School Administrators' Self-Efficacy Beliefs and Leadership Styles

Fatma Cobanoglu *
Pamukkale University, TURKEY

Ugur Yurek
Pamukkale University, TURKEY

Abstract: The effectiveness of schools, that is, their ability to achieve their pre-determined goals depends on many variables but especially the effectiveness of the administrators who are responsible for the implementation of the educational programs and curricula. An administrator must have a healthy perception of being "an effective administrator" in order to be able to demonstrate expected roles successfully. Concerning school effectiveness, in addition to the emphasis of self-efficacy of administrator, the leadership role of the educational administrators has gained importance with modern educational administration approaches. If an administrator wants to be effective, he/she must act as a leader and convince followers. In this context, when questioning the effectiveness of schools, it is important to determine the level of self-efficacy perceptions of administrators and to determine the leadership styles displayed by them. In this study, it was aimed to examine whether there is a significant relationship between the perceived self-efficacy belief and leadership style. The results show that self-efficacy perceptions of the administrators make a difference in their leadership style and there is a relationship between the self-efficacy belief and exhibitors of transformational leadership behaviors; the more administrators feel themselves efficient, the more they exhibit transformational leadership behaviors.

Keywords: *Self-efficacy, leadership style, transformational leadership model, administrator.*

Introduction

There are many factors impacting school effectiveness. The variables that discriminate effective schools from the others are high expectations that every student can learn, a clear mission, learning opportunities for every student, using instructional time effectively, monitoring the development of the students, having a school administrator who is an instructional leader, and a positive relationship between schools and the parents (Cobanoglu and Badavan, 2017). Among these variables, it is possible to claim that school effectiveness is mostly based on the administrator who is responsible for conducting the educational and instructional programs at school (Purkey&Smith, 1982; Edmonds, 1979; Levine&Lezotte, 1990; Stefano, 2003; Maciel, 2005). Indeed, one of the most important problems of Turkish educational system is the training, selecting and appointing the school administrators (Kosterelioglu&Bayar, 2014).

Self-efficacy based on social cognitive theory (Bandura, 1977; 1994) is the belief of an individual to him/herself to perform an expected behavior in case of the situations affecting his/her life (Bandura, 1994). Administrators' self-efficacy beliefs are crucial for managing a school and can be referred as a kind of leadership self-efficacy that one is being confident in his/her knowledge, skills and abilities (Hannah, Avolio, Luthans and Harms 2008). An administrator should have a healthy perception of being an effective administrator in order to perform the expected roles. Apart from the self-efficacy beliefs of the administrators, contemporary administrative approaches and leadership role of the administrator are also important factors for an effective school. The school administrator has integrated the roles of a program manager in 1960s, an instructional leader in 1980s and a transformational leader in the 1990s (Vandenberghe, 1995). If an administrator wants to be effective, s/he should act as a group leader and persuade his/her followers. In this sense, when considering the school effectiveness, it is also important to examine the self-efficacy beliefs of the administrators on administration, and moreover their leadership styles.

School Administrators' Self-Efficacy Beliefs

The job definition of the school administrators involves managing the people, environment and the program. This position requires information and skills from various disciplines however this is not still enough. The success of the

---

* **Corresponding author:**
Fatma Cobanoglu, Pamukkale University, Faculty of Education, Denizli, Turkey.
Email: fcobanoglu@pau.edu.tr

school administrators on this hard mission depends on the positive perception of them towards having self-efficacy for the task. McCollum and Kajs (2015) point out that self-efficacy is an important factor for the motivation because people tend to avoid actions that they believe they would fail. Required skills and knowledge are not enough to complete a task, besides "the belief of having these" is also necessary.

Self-efficacy of administrators is essential for a school management (Fisher, 2014) and the principal beliefs effect their behaviors and teacher commitment (Hallinger, Hosseingholizadeh, Hashemi and Kouhsari, 2017). School administrators, who have a high level of self-efficacy beliefs, are determined to pursue their goals. They are more open to adopting new strategies in different situations. Change is a slow process for them and while they are faithful to their goals they do not hesitate to change their strategy if necessary (Osterman&Sullivan, 1996). Furthermore, these administrators do not perceive unsolved problems as a failure. They can adapt their personal expectations even in hard conditions (Tschannen-Moran&Gareis, 2004). In this sense, school administrators having a high level of self-efficacy beliefs might be more effective and qualified in the process of improving the school. As a matter of fact, the schools of these kinds of administrators are expected to be more effective and successful because it might directly affect teachers, students, and the staff. As Kelleher (2016) indicates, variables such as school effectiveness, teaching and learning quality, effective leadership are all related to administrators' self-efficacy. Similarly, in a study of Isik and Gumus (2017), self-efficacy perceptions of administrators are closely related to school effectiveness. School administrators, who have a high level of self-efficacy beliefs, feel responsible for students' success. They have the possibility of using intrinsic personal power such as expertness, informing and reference. They rely on personal power resources rather than politics, procedures or legal regulations in order to influence the teachers (Lyons&Murphy, 1994).

