

# The Relationship between Physical Conditions of School Buildings and Organizational Commitment According to Teachers' Perceptions

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Received: March 5, 2019

Accepted: April 4, 2019

Online Published: April 20, 2019

doi:10.5430/wje.v9n2p166

URL: <https://doi.org/10.5430/wje.v9n2p166>

## Abstract

The aim of this study is to determine the relationship between the physical conditions of school buildings and organizational commitment according to the perceptions of teachers in public primary schools. The research population consists of 2450 teachers from 92 primary schools in the central district of Diyarbakır/Turkey in the academic year of 2017-2018. The data collection instrument was applied to randomly selected 534 teachers from 27 schools. "School Buildings Scale" developed by Çađlayan and Yılmaz (2011) and "Organizational Commitment Scale" developed by Meyer, Allen and Smith (1993), and adapted into Turkish by Dađlı, Elçiçek and Han (2017) were used in this study.

Some important findings of the study are listed below: According to teachers' perceptions, the highest item that is associated with the school buildings was found in the dimension of "General view (M=3,58; Quite adequate), the item with the lowest level was found in the dimension of "Fields reserved for students" (M=2,44; insufficient). The mean of the whole scale was found as (M=2.99) "Partially adequate". It was determined that the highest mean of teachers' perceptions about organizational commitment (M=3.50; Agree) was in "affective commitment" dimension and the lowest mean (M=2,94; Undecided) in the dimension of "normative commitment". Teachers participated in the total mean of the organizational commitment scale at the level of (M=3.19; Undecided). Generally, it was found that there was a moderate and positive relationship between the school building scale and organizational commitment scale ( $r=.561$ ,  $p < 0.01$ ). This shows that, as the physical conditions of the school buildings are improved, the organizational commitment of the teachers is increased.

**Keywords:** school buildings, physical conditions of school buildings, organizational commitment

## 1. Introduction

The education needs of people are largely provided by schools. School is the place where education is marketed in a society. The school is an indispensable social institution created by the society as a result of development for centuries. The school is the first thing that comes to mind in relation to education or education system as they are the place where education service is produced (Başaran, 1989: 12-13). The duties of the school are in fact the duties of education and these can be grouped as social, political and economic. The social duty of the school is to socialize the child, in other words to transfer the culture of society to the child. The political duty of the school is to train its generation in a way that they have a commitment to the state system of society as well as ensuring the selection and training of students with leadership skills. The economic duty of the school is to meet the brain power and manpower needs of the economy (Bursalıođlu, 2015: 37). The basic function of schools within the education system is to provide the students with the desired behaviors and to organize the environment in a way necessary for students to experience certain learning experiences (Taymaz, 1989: 1).

The school is a social environment which must meet the social needs of the community living in it (Erman & Ayalp, 2012: 28). As an organizational institution the school aims to increase the efficiency of learning process. In order to ensure the efficiency of the organization, it is very important to coordinate and organize human resources and physical facilities in harmony with managerial functions (Başar, 2000: 1). The school building is a physical space,

which includes all the educational, administrative and service units allocated to be used by students and other employees at the school (Küçükahmet, 1986: 12-14; cited in Gök & Gürol, 2002: 264). Hathaway (1988: 28), at the introduction part of his research called “Educational Buildings” mentions the following expression:

*“We first shape the buildings, and then they shape us”.*

Similarly, an author and educator from United States, Jonathan Kozol (2012) argues in his book “Savage Inequalities: Children in America’s Schools” that (cited in Atabay, 2014: 38):

*“School reforms are of no value if children have to go to school buildings that kill their souls”.*

School buildings are places where students spend a significant part of their days. School buildings should have a distinctive character and its stakeholders should have the feeling of commitment to it in order for school buildings to be a place to live in (Dinç & Onat, 2002: 52, 53). As Yellond (2012) mentions, the quality of school buildings has a critical importance for improving education. School buildings with high quality provide supportive environments that meet the changing needs of teachers and students in the school and make a significant difference in the learning and teaching process (cited in Blyth, Almeida, Forrester, Gorey, & Hostens, 2012: iii). Moreover, Lyons (2001: 5) argues that the teaching resources, the quality of the teacher and the curriculum plays an important role for the child education as well as the physical conditions of the school buildings have an impact on learning and student success.

