

THE EFFECT OF SCHOOL ADMINISTRATORS' TRANSFORMATIONAL LEADERSHIP AND TECHNOLOGICAL LEADERSHIP STYLES ON TEACHERS' ORGANIZATIONAL COMMITMENT

Hüseyin DUMAN

ABSTRACT

The aim of our study is to examine the transformative leadership styles of educational institution administrators and the effects of technological leadership styles on their organizational commitment. The data of the research were obtained from 2240 teachers working in primary schools operating under the Ministry of National Education in the city of Bursa, Yıldırım district during the 2016-2017 academic year. The analysis of the findings was performed with the SPSS versiyon 24.0 program, and Kolmogorov-Smirnov, Shapiro-Wilk, QQ plot chart, Skewness, Kurtosis, Levene, t-test, ANOVA, Tukey and Pearson correlation analyses were performed.

According to the findings of the research, school administrators and teachers become role models for their followers, focus more on concepts such as efficiency and quality, reveal transformative, interactive and liberating leadership styles, and their organizational commitment increases in case of perfection of their professional development, and they are not motivated about the goals and objectives of the organization, cases where are not encouraged to approach events, situations and problems with a new and different perspective, transformational leadership is not shown in today's conditions where change is experienced in a dizzying way, science and technology are developing and spreading extremely fast, leadership behavior results are negative and visionary leadership is not carried out. Organization commitment has been found to decrease.

Keywords: Education, Teacher, Technology, Leadership, Transformational leadership, Organizational commitment

INTRODUCTION

In schools, which are one of the important building blocks of the social structure, the leadership characteristics of the administrators affect the success and all activities of the educational institution. Studies conducted in the last two decades have revealed that the key to success of managers is competent management (Karip & Köksal, 1999). Therefore, although the authorities and responsibilities of all administrators in matters related to education are found to be similar, their administration styles are found to vary (Bass, 2008). For example, administrators' different interpretations of the legislation which they are bound, their desire to do what their authority has or

their reluctance to do arise from the individual characteristics of the administrator and his/her upbringing. It is possible for an administrator to have a substantial effect on the continued activities of his/her organization. Administrators are individuals whose obligations impose on other people and enable those people to show the desired actions. Therefore, leadership is the gability to direct individuals to engage in the desired behavior patterns. It is possible to define impact as one person following the advice, directions or instructions of the other person. In this respect, an individual who advises or gives instructions will be considered a leader (Drucker, 1988). In this respect, leadership characteristics of managers are important for both their individual and organizational performances.

CONCEPTUAL FRAMEWORK Transformational Leadership

*Near East University, Graduate School of Educational Sciences,
Department of Educational Administration, Supervision, Planning and
Economics, Northern Cyprus,
hduman01@gmail.com, orcid:0000-0001-6932-7042*

Transformational leadership was first defined by Kegan, defined by Downton in 1973. It is seen that he voiced Mc Gregor BURNS in 1978, but these did not attract attention at that time. According to Burns, leadership is the process of maximizing the morale and motivation of the leader and his/her followers. Later, it was discussed by Bernard BASS et al and developed into transformational leadership theory (Şahin, 2006). Transformational leaders attempt to create a conscious personality by making moral values and ideals such as freedom, justice, equality, peace and humanity attractive to the followers (Akbaba, 2003). In the studies conducted after 1973 and in addition to the classical and traditional leadership behaviors in management and leadership, Burns and Bass reached the view in their studies that a new distinction should be made in transformational leadership. This distinction has revealed transformational leadership styles towards the future, innovation, change and reform (Eren, 2011). The main task of the transformational leader is to ensure that the organization can survive in the developing and changing world, and to keep up with changes so that it can survive (Dağ & Göktürk, 2014).

In the last century, organizations have turned into institutions of a globalizing world. Technological developments have accelerated, many companies have grown and new product lines have been created. Transformational leaders are required to deal with the changing external environmental and organizational conditions and problems by taking on entrepreneurial, deliberative, motivating, inspiring, guiding, strategic and general problems, guiding business managers and solving problems (Eren, 2003). Leaders with Transformational Leadership provide a vision to employees. By making changes in organizational culture to contribute to this vision, it makes them believe they can do more than they are currently doing or potentially think they can. It enables them to work more efficiently by increasing their confidence. Since the transformational leader acts with an eye on the future, he/she can make significant changes in the performance of the organization in a short time. Organizational performance may even decrease a little at the beginning. There may even be some strong resistance to change. However, those who show this resistance then try to adapt to the new environment (Eren, 2003).

Transformational leaders give the members of the organization the responsibility to develop their skills and increase their success, thus enabling them to be more efficient. Transformational leaders

provide subordinates with the ability to maximize their desire for change and achieve satisfaction in meeting their emotional needs (Dağ & Göktürk, 2014). Transformational leadership has been expressed as the ability to create change in the organization's vision, strategy and culture (Daft, 2000).

"According to Podsakoff, transformation leaders have the following characteristics (Podsakoff et al., 1990);

1. Define the organizational vision,
2. Act as a suitable model for followers,
3. Encourage and acknowledge the group's goals,
4. Expecting high performance from all members of the group,
5. Provide individualized support to each member

6. Provide intellectual stimulation
It is stipulated that at least six features must be present.

Transformational leadership has been considered by many scholars to be founded on four basic components (Stewart, 2006; Scandura & Williams, 2004; Bass, 1997; Koh, et al., 1995; Bass, 1990; Barlı, 2010).

1. Charisma
2. Impressive motivation
3. Intellectual stimulation
4. Individualized attention

In fact, as the name suggests, a transformational leader is someone who changes the beliefs, values, and needs of their audience. It maximizes the performance of organizations by realizing change and renewal within the organizations. It is of great importance that a vision is created for the group and then shared with followers, and it is the leader who provides this. This is possible if the leader has a vision and imposes the vision on the audience (Koçel, 2007).

In other words, the transformational leader acts for the future. At the same time, he/she should have a vision and encourage his/her followers to adopt this vision (Özden, 2002). Transformational leaders are not just people who invite their followers to rethinking existing practices and create alternative approaches. In addition, they are people who try to reveal the originality and initiative by removing prohibitive restrictions and revealing the change in the business environment as much as possible (Moss et al., 2006). As a result, when the conceptual studies on transformational leadership are examined, it can be said that they are all focused on the human aspects human and the criterion of an effective leader is meeting human needs and

ensuring their development. Transformational leaders stand in front of the group by using ideal influence, individual attention, and inspiring motivational behaviors and direct them (Celep, 2004).

Technological Leadership

The technological leadership of the School Principals stated that the teachers working in the school were able to use the technology effectively and meet the needs needed for this, and be a suitable model if necessary (Bilge, 2013). They are the people who make the necessary effort to provide the appropriate environment for the purchase and use of educational technologies by school administrators and to ensure that students benefit from these opportunities (Banoğlu, 2011). The technology leader is the person who helps to enable these components to function in harmony and to establish the correct relationship between them during the implementation of human and technology components in the application of technology (Hamzah et al., 2010).

In fact, the most important problem of administrators in schools arises from the fact that they are not suitably prepared for his issue. School administrators should guide teachers and enable them to use technology effectively. To achieve this, training teachers by providing in-service training if necessary may be among the technological leadership tasks of school administrators (Yeh, Chi and Chiou, 2008). It is known that various factors such as the rapid development of technology, rapid changes in education policies in our country, the increase in the sanctions on technology education and the expectations from the school cause increased competition between schools and the emergence of new educational approaches. All these rapid developments have caused the roles expected from school administrators to become increasingly complex. It is expected that schools will create better quality learning communities by using and applying technology more efficiently. As a result, the importance of technology leadership among school administrators increases even more (Afshari et al., 2009).

Modern educational tools developed with state-of-the-art technology have made a valuable contribution to education. School administrators must play a decisive role in the effective use of these innovations in their schools. This role can be defined as technological leadership (Yu & Durrington, 2006). Technological leadership can be defined as management by individuals who provide the necessary guidance in the efficient use of

technology in school, influences, directs and manages students in this regard (Akbaba & Altun, 2004).