School Administrators' Self-Efficacy and Leadership Style

Leadership is required continuously an effort of goal-orientation, effective task strategies, and artistic practicing of various conceptual, technical and interpersonal skills. A strong sense of efficacy is needed to make an effort for actualizing the goals of the institution (Tscjannen-Moran&Gareis, 2004). Leadership self-efficacy is the perceived ability of a person that s/he performs the required cognitive and behavioral tasks in order to reach the group goals. In other words, it is a person's self-confidence towards taking the lead of a group successfully (McCormick, 2001). Leithwood (2008) underlined that this self-confidence is a significant property for an effective leadership in leadership literature. What McCollum and Kajs (2015) also added that the actions of the leaders are affected by their thoughts and beliefs. Self-efficacy of the school administrators is the belief towards the ability to develop the instruction and student learning. Leaders' behaviors are considered to influence the schools, classes, and students learning (Leithwood&Jantzi, 2008). Moreover, considering that the total effect of leadership on student learning is one-fourth of school's total effect (Leithwood, Seashore, Anderson and Wahlstrom, 2004), the self-efficacy belief that the administrator has become a question of matter. Leadership success of the school administrators depends on their self-efficacy beliefs apart from the required abilities they have.

The only and the most important reason of the success or failure in educational institutions is accepted as leadership, and institution members think that the leader is responsible for the school performance (Hoy&Miskel, 2012: 375). Considering the literature, school administration is always associated with the leadership, and the administrators are expected to perform leadership behaviors. The high level of self-efficacy beliefs is related to a leader's behaviors who makes an effort for a change in the institution, searches for an innovation, and uses creative approaches to gain the goals and professional autonomy (Paglis&Green, 2002). On the other hand, low level of self-efficacy beliefs means not to perform all these behaviors because self-efficacy beliefs have a direct influence on the actions of the individuals. The effort that people will make and to pursue it depends on the self-efficacy beliefs (Leithwood&Jantzi, 2008). Thus, the self-efficacy beliefs of the administrators might create a difference in the behaviors or leadership styles of them.

There is a body of research on administrators' self-efficacy (Ata, 2015; Acat, Ozyurt and Karadag, 2011; Demirtas&Caglar, 2012; Koybasi, 2017; Fisher, 2014; Tschannen-Moran&Gareis, 2007; Okutan &Kahveci, 2012; Osterman&Sullivan 1996; Santamaría, 2008; Sazali, 2010; Smith, Guarino, Strom &Adams 2006), and its relation to various variables such as ability to manage a school (McCollum&Kajs, 2015); using power (Lyons&Murphy, 1994); student achievement (Williams, 2012); job autonomy, job satisfaction and contextual constraints (Federici, 2013). Moreover, in a study by Ramchunder and Martins (2014), the relationship between general self-efficacy beliefs and leadership styles were examined. Nevertheless, the association between administrators' self-efficacy beliefs and their leadership styles were scarcely investigated. Thus, the current research aims to investigate the perceived self-efficacy beliefs of the administrators towards administration, and which of the leadership style (transformational, transactional and laissez-faire) they perform. Hoy and Miskel's (2012) transformational leadership model, which is prominent in administration literature and an effective and extensive theory for the leaders of social organizations, was grounded in the research. Moreover, the relationship between self-efficacy beliefs and the leadership styles were examined also.

Methodology

Research Goal

Relational screening model was used in this descriptive research. Relational screening models aim to determine the level of relations between two or more variables, or whether there exists a relation (Karasar, 1999). The current research investigated the perceived self-efficacy beliefs of the administrators towards administration, and which of the leadership style (transformational, transactional and laissez-faire) they perform and then the relationship between the administrators' self-efficacy beliefs and their leadership styles.

Sample and Data Collection

The study group of the research consists of 105 administrators working in state primary, secondary and high schools in Tatvan-Bitlis, Turkey during the 2017-2018 academic years. The study sample included 93 administrators randomly selected from different schools, and the administrators were included in the study after the researcher explained the concept of the study at schools. Table 1 displays the demographics of the administrators.

Table 1. Sample characteristics

Variables	Demographics	N	%
Gender	Man	87	93.5
	Woman	6	6.5
Age	30 Age and below	11	11.8
	31-40	44	47.3
	41-50	27	29.0
	Age 51 and above	11	11.8
	1-5	46	49.5
Seniority in	6-10	16	17.2
administration	11-15	10	10.8
	16-20	10	10.8
	21 years and above	11	11.8
Education	Bachelor degree	77	82.8
	Master degree	16	17.2
School level	Primary school	33	33.5
	Secondary school	33	33.5
	High school	27	29.0
Administration type	Administrator	34	36.6
	Assistant principal	59	63.4

Data Collection Tools

In order to investigate the self-efficacy beliefs of the administrators, "Administrator's Self-Efficacy Scale" developed by Tschannen-Moran and Gareis (2004) and adapted to Turkish by Negis-Isik and Derinbay (2015) was used. It is an 18-item on a 9 point Likert scale (1-Never, 9-Pretty much). Table 2 displays the comparative results of reliability and factor analysis of the scale by Negis-Isik and Derinbay (2015), and for this research.

Table 2. Reliability and Factor Analysis Results of Self-Efficacy Scale

		Number of items	Cronbach Alpha (α)	Explained variance (%)	Factor load	KMO	p
Self-efficacy	For this research	18	.86	35	.35 - .71	.82	.000*
	The original form	18	.93	41	.50 - .74	.88	.000*

*p< .05

In order to investigate administrators' leadership style, Leadership Style Scale developed by Oguz (2008) was used. As a 49-item and a 5 point Likert scale, it deals with three types of style that are transformational, transactional and laissez-faire leadership styles. Table 3 displays the comparative results of reliability and factor analysis of the scale by Oguz (2008), and for this research.

