. Taking the importance of the case into consideration, this paper aimed to answer this question: 'What is the level of competence of Turkish primary school administrators?'

1.1.1. Research questions

This study was constructed on three research questions:

- What is the general level of self-efficacy of school principals?
- Does the self-efficacy of school principals differentiate according to gender, position type and level of education?
- Is there a relationship between school principals' self-efficacy and age and seniority variables?

2. Method

2.1. The research approach

This study was designed as a survey model to determine the level of school principal's self-efficacy. Survey models are research approaches that aim to describe a situation that has existed in the past or still exists. The subject of the research, the individual or object is tried to be defined in its own conditions and as it is. The researchers don't attempt to change these current circumstances in any way. The important thing in survey model studies is to be able to observe and present the case properly. A survey with a screening model has two basic limitations. These are difficulties in controlling and gathering data. Screening models can be classified as general screening models and case study models (McMillan & Schumacher, 2006).

2.2. Participants

The sample consisted of 198 school principals who volunteered to participate in the study and were included using three strata cluster sampling method according to the socioeconomic structure of the region (upper-middle-lower). Information on the demographic characteristics of the sample group is presented in Table 2.

Table 2.
Demographic information on participants

Variables		1	2	3	Total
Sex		Male	Female		-
	n	144	54		198
	%	72.7	27.3		100
Task		Principal	Vice Principal		-
	n	33	165		198
	%	16.7	83.3		100
Education level		Associate Degree	Undergradute	Gradute	-
	n	12	153	33	198
	%	6.1	83.3	16.7	100

Note: Age M=40.6, SD=8.5; Seniority of administration X=6.3, SD=4.9

2.3. Instrument

School Administrator Efficacy Scale [SAES]: The scale was developed in parallel with the model developed by McCollum, Kajs & Minter (2006a) about self-efficacy of the school principals. The scale was later tested by McCollum, Kajs & Minter (2006b) with confirmatory factor analysis (Confirmatory Factor Analysis). As a result of this process the scale was found to consist of 8 factors and 51 items. There factors are: (*i*) Instructional Leadership and Staff Development, (*ii*) School Climate Development, (*iii*) Community Collaboration, (*iv*) Data-based Decision Making Aligned with Legal and Ethical Principles, (*v*) Resource and Facility Management, (*vi*) Use of Community Resources, (*vii*) Communication in a Diverse Environment and (*viii*) Development of School Vision. The factor structure of the scale in Turkish culture was tested with confirmatory factor analysis. Confirmatory factor analysis of the scale was carried out in two stages. It was determined that the factors obtained as a result of the exploratory factor analysis in relation to the first stage of analysis of the scale did not exceed the theoretical limits before the evaluation of the confirmatory factor analysis results. Chi-square (χ^2) value and statistical significance levels were calculated as [χ^2=271.89, *df*=328] for the scale. Besides, other fit indices of the model [*GFI*=0.94, *AGFI*=0.96, *RMSR*=0.04] suggest that the proposed model is appropriate. In addition, the factor loadings obtained from the confirmatory factor analysis of the scale were between 0.41 and 0.84. As a result, SAES, which is a seven-point (1=not true, 7=completely true for me) scale, is composed of 51 items, and 8 factors, and was used to examine the self-efficacy levels of the school principals. In Table 3, Cronbach's alpha reliability coefficients of the factors of the scale were given (McCollum, Kajs & Minter, 2006b and this study).

Table 3.
Reliability coefficients of the subscales and item numbers

Factors	Item	2006b		This Study	
		Alpha	N	Alpha	n
1-Instructional Leadership and Staff Development	12	.93	559	.89	198
2- School Climate Development	7	.93	559	.87	198
3-Community Collaboration	7	.91	559	.86	198
4-Data-based Decision Making Aligned with Legal and Ethical Principles	8	.93	559	.91	198
5-Resource and Facility Management	5	.89	559	.90	198
6-Use of Community Resources	3	.95	559	.92	198
7-Communication in a Diverse Environment	3	.81	559	.83	198
8-Development of School Vision	4	.96	559	.93	198

2.4. Procedure

In the study, data were obtained by administering the scale to the principals by the researchers. It was observed that the answering the items on the scale lasted about 10-15 minutes. In the study, demographic variables were grouped before the statistical analysis and the items on the data collection tool administered to the principals were scored with 7-point Likert system. Demographic characteristics of the school principals who constitute the study group were calculated and summarized by using frequency (*n*) and percentage (%) values, and mean (*M*) and standard deviation (*SD*) scores of all sub-scales were calculated. In the study groups, non-parametric techniques were used for those that do not show normal distribution (*n*<30) in groups, and parametric techniques were used for those with normal distribution characteristics. In this regard, in order to determine whether school principals compentency levels differ according to gender and position type, independent samples t test; to determine whether school principals compentency levels differ according to level of education, Kruskal Wallis-H test; to examine the relationship between age and seniority Pearson Correlation coefficient were used.