Education administrators in schools should be able to understand and explain technology applications in decision-making processes, have awareness of how pedagogy and technology interact, and know what technology can and cannot do. It is stated that only in this way can individuals become technology leaders (Can, 2003). School Administrators do not have clear job descriptions as technological leaders in any school in our country. Due to the fact that school administrators are mostly responsible for the implementation of technology in schools, the job definition standards of school administrators have been published by the International Society for Technology in Education (ISTE), which is based in the USA. These standards aim to help school administrators become more effective teaching leaders in the use of technology in education in terms of providing a suitable environment for school administrators to purchase and use educational technologies, and ensuring that students can benefit from these opportunities. NETS-A standards were re-evaluated by ISTE in 2009 and then updated with some changes. The characteristics sought in technology leaders are as follows (ISTE, 2009; Hacifazlıoğlu et al., 2011; Banoğlu, 2011):

1. Visionary Leadership
2. Digital Age Learning Culture
3. Excellence in Professional Practice
4. Systematic Development
5. Digital Citizenship

In this research, the NETS-A standards published in 2009 were taken as basis and the standards were briefly explained (Hacifazlıoğlu et al., 2010).

Managers have the opportunity to have an impact on their followers through the leadership models they adopt. Impact creation is the name given to the sum of the stages in which an individual differentiates the types of behavior. Making an impact should be understood as a person who can support the manager in terms of acceptance of the individuals under his administration, determine the parties' need for guidance, and can support employees in achieving their goals. In the business environment, leaders and employees are in a constant state of affection. Leading managers in this communication; They should be successful in achieving their organizational goals, enhancing the loyalty of employees to the organization, ensuring that they reach what they expect and impressing the employees. This success will allow employees to evaluate their profession at a high level in their life

as a result of their activities to gain talent and become experts in a specific. (Kotter, 2001) defined this situation as putting forward the professional identity, spending effort in terms of the professional class of which he/she is a member, and commitment to professional purpose, value, rules and moral principles. In the studies conducted in the field of professional commitment, it is observed that there is no consensus on the use of career, professional and occupation concepts. Feeling connected to the organization refers to the desire to continue to belong to an organization, the desire to make significant effort for the organization, or to firmly believe and accept the goals and values of the organization. In other words, the feeling that he / she is connected to the organization by taking on an identity focused on the activities, interests and success of the organization. In some of the studies conducted to determine the factors that affect the sense of organizational commitment, the behaviors of the leader were also explained as a key element (Çetin, 2004).

Organizational commitment

When we examine the concept of organizational commitment, it can be said that it is a phenomenon related to the attitudes and behaviors of the organization and its employees towards work. In line with this analysis, the concept of organizational commitment is also concerned with the employee's identification with the job, the level of loyalty to the job and the level of adaptability to the job. In other words, the aforementioned concept evolves into a state of psychological commitment in the organization-employee relationship, and mutual expectations must be realized in order to talk about this state of commitment (Demirel, 2009).

Factors affecting organizational commitment were examined under three headings: personal factors, organizational factors and external factors (Akan & Yalçın, 2015).

Personal Factors: A significant amount of research has been conducted on the relationships between organizational commitment and personal factors. As a general statement, it is accepted that there are close relationships between personal factors and organizational commitment. In fact, it has been of great importance in matters such as the fact that personal factors, organizational goals and principles become familiar with the amount of time spent in the organization (Akova & Bayhan, 2015).

1. Job Expectations
2. Psychological Contract
3. Personal Characteristics

Organizational Factors: Organizational factors

affecting organizational commitment; include variables such as the nature and importance of the job, management style, participation in the decision-making process, work groups, organizational culture, role conflict, skill level of subordinates, job focus, job identity and organizational rewards. In addition to these, some researchers have added role ambiguity, job difficulties, subordinate-superior relations, advancement and career opportunities, importance given to employees' needs, wage justice and supervision relationships to organizational factors (Buluç, 2009).

- Nature and Importance of the Job
- Management and Leadership
- Wage level

According to previous studies, it is known that leadership behavior and application styles affect employees' feelings of organizational commitment (Wang & Walumbwa, 2007). The employee, who believes that he/she is not helped by the organization and the leader who represents the organization in this context, Show a lower level of loyalty to the organization. If the personnel working in the institution are unemployed in the companies where they are functional or in the sectors in which the companies are in, there is a lack of capital and equipment, especially the company they do their job with, and there is a lack of organizational commitment (Moss et al., 2006).

In this regard in order for individuals to be educated and developed in the desired way, important roles are assigned to educational institutions and those who manage these institutions or work as principals in schools. In the same way that the driver behind the wheel of the car is effective and responsible in directing the vehicle; the transformational leadership and technological leadership of school administrators are equally effective in ensuring the correct and successful management of educational institutions, which are the most sensitive places in terms of conveying the structural thinking, mission and goals of education to individuals and ensuring the organizational commitment of teachers. In our research on this subject the aim was to determine the effect of transformational leadership and technological leadership styles of school principals on organizational commitment within the framework of teachers' opinions. In line with the purpose of the study, answers to the following questions were sought:

1. Is there a meaningful connection between the types of leaders who make transformation and the organizational commitment levels of the School

2. Administrators?
3. Is there a meaningful connection between the way the educational institution managers are technological leaders and the level of commitment of the teachers to the organization?
4. The transformational leadership styles of educational institution administrators show a meaningful difference within the framework of teachers' individual qualifications (age, length of services in the department in which they work, education level, gender, branch, etc.)?
5. The types of educational institution administrators being technological leaders Show a meaningful difference in terms of the individual qualifications of the trainers (education level, gender, length of service in the department in which they work, branch, etc.)?

6. Is there a difference between public schools and private schools?

In conclusion, in our study, the link between the different transformational leadership styles and technological leadership styles demonstrated by educational institution administrators in their managerial roles and the organizational commitment of the movements will be evaluated based on the opinions of the educators. Our research has importance in terms of obtaining data about the types of transformational leaders and their style of being a technological leader, being more effective in the business environment by improving their leadership behavior, and providing more support to the institution where they are trained. When the transformational leadership and technological leadership behaviors of educational institution administrators are revealed, the effect on their commitment to the organization will be determined. It is thought that our study will make a valuable contribution to the field of educational sciences and the concepts of management-administration in educational institutions, in order that the administrators of educational institutions can know their status in the form of organization that differs and progresses.

METHOD

Research Model

This research is a descriptive study conducted with the aim of examining the relationship between the organizational commitment of educators and the transformational leadership styles and technological leadership styles of the administrators of educational institutions according to socio-demographic variables made with the relational scanning model.

Research Universe and Sampling

The universe of the study was composed of 2240 teachers working in primary schools operating under the Ministry of National Education in Bursa, Yıldırım District during the 2016-2017 academic year and a sample of teachers from the universe was reached.

A table showing the socio-demographic characteristics of the school administrators and teachers participating in the study is given below.

Table 1. Distribution of School Administrators and Teachers According to their Socio-demographic Characteristics (n = 2240)

	Frequency (f)	Percent (%)
Gender		
Female	1393	62,2
Male	847	37,8
Age		
20-30	491	21,9
31-39	1053	47,0
40-48	440	19,6
49 and above	256	11,4
Marital status		
Married	1747	78,0
Single	485	21,7
Widowed / Divorced	8	,4
Educational status		
Bachelor's	1276	57,0
Master's	684	30,5
Doctorate	280	12,5
Occupational seniority		
1-10 years	1694	75,6
11-20 years	330	14,7
21 years and above	216	9,6
Education levels taught		
Primary School	822	36,7
Middle School	1005	44,9
High School	413	18,4
School		
State School	1900	84,8
Private School	340	15,2

According to the data in Table 1, from the school administrators and teachers participating in the research; 62.2% were women and 37.8% were male, 21.9% of them were in the 20-30 age range, 47.0% of them were between the ages of 31-39, 19.6% were in the 40-48 age range, 11.4% of them were 49 and over, 78.0% were married, 21.7% were single, 0.4% of them were widowed / divorced, 57.0% of them had a bachelor's degree, 30.5% of them had a master's degree, 12.5% of them had a doctorate, According to their professional seniority 75.6% of them had between 1-10 years, 14.7% had between

11-20 years, 9.6% had 21 years and over. Finally, in terms of the level of education taught,; 36.7% were teaching in primary schools, 44.9% in secondary schools, and 18.4% of them were in high schools, while 84.8% were teaching in public schools and; 15.2% private schools.