We live in an environment filled with the buildings that shape our lives. Places determine the limits of what we can do for example; windows determine the limits of what we can see. Thus the school buildings draw the limits of how well education can be. As a building structure, school is expected to meet such needs as meeting the different needs of the students and providing physical environment to satisfy its students (Sanoff, Pasalar, & Hashas, 2001: 6; cited in Yılmaz, 2009: 291, 292).

As educational buildings the schools needs to be located in an appropriate place, they need to be large enough, planned according to the required standards and provide effective services so that it will provide a more efficient education (MEB, 2015). As stated in the Official Newspaper dated 31 March 2009 numbered 27305 (art. 64):

“School or institution building is constructed along with the projects approved by the Ministry of Education in relation to the needs of the settlement area, age and physical development of the students. School buildings have such places as guidance and counseling services, classrooms, information and technology classrooms, workshops, laboratories, rooms for management, rooms for equipment, art and music classrooms, resources or support training rooms, conference room, teachers' room, library and similar places. The gym, multipurpose sport hall, sports and playgrounds are organized in relation to the objectives of the school or institution. In case the buildings and their additions are sufficient, hobby areas and social activity environments are arranged and equipped with scientific and technological equipment in relation to the needs of the age we live in”.

Summary of UNICEF (2009)’s Basic Planning and Design Standards in Educational Buildings is listed below:

1. *Structure:* The buildings must be well-structured, structurally stable, weather-resistant, climate-friendly, easily evacuated in emergencies and well-integrated to environmental and cultural contexts.

2. *Hygienic areas:* A separate area with water and soap or other cleaning agents should be provided for children to wash their hands.

3. *Light, air, sun, dust, flash, reflection, moisture, noise and smell:* Classrooms need good air circulation to prevent heat and excess moisture. To ensure sufficient daylight, at least 20 percent of the classrooms’ space should be allocated to the window area. Electrical or other power supplies are required for lightening and operating the equipment. Classes should be sufficiently shaded by direct sunlight, flash (direct light) and reflection (indirect light). Schools should not be located near extreme noise sources (traffic, railways, industries, informal sector activities) or excessive pollution or odors (waste bands, slaughterhouses).

4. *Security provision:* Fire prevention and emergency evacuation plans should be part of the design process and the school program.

5. *Landscape:* School areas should be integrated with school buildings and its users, which are often neglected in traditional school planning. Trees are vital for filtering sun, dust and noise, and to make the schools beautiful places. Local trees, shrubs and flowers should be planted in the schoolyard with edible plants used to teach children food production and preservation.

6. *Flexible areas:* Flexible areas increase child participation in the classroom and allow teachers to provide a more dynamic environment for learning and teaching. Such areas provide opportunities for group activities, for

manual project areas, and easy access to open areas. Classrooms should be accessible for all children; ramps and wide doors should be provided for active children.

7. *Individual areas*: Flexible learning areas for large and small groups (project-based learning / teamwork), as well as individual learning areas should be provided.

8. *Open areas*: Easy access to open areas from classrooms allows children to be in close contact with the environment and participate in physical activities.

9. *Clinic*: Having a school on a campus and near a clinic provides students with general health care and supports the care of students who need continuous monitoring of their health.

Erden (1998: 60), listed the characteristics of the school buildings below as such: (1) School buildings should be safe, clean, well-maintained and durable. (2) The size of the school buildings should be compatible with the number of students, and there should be a garden in the school where students can relax and play sports. (3) Large indoor spaces that allow children to do sports and engage in social activities should be included in the building. (4) In addition to classrooms, there must be at least a science and a computer lab and a library in school buildings. (5) There must be sinks and toilets suitable for the number of students and health conditions within the building. (6) Classrooms should have sunlight; should be appropriate for light and health conditions and should be equipped with teaching tools and equipment. (7) Desks, chairs and sinks should be prepared in accordance with the physical qualities of the students. (8) The classrooms, managements' rooms, teacher rooms and the laboratory should be accessible to one another. The structure of the building should not interfere with personnel communication.