3. Findings

Among the self-efficacy levels of school principals, the highest average score belongs to 'Resource and Facility Management' factor, while the lowest average score belongs to 'Use of Community Resources' factor. In addition, the examination of the averages of all factors show that they have an average of more than five out of seven (see Table 4).

Table 4.
Mean and standard deviation of school principals' self-efficacy

Factors	n	M	SD
1-Instructional Leadership and Staff Development	198	5.27	1.09
2-School Climate Development	198	5.32	1.16
3-Community Collaboration	198	5.31	1.03
4-Data-based Decision Making Aligned with Legal and Ethical Principles	198	5.53	1.13
5-Resource and Facility Management	198	5.39	1.16
6-Use of Community Resources	198	5.26	1.15
7-Communication in a Diverse Environment	198	5.35	1.11
8-Development of School Vision	198	5.25	1.23

Table 5 presents the t-test results of the school principals' competence in relation to the gender variable. According to the statistical results, a significant difference was found in favor of male managers in 'Community Collaboration' factor score related to school manager competence. On the other hand, there was no significant difference between male and female principals in the other factor scores of school management competence.

Table 5.
t-Test results for gender of school principals

Factors	Male n=144		Female n=54		t	df	p
	M	SD	M	SD			
1-Instructional Leadership and Staff Development	5.31	1.13	5.19	1.02	.70	196	.48
2-School Climate Development	5.39	1.18	5.15	1.10	1.27	196	.20
3-Community Collaboration	5.43	1.01	5.01	1.07	2.60	196	.01
4-Data-based Decision Making Aligned with Legal and Ethical Principles	5.56	1.13	5.47	1.15	.49	196	.62
5-Resource and Facility Management	5.41	1.15	5.33	1.20	.43	196	.66
6-Use of Community Resources	5.30	1.18	5.15	1.10	.83	196	.40
7-Communication in a Diverse Environment	5.38	1.14	5.30	1.05	.45	196	.65
8-Development of School Vision	5.32	1.26	5.07	1.18	1.25	196	.21

In Table 6, t-test results of school administrator self-efficacy according to position type (principal & vice principal) are given. According to the statistical results, there was no significant difference between the principal and vice principal positions in all factor scores related to the school principal self-efficacy.

Table 6.
t-Test results for position type

Factors	Principal n=33		Vice Principal n=165		t	df	p
	M	SD	M	SD			
1-Instructional Leadership and Staff Development	5.23	1.17	5.29	1.09	-.25	196	.80
2-School Climate Development	5.40	1.19	5.31	1.16	.43	196	.66
3-Community Collaboration	5.26	1.15	5.33	1.02	-.34	196	.72
4-Data-based Decision Making Aligned with Legal and Ethical Principles	5.30	1.22	5.59	1.12	-1.34	196	.17
5-Resource and Facility Management	5.30	1.39	5.41	1.11	-.52	196	.60
6-Use of Community Resources	5.24	1.28	5.26	1.14	-.10	196	.92
7-Communication in a Diverse Environment	5.06	1.33	5.41	1.06	-1.66	196	.09
8-Development of School Vision	5.36	1.31	5.23	1.23	.57	196	.56

Table 7 shows the results of the Kruskal Wallis-H test conducted to determine the differences between the school administrator self-efficacy and the education level of the school principals. According to the statistical results, a significant difference was found in favor of the administrators of the associate degree level in the 'Use of Community Resources' factor score related to the school principal self-efficacy. On the other hand, there were no significant differences in other factor scores of the school principal self-efficacy among the administrators at the associate, undergraduate and graduate level.