Data Collection Tools

The research data were collected with a questionnaire, and the details of the sections in the questionnaire form are given below. The implementation of the research was deemed appropriate according to the letter of Governorship of Bursa Provincial Directorate of National Education dated 21.02.2018 and numbered 3739156.

Socio-demographic Data Form

The Individual Data Chart was developed by the researcher, in order to determine the general profile of teachers and their demographic characteristics, as well as to examine the relationship between the transformational leader types and technological leadership styles of educational institution administrators and the organizational commitment levels of educators, according to various socio-demographic variables. In the form, there are items related to marital status, gender, age, seniority in the teaching profession, education level, the stage of education and the status of the school where the education is given.

Multifactor Leadership Questionnaire 5-x short (MLQ)

The Multi-Factor Leadership Questionnaire (MLQ-5X) was developed by Bass and Avolio in 1995 in order to measure the types of transformational and interactivity leaders. In the questionnaire form, there are 45 questions in accordance with the preparation of personal leadership report types in terms of institutional and science-related investigations (Avolio and Bass, 2004). The transformation consists of 45 statements in total, with 20 determining the acting leadership type, 16 identifying the interacting leader type, and 9 identifying the results of the actions to be a leader. The transformational leadership situation itself, each part consisting of 4 statements; It consists of idealized influence (movement), idealized influence (cited), suggestion and motive realization, intellectual stimulation and personal assistance. In the research, the scores of being a transformational leader sub-scale were calculated, and the information about the interacting leader status and

results scale were excluded from the evaluation content. The Cronbach's alpha reliability coefficient was calculated as $\alpha = .94$. (Avolio and Bass, 2004). In our study, the Cronbach's alpha reliability coefficient of the Multifactor Leadership Questionnaire 5-x short (MLQ) was found to be $\alpha = .90$. The use of the scale in our study was given permission by Mind Garden in 2017.

Technological Competence Scale (TCS)

The scale was originally named "Principals Technology Leadership Assessment", with the support of Iowa State University by the American Research Institute (AIR) and Center for Advanced Studies (CASTLE). The scale subscales consist of 6 technology use scales known as NETS-A. Cronbach's alpha coefficient was investigated in terms of internal consistency reliability by applying the scores of the scale content validity to be evaluated by experts. The Cronbach's alpha reliability coefficient of the scale was determined as $\alpha = .95$. However, the internal consistency reliability coefficient of the "productivity and professional" application scale was determined as $\alpha = .65$ (Castle, 2009).

In our study, the Cronbach's alpha reliability coefficient of the Education Managers' Technology Competencies Scale (TCS) was found as $\alpha = .94$. In terms of scale scoring, -2 points was given for the "none" preference, -1 point for the "less" preference, 0 points for the "partially" preference, 1 point for the "substantial" preference, and 2 points for the "completely" preference. While scores close to (-2) refer to being a weak, technological education manager, scores close to (2) indicate being manager. The fact that the average score is positive or negative makes it easy to interpret the educational institution administrator's lack of personal data and ability level or opportunity (Castle, 2009).

In the evaluation of the qualification levels, 5 intermediate uses, starting from (-2) reaching to (+2) and holding 8 intermediate values, were used. The names of the levels of adequacy by showing fidelity to the scale of originality, "None" (Average = between -2 and -1.2), "Little" (Average = between -1.2 and -0.4), "Partially" (Average = between -0.4 and 0.4), "Significant amount" (Average = 0.4 to 1.2), "Completely" (Average = 1.2 to 2) was determined as.

When conducting the Turkish translation of the scale, Banoğlu (2012) obtained compulsory permissions from CASTLE director Scott Mcleod, and support was requested for the translation from two language experts, one of whom graduated from

the department of English Language and Literature at Istanbul University. A comparison of the texts resulting from the translation of the text back into English was carried out by the translation team. The reliability status of the "Productivity and Professional Practice" scale in the scale with its originality and the approval of the translation team as a result of the problems in the translation phase related to culture, this scale is not included in the Turkish version of the main scale. The scale consists of 32 items and 5 dimensions in total. In terms of the scale subscales, the "Visionary" dimension consists of statements between 1-12, the "Digital Age Learning Culture" dimension consists of 3 items between 13-15 the "Excellence in Professional Development" dimension consists of 8 items between 16-23, the "Systematic Development" dimension consists of 3 items between 24-26, the "Digital Citizenship" dimension consists of 6 items between 27-32. The use of the scale in our study was deemed appropriate according to Köksal Banoğlu's e-mail dated 20.12.2017.

Organizational Commitment Scale (OCS)

In measuring the organizational commitment of the trainers, the "Organizational Commitment Scale (IAS)" scale developed by Balay (2000) was used. This scale examines organizational commitment in three sub-scale, namely the identification, adaptation and internalization subscales examined by O'Reilly III and Chatman (1986).

Identification Subscale: It measures the commitment that occurs when the person is affected in order to realize the connections that bring satisfaction.

Compliance Subscale: It measures the commitment that occurs when individuals accept attitudes and behaviors to obtain specified rewards during the compliance phase, which is the first step of commitment.

Internalization Subscale: It is the scale of the commitment of the organization and the person that occurs when their values meet each other. It is the type of affiliation that organizations choose the most (O'Reilly III & Chatman, 1986).

The Organizational Commitment Scale consists of 27 items. The evaluation of the items is done in 5 point- Likert style. The research participants were required to choose from the following options for each statement: (1) I do not agree at all, (2) I agree a little, (3) I agree moderately, (4) I agree and (5) I totally agree. The expressions of the subscales are between 1-8 in Adaptation, between 9-16 in Identification, and between 17-27 in Internalization. A lower organizational commitment score indicates

lower level of organizational commitment, while a higher level commitment score indicates a higher level of organizational commitment. Organizational commitment criteria have been determined as: (1) I do not agree at all - 1.00 to 1.79; (2) I agree a little - 1.80 to 2.59; (3) I agree moderately - 2.60 to 3.39; (4) I agree - 3.40 to 4.19; (5) I totally agree- 4.20 to 5.00. The Cronbach's alpha reliability coefficient is $\alpha = .80$. In our study, the Cronbach's alpha reliability coefficient of the Organizational Commitment Scale (IAS) was found as $\alpha = .91$.

Research permissions

Permission to conduct the research was obtained from the Bursa Provincial Directorate of National Education with the approval number 86896125.605-01 / E.3739156, dated 21.02.2018. Ethical approval was obtained according to the letter of the Near East University Scientific Research Ethics Committee dated 04.03.2019 and numbered NEU / EB / 2019/272.

Data Collection

The questionnaires were distributed to school administrators and teachers working in public and private primary schools operating under the Ministry of National Education in the Yıldırım district of Bursa province in the 2016-2017 academic year, and then collected from the teachers.

Statistical Analysis of Data

Statistical Package for Social Sciences (SPSS) 23.0 software was used for the statistical analysis of the data obtained through questionnaire from used in the study. The socio-demographic and distribution of some characteristics of the educational institution administrators and educators participating in the study were determined by frequency analysis. Descriptive statistics regarding the scores of the school administrators and teachers from the Education Managers' Technology Competencies Scale (TCS) and the Organizational Commitment Scale (OCS) are given. Parametric hypothesis test types were used in comparing the socio-demographic characteristics of school administrators and teachers with the scores of school administrators and teachers from the Education Managers' Technology Competence Scale (TCS) and the Organizational Commitment Scale (OCS), since the data set did not show abnormal distribution. Conformity of the data set to non-abnormal distribution was evaluated by Kolmogorov-Smirnov, Shapiro-Wilk tests, QQ plot graph and Levene test for homogeneity of variances with skewness-kurtosis values. If the independent

variable consists of two categories, the independent sample t test was used, and if the number of categories of the independent variable was greater than two, the ANOVA test was used. According to the ANOVA results, in the event of a statistically significant difference between groups of independent variables, the Tukey test, a post-hoc test, was used to determine from which groups the difference arose. Correlations between the scores of the school administrators and teachers from the Education Managers' Technology Competence Scale

(TCS) and the Organizational Commitment Scale (OCS) were determined by Pearson correlation analysis.