Table 3. Reliability and Factor Analysis Results of Leadership Style Scale

Dimension		Cronbach Alpha (α)	Explained variance (%)	Factor load	KMO	p
Transformational leadership style	For this research	.83	26	.35 - .75	.74	.000*
	Oguz (2008)	.95	50	.30 - .87	.95	.000*
Transactional leadership style	For this research	.56	16	.33 - .69	.53	.000*
	Oguz (2008)	.81	25	.31 - .76	.95	.000*
Laissez-faire leadership style	For this research	.69	53	.67 - .80	.72	.000*
	Oguz (2008)	.85	69	.74 - .89	.81	.000*

*p<.05

Analyzing of Data

Before the analysis, the data were examined according to skewness and kurtosis values to determine its normal distribution (Buyukozturk, 2006: 40). The skewness and kurtosis coefficients were -.786 and .886 respectively for the Self-Efficacy Scale, and -.088 and .077 respectively for the Leadership Style Scale. As these values are between +1 and -1, and the values of median and mode are close to each other, the data were considered as normally distributed. So parametric tests were used for the data analysis. However, the normality premise cannot be meet for the comparison of self-efficacy beliefs because the number of the participants were under 30 so nonparametric tests were used. In order to investigate the level of self-efficacy beliefs of the administrators, arithmetic mean and standard deviation were used. The difference between the maximum (162) and minimum (18) scores obtained from the scale was calculated and divided by the number of intervals (5). In order to determine the leadership style of the administrators, arithmetic means and standard deviation of the responses were calculated. Moreover, Pearson Product-Moment Correlation was used to investigate the relationship between the level of self-efficacy beliefs of the administrators and their leadership style.

Findings / Results

The administrator's self-efficacy

Table 4 displays the arithmetic mean and standard deviation results which show the levels of administrators' self-efficacy beliefs.

Table 4. Descriptive Statistics of the Administrators' Self-Efficacy Beliefs

	N	$\overline{X}$	Ss	The level of self-efficacy
Self-efficacy	93	143,82	11,49	Pretty much*

*Never (18,00 – 46,80), Very little (46,81 – 75,61), Partially (75,62 – 104,42), Quite (104,43 – 133,23), Pretty much (133,24 – 162,00)

As seen in Table 4, school administrators had the level of "pretty much" self-efficacy beliefs. The Mann-Whitney U test was conducted in order to investigate whether there was a significant difference between the self-efficacy beliefs of school administrators according to their gender (see Table 5).

Table 5. Comparison of self-efficacy beliefs according to gender variable

	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	p
Self-efficacy	Male	87	48.14	4188.5	161.5	.119
	Female	6	30.42	182.5		

There is no significant difference between the self-efficacy beliefs of the administrators according to their gender (p>.05). In other words, the self-efficacy beliefs of male and female administrators are similar to each other.

Table 6 displays Kruskal-Wallis and Mann-Whitney U tests results made to investigate the significant difference between the self-efficacy beliefs of the administrators according to their seniority, education level and school level that they are working in.

Table 6. *Comparison of self-efficacy beliefs according to the administrators' properties*

Seniority	N	Mean Rank	Chi-Square	df	p
1- 5 years	46	42.02	7.89	4	.096
6-10 years	16	47.75			
11-15 years	10	42.45			
16-20 years	10	51.90			
21 years and above	11	66.41			
School level	**N**	**Mean Rank**	**Chi-Square**	**df**	**p**
Primary school	33	54.17	4.69	2	.095
Secondary school	33	39.77			
High school	27	47.07			
Education level	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**p**
Bachelor degree	77	49.31	3797	438	.070
Master degree	16	35.88	574		

There was no difference between the self-efficacy levels of the administrators in terms of their seniority, the school that they graduated and the level of school they are working in.

Leadership style

The arithmetic mean and standard deviation values for school administrators' leadership styles determined according to their perceptions were displayed in Table 7.

Table 7. *Leadership Styles Performed by the Administrators*

Leadership styles	N	$\overline{X}$	SD
Transformational leadership	93	115.78	9.09
Transactional leadership	93	64.35	5.97
Laissez-faire leadership	93	6.20	2.85

As shown in Table 7, school administrators mostly performed transactional leadership style ($\overline{X}$=115.78) while they performed laissez-faire leadership style the least ($\overline{X}$=6.20).

Table 8 shows the results of the relationship between self-efficacy beliefs of administrators and their leadership style.

Table 8. *The Relationship between Self-efficacy and Leadership Style (Pearson Product Moment Correlation Analysis)*

Variable	N	$\overline{X}$	r	p
Self-efficacy	93	143.82	.610	.000*
Transformational leadership	93	115.78		
Self-efficacy	93	143.82	.373	.000*
Transactional leadership	93	64.35		
Self-efficacy	93	143.82	-.090	.38
Laissez-faire leadership	93	6.20		

The level of administrators' self-efficacy beliefs were significantly and positively related with transformational leadership style (r= .610; p<.01), and with transactional leadership style in a medium level (r= .373; p<.01). There is no significant relationship between the level of administrators' self-efficacy beliefs and laissez-faire leadership style.