Table 7.
Kruskal wallis-h test results of school principals concerning the education level variable

Factors	Groups	n	M	SD	X_{rank}	X^2	df	p	Difference
1-Instructional Leadership and Staff Development	1- Associate Degree	12	5.86	0.41	129.5	3.50	2	.17	–
	2-Undergraduate	153	5.23	1.17	97.5				
	3-Gradute	33	5.30	0.89	97.4				
2-School Climate Development	1- Associate Degree	12	5.59	1.16	113.6	1.03	2	.59	–
	2-Undergraduate	153	5.31	1.22	99.5				
	3-Gradute	33	5.27	0.87	94.0				
3-Community Collaboration	1- Associate Degree	12	5.57	0.18	107.7	.44	2	.80	–
	2-Undergraduate	153	5.28	1.11	98.1				
	3-Gradute	33	5.42	0.89	102.7				
4-Data-based Decision Making Aligned with Legal and Ethical Principles	1- Associate Degree	12	6.16	0.48	129.8	4.50	2	.10	–
	2-Undergraduate	153	5.51	1.17	99.3				
	3-Gradute	33	5.43	1.12	89.0				
5-Resource and Facility Management	1- Associate Degree	12	6.00	0.18	131.7	4.28	2	.11	–
	2-Undergraduate	153	5.32	1.23	96.5				
	3-Gradute	33	5.50	0.99	101.5				
6-Use of Community Resources	1- Associate Degree	12	6.00	0.24	140.0	6.69	2	.03	1-2 1-3
	2-Undergraduate	153	5.17	1.27	96.0				
	3-Gradute	33	5.42	0.56	101.0				
7-Communication in a Diverse Environment	1- Associate Degree	12	5.75	0.45	118.2	1.85	2	.39	–
	2-Undergraduate	153	5.33	1.16	99.6				
	3-Gradute	33	5.30	1.03	92.1				
8-Development of School Vision	1- Associate Degree	12	5.19	1.03	92.0	.22	2	.89	–
	2-Undergraduate	153	5.25	1.31	100.0				
	3-Gradute	33	5.30	0.97	99.9				

Table 8 presents the correlation analysis results to determine the relationship between school administrator self-efficacy and the age and seniority of managers. According to the statistical results, there was no statistically significant relationship between all sub-dimensions of school administrator self-efficacy and age and seniority of managers.

Table 8.
Pearson correlation matrix between school principals views and their age and seniority

Variables	1	2	3	4	5	6	7	8	9	10
Factors										
1-Instructional Leadership and Staff Development	-									
2-School Climate Development	.80*	-								
3-Community Collaboration	.79*	.76*	-							
4-Data-based Decision Making Aligned with Legal and Ethical Principles	.86*	.75*	.89*	-						
5-Resource and Facility Management	.81*	.66*	.85*	.86*	-					
6-Use of Community Resources	.74*	.64*	.71*	.70*	.74*	-				
7-Communication in a Diverse Environment	.79*	.75*	.79*	.85*	.80*	.82*	-			
8-Development of School Vision	.72*	.82*	.64*	.68*	.59*	.58*	.75*	-		
9-Age	-.06	-.31	-.06	.37	-.10	.03	.00	-.06	-	
10-Seniority of administration	.05	.04	.17	.41	.07	.16	.05	.04	.00	-

$n = 198$, *$p < .01$

4. Discussion

Central to the social cognitive theory are thoughts people have about their actions, of which self-efficacy beliefs are a key component. 'Self-efficacy beliefs are people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances' (Bandura, 1986, p.391). 'Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment' (Pajares, 2002, p.3). Within the scope of these definitions; school principal self-efficacy is a principal's belief in the capacity of a principal (of herself/himself) to plan and act to achieve a particular teaching action in a particular context.

In this context, the study searched for answers about the self-efficacy levels of the Turkish school principals working in Turkish primary schools. Within this scope, findings can be summarized as:

- Self-eficacy level of school principals is high, and school principals feel themselves sufficient in 'Resource and Facility Management' factor.
- Male school principals feel more sufficient in 'Community Collaboration' factor.
- Principals who have associate degree feel more sufficient in the 'Use of Community' Resources factor.
- Significant correlation isn't found between school principals self-eficacy scores and age and seniority.