Findings

The findings of the study conducted with the aim of examining the relationship between the transformational leader types and technological leadership styles of educational institution administrators and the organizational commitment of educators according to socio-demographic variables are shown below.

Table 2. School administrators and teachers descriptive statistics of educational administrators' Organizational Commitment Scale (OCS), Multiple Factor Leadership Styles Scale (MLQ-5X) and Organizational Commitment Scale (OCS) (n = 2240)

Ölçekler	n	\bar{x}	s	Min	Max
– Compliance	2240	24.60	9.16	10	50
– Identification	2240	34.28	9.21	10	50
– Internalization	2240	36.34	8.62	10	50
Organizational Commitment Scale (OCS)	2240	32.25	6.83	10	50
– Idealized effect (behavior)	2240	35.55	7.61	10	50
– Idealized effect (attributed)	2240	37.40	8.96	10	50
– Suggestive motivation	2240	35.75	8.49	10	50
– Intellectual stimulation	2240	33.75	8.31	10	50
– Individual support	2240	38.41	8.56	10	50
Transformational Leadership	2240	36.17	6.36	10	50
Interactive Leadership	2240	33.13	5.79	10	50
Results of Leadership Behaviors	2240	37.64	8.16	10	50
Multiple Factor Leadership Styles Scale (MLQ-5X)	2240	35.38	5.32	10	50
– Visionary	2240	33.66	7.74	10	50
– Digital Age Learning Culture	2240	35.90	9.52	10	50
– Excellence in Professional Development	2240	35.23	6.94	10	50
– Systematic Development	2240	33.27	8.95	10	50
– Digital Citizenship	2240	35.51	8.75	10	50
Technology Competencies Scale (TCS)	2240	34.57	6.48	10	50

Table 2 shows the Organizational Commitment Scale scores for the school administrators and teachers, with average scores of 24.60 ± 9.16 from the compliance subscale, 34.28 ± 9.21 from the identification subscale, and 36.34 ± 8.62 from the internalization subscale. It was found that school administrators and teachers a minimum of 10 and maximum 50 points from the overall Organizational Commitment Scale, and their mean score was 32.25 ± 6.83 .

Multi-factor leadership styles scale is from the idealized effect (behavior) sub-dimension of the transformational leadership scale (35.55 ± 7.61), from the idealized effect (attributed) sub-dimension (37.40 ± 8.96), from the suggestion-motivation sub-dimension (35.75 ± 8.49), from the intellectual stimulation sub-dimension (33.75 ± 8.31), It was observed that the scores for the Cleckler individual

support sub-dimension were (38.41 ± 8.56). School administrators and teachers received minimum of 10 and maximum of 50 from the overall transformational leadership scale, and the average and standard deviation of these scores were found to be (36.17 ± 6.36). It was observed that the multi-factor leadership styles scale got points from the interactional leadership sub-dimension (33.13 ± 5.79) and the results of leadership behavior sub-dimension (37.64 ± 8.16). School administrators and teachers received a minimum of 10 and a maximum of 50 points on the multi-factor leadership styles scale, and the average of these scores was found to be (35.38 ± 5.32).

In Technology Competencies Scale, scores of 33.66 ± 7.74 were recorded from the visionary sub-dimension, 35.90 ± 9.52 from the Digital Age Learning Culture sub-dimension, 35.23 ± 6.94 from

the Excellence in Professional Development sub-dimension, 33.27 ± 8.95 from the Systematic Development sub-dimension and 35.51 ± 8.75 from the Digital Citizenship sub-dimension. It was found

that school administrators and teachers received at a minimum of 10 and maximum of 50 from the Technology Competence Scale, and the mean score was 34.57 ± 6.48 .

Table 3. School administrators and teachers; Comparison of the scores obtained from the scales according to their gender (n = 2240)

Scales	Gender	n	\bar{x}	s	t	p
Compliance	Woman	1393	24.01	8.80	-	.000*
	Male	847	25.56	9.64	3.902	
Identification	Woman	1393	33.85	9.22	-	.004*
	Male	847	35.00	9.14	2.871	
Organizational Commitment Scale (OCS)	Woman	1393	31.84	6.89	-	.000*
	Male	847	32.92	6.69	3.631	
Multiple Factor Leadership Styles Scale (MLQ-5X) Idealized effect (Attributed)	Woman	1393	37.75	8.73	2.387	.017*
	Male	847	36.82	9.30		

*p<0,05

In Table 3, the differences between the scores of the educational institution administrators and trainers participating in the research from the organizational commitment scale, compliance and identification subscales according to their gender are statistically significant ($p < 0.05$). The scores obtained by the male school administrators and teachers from the organizational commitment scale in general, as well as the adaptation and identification sub-dimensions were found to be

higher than the female school administrators and teachers. The difference in the scores of school administrators and teachers got from the idealized effect (attributed) subscale of the Multi-Factor Leadership Styles scale of the transformational leadership scale is statistically significant ($p < 0.05$). The scores of the female school administrators and educators for the idealized effect (attributed) subscale were found to be higher than the male school administrators and educators.

Table 4. School administrators and teachers; Comparison of the scores obtained from the scales according to their ages (n = 2240)

	Age	n	\bar{x}	s	MinMaxF	p	Difference
– Organizational Commitment Scale (OCS) Compliance subscales	20-30	491	24.41	8.82	10 50	3.824	.010*
	31-39	1053	24.24	8.87	10 50		
	40-48	440	25.91	9.47	10 50		
	49 and above	256	24.18	10.21	10 50		
	20-30	491	33.02	5.41	10 50		
– Multiple Factor Leadership Styles Scale (MLQ-5X) Interactive Leadership subscales	31-39	1053	32.81	5.64	10 50	5.282	.001*
	40-48	440	34.09	6.01	10 50		
	49 and above	256	32.94	6.52	10 50		
	20-30	491	35.81	6.84	10 50		
	31-39	1053	34.81	6.96	10 50		
– Technology Competencies Scale (TCS) Excellence in Professional Development subscales	40-48	440	35.40	6.81	10 50	2.778	.040*
	49 and above	256	35.61	7.23	10 50		
	20-30	491	35.14	6.45	10 50		
	31-39	1053	34.17	6.51	10 50		
	40-48	440	34.71	6.37	10 50		
Technology Competencies Scale (TCS)	49 and above	256	34.889	6.51	10 50	2.870	.035*

*p<0,05

In table 4, according to the ages of the school administrators and teachers participating in the

research, it was determined that the difference between the scores of the Organizational

Commitment Scale (OCS) compliance subscale was statistically significant ($p < 0.05$). This difference arises from school administrators and teachers between the ages of 20-30 and between 40-48.

It was determined that the difference between the scores of the interactional leadership subscale of the multi-factor leadership styles scale was statistically significant ($p < 0.05$). This difference arises from school administrators and teachers

between the ages of 20-30, 31-39 and 40-48.

According to the age of the school administrators and teachers was determined that the difference between the scores they received for the technology scale excellence in professional development subscale and Technology Competencies Scale (TCS) in general was statistically significant ($p < 0.05$). This difference arises from school administrators and teachers between the ages of 20-30 and 31-39.

Table 5. School administrators and teachers: Comparison of the scores obtained from the scales according to their marital status (n = 2240)

	Marital status	n	\bar{x}	s	Min	Max	F	p	Difference
Identification	Married	1747	34.41	9.02	10	50	3.634	.027*	2-3
	Single	485	33.70	9.86	10	50			
	Widowed / Divorced	8	41.56	4.31	37	50			

* $p < 0,05$

In table 5, it was determined that the difference between the scores of the organizational commitment scale identification sub-dimension according to the marital status of the school

administrators and teachers participating in the study was statistically significant ($p < 0.05$). This difference stems from single and widowed / divorced school administrators and teachers.

