

Essay

# The Relationship of Educational Management in the New World Order with the Sustainability of Digital Transformation and Corporate Commitment <sup>†</sup>

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<sup>†</sup> This article was produced from Hüseyin Duman's doctoral thesis titled "The Relationship Level Between School Administrators 'Transformational Leadership Styles and Teachers' Organizational Commitment", conducted under the supervision of Huseyin Bicen.

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Received:xxx; Accepted:xxx; Published:xxx

**Abstract:** While the digital age takes place through digital information networks, the triggering force of the age, digital transformation, has rapidly transformed the current economic and social order. This article study examines how the recent digital transformation process has affected corporate commitment in educational institutions. Educational institutions were analyzed at the sector level in terms of digital transformation and institutional commitment, while educational institutions with digital change were researched at the school level. The findings of the study reveal that administrators and teachers working in educational institutions are role models for their students and their environment, think more about concepts such as efficiency and quality, and their transformational qualities. In addition, if they develop professionally, their institutional commitment increases, otherwise they are not motivated and encouraged towards the goals and objectives of the institution, they are not guided to look at daily events, situations and problems from a wider perspective, and because of the speed of the transformation process, science and technology can also It has been determined that organizational commitment has decreased in today's conditions where it has become widespread.

**Keywords:** education; school; teacher; technology; organizational commitment

## 1. Introduction

When the historical development of human life is examined in terms of education life, it is seen that the first break occurred thanks to the industrial revolution. While education shows a certain importance in societies where education is carried out with extremely simple methods and tools, it has a negative side in non-educational activities. In terms of classical education management; While teachers providing education are considered as civil servants, it is the education administration that determines teacher-student relations. The most radical change in terms of education management is experienced in the digital age. With this digital transformation, the value and importance given to education has achieved a level of positivity that cannot be compared to previous societies, while it has been realized in educational institutions through education administrators, where all authority in education is transferred. In addition to this, as a result of the digitalization of the problem of access to education in rural areas, the teacher-student-parent relations have manifested themselves in education life within the scope of freedom of education and in return for a financial price.

While the transformation of education life as a result of digital transformation revealed more than one important problem for students, it required the protection of students from the unfavorable aspects of digital life. Digital transformation has affected education and training, and the system based on excessive specialization that manifests itself in progressive stages has accelerated the institutional commitment process of educators who cannot provide quality education. Especially in digital transformation, education management is experiencing its best period due to the stable development seen in the education systems of developed countries and the role it has assumed in the restoration stages in education. During this period, while teacher-student-parent relationships helped determine the order, the phenomenon of digitalization in education also gained a certain depth. However, consistent digital development in developed countries slowed down after a certain period. The crises seen with industrial shocks, apart from the high cost of living and the increase in unemployment of teachers, and the harmony observed in education life has deteriorated.

As a result of some wrong education policies implemented in the digital age, a certain decrease has been observed in the quality of education. The stages of globalization have also increased this orientation. Apart from this, important differences in education have shown themselves especially with the accelerated globalization. In this period, which is named as post digital transformation, while the classical education management thought was abandoned, the idea of digital education that meets the demand of students and parents more quickly showed itself. Corporate commitment has replaced the classical education management in educational institutions, and digitalization has come to the fore in education management. While this change resulted in the abandonment of the classical education management approach, the concepts of digital change and institutional commitment were included, taking the principle of protecting teachers and students into the foreground. The stages of globalization also increased education in developed countries and caused an increase in the students of educational institutions.

The technology that manifested itself in informatics not only increased the automation of educational structures, but also enabled digital transformation to take place. The emerging information technologies not only improved the automation of education systems, but also paved the way for digitalization. In this way, starting with digitization and transitioning to cyber physical systems, more precisely to structures that integrate the physical world with the information processing of the virtual world with the support of sensors, progressive stages triggered the digital transformation. The transformation in question is seen as all of the objects, services and values that consist of cyber-physical structures that have a great role in the formation of the educational structure with intelligence.

Today, education is done with different methods from the systems used in the past. Apart from this, while new professions and jobs emerge, increasing automation in education, artificial intelligence and technology types associated with the increasingly increasing robots are entering the education life. The aforementioned stages have the potential to transform in education life, not showing modern education model types, modern education professions, modern education forms. However, it is claimed that with the use of robots in education, teacher unemployment will gradually increase, students and teachers will not be protected from the disadvantages of technology, and that new legal regulations are required within the scope of digitalization of education. In this study, the relationship between digital transformation and institutional commitment in new world education management is evaluated.

### 1.1. Digital Transformation

It is observed that the digitization and digitization process, which started in the last years of the 20th century and accelerated in the 2000s, showed radical differences in almost all institutions and working styles. With the application types such as smart systems, e-government, e-commerce, mobile communication, robots and social media from digital technology products, a lot of differentiation has been observed in different fields of the sector that provide services in the form of production, banking transactions and health-related institutions, along with the education sector.

At the basis of this differentiation and transformation, there are possibilities of realizing the working methods brought by technological development very quickly, effectively and without paying too much cost, as well as the realization of full-time recording of information, its very rapid processing, transmission and evaluation in decision-making stages.

Digitalization stages are very important in reaching this point. Where is digital change in digital development? In other words, what are the differences between digitalization and digital transformation? Digitalization is similar to digital transformation as the concept is associated with simultaneously differentiating training operations, training models, and moreover, data flows and new training opportunities. Digital transformation, as used today, is a more common concept than digitizing it as a method of its transfer to the digital education world. Putting forward a very advanced digitalization strategic idea requires being multi-bridged [1].