Discussion and Conclusion

The level of administrators' self-efficacy beliefs and their leadership style is pretty much significant for the efficiency of the educational administration. As states make revisions in their educational systems in order to train youth for rapid technological changes and increasing economic and social problem, the school administrators should also undergo a change. Today, administrators are expected to develop teaching and learning more than before (Fisher, 2014). Apart from being a school administrator, they are also expected to be an educational visionary, instruction and program leader, evaluation and discipline expert, efficient managers, a budget expert, institutional manager, public relation specialist, legal procedures specialist, moreover be sensitive to social collaboration and students' needs. School administrators are expected to have a high level of belief that s/he can perform all those roles listed above and to have leadership skills to make transformations needed. The current research concluded that school administrators have a high level of self-efficacy beliefs and adopt transformational leadership style most.

Administrator's self-efficacy is the belief for how s/he affects the student's success, and it is a critical factor in administrator's real performance (Lyons&Murphy, 1994). An important result of the current research is that school administrators have a high level of self-efficacy beliefs. In related literature, there is some research supporting this result (Okutan&Kahveci, 2012; Ata, 2015; Koybasi, 2017; Acat et al., 2011; Demirtas &Caglar, 2012), and some do not (Sagri, et al., 2010). One of the possible outcomes of self-efficacy belief of an individual is its effect on the performance. According to Bandura (1977), perceived self-efficacy is "…proved to be a better predictor of behavior toward unfamiliar threats than did past performance (p. 211)". Hysong and Quiñones (1997) and Judge and Bono (2001) associated self-efficacy to the job performance. Moreover, Hysong and Quiñones (1997) stated that as for complex or unclear tasks, self-efficacy is an important predictor of the performance. In a similar way, Wood and Bandura (1989) also associated efficacy with the performance by asserting that perceived self-efficacy beliefs for organizational performance affect the managers' success both directly or indirectly.

There is no significant difference in the self-efficacy beliefs of the administrators in terms of gender variable. Male and female administrators have similar self-efficacy perceptions. Moreover, administrators working in different schools and have different seniority have similar perceptions of their self-efficacy also. There is a body of research having similar findings in terms of seniority (Lyons & Murphy, 1994; Williams, 2012; Isik&Gumus, 2017; Demirtas &Caglar, 2012; Koybasi, 2017). However, Acat and others (2011) found that as the age and seniority increase, self-efficacy beliefs also increase. Furthermore, Santamaria (2008) concluded that age and seniority are two of the important predictors of self-efficacy belief. As a striking finding by Fisher (2014), the level of self-efficacy belief is at its top point in the first year of an administrator job. As the experience advanced, self-efficacy levels decrease. The level of self-efficacy beliefs begins to increase after ten years of experience, nevertheless not at the level of as it was in the first year.

Koybasi (2017) conducted a study on school level of the administrators and found that there was no significant difference in administrators' self-efficacy beliefs according to the school they are working in. On the other hand, Santamaria (2008) stated that as the school level increases, administrators' sense of self-efficacy beliefs gets higher also. There was no significant relationship between the self-efficacy beliefs of the administrators in terms of their educational level. Negis-Isik and Gumus (2017), and Demirtas and Caglar (2012) also reached similar findings, however, Acat et al. (2011) found that administrators having a two-year degree have a higher level of self-efficacy beliefs than the others. Indeed, self-efficacy belief is determined by the individual's success and failure, others' experiences, deep emotional experiences such as excitement, happiness, and fear (Akkoyunlu&Orhan, 2003). Put differently, self-efficacy is a context-based concept (Tschannen-Moran&Gareis, 2004). That's to say, an administrator might feel efficient in one situation but inefficient for another given task. In this sense, self-efficacy belief is a changeable factor and might vary or not vary in different kind of situations.

Another important finding of the research is that school administrators adopt transformational leadership the most. They perform transactional and laissez-faire leadership style respectively. Related research reached similar findings (Avci 2015; Ozkan, Alev, Ercan 2015; Dasci 2014; Maral 2016; Tura 2012; Oguz, 2011; Toremen&Yasan, 2010; Wahap et al., 2014; Cemaloglu 2007; Cemaloglu, Sezgin&Kilinc, 2012). Considering that transformational leaders take place an important role in educational institutions which have the responsibility to adapt the rapid changes, it is a promising result that administrators perceive themselves as transformational.

Research findings revealed that administrators' self-efficacy beliefs and leadership styles are related to each other. Leadership is effective on understanding the situations for the followers, selecting the goals, organizing the activities in order to reach the goals, motivating the followers, pursuing collaboration and teamwork, and providing support and collaboration from outside the institution (Leithwood, et al., 2004). Associated with being a successful leader, these properties such as patience, goal-oriented and problem solving (McCormick, 2001) are also required to be performed by individuals having a high level of self-efficacy.

It is striking that there is a positive relationship between the administrators' self-efficacy beliefs and the transformational and transactional leadership styles they perform. Put differently, administrators having a high level of self-efficacy beliefs might perform transformational and transactional leadership styles or vice versa. In a similar study by Sigri, Tabak, and Gungor (2010), there are significant differences between the transformational leadership styles levels of the administrators having a high and low level of self-efficacy beliefs. Furthermore, self-efficacy was found to affect transformational leadership.