Table 6. School administrators and teachers comparison of the scores obtained from the scales according to their education level (n = 2240)

	Educational status	n	\bar{x}	S	Min	Max	F	p	Difference
Organizational Commitment Scale (OCS) Compliance subscales	Bachelor's	1276	23.32	9.08	10	50	31.736	.000*	1-2
	Master's	684	25.91	8.78	10	50			
	Doctorate	280	27.22	9.43	10	50			
Multiple Factor Leadership Styles Scale (MLQ-5X) Idealized effect (behavior) subscales	Bachelor's	1276	35.65	7.47	10	50	8.898	.000*	1-2
	Master's	684	36.08	7.54	10	50			
	Doctorate	280	33.83	8.19	10	50			
Multiple Factor Leadership Styles Scale (MLQ-5X) Suggestive motivation subscales	Bachelor's	1276	36.34	8.39	10	50	8.841	.000*	1-2
	Master's	684	35.27	8.58	10	50			
	Doctorate	280	34.21	8.51	10	50			
Multiple Factor Leadership Styles Scale (MLQ-5X) Transformational Leadership scales	Bachelor's	1276	36.33	6.35	10	50	3.239	.039*	1-3
	Master's	684	36.25	6.30	10	50			
	Doctorate	280	35.27	6.53	10	50			
Multiple Factor Leadership Styles Scale (MLQ-5X) Interactive Leadership scales	Bachelor's	1276	32.88	5.62	10	50	3.871	.021*	1-2
	Master's	684	33.64	6.02	10	50			
	Doctorate	280	32.98	5.92	10	50			

* $p < 0,05$

In Table 6, it was determined that the difference between the scores of the school administrators and teachers participating in the study from the organizational commitment scale compliance subscale according to their educational status was statistically significant ($p < 0.05$). This difference stems from the bachelor's, master's and the doctorate graduate school administrators and teachers.

According to the educational status of school administrators and teachers, it was determined that the difference between the scores they received from the idealized effect (behavior) subscale of the

Multi-Factor Leadership Styles Scale was statistically significant ($p < 0.05$). This difference arises from bachelor's, master's and doctoral graduate school administrators and teachers.

It was determined that the difference between the scores of the transformational leadership scale on the suggestion motivation subscale was statistically significant ($p < 0.05$). This difference arises from bachelor's, master's and doctoral graduate school administrators and teachers.

It was determined that the difference between the overall scores of the transformational leadership scale was statistically significant (p

<0.05). This difference arises from undergraduate and doctorate graduate school administrators and teachers.

It was determined that the difference

between the scores they received from the interactional leadership scale was statistically significant ($p < 0.05$). This difference arises from bachelor's and doctorate graduate school administrators and teachers.

Table 7. Correlations between school administrators and teachers' scale scores (n = 2240)

	Compliance	Identification	Internalization	Organizational Commitment Scale (OCS)	Visionary	Digital Age Learning Culture	Excellence in Professional Development	Systematic Development	Digital Citizenship	Technology Competencies Scale (TCS)
Compliance	1									
Identification	r ,199** p ,000	1								
Internalization	r ,103** p ,000	r ,765** p ,000	1							
Organizational Commitment Scale (OCS)	r ,529** p ,000	r ,871** p ,000	r ,860** p ,000	1						
Visionary	r ,096** p ,000	- ,016 p ,458	- ,034 p ,107	r ,014 p ,495	1					
Digital Age Learning Culture	r ,125** p ,000	r ,014 p ,512	- ,005 p ,802	r ,052* p ,013	r ,787** p ,000	1				
Excellence in Professional Development	r ,101** p ,000	r ,003 p ,884	- ,004 p ,868	r ,040 p ,061	r ,670** p ,000	r ,640* p ,000	1			
Systematic Development	r -,012 p ,557	- ,013 p ,548	- ,009 p ,660	- ,015 p ,485	r ,326** p ,000	r ,264* p ,000	r ,679** p ,000	1		
Digital Citizenship	r -,001 p ,953	- ,015 p ,487	- ,012 p ,582	- ,012 p ,559	r ,336** p ,000	r ,300* p ,000	r ,634** p ,000	r ,700** p ,000	1	
Technology Competencies Scale (TCS)	r ,085** p ,000	- ,010 p ,648	- ,021 p ,319	r ,019 p ,362	r ,863** p ,000	r ,772* p ,000	r ,904** p ,000	r ,671** p ,000	r ,705** p ,000	1

* $p < 0,05$ ** $p < 0,01$

In Table 7, as a result of the Pearson correlation analysis conducted to determine the correlations between school administrators and teachers' Organizational Commitment Scale and Technology Competencies Scale scores, it was determined that

the organizational commitment of school administrators and teachers and their technological competencies were related. Accordingly, it was determined that there are statistically significant and positive correlations between the scores they

received from the compliance sub-dimension in the Organizational Commitment Scale and the scores they received from Identification, Internalization, Organizational Commitment Scale, Technology Competencies Scale, Visionary, Digital Age Learning Culture, Excellence in Professional Development ($p < 0.05$). It was determined that there are statistically significant and negative correlations between Systematic Development and Digital Citizenship ($p < 0.05$).

It was determined that there were statistically

significant and positive correlations between the scores they got from the identification sub-dimension in the Organizational Commitment Scale and the scores they got from internalization, Organizational Commitment Scale, Technology Competencies in general, Digital Age Learning Culture and Excellence in Professional Development ($p < 0, 05$). It was determined that there are statistically significant and negative correlations between Visionary, Systematic Development, Digital Citizenship and Technology Competencies Scale overall ($p < 0.05$).

Table 8. Correlations between school administrators and teachers' scale scores (n = 2240)

	Compliance	Identification	Internalization	OCS	Idealized effect (behavior)	Idealized effect (attributed)	Suggestive motivation	Intellectual stimulation	Individual support	Transformational Leadership	Interactive Leadership	Results of Leadership Behaviors	MLQ-5X	Visionary	Digital Age Learning Culture	Excellence in Professional Development	Systematic Development	Digital Citizenship	TCS
Compliance	r 1																		
Identification	p .199**	1																	
Internalization	p .103**	.765**	1																
OCS	r .529**	.871**	.860**	1															
Idealized effect (behavior)	p .000	.000	.000	.000	1														
Idealized effect (attributed)	r -.061**	.138**	.158**	.112**	.669**	1													
Suggestive motivation	p .004	.000	.000	.000	.000	.000	1												
Intellectual stimulation	r .018	.237**	.207**	.208**	.510**	.468**	.690**	1											
Individual support	p .395	.000	.000	.000	.000	.000	.000	.000	1										
Transformational Leadership	r -.336**	-.052*	.001	-.153**	.510**	.468**	.690**	.541**	.678**	1									
Interactive Leadership	p .000	.014	.952	.000	.000	.000	.000	.000	.000	.000	1								
Results of Leadership Behaviors	r -.241**	-.088**	-.053*	-.158**	.414**	.399**	.690**	.541**	.788**	.799**	.381**	1							
MLQ-5X	p .000	.000	.012	.000	.000	.000	.000	.000	.000	.000	.000	.000	1						
Visionary	r .080**	-.014	-.048*	.001	.327**	.363**	.325**	.541**	.788**	.799**	.164**	.391**	.354**	.231**	1				
Digital Age Learning Culture	p .000	.500	.022	.960	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1			
Excellence in Professional Development	r -.141**	.059**	.070**	.004	.749**	.788**	.799**	.541**	.788**	.799**	.164**	.391**	.354**	.231**	.224**	.787**	.640**	1	
Systematic Development	p .000	.005	.001	.868	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1
Digital Citizenship	r .349**	.257**	.193**	.340**	.330**	.460**	.092**	.164**	.391**	.391**	.164**	.391**	.354**	.231**	.224**	.787**	.640**	.700**	.705**
TCS	p .000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

* $p < 0,05$ ** $p < 0,01$

Table 8, school administrators and teachers; Organizational Commitment Scale, Multifactor Leadership Types Scale, Technology Competencies Scale as a result of the Pearson correlation analysis performed to determine the correlations between the scores of the Organizational Commitment Scale from the adaptation sub-dimension and the Multifactor Leadership Types Scale are among the idealized effect (behavior), suggestive motivation, and intellectual stimulation sub-dimensions, it was determined that there were statistically significant and negative correlations between the scores they got from transformational leadership and leadership behavior results scales ($p < 0.05$). These correlations are negative, and as school administrators and teachers' adjustment scores increase, the scores of idealized effect (behavior), suggestive motivation, intellectual stimulation,

transformational leadership and leadership behavior results decrease.