It is impossible to reduce digitalization to few technologies, but the age-changing effect of augmented reality, cloud, informatics, big data, digital media, web 2.0, mobile, broadband internet, artificial intelligence, internet of things and 3D printers has created a new era. Technological developments that enable digitalization, first of all, analog recordings have become digitally processed (automation) and processes have been transferred to digital environment (e-service). At the point reached, all types of corporate assets and stakeholder connections are redefined in digital environment (digital transformation). The stages of digitization do not occur unilaterally, and organizations can generally make their automation more efficient with modern technology types and can rehabilitate the digital technology experience in educational services. Digital transformation based on these explanations; The process of digitization and digitization is in the form of "the holistic transformation of organizations in individual, business processes and technology factors in order to provide more effective and efficient education services and to achieve student-parent satisfaction in the direction of the opportunities provided by rapidly progressing data and communication technology types and differentiating social needs". Definition can be made [2].

Digital transformation, which shows the differences in the application of digital technology in all areas of the social life of individuals, includes digital technologies, educational strategy or digital strategy, models, operations, education, educational approach, goals, etc. accepts. The renewal and transformation of the education world is an education presentation management system that accelerates the presentation and development of education and offers an end-to-end solution. The transformation phase means that digital uses allow for new types of innovation and creativity in a specific area, rather than developing and supporting traditional methods [3].

The widespread use of computers and the internet, which were initially integrated with it, but now integrated into almost every digital device/device, and the acceleration of digitalization and digitalization have made digital transformation enter the 2010 agenda. For example, digital transformation has recently been evaluated as a new form by the European Union (EU). The name of this vision, published in 2010, is "European Digital Agenda". One of the 7 supports of the Europe 2020 Strategy, which determines the growth targets of the European Union, is the Digital Agenda presented by the European Commission. The Digital Agenda aims to make greater use of information and communication technologies to promote innovation, economic growth and development; it is explained that its main purpose is to develop a single digital market in order to achieve continuous and comprehensive growth in Europe. In achieving the purpose of the Digital Agenda; 7 stages have been identified, supported by realizing the digital single market, standardizing cooperation, providing virtual protection, providing very fast internet, R&D investments, digital literacy, promoting skills and inclusion, and obtaining effective benefits from knowledge. Communication technologies for the EU community It is envisaged to "create a data center using open data, content and API (Application Programming Interface)" by publishing the Digital Government Roadmap after European continental countries in May 2012. It has been categorized under 4 headings: "Establishing a common platform for the development of digital services", "using customer-centered tools and technology" and "the foundation of security and privacy in the use of new technology" [4].

EU digital conversion stages and will be held in conjunction with the US operation determining which Turkey has experienced a delay in this matter. 64th government's 2016 "Digital Turkey Project Roadmap" Action Plan has been commissioned. The "Digital Transformation Office" was established during the 67th government and after the 2018 elections. Working in coordination with the Ministry of Industry and Technology, the office works for the digital transformation of economic and social life and government services. With the digital transformation, the educational infrastructure was developed first. In this way, great success has been achieved in the global epidemic in 2020. In this context, programs that train digital technology developers in educational institutions have been increased. Approximately 30 thousand students are targeted to do their doctorate in the field of digital technology. Digital transformation awareness has been increased. With special incentives, it is aimed to bring the education sector to stages such as comparing educators with digital competence with the education sector, to accelerate the services provided by the state and to eliminate bureaucracy. In addition, the Office, together with the ministry and affiliated institutions, discloses technology roadmaps for "cloud computing", "artificial intelligence" and "autonomous robots". The establishment of approximately 50 applied research centers focusing on priority technologies continues. High speed internet access was provided to industrialists. Industrial and social cyber security was provided and cyber attacks were responded immediately [5].

### 1.2. Corporate Commitment

Before examining the concept of corporate loyalty, it is necessary to touch the concept of "loyalty". As a term adherence means to unite in Latin. The dictionary of the Turkish Language Association is defined as a form of loyalty, love, respect and loyalty to someone or to social life [6].

Harol Guetzkov (1955), one of the researchers who defined the concept of loyalty, explains the commitment to the individual with an idea, an institution, or a feeling that sets goals for individuals and activities that support development. According to Çöl [7] within the scope of this goal, loyalty is a concept and perception, wherever there is a sense of social life, social life instinct is a form of expression. General loyalty; It is a task we have to do to an individual, an organization, a random thought, or something that seems higher than it [8].

The concept of institutional commitment, on the other hand, was the first time in Whyte's "Organization Person" study in 1956; have examined in terms of institutions [9]. In this context, the concept of corporate commitment has been researched by academicians and researchers starting from the 1970s. There is a generally accepted definition of what institutional commitment means conceptually, although there are studies in the context of the direct connection between the employee and the workplace in the related literature. The reason arises from the studies of scientists from disciplines such as psychology, sociology, social psychology, and organizational behavior according to their field of expertise [10]. Therefore, this change has led to different definitions of the concept of institutional commitment. The first definition of corporate commitment was made by Grusky in 1966 [11]. According to Grusky [11], institutional commitment is defined as the explanation of the strength of the bond with the institution in which a person works. The main definitions in the literature are as follows:

Being influenced by economic, political and political differences in institutions over time, according to global market conditions, has led researchers to investigate the concept of corporate loyalty. He examined the concept of corporate loyalty for the first time in 1956 with Whyte's "Person of Organization" study. Multiple scientists such as Porter, Mowday, Steers [12] Allen, Meyer [13], and Becker [14] followed suit.