The school buildings designed in accordance with the innovative education approach can be determinative for the student's academic success as well as for the development of physical, emotional and mental skills. A student in the school which is transparent, accessible and able to provide students with a variety of places to study, play, rest, produce will gain an experience on the way of becoming an individual who is confident in his social life, entrepreneurial, full of exploration sense and prone to cooperation and team work.

On the other hand, as educational institutions schools regulate the educational relations between the members of the society and serve as one of the society's adaptive institutions (Başaran, 1994:11). From this point of view, it is possible to say that the effectiveness of the school will increase as teachers' commitment to their school, their jobs and the students' success (Hoy, Tarter, & Kottkamp, 1991: 106).

*Commitment* is a mental or emotional state developed for a person, group, theory or teaching (Bakırcıoğlu, 2012:77). *Organizational commitment* is expressed as the degree of personal identification and integration that an individual feels towards the organization in which he is involved (Steers, 2002: 299). Reichers (1985), in his article argues that commitment to the organization can be measured according to three criteria (Reichers, 1985; cited in Eren, 2010: 555). These criteria as follow: (1) Employees' heartfelt desire to become members of the organization, (2) A strong effort by the employee to serve the purposes and interests of the organization, (3) Employees' contribution voluntarily to the formation and maintenance of the organizational culture by adopting the aims, norms and values of the organization.

Employee commitment to the organization they work for is seen as the most important factor in achieving organizational success. In this respect, all organizations want to increase the organizational commitment of their members as organizational commitment ensures that employees are the people who solve the existing problems instead of the ones who produce problems in the organization. Therefore, if organizations want to be prosperous or to maintain their existence, they must ensure the commitment of their employees (İnce & Gül, 2005: 13, 14). Organizations work to prevent the separation of their employees from the organization to maintain its existence. In order to achieve this, they use such methods as raising wages, raising opportunities and providing incentives (Başaran, 1982: 241).

Organizational commitment reflects the degree of identification of employees with the organization. In this respect, employees' definite desire to continue their membership in the school affects the commitment of the school administrators and teachers to the school they work in, their concession and strong beliefs of the school aims as well as their desire to spend more effort than expected for the school (Randall, 1987: 461; Reichers, 1985: 468; cited in Balay, 2000: 36).

Allen and Meyer (1990: 2) argue that all organizational commitment approaches in the literature are based on three basic elements. These are *Emotional commitment*, *Perceived Cost and Obligation*. Based on these three elements Allen and Meyer assert that known as the relationship between the individual and the organization, organizational commitment stems from the concepts of (1) *affective commitment*, (2) *continuance commitment* and (3) *normative*

*commitment*. These concepts briefly explained below:

1. *Affective Commitment*: It means the identification and participation of individual with the organization (Allen and Meyer, 1990: 2). Affective commitment is also defined as an emotional connection and relationship with an organization, and participation in an organization (Meyer & Allen, 1991: 67; Meyer & Herscovitch, 2001: 307). It is the employees' commitment to the organization at the degree of they adopt values, goals and objectives of the organization they work for (Bayram, 2005: 132). An employee's affective commitment to the organization is described as psychological commitment to and identification with the organization (Fields, 2002: 44).

2. *Continuance Commitment*: It expresses the awareness of an individual about the results of the separation from an institution (Meyer & Allen, 1991: 67). Continuance commitment depends on the fact that either the cost of separation is too high or there is no alternative. In other words, the individual remains in the organization with the thought that the cost of leaving the organization will be high (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002: 21; Meyer & Allen, 1991: 71). When an individual thinks that he has a few job opportunities for him, his commitment to the organization will be higher (Allen & Meyer, 1990: 3).