It was determined that there were statistically significant and positive correlations between the scores they got from the individual support sub-dimension, the interactionist leadership scale, the Multifactor Leadership Types Scale overall, the Technology Competencies Scale visionary leadership, digital age learning culture, professional development sub-dimensions, and the Technology Competencies Scale overall ($p < 0.05$). These correlations are positive, and as school administrators and teachers' adaptation scores increase, their scores from the Multifactor Leadership Types Scale, Technology Competencies Scale, visionary leadership, digital age learning culture, excellence in professional development sub-dimensions, and Technology Competencies

Scale increase.

It was determined that there were statistically significant and negative correlations between the scores of school administrators and teachers obtained from the Identification sub-dimension of the Organizational Commitment Scale, the Multifactor Leadership Types Scale, motivation by suggestion, and the interactionist leadership scale ($p < 0.05$). These correlations are negative, and as the identification scores of school administrators and teachers increase, their scores on suggestion motivation and interactive leadership scale decrease.

The Multifactor Leadership Types Scale It was found that there were statistically significant and positive correlations between the scores they received from the idealized effect (behavior), idealized effect (attributed) and intellectual stimulation sub-dimensions, and the overall transformational leadership and Multifactor Leadership Types Scale ($p < 0.05$). These correlations are positive, and as the identification scores of school administrators and teachers increase, their scores on the Idealized effect (behavior), idealized effect (attributed), intellectual stimulation, transformational leadership, and Multifactor Leadership Types Scale increase.

It was determined that there were statistically significant and negative correlations between the scores obtained by school administrators and teachers from the internalization sub-dimension of the Organizational Commitment Scale, intellectual stimulation and individual support sub-dimensions of the Multifactor Leadership Types Scale ($p < 0.05$). These correlations are negative, and as school administrators and teachers' internalization scores increase, their scores on intellectual stimulation and individual support scales increase.

It was determined that there are statistically significant and positive correlations between the sub-dimensions of the Multifactor Leadership Types Scale, idealized effect (behavior), idealized effect (attributed), the transformational leadership and interactional leadership scales of the Multifactor Leadership Types Scale and the overall scores of the Multifactor Leadership Types Scale ($p < 0.05$). These correlations are positive, and as school administrators and teachers' internalization scores increase, their scores from the scale of idealized effect (behavior), idealized effect (attributed), transformational leadership and interactional leadership, and the Multifactor Leadership Types Scale increase.

It was determined that there were statistically significant and negative correlations between the

scores of school administrators and teachers obtained from the Multifactor Leadership Types Scale from the sub-dimensions of suggestion motivation and intellectual stimulation and the Leadership behavior results scale ($p < 0.05$). These correlations are negative, and as the organizational commitment scores of school administrators and teachers increase, their scores from the sub-dimensions of motivation by suggestion and intellectual stimulation, and the Leadership behavior results scale, decrease.

From the overall Organizational Commitment Scale, the Multifactor Leadership Types Scale, the idealized effect (behavior) and idealized influence (attributed) sub-dimensions, the interactional leadership scale, the Multifactor Leadership Types Scale, and the Technology Competencies Scale sub-dimension is statistically significant among the scores they got from the digital age learning culture. and positive correlations were found ($p < 0.05$).

These correlations are positive, as school administrators and teachers' organizational commitment scores increase, from the overall Organizational Commitment Scale, from the idealized effect (behavior) and idealized effect (attributed) sub-dimensions of the Multi-Factor Leadership Types Scale, from the interactionist leadership scale, from the Multi-Factor Leadership Types Scale, Technology The sub-dimension of Leadership Competencies Scale increases in the scores they get from digital age learning culture.

In Table 9, when the regression analysis results of the scores obtained from the Multiple Factor Leadership Styles scale and Technology Competencies scale of the school administrators and teachers participating in the research are predicted from the Organizational Commitment Scale;

School administrators and teachers; Regression model related to predicting organizational commitment scores of scores from Idealized Effect (Attributed), Suggested Motivation, Intellectual Stimulation, Transformational Leadership, Interactional Leadership, Leadership Behavior Results, Multiple Factor Leadership Styles Scale, Visionary Leadership and Professional Development Scales It was determined that it explained 21.2% of the variance ($p < 0.05$).

Organizational commitment scores of school administrators and teachers; If the idealized influence (attributed) scores increase by 1 unit, it increases by 1.94 unit, if the interactionist leadership scores increase by 1 unit, it increases by 3.39 units, if the scores of multiple leadership styles increase by 1 unit, it increases by 7.96 units, and if

the scores of excellence in professional development increase by 1 unit, it increases by 0.90 units.

It was determined that organizational commitment of school administrators and teachers decreased by 1.45 units in not being motivated by

suggestion, 0.93 units decreased in not performing intellectual stimulation, 5.86 units decreased in not performing transformational leadership, 1.19 units decreased in negative leadership behavior results, and 0.49 decreased in not performing visionary leadership.

Table 9. School administrators and teachers regression model for predicting organizational commitment by scores from the Multi-Factor Leadership Styles Scale (MLQ-5X), Technology Leadership Competencies Scale (TCS) (n = 2240)

	Non-Standardized Coefficients		Standardized Coefficients	
	B	SH	Beta	t p
(Constant)	2,479	,112		22,088 0,000*
Idealized effect (behavior)	0,32	0,23	0,36	1,379 0,168
Idealized effect (attributed)	1,94	0,22	2,54	8,664 0,000*
Suggestive motivation	-1,45	0,23	-,1,80	-6,290 0,000*
Intellectual stimulation	-0,93	0,25	-,1,13	-3,772 0,000*
Individual support	-0,04	0,25	-0,05	-,164 0,870
Transformational Leadership	-5,86	0,50	-5,45	-11,6280,000*
Interactive Leadership	3,39	0,27	2,87	12,416 0,000*
Results of Leadership Behaviors	-1,19	0,28	-,1,42	-4,326 0,000*
MLQ-5X	7,96	0,61	6,20	12,978 0,000*
Visionary	-0,49	0,19	-0,55	-2,588 0,010*
Digital Age Learning Culture	0,18	0,29	0,25	,628 0,530
Excellence in Professional Development	0,90	0,46	0,92	1,958 0,050*
Systematic Development	-0,29	0,24	-0,38	-1,215 0,225
Digital Citizenship	-0,15	0,26	-0,19	-,563 0,574
TCS	-0,44	0,78	-0,42	-,569 0,569

*p<0,05, R2=0,212

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this study, the effect of school administrators' transformational leadership and technological leadership styles on teachers' organizational commitment was examined according to teachers' views. As a result of the study, it was seen that the transformational leadership and technological leadership styles of school administrators positively affected teachers' organizational commitment and that there were significant relationships.

According to the research results; In terms of organizational commitment of school administrators and teachers, internalization was the highest, and compliance was the lowest perceived dimension. This situation can be interpreted as teacher values are in harmony with school values and school values are effective on teachers' attitudes and behaviors. Sıgır and Basım (2006) obtained similar results in their research. According to the results of the research; The organizational commitment of private sector employees for internalization was also significantly higher than civil servants. It is possible to state that the basis of

the low internalization understanding in civil servants stems from the fact that there are more uncertainties in the duties of civil servants. It can be stated that the higher participation in the decision in the private sector is due to the greater sense of ownership of the organization. Besides, different from the findings obtained from the research, Atik and Üstüner (2014), Töremen and Yasan (2010), Ulutaş (2011), Karataş and Güleş (2010), Dursun (2011), Çetin (2004), Eraslan (2004) and In the studies conducted by Tokgöz (2011), it was observed that the highest perceived dimension was the individual interest dimension, while the lowest perceived dimension was the motivation by suggestion dimension.