They examined it in terms of institutions [9]. In this context, the concept of corporate loyalty has been researched by academics and researchers starting from the 1970s. Although there are studies in the literature about the direct link between employee and workplace, there is a generally accepted definition of what corporate loyalty means conceptually. The reason is that scientists from disciplines such as psychology, sociology, social psychology and organizational behavior examine themselves according to their fields of expertise [10]. Therefore, this change has led to different

definitions of corporate loyalty. The first definition of corporate loyalty was made by Grusky in 1966. According to Grusky [11], institutional commitment is defined as explaining the strength of the bond in the institution where one works. Some of the other definitions in the literature are:

- Hall, Schneider, and Nygren [15] define institutional commitment as "processes that integrate or harmonize corporate and individual goals over time".
- Sheldon [16] defined corporate loyalty as an adaptation between personal identity and corporate identity by positively examining the workplace in which a person works and acting within the framework of objectives.
- According to Hrebiniak and Alutto [17], institutional loyalty is the understanding of commitment that provides institutional development by paying attention to the order between material and spiritual incomes, in which the individual adds value to the institution in the direction of institutional goals.
- According to Buchanan [18], institutional commitment is the attachment of the individual to the corporate goals and values, the individual's duty and the institution within the scope of these goals and values.
- Wiener [19] is a set of normative pressures that are identical to an individual to demonstrate a certain behavior in a way that ensures institutional commitment, the purpose and interests of the institution.
- According to Reichers [20], institutional commitment is the stages where different factors of an institution (top managers, consumers, non-governmental organizations and social life) become identical with the purpose of the institution.
- According to Davis and Newstrom [21], corporate loyalty is the level of identity harmony between the employee and the organization and the desire to continue to become an active member of the institution.
- Schermerhon et al. [22] stated that corporate loyalty is the measure of "an individual's relationship with the workplace and his/her feeling of belonging to the place where he/she works".
- Leong et al. [23] explain the integrated potential of organizational commitment, the identity collaboration and commitment that an individual creates with their workplace or with another workplace.
- According to Elizur and Koslowsky [24], institutional commitment is defined as a feeling and functional attachment and responsibility towards a person or an object.
- According to Marchiori and Henkin [25], corporate commitment is the general name of the types of attitudes and behaviors related to the workplace that add value to the workplace.

It is observed that there is no consensus on the definition of institutional commitment among the researchers whose studies have been described above, and that research people representing different disciplines give different meanings to the term in terms of their own disciplines. However, in general of these types of definitions, factors expressing commitment are included in the person's strong desire and acceptance of the values and goals of the workplace, willingness to work extra in order to achieve the goals on behalf of the workplace, and a strong belief that the person continues to work in the workplace [26].

It is not correct to explain that a random one of the types of definitions is more accurate than other definitions and has accepted its validity. Only each new study has revealed a desire to put forward a different opinion on this concept.

### 1.3. *Definition of Sustainability*

Sustainability is the expression of the conscious utilization of resources while meeting the needs and the phenomenon that digital transformation provides for the organization or for the employees. Market problems, economic problems, the increase in the number of employees, the problem of evaluating financial opportunities and fast technology are the problems of this concept. Apart from this, it contains the main problems to be put forward in terms of this subject. For this

reason, social development has shown not only the needs of today's individuals but also the problem of meeting the needs of future generations. With sustainable progress, it is aimed to provide workplace working quality, social life capacity, digital change. While sustainability ensures the continuation of digital change, it also means maintaining the ability to be found continuously. Sustainability comes from continuity as the root of the word. It is also used to mean the realization of the continuity of a technology. Sustainability is defined in our Common Future Report as "meeting the needs of today without compromising the ability of future generations to meet their own needs" [27].

Sustainability shows itself as a phenomenon that is being considered today due to the increasing use of technology. Sustainable technology development is the efficient use of corporate values and resources. It is a sustainable technology idea created by taking into account today's and future generations in a way that pays attention to savings. "Sustainable technology is the work that will integrate and fulfill the current, economic and social needs of future generations regarding the school" [28].

"The name of the order and phenomenon realized by systems and individuals that are pure in nature is sustainable technology. If it can renew itself naturally, if it can analyze itself, it renews itself in sustainable technology, transforms a data source into another data source without consuming it" [29].

The purpose of sustainable technology is to bring what has been accomplished by the individual into a digital environment. While doing this, it acts with a human focus and creates the technology design criteria required for the individual. Technology can renew itself, every data in technology has an evaluation purpose. For example, some data residues can be found in the data of another technology, and everything belonging to such technology can be re-evaluated in a transformative way. Sustainability makes this transformation with the help of computers. The phenomenon, which includes data evaluation forms, social life, network architecture, school culture, health of technology users and technology trade, and provides the best efficiency with these fields, is called sustainable technology.

Sustainable technology aims to find a balance between countries and the world with its economic and technology disadvantages. This balance aims to achieve the best of technology conditions, to fulfill the technology needs of the individual in the best way, and to create aesthetic and transformable digital environments at the same time.

Considering the sustainability criteria in the world, it takes into account the use of economic activities, digital use, material, clean data consumption and radioactive materials. The use of the products of digital transformation provided by the use of annual global technology in the education sector has enabled the emergence of criteria according to these products. The sustainability of the digital transformation aims to create a system that will meet the needs of the world's education sector and at the same time create a resource for future generations while creating this system. Sustainability issue is divided into three as economic, social and environmental. The sustainability of digital transformation in the education sector can be examined within social sustainability [28].

## 2. Materials and Method

This research is a descriptive study conducted with the aim of examining the relationship between the sustainability of digital transformation and institutional commitment of educational management in the new world order, according to socio-demographic variables made with the relational scanning model.

The population of the study was composed of 2240 teachers working in public and private primary schools operating under the Ministry of National Education in Bursa, Yıldırım district during the 2016-2017 education and training period, and the number of teachers in the universe was reached as a sample. The table regarding 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 .