The similarity of the relationship between self-efficacy and these two kinds of leadership styles might be rooted in their complementary characteristics. As Burns (1978) indicated, the leadership process can occur either in a transactional or transformational way (Cited in Bass&Waldman, 1987). According to Bass (1985; cited in Lowe, Kroeck&Sivasubramaniam, 1996), a transformational leader is possibly ineffective without performing a transactional leadership style so an administrator may perform the two of the styles.

The administrators having a high level of self-efficacy beliefs towards the administration process might perform transformational leadership style based on this belief. Osterman and Sullivan (1996) indicate that administrators with a high level of self-efficacy belief are also successful role models. Moreover, Lyons and Murpy (1994) stated that they prefer to use their personal power resources rather than politics, procedures or legal regulations in order to influence

the teachers. Considering the dimension of "inspirational motivation" of transformational leadership and to the extent that leadership behaviors motivating the followers in terms of the goals, Osterman and Sullivan (1996) stated that self-efficient administrators tend to make an effort to reach the goals even in hard conditions. Furthermore, they might affect task performance, motivation level and self-development efforts in school (Schultz&Schultz, 1998); play an important role on the reconstruction of the schools (Dimmock&Hattie, 1996); influence how the teachers teach better and the learners learn better (Smith, Strom&Adams, 2006). Within the context of "intellectual stimulation" dimension of the transformational leadership, many researchers indicated that there is a positive relationship between the administrators' self-efficacy beliefs enabling the followers to be innovative and creative and their perceived transformational leadership behaviors (Walumbwa, Lawler, Avolio, Wang and Shi, 2005; Walumbwa, Avolio and Zhu, 2008; Schyns, 2004; Schyns, 200; Nielson, Yarker, Randall and Munir, 2009). What's more, Schyns (2004) asserted leaders might also influence their followers' self-efficacy beliefs by giving an opportunity for their experiences, and by being a role model. As for the "individualized consideration" dimension of the transformational leadership, self-efficacy mediates the behavior of busying with the task emerging when the follower emotionally connected to others to find a meaning in the work or/and s/he is cognitively aware (Luthans&Peterson, 2002). Leadership self-efficacy is related to gaining the attachment of the followers besides determining the direction and coping with the obstacles to the changes (Paglis&Green, 2002). Administrators having a low level of self-efficacy beliefs are in a rush to identify themselves as unsuccessful and feel anxiety, stress, and disappointment (Tschannen-Moran&Gareis, 2004). Let alone, these behaviors are so far from the individualized consideration of the teachers. All these studies associated with the sub-dimensions of transformational leadership support the relationship found in the current research. In other words, self-efficacy beliefs of the administrator and his/her transformational leadership style are two of the complementary phenomena.

Suggestions

Apart from the legal requirements for administrator selection, considering the self-efficacy beliefs in this process might contribute to the effectiveness of the desired feedbacks in the system. According to Hogan, Curphy, and Hogan (1994), through interviews and assessment centers, psychologists have gathered data about the cognitive abilities and personality of the leaders. Nevertheless, many of the organizations do not prefer this kind of information centers or they are unaware of their presence. Thus, technical qualities become a base for the staff selection rather than the leadership skills.

Although the level of self-efficacy beliefs of the administrators are high in the current research, it should be considered that self-efficacy can be a changeabl**e** concept and it can vary based on the conditions. The successful experiences of the administrators might affect their self-efficacy positively while their failure might not. Airola, Bengtson, Davis and Peer (2014) asserted that when people get training for leadership capacity, an increase arises in the level self-efficacy beliefs. In other words, an education of leadership might positively influence the self-efficacy, therefore not only in preparation programs but also in the administration process, programs including especially transformational leadership behaviors and attitudes will increase the capacity or leadership and levels of self-efficacy. Besides, if such programs include experiences, role making/drama activities, and also positive persuading messages, they will contribute to improving the sense of self-efficacy more (Gist&Mitchell, 1992).

According to a study conducted by Calisir (2008), the school administrators encounter with some obstacles such as inefficient sources, the responsibility of the authority, the intervention of the superiors, limitations of legal regulations and uncertain situations during the management process. These kinds of problems might affect the self-efficacy of the administrators negatively. Thus, psychological conditions at schools might be improved to increase the level of self-efficacy beliefs.

Limitations

Apart from all its significant findings, the current study should be evaluated with its limitations; one of which is that the administrators' comments on their self-efficacy perceptions. However, self-efficacy beliefs are based on a person's perception of ability rather than the ability s/he has. Either high or low, information on self-efficacy beliefs provides critical data for the researchers to understand the organizations better (Williams 2012). Thus, administrator self-efficacy might be studied related with some variables which are important for school effectiveness (teacher and student motivation, student achievement, organizational commitment, organizational support, etc.) or with different institutions (special schools, pre-school institutions, colleges). Comparative research might be carried out with other shareholders of the school (teachers, staff, parents, etc) in which they evaluate the administrator's self-efficacy beliefs in order to understand the issue more deeply. Furthermore, besides the self-efficacy beliefs towards administration, general self-efficacy beliefs of the administrators might be investigated also. Besides, the self-efficacy beliefs of the administrators, leadership styles, and their relationship might be investigated via mixed method approaches which both quantitative and qualitative methods are used.