According to the gender of educational institution administrators and trainers; There is a statistically significant difference in terms of organizational commitment scale overall, organizational commitment scale compliance and identification subscales. Similar to our study, in the variable related to gender; The studies of Akbolat, Işık and Yılmaz (2013), Turan (2007), Ağca and Ertan (2008), Töremen and Yasan (2010) are consistent

with our research results. In the studies conducted by Avcı (2015), Dağ and Göktürk (2014) and Tösten Avcı and Yıldırım (2018), no significant difference was found. It was observed that the male and female educators who participated in our study gave similar answers about organizational commitment, adaptation and identification, and idealized influence. This is thought to be due to the fact that the research group was educators. These results were found to be consistent with our research. Stating that gender is among personal characteristics, Kardeş (2009) stated that different personal characteristics have different results on loyalty to the organization. Tsui and Chang (1999) also stated in their study on loyalty to organization that the gender variable revealed a significant difference on it. At the same time, Boylu et al. (2007), Şama and Kolamaz (2011), Demirkol (2014), and Sönmez (2017) revealed that the participants' views on organizational commitment do not differ according to gender. Similarly, in this study, it was concluded that the gender variable did not make a significant difference on teachers' organizational commitment. Considering the studies examining the relationship between organizational commitment and gender, it is seen that there is no consensus on the degree of organizational commitment of women and men (Kurşunoğlu et al. 2010). Yalçın and İplik (2007) 's Ayen et al. According to the citation from (1993), it has been suggested that male employees are more committed to the organization because they mostly work in better positions and with higher wages than women. This situation does not make sense in public schools as the wages of teachers in public schools do not vary according to gender.

Again, Ayen et al. (1993) put forward by gender, as women prioritize their roles within the family, their institutions remain in the background. (Trans. Yalçın & İplik, 2007). Contrary to these views, Angle and Perry (1981), Mathieu and Zajac (1990) stated in their research that women's commitment is higher than men (Trans. Gören & Sarpkaya, 2014). According to the data obtained, organizational commitment of men and women according to their gender does not change in this study.

In the research carried out by Akbolat, Işık and Yılmaz (2013), a significant difference was not observed. In addition to this situation, when the time elapsed about the profession is examined; In the studies of Akbolat, Işık and Yılmaz (2013) and Avcı (2015), there was no difference in the level with meaning. The educators in our study are generally thought to be young educators, to be idealistic, to feel connected to their schools and to follow

technological developments. This situation is considered as promising for our education future. These results were found to be consistent with our research.

In the study carried out by Köse et al. (2004), it was determined that single individuals seek renewal more than married ones. It is understood that single people increase their leadership qualities in their search for innovation compared to married ones. Although most of the educators who participated in our study were married, it was understood that our single teachers had more specific opinions about our study subject. The reason for this is family responsibility, which suggests that it is more dominant among married teachers. Identification in terms of educational levels of school administrators and teachers, internalization, organizational commitment in general, idealized influence (cited), intellectual stimulation, personal help, leadership behavior results, multiple leadership styles, being a visionary leader, learning cultural structure of the information age, During the development of the profession, excellence, systematic development and the increase of knowledge, which is the common product of the society, thanks to technology, the state of being a citizen based on its expansion and the technology competence scores of education administrators are similar. School administrators and teachers with a doctorate had higher scores on compliance, graduate graduates on idealized influence (Behavior) and interactional leadership, and undergraduate graduates had higher scores on inspirational motivation and transformational leadership than others.

According to Turan (2007), educators; They mostly agreed that their administrators in educational institutions have transformational leadership qualities at all scales. In the study of Aktaş, Türk Aktaş and Erol (2015) regarding the determination of the educator's thoughts on the levels of elementary education administrators demonstrating transforming leadership behavior styles, educators expressed their opinion about the transformational leader style of educational institution administrators. The aim of the study conducted by Taş and Çetiner (2011) is to evaluate the instructor understanding of the educational institution administrators regarding the level of behaviors of the transformative leader type of charisma, suggestion, intellectual warning and personal assistance scales. As a result, educators acknowledge that the administrators of educational institutions have the transformative leadership qualities in themselves, and they think that they are the most transformative leaders associated with

intellectual stimulation.

In the study conducted by Dağ and Göktürk (2014), which is called leadership in classroom management and the contribution of leadership to classroom management, when looking at the level of educational institution administrators holding the qualities of being transformational leaders, it can be stated that educational institution administrators consider them competent in this matter, based on their level of participation. These results were found to be consistent with our research.

As a result, the devotion of educators to the organization they work in is considered to be the most sensitive factor in achieving success as an organization (Dick & Metcalfe, 2001; Beck & Wilson, 1997). People with high levels of organizational commitment demonstrate strong attitudes and tendencies and commitment to the organization (Chow, 1994). Employees with low loyalty cannot show enough success. They are less involved in realizing group commitment, which they fall behind in their work related to their duties. The low organizational commitment causes rumors, objections and complaints and damages the organization. Trust in the organization is ending, it becomes difficult to adapt to new situations that arise, and the organization is at loss (Izgar, 2008).

Recommendations

- The reasons why teachers' opinions about the digital transformation realization levels of education administrators are not positive should be investigated. Thanks to the results to be found in this framework, education administrators should be able to show the digital transformation features to teachers more.

- The reason for the negative opinions of the teachers about the advocacy of digital transformation of educational administrators is found to be related to the competence of the school administrator, trainings should be carried out in this context.

- It should be ensured that the education level of candidates for educational administrators be increased.

- The sample group of the research section of this article is limited in number. In order to obtain clearer and more comprehensive results on the subject of the study, country-wide research is required.

- Legislative arrangements should be made to support school administrators to reveal their digital transformation features in the face of the restrictions they may encounter while performing

their administrative duties.

- Teachers 'organizational commitment and educational administrators' opinions should be determined in terms of revealing their digital transformation requests.

- Digital transformation trainings that will improve educational institutions should be provided by increasing the allocation for education and training.

REFERENCES

- [1] Afshari, M., Bakar, K.A., Luan, W. S., Samah, B. A. & Fook, F.S. (2009). Technology and school leadership. *Technology, Pedagogy and Education*, 18 (2), 235-248.
- [2] Ağca, V. and Ertan, H. (2008). Changes in Employees' Organizational Commitment Based on Their Demographic Characteristics: A Study in Five Star Hotels in Antalya. *Dumlupınar University Journal of Social Sciences* 7 (22), 389-408.
- [3] Akan, D. and Yalçın, S. (2015). Investigation of the Relationship Between School Administrators 'Leadership Styles and Teachers' Organizational Commitment. *Education and Humanities Journal*, 6 (11), 123-150.
- [4] Akbaba Altun, S. (2003). The Importance and Application Levels of Primary School Principals to Transformational Leadership. *Elementary Education Online* 2 (1). [http:// www.elementary-online.org.tr](http://www.elementary-online.org.tr). 07 July 2020
- [5] Akbaba Altun, S. (2004). School Principals' Views on Information Technology Classes. *Educational Administration: Theory and Practice*, 37 (37), 46-71.
- [6] Akbolat, M., Işık, O. and Yılmaz, A. (2013). The effect of transformational leadership behavior on motivation and emotional commitment. *International Journal of Economic and Administrative Studies*, 6 (11), 35-50.
- [7] Akova O. and Bayhan İ. (2015). The Relationship Between Organizational Commitment and Recreational Opportunities: A Study on Employees in Hospitality Businesses in Antalya, *Journal of International Social Research*, 8 (38), 792-793.
- [8] Aktaş, Z., Türk Aktaş, M., and Erol, H. (2015). Mustafa Kemal Atatürk with Transformational Leadership Features in Ensuring Organizational Development. *Journal of the Institute of Social Sciences*, 39 (2), 222-236.
- [9] Atik, S., Üstüner, M. (2014). The Relationship Between the Organization Type of Primary Schools and the Organizational Commitment of