	Frequency (f)	Percent (%)
<b>Gender</b>		
Woman	1393	62,2
Male	847	37,8
<b>Age</b>		
20-30	491	21,9
31-39	1053	47,0
40-48	440	19,6
49 and above	256	11,4
<b>Marital status</b>		
Married	1747	78,0
Single	485	21,7
Widowed/Divorced	8	,4
<b>Educational status</b>		
License	1276	57,0
Master	684	30,5
Doctorate	280	12,5
<b>Occupational seniority</b>		
1-10 years	1694	75,6
11-20 years	330	14,7
21 years and above	216	9,6
<b>Education levels that give</b>		
Primary school	822	36,7
Middle School	1005	44,9
High school	413	18,4
<b>Status of Education gave the school</b>		
State school	1900	84,8
Private school	340	15,2
Total	2240	100,0

In table 1, school administrators and teachers participating in the research; 62.2% are women and 37.8% are male, 21.9% of them are in the 20-30 age range, 47.0% of them are between the ages of 31-39, 19.6% are in the 40-48 age range, 11.4% of them are 49 and over, 78.0% are married, 21.7% are single, 0.4% of them are widowed/divorced, 57.0% of them are undergraduate, 30.5% of them have a master's degree, 12.5% of them have doctorate, according to their professional seniority 75.6% of them between 1-10 years, 14.7% are between 11-20 years, 9.6% are 21 years and over, 36.7% of the level they teach is primary school, 44.9% of the secondary school, 18.4% of them are high school, state of the school they teach 84.8% of the public school, 15.2% private school has been determined.

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 with the letter of the Governorship of Bursa Provincial Directorate of National Education dated 21.02.2018 and numbered 3739156.

*Socio-demographic Data Form:* The Individual Data Chart, developed by the researcher, was prepared by determining various variables in order to determine the general profile of teachers and their demographic characteristics, as well as to examine the relationship between digital transformations and organizational commitment of educational institutions according to socio-demographic variables. Form marital status, gender, age, teaching professional seniority, education level, stage of education and items related to the school where the education is given.

*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). 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 coefficient of the scale Cronbach's Alpha reliability was determined as  $\alpha = .95$ . However, the internal consistency reliability coefficient of the "productivity and professional" application scale was determined as  $\alpha = .65$  [30].

In our study, the coefficient of the Cronbach's Alpha reliability of the Education Managers' Technology Competencies Scale (TCS) was found as  $\alpha = .94$ . Points to be averaged in scale scoring, -2 points for "none" preference, -1 point for the "less" preference, 0 points for the "partially" preference, 1 point for the "substantial" preference, 2 points for the "completely" preference calculation was made by giving. While scores close to (-2) explain being weak, scores close to (2) indicate being a strong technological education 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 [30].

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.

At the stage of Turkish translation of the scale, Banoğlu [31] obtained compulsory permissions from CASTLE director Scott Mcleod, and support was requested and translated from two language experts, one of whom graduated from the department of English Language and Literature at Istanbul University. The 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. Scale subscales; "Visionary" dimension consists of statements between 1-12, "Digital Age Learning Culture" dimension consists of 3 items between 13-15, "Excellence in Professional Development" dimension consists of 8 items between 16-23, The "Systematic Development" dimension consists of 3 items between 24-26, "Digital Citizenship" consists of 6 items between 27-32. The use of the scale in our study was deemed appropriate with 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 [8] was used. This scale examines organizational commitment in three sub-scales. These; Identification, adaptation and internalization subscales examined by [32].

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

*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 [32].

Organizational Commitment Scale consists of 27 items. The evaluation of the items is done in 5-Likert style. Each statement they will choose from research participants (1) I do not agree at all, (2) I agree little, (3) I agree moderately, (4) I agree and (5) I totally agree are requested to mark as. The expressions of the subscales are between 1-8 in Adaptation, between 9-16 in Identification, and between 17-27 in Internalization. The lower level organizational commitment score indicates the lower level organizational commitment, while the higher level commitment score indicates the higher level organizational commitment. Organizational commitment criteria; (1) I do not agree at all 1.00 to 1.79, (2) I agree 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 has been determined. The coefficient of Cronbach's Alpha

reliability is  $\alpha = .80$ . In our study, the coefficient of the Cronbach's Alpha reliability of the Organizational Commitment Scale (IAS) was found as  $\alpha = .91$ .

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

The data of the study 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 education and training period, and then collected from the teachers.

Statistical Package for Social Sciences (SPSS) 23.0 software was used for the statistical analysis of the data obtained through the form of the questionnaire 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 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 performed 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 2 categories, the independent sample t test was used, and if the number of categories of the independent variable was more than two, the ANOVA test was used. According to the results of ANOVA, in the event of a statistically significant difference between groups of independent variables, the Tukey test, a post-hoc test, was used to find out from which groups the difference arose. Correlations between school administrators and teachers 'scores from the Education Managers' Technology Competence Scale (TCS) and the Organizational Commitment Scale (OCS) were determined by Pearson correlation analysis.

### 3. Findings

The findings of the study conducted to examine the relationship between the transformation of educational institution administrators and their organizational commitment according to socio-demographic variables are as follows.

**Table 2.** Organizational Commitment Scale and Technology Competencies Scale scores.

<b>Scales</b>		<b>n</b>	<b><math>\bar{x}</math></b>	<b>s</b>	<b>Min</b>	<b>Max</b>
–	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
–	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

In table 2, school administrators and teachers, Organizational Commitment Scale scores  $24.60 \pm 9.16$  from compliance subscale,  $34.28 \pm 9.21$  from identification subscale,  $36.34 \pm 8.62$  from internalization subscale. It was found that school administrators and teachers got at least 10 and maximum 50 points from the Organizational Commitment Scale overall, and their mean score was

$32.25 \pm 6.83$ . Technology Competencies Scale  $33.66 \pm 7.74$  from the visionary sub-dimension,  $35.90 \pm 9.52$  from the Digital Age Learning Culture sub-dimension,  $35.23 \pm 6.94$  from the Excellence in Professional Development sub-dimension,  $33.27 \pm 8.95$  from the Systematic Development sub-dimension and  $35.51 \pm 8.75$  from the Digital Citizenship sub-dimension was seen that they got points. It was found that school administrators and teachers received at least 10 and at most 50 from the Technology Competence Scale, and their mean score was  $34.57 \pm 6.48$ .