3. *Normative Commitment*: It expresses the responsibility for continuing to work with an institution (Meyer & Allen, 1991: 67). Normative commitment shows employees' beliefs about their responsibility towards the organization (Çırpan, 1999: 71). An important way to create normative commitment in organizations is to make employees feel indebted to their organization. For example, when an organization makes big investments to its employees and invests on their education which ensures their developments, the employees will feel responsible and liable to the organization and will not have a desire to leave thus continue to work for long years (Özkalp & Kirel, 2013: 672).

It can be said that employees with high organizational commitment make extra efforts to fulfill their duties and achieve organizational goals as well as such employees establish positive relationships with the organization and want to maintain their membership for longer. On the other hand, the physical characteristics of the school buildings made for the adaptation of the employees of education sector to the organizational environment after the start of the profession should be adequate in all aspects as they have a vital role for supporting employees' motivation, job satisfaction and commitment to the organization as well as helping the employees accept the values, attitudes and norms of the education system.

There are so many scientific researches carried out in Turkey and abroad regarding the physical conditions of school buildings such as Gök & Gürol (2002), Dinç & Onat (2002), Aksu & Demirel (2011), Yılmaz (2012), Yenice (2013), Usta & Şimşek (2014), Kaplan (2014), Çağlayan (2014), Şensoy & Sağsöz (2015), Akbaba & Turhan (2016); in abroad Harner (1974), Cheng (1994), Lemasters (1997), Earthman (2002), Schneider (2002), Leemans (2009) and Kangas (2010). The most recent researches and related findings from these studies are as follows: Kaplan (2014) in his study named "the investigation of physical qualification of school buildings in views of teachers" concluded that physical conditions of the school buildings are inadequate, school buildings have not been designed in line with the needs of disabled individuals and children thus school buildings are inadequate to meet the needs of teachers and students. Çağlayan (2014) in her study named "school buildings and organizational climate" concluded that teachers' perceptions of physical conditions of the school buildings is in the category of "partially sufficient" and teachers' perceptions of the physical characteristics of school buildings is a significant predictor of their perception of school climate. Akbaba and Turhan (2016) in their study named "investigation of teachers' views on physical problems of primary school buildings" concluded that a significant number of teachers think that school buildings are physically insufficient. According to the findings of research carried out in Diyarbakır by Tösten and Han (2015: 1) the majority of the schools have no school gym and cleaning staff; information technology classrooms, cleaning supplies, heating level of the school, the school yard and classroom libraries are insufficient. Cheng (1994) in his study on the relationship between the physical properties of the class student performance concluded the existence of a significant relationship between perception of physical environment and student performance. Schneider (2002) in his study named "do school buildings affect academic outcomes?" concluded that school buildings have an impact on learning as well as that spatial configurations, noise, heat, cold, light and air quality have an impact on students and teachers. Leemans (2009), on the other hand, in his study of monitoring the quality of school buildings in the Flemish community of Belgium found that most school buildings meet the basic requirements of liveliness and safety, but they are often inadequate when it comes to new pedagogical and social challenges of the 21st century.

As seen in the literature no attempt has been made to investigate the association between the organizational commitments which reflect the degree of teachers' identification with the school buildings which is the context of all kinds of resources in education. At this point, this study tries to determine whether there is a significant relationship between the perceptions of the teachers working in public primary schools about the physical conditions of the

school buildings and their perceptions about organizational commitment. The results of the study is thought to contribute to the improvement of the physical conditions of the existing school buildings and construction of the new school buildings in line with the current needs as well as contributing to the managers and teachers in practice and prospective researchers conducting scientific research in the field.

### *1.1 Aim of the Research*

The aim of this study is to investigate the relationship between whether there is a significant relationship between the perceptions of the teachers in public primary schools about the physical conditions of school buildings and their perceptions on organizational commitment. For this purpose, the following questions related to study have been explored:

1. What are the perceptions of primary school teachers about the physical conditions of the school buildings they work in?
2. What are the perceptions of teachers working in primary schools about organizational commitment?
3. Is there a significant relationship between the perceptions of the teachers working in primary schools about the physical conditions of their school buildings and their perceptions about organizational commitment?