School principal self-efficacy varies depending on the context. Managers don't feel themselves equally active in all management situations. In certain environments, the principals feel competent when they manage certain teachers on specific issues. In different situations they feel more or less active. The level of competence of managers can vary from one management activity to another (Rossi, Cousins & Gadalla, 1996; Raudenbush, Rowan & Cheong, 1992). When evaluating self-efficacy, consideration of the management work and context is as necessary as the assessment of the weaknesses and strengths of the person associated with the requirements of the work to be performed. According to Bandura (1977) people evaluate the

competence of their actions throughout their life and compare these actions with those of others. An individual who believes he is capable of a subject can develop a positive sense of self-efficacy, even if he is not capable. The opposite is also possible. In other words, individuals may tend to exhibit ineffective behaviors about any skill by developing a negative sense of self-efficacy- even if they are capable. However, according to Bandura (1977), individuals with high perceived self-efficacy have more control over their environment and have more success in dealing with the difficulties they face. Another kind of self-efficacy suggested by Bandura (1998) is the result effectiveness. This type of self-efficacy accounts for the ability of individuals to reach a result by controlling the environmental factors and reaching the result. This type of self-efficacy meet the individuals in order to reach the goal under the control of environmental factors can reach to the result of the self-efficacy. Efficacy can serve as a means to understanding school principals' thoughts and motivations, tied to their behaviors and the school environments they create. School leaders with a sense of efficacy tend to make noble efforts to achieve school goals, including a relentless persistence even through difficult circumstances (Osterman & Sullivan, 1996). School principal's efficacy can affect task performance, motivational level, and self-improvement efforts linked to school practices (Schultz & Schultz, 1998). Furthermore, efficacy is especially critical in relation to instructional leadership because the quality of a school principal's leadership is linked statistically and practically to student achievement (Kaplan, Owings, & Nunnery, 2005, p. 43). Dimmock and Hattie (1996) concluded that principal efficacy is central for schools going through a restructuring process, and Smith, Guarino, Strom, and Adams (2006) noted that principal efficacy effects how well teachers instruct and students learn. Because of the major, long-term impact that school principal efficacy can play in the lives of the campus community and the community at large, the study of the efficacy construct and how it influences multiple school-related activities and processes, for example, planning, decision making, and organizational development, is vital (McCollum & Kajs, 2007a). When all the findings in the literature are examined in the present study, it is seen that in the flow models of the school budgets in the European Union countries, local governments generally have an impact on the creation of the education budget. Local administrations support the school in areas such as employment of education and training personnel, transportation, canteen, major repairs and building construction, food, milk, insurance, water, electricity and health. In the European Union countries, the school directorate has been given the freedom to make school budgets in areas such as the employment of teachers, minor repairs, and use of educational materials (Eurydice, 2001). However, the case isn't the same in Turkish education system. In Turkish education system, the central and local government assistance to schools is limited or absent. This situation necessitates all schools to create their own resources. Therefore, it can be said that the most important managerial task of Turkish school principals is the management of public resources. In parallel with this situation, the result is as was expected.

Another important result obtained in the study, concerning of school principal competencies in 'Community Collaboration' factor has been seen that male managers are more dominant. While this situation has been examined in detail, it is seen that male managers compared women managers have high managerial experiences. *Mastery experience* is the single most important source of self-efficacy. Performance successes and failures (i.e., actual experiences) in completing a task have strong effects on self-efficacy. Recurrent successes raise efficacy perceptions; regular failures produce self-doubts and reduce self-efficacy, especially if failure occurs early in a task sequence and does not reflect a lack of effort or opposing external influences. Efficacy is facilitated as gradual accomplishments build skills, coping abilities, and expose needed for task performance (Hoy & Miskel, 2005, p. 151).

As a result, experimental studies on self-efficacy in the organizational and managerial literature gave consistent results. Self-efficacy is associated with performance in jobs such as productivity, coping with difficult jobs, career choice, learning, success, and adapting to new technology (Gist & Mitchell, 1992). Similar results are evident in educational settings. Self-efficacy research in schools tends to focus on one of two areas of approaches. The first group of studies test for the effects of student and teacher self-efficacy on various motivational and achievement indicators (Hoy & Miskel, 2005). The general finding is that self-efficacy is positively related to teaching (Ashton & Webb, 1986; Enochs & Riggs, 1990; Gibson & Dembo, 1984; Guskey, 1988), achievement (Anderson, Greene & Loewen, 1988; Ashton & Webb, 1986;

Midglye, Feldlaufer & Eccles, 1989; Ross, 1992), course grades (Pintrich & Garcia, 1991), student motivation (Midgley, Feldlaufer & Eccles, 1989), and classroom management strategies of teachers (Ashton & Webb, 1986). Moreover, experimental studies have consistently found that changing self-efficacy beliefs can lead to better use of cognitive strategies and higher levels of academic achievement for mathematics, reading, and writing tasks (Schunk, 1991). In addition to these results, this research reveals the self-efficacy of the school principals who are the most important stakeholders of the schools.

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