**Table 3.** Comparison of school administrators and teachers' scores from the Organizational Commitment Scale according to their gender.

Scales		Gender	n	$\bar{x}$	s	t	p
-	Compliance	Woman	1393	24,018,80	-		
		Male	847	25,569,643,902		0,000*	
-	Identification	Woman	1393	33,859,22	-		
		Male	847	35,009,142,871		0,004*	
Organizational Commitment Scale (OCS)		Woman	1393	31,846,89	-		
		Male	847	32,926,693,631		0,000*	

\*p<0,05

In table 3, the difference between the values taken by the educational institution administrators and trainers participating for the research from the organizational commitment scale, compliance and identification subscales according to their gender is statistically significant ( $p<0.05$ ). The scores obtained by male school administrators and teachers from the organizational commitment scale in general, adaptation and identification sub-dimensions were found to be higher than woman school administrators and teachers.

**Table 4.** Comparison of school administrators and teachers' scores from the Organizational Commitment Scale according to their ages.

	Age	n	$\bar{x}$	s	Min	Max	F	p	Difference
Compliance	20-30	491	24,41	8,82	10	50			
	31-39	1053	24,24	8,87	10	50			
	40-48	440	25,91	9,47	10	50	3,824,010*		1-3
	49 and above	256	24,18	10,21	10	50			
	20-30	491	35,81	6,84	10	50			
Excellence in Professional Development	31-39	1053	34,81	6,96	10	50			
	40-48	440	35,40	6,81	10	50	2,778,040*		1-2
	49 and above	256	35,61	7,23	10	50			
	20-30	491	35,14	6,45	10	50			
Technology Competencies Scale (TCS)	31-39	1053	34,17	6,51	10	50			
	40-48	440	34,71	6,37	10	50	2,870,035*		1-2
	49 and above	256	34,889	6,51	10	50			

\*p<0,05

In table 4, according to the ages of school administrators and teachers participating in the research was determined that the difference between the scores of 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.

According to the age of school administrators and teachers was determined that the difference between the scores they got from 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 between 31-39.

**Table 5.** Comparison of school administrators and teachers' scores from the Organizational Commitment Scale according to their marital status .

	Marital status	n	$\bar{x}$	s	Min	Max	F	p	Difference
Identification	Married	1747	34,41	9,02	10	50			
	Single	485	33,70	9,86	10	50	3,634	,027*	2-3
	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.** Comparison of school administrators and teachers' scores from the Organizational Commitment Scale according to their educational status .

	Educational status	n	$\bar{x}$	S	Min	Max	F	p	Difference
Compliance	License	1276	23,329,08	10	50				
	Master	684	25,918,78	10	50	31,736,000*			1-2
	Doctorate	280	27,229,43	10	50				1-3

\*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 is statistically significant (p<0.05). This difference stems from the undergraduate and graduate graduates and the doctorate graduate school administrators and teachers.

**Table 7.** Correlations between school administrators and teachers' scale scores .

	Compliance	Identification	Internalization	Organizational Commitment (OCS)	Visionary	Digital Age Culture	Learning in	Excellence in Professional Development	Systematic Development	Digital Citizenship Technology Competencies (TCS)	Scale
Compliance	r 1										
	p										
Identification	r ,199**	1									
	p ,000										
Internalization	r ,103**	,765**	1								
	p ,000	,000									
Organizational Commitment Scale (OCS)	r ,529**	,871**	,860**	1							
	p ,000	,000	,000								
Visionary	r ,096**	-,016	-,034	,014	1						
	p ,000	,458	,107	,495							
Digital Age Learning Culture	r ,125**	,014	-,005	,052*	,787**	1					
	p ,000	,512	,802	,013	,000						
Excellence in Professional Development	r ,101**	,003	-,004	,040	,670**	,640**	1				
	p ,000	,884	,868	,061	,000	,000					
Systematic Development	r -,012	-,013	-,009	-,015	,326**	,264**	,679**	1			
	p ,557	,548	,660	,485	,000	,000	,000				

Digital Citizenship	r	-,001	-,015	-,012	-,012	,336**	,300**	,634**	,700**	1
	p	,953	,487	,582	,559	,000	,000	,000	,000	
Technology Competencies Scale	r	,085**	-,010	-,021	,019	,863**	,772**	,904**	,671**	,705**
(TCS)	P	,000	,648	,319	,362	,000	,000	,000	,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).

#### 4. Discussion, Conclusion and Recommendations

In the study, the relationship between sustainability and corporate commitment of digital transformation in new world education management was examined according to the opinions of educators. As a result of the research, it has been understood that there are significant connections on the positive side between the sustainability of digital transformation in new world education management and corporate commitment.

In line with the results of the study, internalization is the highest and the least understood subscale in the organizational commitment dimensions of school administrators and teachers. This situation can be interpreted as teacher values are in harmony with the values of the educational institution and that the values of the school are effective in teachers' attitudes and behaviors. Sığrı and Basım [33] have obtained similar results in their research. According to the results of the research, the organizational commitment of private sector employees regarding internalization was also significantly higher than the 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.