## **2. Method**

In this part of the study, the model of research, population and sample, data collection instruments and data analysis techniques are explained in detail respectively.

### *2.1 The Research Model*

This study is conducted on the basis of general survey and correlational survey designs. In “general survey design” the subject of the research is tried to be defined or investigated in its own natural context while in “correlational survey design” the existence or degree of interchange between two or more variables is investigated (Karasar, 2006: 77, 81).

### *2.2 Population and Sample*

The population of this study consists of classroom teachers working in primary schools in the city center of Diyarbakir in the 2017-2018 academic year. There are 2450 classroom teachers working in 92 primary schools in city center of Diyarbakır/ Turkey. The sample of the study was selected with via random sampling method in which all the objects in population have an equal chance to be selected at all points of the population without any possible prediction of who will be selected (Kaptan, 1991: 120). The sample of the study consisted of 534 teachers working in 27 primary schools selected randomly. Of the teachers % 48.9 were female while % 51.1 were male; % 83.5 are married and % 16.5 are single. On the other hand, % 86,0 of the teachers had bachelor's degree, % 8,6 had master degree and % 5,40 had associate degree. The sample is determined to represent the population at the rate of %21,79.

### *2.3 The Data Collection Instruments*

In this study “School Buildings Scale” developed by Çağlayan and Yılmaz (2011) and “Organizational Commitment Scale” developed by Meyer, Allen and Smith (1993) and adapted to Turkish by Dağlı, Elçiçek and Han (2017) were used in the study. The details related to instruments are explained below.

*1. School Buildings Scale (SBS):* This scale was developed by Çağlayan and Yılmaz (2011) to be used for teachers working in public schools. The scale consisted of 45 items and 4 dimensions. The first dimension called “Fields reserved for students” consists of 14 items (9, 10,11, 12, 20, 21, 22, 23, 24, 25, 31, 32, 33, 35), the second dimension called “Maintenance and safety” consists of 12 items (26, 27, 29, 30, 36, 38, 39, 40, 41, 42, 44, 45), the third dimension called “Fields for teaching” consists of 11 items (2, 3, 4, 13, 14, 15, 16, 17, 18, 34, 43) and the fourth dimension called “General view” consists of 8 items (1, 5, 6, 7, 8, 19, 28, 37). The scale is a 5 point Likert scale rated with options of (1) Completely inadequate, (2) Inadequate, (3) Partially adequate, (4) Adequate, (5) Completely adequate. When interpreting the means, mean values between 1.00-1.79 is accepted as “Completely inadequate”, mean values between 1.80-2.59 is accepted as “Inadequate”, mean values between 2.60-3.39 is accepted as “Partially adequate”, mean values between 3.40-4.19 is accepted as “Quite adequate” mean values between 4.20- 5.00 is accepted as “Completely adequate”. Cronbach Alpha reliability coefficient was determined to be .955 for the first dimension, .932 for the second dimension, .926 for the third dimension, .908 for the fourth dimension and .976 for the whole scale (Çağlayan & Yılmaz, 2011). In this study Cronbach Alpha reliability coefficients of the SBS were calculated as .930 for the “Fields reserved for students” dimension, .910 for the “Maintenance and safety”

dimension, .890 for the “Fields for teaching” dimension and .880 for “General view” dimension and .970 for the whole scale.