Acknowledgements

References

Acat, M. B., Ozyurt, O., & Karadag, E. (2011). Ilkogretim okul mudurlerinin mevzuat gorevleri oz yeterlilik duzeylerinin degerlendirilmesi [Evaluation of elementary school principals' self-efficacy levels about legislation tasks], *NWSA: Education Sciences*, *6*(1), 605-620.

Akkoyunlu, B., & Orhan, F. (2003). Bilgisayar ve ogretim teknolojileri egitimi bolumu ogrencilerinin bilgisayar kullanma oz yeterlik inanci ile demografik ozellikleri arasindaki iliski [Relationship between using computer self-efficacy belief and demographic characteristics of *computer* and teaching technology education department students]. *The Turkish Online Journal of Educational Technology*, *2*(3), 86-93.

Airola, D. T., Bengtson, E., Davis D. A., & Peer D. K. (2014) Principals' sense of efficacy: the influence of the Arkansas Leadership Academy, *Journal of Educational Administration*, *52*(6), 754-774. Retrieved from https://doi.org/10.1108/JEA-08-2013-0089.

Ata, E. (2015). *Okul yoneticilerinin oz yeterlik inanclari ile etkili okul liderligi arasindaki iliski [Relationship between school leaders' self-efficacy beliefs and effective school leadership]*. Unpublished Doctoral Thesis, Gazi University, Ankara.

Avci, A. (2015). Ogretmen algilarina gore okul mudurlerinin liderlik stilleri [School principals' leadership styles according to teacher perceptions]. *HAYEF: Journal of Education*, *12*(24), 161-189.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191-215.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs: NJ: Prentice Hall.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998). Retrieved from http://www.uky.edu/~eushe2/Bandura/BanEncy.html.

Bass, B. M. (1985). *Leadership and performance beyond expectation*. New York: Free Press.

Bass, B. M., Waldman D. A., Avolio B. J., & Bebb M. (1987). Transformational leadership and the falling dominoes effect. *Group & Organization Studies*, *12* (1), 73-87.

Burns, J. M. (1978). *Leadership*. New York: Harper & Row.

Buyukozturk, S. (2006). *Sosyal bilimler icin veri analizi el kitabi [Manual of data analysis for social sciences]*. Ankara: Pegem.

Cemaloglu, N. (2007). Okul yoneticilerinin liderlik stillerinin farkli degiskenler acisindan incelenmesi [An analysis of the school administrators' leadership styles in terms of different variables]. *Journal of Turkish Educational Sciences, 5*(1), 73- 112.

Cemaloglu, N., Sezgin, F., & Kilinc, A. C. (2012). Examining the relationships between school principals' transformational and transactional leadership styles and teachers' organizational commitment. *The Online Journal Of New Horizons In Education*, *2*(2), 53-64.

Calisir, M. (2008). *Mamak ilcesi ilkogretim okulu yoneticilerinin goruslerine gore okul mudurlerinin kullandiklari yetki turu ve duzeyleri [The authority types and levels used by school administrators according to the opinions of the administrators of primary schools in Mamak province]* (Unpublished Master's Thesis). Ankara University, Ankara, Turkey.

Cobanoglu F., & Badavan Y. (2017). The key of successful schools: the correlates of school effectiveness. *Pamukkale Universitesi Sosyal Bilimler Enstitusu Dergisi [Journal of Pamukkale University Social Sciences Institute]*, *26*, 114-134.

Dasci, E. (2014). *Ilkogretim kurumu yoneticilerinin liderlik tarzlari ile ogretmenlerin yasadiklari yildirma (mobbing) ve orgutsel sessizlik davranislari arasindaki iliski [The relationship between leadership styles of elementary school principals and mobbing that teachers experience and organizational silence behaviors]* (Unpublished Master's Thesis). Gazi University, Ankara, Turkey.

Demirtas H., & Caglar C. (2012). Okul mudurlerinin oz yeterlik inanclari ve tukenmislik duzeylerinin bazi degiskenler acisindan incelenmesi [An investigation of the self-efficacy beliefs and burnout levels of school principals in terms of several variables]. *Inonu Unıversıty Journal of The Faculty Of Education*, *13*(3), 1-22.

Dimmock, C., & Hattie, J. (1996). School principals' self-efficacy and its measurement in a context of restructuring. *School Effectiveness and School Improvement*, *7*(1), 62-75.

Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, *37*, 15-18.

Federici R. A. (2013). Principals' self-efficacy: relations with job autonomy, job satisfaction, and contextual constraints, *European Journal of Psychology of Education*, *28*(1), 73-86.

Fisher, Y. (2014). The timeline of self-efficacy: changes during the professional life cycle of school principals. *Journal of Educational Administration*, *52*(1), 58-83. doi: 10.1108/JEA-09-2012-0103.

Gist M. E., & Mitchell T. R. (1992). Self-Efficacy: A theoretical analysis of its determinants and malleability, *The Academy of Management Review*, *17*(2), 183-211.