There is a statistically significant difference in terms of organizational commitment scale overall, organizational commitment scale adaptation and identification subscales according to the gender of educational institution administrators and trainers. Similar to our study, the studies conducted by Akbolat, İşık and Yılmaz [34], Turan [35], Ağca and Ertan [36], Töremen and Yasan [37] in the gender-related variable are consistent with our research results. In the studies conducted by Avcı [38], Dağ and Göktürk [39] and Tösten Avcı and Yıldırım [40], no significant difference was found. It was seen 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 [41] stated that different personal characteristics have different results on loyalty to the organization. Tsui and Chang [42] also stated that the gender variable revealed a significant difference in their study on loyalty to organization. At the same time, Boylu et al. [43]; Erdoğan and

Kolamaz [44]; Demirkol [45]; Sönmez [46]; found 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. When looking at the studies investigating the connection between organizational commitment and gender, it is seen that there is no consensus on the degree of organizational commitment of women and men [47]. Yalçın and İplik's [48] Ayan et al. according to the citation from [49], it has been claimed that male employees are overly committed to the organization since they mostly work in the best positions where women are employed and pay more. This situation does not make sense in public schools as the wages of teachers in public schools do not vary according to gender. Again, Ayan et al. [49] put forward another view according to gender, because women prioritize their roles in the family, their institutions remain in the background [48]. Contrary to these views, Angle and Perry [50], Mathieu and Zajac [51] stated that female commitment is higher than that of men in their study [52]. 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 [34], a significant difference was not observed. In addition to this situation, when the time elapsed about the profession is examined, there was no difference in the level of meaning in the studies of [34] and [38]. Since the educators in our study are generally young educators, it is thought that they are idealistic, feel connected to their schools and 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 [53], it was determined that single people seek renewal more than married ones. It is understood that single individuals increase their education manager qualifications higher 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, visionary, learning cultural structure of the information age, being perfect during the development of the profession, systematic development and the increase in the amount of information found in the form of a common output of social life through technology, becoming a citizen based on its expansion status scores are similar. The compliance scores of the school administrators and teachers who do doctorate are higher than the others.

According to Turan [35]; the educators participated in all scales, mostly at the level of the managers in educational institutions to have the transformational training manager qualifications. He examined this issue in his study titled the connection between the types of transformational education managers of the administrators of educational institutions providing primary education and their commitment to the educational organization of the instructors working in the said educational institutions. In our study, studies were generally conducted in public education institutions. For this reason, it has been thought that our educators have similar views about our research topic.

In the study of Aktaş, Türk Aktaş and Erol [54] regarding the determination of the educator's thoughts on the levels of demonstrating transforming educational manager behaviors of primary education administrators, the educators expressed their opinion that the administrators of the educational institutions are transforming education managers.

The aim of the study conducted by Taş and Çetiner [55] is to evaluate the instructor understanding of educational institution administrators regarding the level of behaviors of the transformative educational manager type of charisma, suggestion, intellectual warning and personal assistance scales. As a result, educators accept that the administrators of educational institutions have the transformative qualities in themselves, and they think that they exhibit the transformational quality most related to the intellectual warning.

In the field study conducted by Dağ and Göktürk [39], considering the level of educational institution administrators holding the qualifications to be transformation providers, it can be stated that the administrators of educational institutions are considered competent in this matter, based on their level of participation. These results were found to be consistent with our research.

As a result, the commitment of educators to the organization they work in is considered to be the most sensitive factor in achieving success as an organization [56], [57]. People with high levels of organizational commitment demonstrate strong attitudes and tendencies and commitment to the organization [58]. Employees with low loyalty cannot achieve enough. They also struggle less 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 [59].

#### 4.1. 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. i-SCOOP I. Digitization, digitalization and digital transformation: the differences, Retrieved from <https://www.i-scoop.eu/digitization-digitalization-digital-transformation-disruption/> [07.8.2020]. [[CrossRef](#)]
2. TUBITAK-WISE. *What is Digital Transformation ?*, 2020, Digital Transformation Portal, Retrieved from <https://www.dijitalakademi.gov.tr/dijitaldonusum-gov-tr-sitesi-cevrimici-olmustur> [07.08.2020]. [[CrossRef](#)]
3. Digital Transformation Journal. *What is Digital Transformation? (Digital Transformation)*, 2017, retrieved from <http://www.dijitaldonusumdergisi.com/dijital-donusum-nedir/> [07.8.2020]. [[CrossRef](#)]
4. Karagöz, U. *Digital Transformation and Turkey* 2018, Retrieved from the [http://www.igb.gov.tr/kutuphane/ugurkaragoz\\_dijital%20d%C3%b6n%C3%bc%C5%9f%C3%b6n%C3%BC%20v%20T%C3%BC%20bckiyepdf](http://www.igb.gov.tr/kutuphane/ugurkaragoz_dijital%20d%C3%b6n%C3%bc%C5%9f%C3%b6n%C3%BC%20v%20T%C3%BC%20bckiyepdf) [07.8.2020]. [[CrossRef](#)]
5. BİK. *Cyber Security*, 2018, Retrieved from <http://www.bik.gov.tr/cumhurbaskanligi-dijital-donusum-ofisi-kuruldu/> [[CrossRef](#)]
6. TDK, Turkish dictionary [www.tdk.gov.tr](http://www.tdk.gov.tr) [07.8.2020]. [[CrossRef](#)]