2. *Organizational Commitment Scale (OCS)*: This scale was developed by Meyer, Allen and Smith (1993) and adapted to Turkish by Dağlı, Elçiçek and Han (2017). This scale consists of 18 items and 3 dimensions. The first dimension called “*Affective Commitment*” consists of 6 items (1, 2, 3, 4, 5, 6), the second dimension called “*Continuance Commitment*” consists of 6 items (7, 8, 9, 10, 11, 12) and the third dimension called “*Normative Commitment*” consists of 6 items (13, 14, 15, 16, 17, 18). The scale is a 5 point Likert scale with options of (1) Strongly disagree, (2) Disagree, (3) Undecided, (4) Agree, (5) Strongly agree. When interpreting the means, mean values between 1.00-1.79 is accepted as “Strongly disagree”, mean values between 1.80-2.59 is accepted as “Disagree”, mean values between 2.60-3.39 is accepted as “Undecided”, mean values between 3.40-4.19 is accepted as “Agree” and mean values between 4.20- 5.00 is accepted as “Strongly agree”. The items numbered 3, 4, 5 and 13 are scored negatively. Cronbach Alpha reliability coefficient was determined to be .80 for the first dimension, .73 for the second dimension, .80 for the third dimension and .88 for the whole scale (Dağlı, Elçiçek, & Han, 2017).

In this study Cronbach Alpha reliability coefficients of the OCS were calculated as .81 for the “*Affective Commitment*” dimension, .75 for the “*Continuance Commitment*” dimension, .80 for the “*Normative Commitment*” dimension and .89 for the whole scale.

#### 2.4 Data Analysis

The data obtained from the study were analyzed using the SPSS 20.0 package program. First of all the data were analyzed for normality and homogeneity. Only “*Affective Commitment*” dimension of Organizational Commitment Scale did not show a normal distribution. Since the parametric tests are more powerful tests, the extreme variables (9 variables) in the “*Affective Commitment*” dimension were excluded from the data set. After then, skewness and kurtosis values were determined to be between +2 and -2 (George & Mallery, 2010) and variables under the dimension of “*Affective Commitment*” were determined to show normal distribution. Thus parametric test techniques were used for data analysis. The mean values and Spearman correlation coefficients were used in order to determine the relations between the dimensions of School Buildings Scale (SBS) and the dimensions of Organizational Commitment Scale (OCS). Correlation is a statistical process that shows the amount and direction of the relationship between two sets of data (Can, 2014: 347). The correlation coefficient is meaningful in that it gives information about the direction of relation whether it is positive or negative. The correlation coefficient is between -1 and +1. When the correlation coefficient is 0, there is no relation between the measured two data set (Taylor, 1990: 36), when the correlation coefficient approaches +1, the relationship is strengthened in positive direction and when it approaches -1, the relationship is strengthened in negative direction. When the correlation coefficient is between 0.70-1.00, it is interpreted to have high level of relationship, when correlation coefficient is between 0.70-0.30, it is interpreted to have medium level of relationship, when correlation coefficient is between 0.30-0.00, it is interpreted to have low level of relationship between two data sets (Büyüköztürk, 2010: 32).

### 3. Findings

In this part of the study answers to the following questions were investigated respectively: (1) What are the perceptions of primary school teachers about the physical conditions of the school buildings they work in? (2) What are the perceptions of teachers working in primary schools about organizational commitment? (3) Is there a significant relationship between the perceptions of the teachers working in primary schools about the physical conditions of their school buildings and their perceptions on organizational commitment?

#### 3.1 The Findings Related to Teachers' Perceptions about the Physical Conditions of Their School Buildings

The mean, standard deviation scores and levels of the teachers' perceptions about the physical conditions of the school buildings in terms of total scale and its dimensions' scores are presented in Table 1.

**Table 1.** The Findings Related to Teachers' Perceptions about the Physical Conditions of Their School Buildings

Dimensions	M	Sd	Level
Fields reserved for students	2,44	0,79	Inadequate
Maintenance and safety	3,26	0,85	Partially adequate
Fields for teaching	2,77	0,73	Partially adequate
General view	3,58	0,75	Quite adequate
Total Scale Score	2,99	1,09	Partially adequate

As seen in Table 1, it was found that the highest score of the teachers' perceptions about the physical conditions of the school buildings was obtained in dimension of "General view" (M=3,58; Partially adequate) and the lowest one was obtained in dimension of "Fields reserved for students" (M= 2,44; Inadequate). Moreover the scores of the teachers' perceptions about the physical conditions of the school buildings for the dimension of "Maintenance and safety" (M=3, 26) and for the dimension of "Fields for teaching" (M=2,77) were determined to be in the level of partially adequate. The mean of the whole scale score (M= 2, 99) was found to be in the level of partially adequate too.