Hallinger, P., Hosseingholizadeh, R., Hashemi, N., & Kouhsari M. (2017). Do beliefs make a difference? Exploring how principal self-efficacy and instructional leadership impact teacher efficacy and commitment in Iran. *Educational Management Administration & Leadership*, *April*, 1-20. doi: 10.1177/1741143217700283

Hannah, S. T., Avolio B. J., Luthans F., & Harms P. D. (2008). Leadership efficacy: Review and future directions, *The Leadership Quarterly, 19*, 669–692.

Hogan, R., Curphy, G. J., & Hogan, J. (1994). What we know about leadership effectiveness and personality. *American Psychologist*, *49*(6), 493-504.

Hoy, W. K., & Miskel, C. G. (2012). *Educational Administration Theory, Research and Practice* (Trans. S. Turan). Ankara: Nobel.

Hysong, S. J., & Quiñones, M. A. (1997). The relationship between self-efficacy and performance: a meta-analysis. *In Twelfth Annual Conference of the Society for Industrial and Organizational Psychology,* St. Louis, MO, January.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits self-esteem, generalized self-efficacy, locus of control, and emotional stability with job satisfaction and job performance: A meta-analysis. *Journal of applied Psychology*, *86*(1), 80.

Kelleher J. (2016). You're OK, I'm OK: a lesser-known branch of research is beginning to focus on using self-efficacy to help principals navigate the increasingly difficult demands placed on them, *Phi Delta Kappan*, *97*(8), 70-74.

Karasar, N. (1999). *Bilimsel arastirma yontemi [Scientific research method]*. Ankara: Nobel.

Kosterelioglu, I., & Bayar, A. (2014), Turk egitim sistemi'nin sorunlarina iliskin guncel bir degerlendirme [An assessment on recent issues of Turkish education system]. *International Journal of Social Science*, *25*(1), 177-187.

Koybasi, F., & Donmez, B. (2017). Okul yoneticilerinin girisimcilik, oz yeterlik ve orgutsel baglilik algilarinin analizi [The analysis of school principals' perception of entrepreneurship, self-efficacy and organizational commitment]. *Educational Administration: Theory and Practice*, *23*(2), 249-280.

Leithwood, K., Seasore, K. L., Anderson, S., & Wahlstorm, K. (2004). *Review of Research How Leadership Influences Student Learning*. New York: The Wallace Foundation.

Leithwood, K., & Jantzi, D. (2008). Linking Leadership to Student Learning: The Contributions of Leader Efficacy. *Educational Administration Quarterly*, *44*(4), 496-528.

Levine, D. U., & Lezotte, L. W. (1990). *Unusually effective schools. A review and analysis of research and practice*. UW-Madison: The National Center for Effective Schools.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformation and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, *7*(3), 385-425.

Luthans, F., & Peterson, S. J. (2002). Employee engagement and manager self-efficacy. *Journal of Management Development, 21*(5), 376-387.

Lyons, C. A., & Murphy, M. J. (1994). *Principal self-efficacy and the use of power*. New Orleans, LA: American Educational Research Association.

Maciel, R. G. (2005). *Do principals make a difference? An analysis of leadership behaviors of elementary principals in effective schools*. Unpublished Doctoral Thesis, Texas-Pan American University.

Maral, M. (2016). O*kul yoneticilerinin liderlik stilleri ile catisma cozme stratejileri arasindaki iliski [The relationship between strategies to solve conflicts and leadership styles of school leaders].* Unpublished Master's Thesis, Sakarya University, Sakarya.

McCollum, D. L., & Kajs, L. T. (2015). School administrator efficacy: assessment of beliefs about knowledge and skills for successful school leadership*. In Teaching Leaders to Lead Teachers*. Published online: 08 Mar 2015; 131-148.

McCormick, M. J. (2001). Self-efficacy and leadership effectiveness: Applying social cognitive theory to leadership. *Journal of Leadership Studies*, *8*(1), 22-33.

Negis-Isik, A., & Derinbay, D. (2015). Turkish version of the principals' sense of efficacy scale: Validity and reliability study. *Eurasian Journal of Educational Research*, *60*, 1-16.

Negis-Isik, A., & Gumus, E. (2017). Yonetici oz-yeterligi ve okul etkililigi arasindaki iliskinin incelenmesi [Investigation of relationship between principals' self-efficacy and school effectiveness]. *Journal of Kastamonu Faculty of Education*, *25*(1), 419-434.

Nielsen, K., Yarker, J., Randall, R., & Munir, F. (2009). The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals: A cross-sectional questionnaire survey. *International journal of nursing studies*, *46*(9), 1236-1244.

Oguz, E. (2008). *Ilkogretim okulu yoneticilerinin liderlik stilleri ile karar verme stilleri arasindaki iliski [Relationship between leadership styles and decision-making styles of elementary school administrators]* (Unpublished Doctoral Thesis). Ankara University, Ankara, Turkey.

Oguz, E. (2011). Ogretmenlerin orgutsel vatandaslik davranislari ile yoneticilerin liderlik stilleri arasindaki iliski [Relationship between teachers' organizational citizenship behavior and leadership styles of administrators]. *Educational Administration: Theory and Practice*, *17*(3), 377-403.

Okutan, M., & Kahveci, A. (2012). Ilkogretim okul mudurlerinin oz yeterlik inanclarinin cesitli degiskenler acisindan incelenmesi (Rize Ornegi)[Examination of the self-efficacy beliefs of the primary school principals in the context of various variables (Rize sample). *Journal of Kastamonu Faculty of Education*, *20*(1), 27-42.