7. Çöl, G. The Concept of Organizational Commitment and Its Relationship with Similar Concepts. *Business Power Industrial Relations and Human Resources Journal*, 2004, 6,2, ([http://www.isgucdergi.org/?P=arc\\_view&ex=233&inc=arc&vol=6&issue=2&year=2004](http://www.isgucdergi.org/?P=arc_view&ex=233&inc=arc&vol=6&issue=2&year=2004)). [07.8.2020]. [[CrossRef](#)]
8. Balay, R. *Organizational Commitment of Managers and Teachers*, Ankara: Nobel Publishing Distribution, Ankara, Turkey, 2000. [[CrossRef](#)]
9. Gülb, H. Comparison and Evaluation of Organizational Commitment Approaches. *Ege Academic Review*, 2002, 2,1, 1-2. [[CrossRef](#)]
10. Çöl, G.; Gülb H. Effects of Personal Traits on Organizational Commitment and an Application in Public Universities, *Atatürk University Journal of İ.İ.B.F*, 2005, 19, 1, 291- 306. [[CrossRef](#)]
11. Grusky, O. Career Mobility and Organizational Commitment, *Administrative Science Quarterly*. 1966, 10, 4, 488-503. [[CrossRef](#)]
12. Mowday, R.T.; Porter, L.W.; Steers, R.M. *Employee-Organizational Linkages: The Psychology of Commitment, Absentism and Turnover*. Academic Press, New York, USA, 1982. [[CrossRef](#)]
13. Allen, N. J.; Meyer, J. P. The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 1990, 63, 1-18. [[CrossRef](#)]
14. Becker, T. E. Foci and Bases of Commitment: Are They Distintions Worth Making? *Academy of Management Journal*, 1992, 35, 1, 232-244. [[CrossRef](#)]
15. Hall, D. T.; Schneider, B.; Nygren, H.T. Personal Factors In Organizational Identification. *Administrative Science Quarterly*, 1970, 15 (2), 176-190 [[CrossRef](#)]
16. Sheldon, M. E. Investments and involvements as mechanisms producing commitment to the organization. *Administrative Science Quarterly*, 1971, 16, 143-150. [[CrossRef](#)]
17. Hrebiniak, L.G.; Alutto, J.A. Personal and Role-Related Factors in the Development of Organizational Commitment, *Administrative Science Quarterly*, 1972, 72, 555-572. [[CrossRef](#)]
18. Buchanan, B. Building Organizational Commitment: The Socialization Of Managers In Work Organizations, *Administrative Science Quarterly*, 1974, 19, 533-546. [[CrossRef](#)]
19. Wiener, Y. Commitment in organizations: A normative view. *Academy of Management Review*, 1982, 7, 418-428. [[CrossRef](#)]
20. Reichers, A. E. A review and reconceptualization of organizational commitment. *Academy of Management Review*, 1985, 10, 465-476. [[CrossRef](#)]
21. Davis, K.; Newstom, J. W. *Human Behavior at Work, Organizational Behavior*, Eight Edition, McGraw Hill Book Company, New York, USA, 1989. [[CrossRef](#)]
22. Schermerhorn, J.R.; Hunt, J.G.; Osborn, R.N. *Managing Organization Behavior*, Fifth Edition, John Willey&Sons, Inc: New York, USA, 1994. [[CrossRef](#)]
23. Leong, C. S.; Furnham, A.; Cooper, C. L. The Moderating Effect of Organizational Commitment on the Occupational Stress Outcome Relationship, *Human Relations*, 1996, 49, 10, 1345-1361. [[CrossRef](#)]
24. Elizur, D.; Koslowsky, M. Values and Organizational Commitment. *International Journal of Management*, 2001, 22, 593-599. [[CrossRef](#)]
25. Marchiori, D.; Henkin, A. Organizational Commitment of Health Profession Faculty: Dimensions, Correlates and Conditions, *Medical Teacher*, 2004, 26, 353-358. [[CrossRef](#)]
26. Bakan, İ. *The basis of organizational strategies, organizational commitment concept, theory, cause and consequences*. Gazi Publishing House. Ankara, Turkey, 2018. [[CrossRef](#)]
27. United Nations World Commission on Environment and Development, *Our Common Future*, Belkis Çıraklı of (trans.), Environmental Problems of Turkey Foundation Publications, Ankara, Turkey, 1991. [[CrossRef](#)]
28. Yılmaz, M. *Architecture and environment, Environment and politics: yearning for another world*, A. Mengi (Derl.), Image Image Publishing: İstanbul, Turkey, 2007, pp.75-92. [[CrossRef](#)]
29. Zinzade, D. Investigation of Sustainability Dimension in High Building Design, *Master's thesis*, ITU Faculty of Architecture, Istanbul, Turkey, 2010. [[CrossRef](#)]