- Teachers. Ahi Evran University Journal of Kirşehir Education Faculty, 15 (2), 133-154.
- [10] Avcı, A. (2015). Leadership Styles of School Principals According to Teacher Perceptions. Hasan Ali Yücel Faculty of Education Journal, 12 (2), 161-189.
- [11] Avolio, B. J. & Bass, B. M. (2004). Multifactor Leadership Questionnaire. Manual and Sampler Set (3rd ed.). Redwood City, CA: Mindgarden.
- [12] Balay, R. (2000). Organizational Commitment of Managers and Teachers, Ankara: Nobel Publishing Distribution
- [13] Banoğlu, K. (2012). Development of Education Managers' Technology Leadership Competencies Scale: Validity and Reliability Study. İnönü University Journal of Education, 13 (3), 43-65.
- [14] Barlı, Ö. (2010). Behavioral Sciences and Behavior in Organizations, Istanbul: Aktif Publishing House
- [15] Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share The Vision. Organizational Dynamics, 3(19), 19-31.
- [16] Bass, B. M. (1997). Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? American Psychologist, 52 (2),
- [17] Bass, B. M. (2008). The Bass Handbook of Leadership, Theory, Research, and Managerial Applications, New York: Free Press.
- [18] Bilge, B. (2013). Leadership Characteristics Expected from the School Principal in Increasing Student Success. Anatolian Educational Leadership and Instruction Journal, 1 (2), 12–23.
- [19] Buluç, B. (2009). The Relationship Between School Principals 'Leadership Styles and Organizational Commitment According to Classroom Teachers' Perceptions. Educational Administration: Theory and Practice, 15 (57), 5-34.
- [20] Burns, J. M. (1978). Leadership, New York: Harper and Row, Publishers, Inc.,
- [21] Can, T. (2003). Technological Leadership Competencies of Bolu Secondary School Administrators. The Turkish Online Journal of Educational Technology, 2 (3), 94–107.
- [22] Celep, C. (2004). Transformational Leadership. Ankara: Anı Publishing
- [23] Çetin, M. Ö. (2004). Organizational Culture and Organizational Commitment, Ankara: Nobel Publishing Distribution
- [24] Daft, R. L. (2000). Management, 5th Edition, New York: The Dryden Press.
- [25] Dağ and Göktürk, T. (2014). Leadership in Classroom Management and Contribution of Leadership to Classroom Management. The Journal of Academic Social Science Studies, (27), 171-184.
- [26] Demirel, Y., & Özçınar, M. F. (2009). The effect of organizational citizenship behavior on job satisfaction: A study for different sectors. Atatürk University Journal of Economic and Administrative Sciences, 23 (1), 129-145
- [27] Drucker, P. F. (1988). The coming of the new organization, Harvard Business Review, 6 (28), 45-53.
- [28] Dursun, M. (2011). The effect of customers' corporate image perception on customer loyalty: A research in the service industry. Management, 22 (69), 97-117.
- [29] Eraslan, L. (2004). School Level Transformational Leadership. Erzincan Faculty of Education Journal, 6 (1), 1-22.
- [30] Eren, E. (2003). Management and organization-contemporary and global approaches. (Sixth Edition). Istanbul: Beta Publishing
- [31] Eren, V. (2011), Organizational Commitment on the Axis of Three Commitment Components Doğuş University Journal, 6 (2), 210-219
- [32] Hacifazlıoğlu, Ö., Karadeniz, Ş. and Dalgiç, G. (2010). The opinions of teachers, administrators and supervisors on technology leadership standards for education managers. Educational Administration: Theory and Practice, 16 (4), 537-577.
- [33] Hacifazlıoğlu, Ö., Karadeniz, Ş. and Dalgiç, G. (2011). School Administrators' Perceptions on Technology Leadership: An Example of Method Analysis, Educational Sciences Research Journal, Vol 1, Issue 1, Istanbul.
- [34] Hamzah, M. I. M., Nordin, N., Jusoff, K., Karim, R. A. & Yusof, Y. (2010). A quantitative analysis of Malaysian secondary school technology leadership. Management Science and Engineering, 4 (2), 124–130.
- [35] ISTE (International Society for Technology in Education). (2009). NETS for administrators 2009. <http://www.iste.org/docs/pdfs/nets-a-standards.pdf?sfvrsn=2>, 05 Eylül 2019.
- [36] Karataş, S., Güleş H. (2010). The Relationship Between Job Satisfaction and Organizational Commitment of Primary School Teachers, Uşak University Journal of Social Sciences, 3 (2), 74-89.
- [37] Karip, E., & Kemal, K. (1999). Training School Administrators. Educational Administration in Theory and Practice. Ankara: Pegem A Publishing.

- [38] Koçel, T. (2007). *Business Management*, Istanbul: Arıkan Publishing and Distribution
- [39] Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior*, 16, 319-333.
- [40] Kotter, J. P. (2001). What leaders really do? *Harvard Business Review*, 79(11), 85-96.
- [41] Köse, S., Sayar, K., Kaleoğlu, Ü., Aydın, N., Ak, İ., Kırpınar İ., Reeves R.A., Przybeck, T.R., Cloninger C.R. (2004), "Temperament and Character Inventory (Turkish Tcı): Validity, Reliability and Factor Structure", *Bulletin of Clinical Psychopharmacology*, 14, 107-131.
- [42] Moss, S.A., McFarland, J., Ngu, S. and Kijowska, A. (2006). Maintaining an Open Mind to Closed Individuals: The Effect of Resource Availability and Leadership Style on The Association Between Openness to Experience and Organizational Commitment. *Journal of Research in Personality*, 1- 17.
- [43] Özden, Y. (2002). *Learning and Teaching*, Ankara: Pegem A Publishing
- [44] Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1: 107-142.
- [45] Scandura, T. A. ve Ethlyn A. W. (2004), *Mentoring and Transformational Leadership: The Role of Supervisory Career Mentoring*, *Journal of Vocational Behavior*, 65,
- [46] Sığrı Ü. and Basım, N. (2006). Analysis of Employees' Job Satisfaction and Organizational Commitment Levels: A Comparative Study in the Public and Private Sector, *Journal of Social Economic Research*, 6 (12), 130-154.
- [47] Stewart, J. (2006). Transformational Leadership. An Evolving Concept Examined through the Works of Burns, Bass, Avolio and Leithwood. *Canadian Journal of Educational Administration and Policy*, Issue 54, June.
- [48] Şahin, S. (2006). Transformational and Sustainable Leadership Styles of Primary School Principals (Izmir Province Example). *Educational Research Journal*, Issue 23, 188-199.
- [49] Taş, A., & Çetiner, A. (2011). Teachers 'Views Regarding Secondary School Principals' Realization of Transformational Leadership Behaviors. *Turkish Journal of Educational Sciences*, 9/2, 369-392.
- [50] Tokgöz, N. (2011). Organizational Sinicism, Organizational Support and Organizational Justice Relationship: The Case of Electricity Distribution Company Employees. *Eskişehir Osmangazi University Journal of Economic and Administrative Sciences*, 6 (2), 363-387.
- [51] Töremen F., & Yasan T. (2010). Transformational Leadership Characteristics of Primary School Administrators (The Case of Malatya Province). *Pamukkale University Journal of Educational Sciences*, 28/2, 27-39
- [52] Tösten, R., Avcı, Y. and Yıldırım, İ. (2018). The Relationship Between Positive Psychological Capital and Organizational Commitment: A Study in Educational Institutions, *Mustafa Kemal University Journal of Education Faculty*
- [53] Turan, S. (2007). Technology leadership of educational administrators in the developing network society. *Education Overview*, 3 (9), 13-18.
- [54] Ulutaş, M. (2011). *Harmonic Management*, 1.bs., Konya
- [55] Wang, P., & Walumbwa, F. O. (2007). Family-friendly programs, organizational commitment, and work withdrawal: The moderating role of transformational leadership. *Personnel Psychology*, 60(2), 397-427.
- [56] Yeh, H. R., Chi, H. K. & Chiou, C. Y. (2008). The Influences Of Paternalistic Leadership, Job Stress, and Organizational Commitment On Organizational Performance: An Empirical Study Of Policemen In Taiwan, *The Journal Of International Management Studies*, 3(2),85-91.
- [57] Yu, C. and Durrington, V. A. (2006). Technology standards for school administrators: An analysis of practicing and aspiring administrators' perceived ability to performance standards. *NASSP Bulletin*, 90, 301-317.