Osterman, K., & Sullivan, S. (1996). New Principals in an Urban Bureaucracy: A Sense of Efficacy. *Journal of School Leadership, 6*, 661-690.

Ozkan, S., Alev, S., & Ercan, A. (2015). An Analysis of the Relationship between School Managers' Change Leadership Style and Multi-Factorial Leadership Styles from the Views of Teachers. *International Journal of Educational Methodology*, *1*(1), 27-34. doi: 10.12973/ijem.1.1.27

Paglis, L. L., & Green, S. G. (2002). Leadership Self-Efficacy and Managers' Motivation for Leading Change. *Journal of Organizational Behavior*, *23*, 215-235.

Purkey, S. C., & Smith, M. S. (1982). Too soon to cheer? Synthesis of research on effective schools. *Educational Leadership*, *40*(3), 64-69.

Ramchunder, Y., & Martins, N. (2014). The role of self-efficacy, emotional intelligence and leadership style as attributes of leadership effectiveness. *SA Journal of Industrial Psychology*, *40*(1), 1-11.

Santamaría, A. P. (2008). *A Principal Sense of Self-Efficacy in an Age of Accountability*. Unpublished Doctoral Thesis, University of California, California.

Sazali, Y. (2010). *The Relationship Between Principals' Self-Efficacy and School Factors and Principals' Personal Attributes*. Retrieved from http://www.academia.edu/733250/THE_RELATIONSHIP_BETWEEN_ PRINCIPALSELF-EFFICACY_AND_SCHOOLSFACTORS_AND_ PRINCIPALS PERSONAL_ATTRIBUTES

Schultz, D., & Schultz, S. E. (1998). *Psychology and Work Today: An Introduction to Industrial and Organization Psychology (7th ed.)*. Upper Saddle River, NJ: Prentice Hall.

Schyns, B. (2001) 'The relationship between employees' self-monitoring and occupational self-efficacy and transformational leadership. *Current research in social psychology, 7*(3), 30-42.

Schyns, B. (2004). The influence of occupational self-efficacy on the relationship of leadership behavior and preparedness for occupational change. *Journal of career Development, 30*(4), 247-261.

Sigri, U., Tabak, A., & Gungor, H. (2010). Oz Yeterligin Donusturucu Liderlik Uzerine Etkisi: Kamu Sektorunde Bir Arastirma [The impact of self-efficacy on transformational leadership : A research in public sector]. *Istanbul Commerce University Journal Of Social Sciences, 17*, 51-66.

Smith, W., Guarino, A., Storm, P., & Adams, O. (2006). Effective Teaching and Learning Environments and Principal Self-Efficacy. *Journal of Research for Educational Leaders*, *3*(2), 4-23.

Stefano, M. D. (2003). *School effectiveness: The role of the principals in a leading public secondary school in Santa fe province, Argentina*. Unpublished Doctoral Thesis, Columbia University.

Vandenberghe, R. (1995) Creative management of a school: a matter of vision and daily interventions, *Journal of Educational Administration*, *33*(2), 31-51 https://doi.org/10.1108/09578239510081291

Toremen, F., & Yasan, T. (2010). Ilkogretim okulu yoneticilerinin donusumcu liderlik ozellikleri (Malatya Ili Ornegi) [Primary school administrator's transformational leadership features (example on the city of Malatya)]. *Pamukkale University Journal of Education, 28,* 27-39.

Tschannen-Moran, M., & Gareis, C. R. (2004). Principals' Sense of Efficacy: Assessing A Promising Construct. Journal of Educational Administration, *42*(5), 573-585. https://doi.org/10.1108/09578230410554070

Tschannen-Moran, M., & Gareis, C. R. (2007). Cultivating principals' sense of efficacy: Supports that matter. *Journal of School Leadership*, *17*(1), 89.

Tura, M. (2012). *Ilkogretim okulu mudurlerinin liderlik stillerinin ogretmenlerin is doyumuna etkisi [The effect of leadership styles of elementary school administartors on job satisfaction of teachers]* (Unpublished Master's Thesis). Balikesir University, Balikesir, Turkey.

Wahab, J. A., Fuad, C. F., Ismail, H., & Majid, S. (2014). *Headmasters' transformational leadership and their relationship with teachers' job satisfaction and teachers' commitments*. Published by Canadian Center of Science and Education, Paper no.: 2014/13.

Walumbwa, F. O., Avolio, B. J., & Zhu, W., (2008). How transformational leadership weaves its influence on individual job performance: the role of identification and efficacy beliefs. *Personnel Psychology*, *61*(4), 793–825. doi 10.1111/j.1744-6570.2008.00131.x

Walumbwa, F. O., Lawler, J. J., Avolio, B. J., Wang, P., & Shi, K. (2005). Transformational leadership and work-related attitudes: the moderating effects of collective and a self-efficacy across cultures. *Journal of Leadership and Organizational Studies*, *11*(3), 2-16.

Williams, J. C. (2012). *Examining the relationship between louisiana principals' self-efficacy beliefs and student achievement* (Unpublished Doctoral Thesis). University of New Orleans, New Orleans, USA.

Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review, 14*(3), 361-384.