30. Castle. *Principal Technology Leadership Assessment*. 2009, [http://www.schooltechleadership.org/storage/ptla\\_info\\_packet.pdf](http://www.schooltechleadership.org/storage/ptla_info_packet.pdf), on 16 July 2020. [[CrossRef](#)]
31. Banoğlu, K. Development of Education Managers' Technology Leadership Competencies Scale: Validity and Reliability Study. *İnönü University Journal of Education*, **2012**, 13,3, 43-65. [[CrossRef](#)]
32. O'Reilly, C. A. Chatman, J. Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of applied psychology*, **1986**, 71, 492-493. [[CrossRef](#)]
33. Sığrı, Ü.; Basım, N. Analysis of Employees' Job Satisfaction and Organizational Commitment Levels: A Comparative Study in the Public and Private Sector, *Journal of Social Economic Research*, **2006**, 6, 130-154. [[CrossRef](#)]
34. Akbolat, M.; Işık, O.; Yılmaz, A. The effect of transformational leadership behavior on motivation and emotional commitment. *International Journal of Economic and Administrative Studies*, **2013**, 6, 35--50. [[CrossRef](#)]
35. Turan, S. Technology leadership of educational administrators in the developing network society. *Education Overview*, **2007**, 3, 13-18. [[CrossRef](#)]
36. Ağca, V.; Ertan, H. Changes in Employees' Organizational Commitment Based on Their Demographic Characteristics: A Study in Five Star Hotels in Antalya. *Dumlupınar University Journal of Social Sciences*, **2008**, 7, 389-408. [[CrossRef](#)]
37. Töremen F.; Yasan T. Transformational Leadership Characteristics of Primary School Administrators (The Case of Malatya Province). *Pamukkale University Journal of Educational Sciences*, **2010**, 28, 27-39, [[CrossRef](#)]
38. Avci, A. Leadership Styles of School Principals According to Teacher Perceptions. *Hasan Ali Yücel Faculty of Education Journal*, **2015**, 12, 161-189. [[CrossRef](#)]
39. Dağ, İ.; Göktürk, T. Leadership and Leadership in Classroom Management Contribution to Classroom Management. *The Journal of Academic Social Science Studies*, **2014**, 27, 171-184. [[CrossRef](#)]
40. Tösten, R.; Avci, Y.; Yıldırım, İ. The Relationship Between Positive Psychological Capital and Organizational Commitment: A Study in Educational Institutions, *Mustafa Kemal University Journal of Education Faculty*, **2018**, 1, 1-2. [[CrossRef](#)]
41. Kardeş, G.G. *Dynamics of Organizational Commitment*, Unpublished master's thesis, Gazi University, Ankara, Turkey, 2009. [[CrossRef](#)]
42. Tsui, K. T.; Cheng, Y. C. School organizational health and teacher commitment: A contingency study with multi-level analysis. *Educational Research and Evaluation*, 1999, 5, 249-268. [[CrossRef](#)]
43. Boylu, Y.; Pelit, E.; Güçer, E. A Study on Academicians' Organizational Commitment Levels. *Financial, Political and Economic Commentary*, **2007**, 44, 55-74. [[CrossRef](#)]
44. Erdoğan, Ş.; Kolamaz, C. The relationship between supportive and developing leadership characteristics and organisational commitment, *The Journal of Turkish Educational Sciences*, **2011**, 9, 313-342. [[CrossRef](#)]
45. Demirkol, A. Y. Organizational Commitment in Educational Institutions: A Study on Vocational Schools, *Journal of Educational Sciences Research*, **2014**, 4, 1, 1-15. [[CrossRef](#)]
46. Sönmez, M. *A Research on Organizational Commitment and Job Satisfaction and an Application in İller Bankası A.Ş. Specialization Thesis*, 2017, Ankara, Turkey. [[CrossRef](#)]
47. Kurşunoğlu, A.; Bakay, E.; Tanrıögen, A. (2010). Organizational Commitment Levels of Primary School Teachers. *Pamukkale University Journal of Education Faculty*, **2010**, 28, 101-115. [[CrossRef](#)]
48. Yalçın A.; İplik, F. N. A Research to Determine the Factors Affecting the Organizational Commitment of Employees in Group A Travel Agencies: Adana Province. *Selçuk University, Journal of Social Sciences Institute*, **2007**, 18, 483-500. [[CrossRef](#)]
49. Ayan, M.; Aşkin, S.; Arslan, S., A Research on Employees' Perceptions of Organizational Justice and Organizational Commitment. 2. *Organizational Behavior Congress Proceedings*, Melikşah University, November 2014, 7/8, Kayseri, Turkey. [[CrossRef](#)]
50. Angle, H. L.; Perry, J. L. An Empirical Assessment of Organizational Commitment and Organizational Effectiveness, *Administrative Science Quarterly*, **1981**, 26, 1, 14. [[CrossRef](#)]

51. Mathieu, J. E.; Zajac, D. M. A Review and Meta-Analysis of the Antecedents, Correlates and Consequences of Organizational Commitment, *Psychological Bulletin*, **1990**, 108, 2, 171-194. [\[CrossRef\]](#)
52. Gören, T.; Yengin Sarıkaya, P. Organizational commitment levels of teachers working in primary education institutions (Aydın province example). *Journal of Educational Sciences*, **2014**, 40, 69-87. [\[CrossRef\]](#)
53. Köse, S.; Sayar, K.; Kaleoğlu, Ü.; Aydin, N.; Ak, İ.; Kirpınar İ.; Reeves R. A.; Przybeck, T. R.; Cloninger C.R. Temperament and Character Inventory (Turkish Tci): Validity, Reliability and Factor Structure, *Bulletin of Clinical Psychopharmacology*, **2004**, 14, 107-131. [\[CrossRef\]](#)
54. Aktaş, Z.; Türk Aktaş, M.; Erol, H. (2015). Mustafa Kemal Atatürk with Transformational Leadership Features in Ensuring Organizational Development. *Journal of the Institute of Social Sciences*, **2015**, 39, 222-236. [\[CrossRef\]](#)
55. Taş, A.; Çetiner, A. Teachers' Views Regarding Secondary School Principals' Realization of Transformational Leadership Behaviors. *Turkish Journal of Educational Sciences*, **2011**, 9, 369-392. [\[CrossRef\]](#)
56. Dick, G.; Beverly, M. Managerial Factors and Organizational Commitment - A Comparative Study of Police Officers and Civilian Staff, *International Journal of Public Sector Management*. **2001**, 14, 114. [\[CrossRef\]](#)
57. Beck, K.; Wilson, C. Police Officers' Views On Cultivating Organizational Commitment Implications For Police Managers, *Policing: An International Journal Of Police Strategy and Management*, **1997**, 20, 1, 175-195. [\[CrossRef\]](#)
58. Chow, I. H. Organizational Commitment and Career Development of Chinese Managers in Hong Kong and Taiwan, *International Journal of Career Management*, **1994**, 6, 3-9. [\[CrossRef\]](#)
59. Izgar, H. Job satisfaction and organizational commitment in school administrators. *Selcuk University Ahmet Keleşoğlu Faculty of Education Journal*, **2008**, 25, 317-334. [\[CrossRef\]](#)