### 3.2 The Findings Related to Teachers' Perceptions on Organizational Commitment

The mean and standard deviation scores and levels of the teachers' perceptions of organizational commitment in terms of total scale and its dimensions' are presented in Table 2.

**Table 2.** The Findings Related to Teachers' Perceptions on Organizational Commitment

Dimensions	M	Sd	Level
Affective Commitment	3,50	0,83	Agree
Continuance Commitment	3,14	0,79	Undecided
Normative Commitment	2,94	0,84	Undecided
Total Scale Score	3,19	0,69	Undecided

As seen in Table 2, the highest score of the teachers' perceptions of organizational commitment was obtained in dimension of "Affective Commitment" (M=3,50) and the lowest one was obtained in dimension of "Normative Commitment" (M=2,94).

### 3.3 The Findings Related to the Relationship between the Perceptions of Teachers about the Physical Conditions of School Buildings and their Perceptions on Organizational Commitment

The correlation between the total scores obtained from the two scales is presented in Table 3.

As seen in Table 3, "**Fields reserved for students**" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r=.492$ ,  $p<.01$ ), with "Continuance Commitment" dimension ( $r=.488$ ,  $p<.01$ ), with "Normative Commitment" dimension ( $r=.438$ ,  $p<.01$ ) and with the total of "Organizational Commitment Scale" ( $r=.561$ ,  $p<.01$ ). "**Maintenance and security**" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r=.504$ ,  $p<.01$ ), with "Continuance Commitment" dimension ( $r=.472$ ,  $p<.01$ ), with "Normative Commitment" dimension ( $r=.451$ ,  $p<.01$ ) and with the total of "Organizational Commitment Scale" ( $r=.565$ ,  $p<.01$ ). "**Teaching fields**" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r=.440$ ,  $p<.01$ ), with "Continuance Commitment" dimension ( $r=.454$ ,  $p<.01$ ), with "Normative Commitment" dimension ( $r=.379$ ,  $p<.01$ ) and with the total of "Organizational Commitment Scale" ( $r=.503$ ,  $p<.01$ ). "**General view**" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r=.427$ ,  $p<.01$ ), with "Continuance Commitment" dimension ( $r=.411$ ,  $p<.01$ ), with "Normative Commitment" dimension ( $r=.331$ ,  $p<.01$ ) and with the total of "Organizational Commitment Scale" ( $r=.462$ ,  $p<.01$ ).

**The total** score of the "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r=.492$ ,  $p<.01$ ), with "Continuance Commitment" dimension ( $r=.488$ ,  $p<.01$ ), with "Normative Commitment" dimension ( $r=.438$ ,  $p<.01$ ) and with the total of "Organizational Commitment Scale" ( $r=.561$ ,  $p<.01$ ). In short, a moderately positive and significant relationship was observed between the total and all dimensions of "School Buildings Scale" with the total and all dimensions of "Organizational Commitment Scale".

**Table 3.** The Findings Related to the Relationship between the Perceptions of Teachers about the Physical Conditions of their School Buildings and their Perceptions on Organizational Commitment

Dimensions		Affective Commitment	Continuance Commitment	Normative Commitment	Total Scale
Fields reserved for students	r	,492**	,488**	,438**	,561**
	p	,000	,000	,000	,000
	n	534	534	534	534
Maintenance and Security	r	,504**	,472**	,451**	,565**
	p	,000	,000	,000	,000
	n	534	534	534	534
Teaching Fields	r	,440**	,454**	,379**	,503**
	p	,000	,000	,000	,000
	n	534	534	534	534
General View	r	,427**	,411**	,331**	,462**
	p	,000	,000	,000	,000
	n	534	534	534	534
Total Scale	r	,492**	,488**	,438**	,561**
	p	,000	,000	,000	,000
	n	534	534	534	534

(\*p < .05, \*\*p < .01)

#### 4. Conclusion and Discussion

In this part of the study, the results of the research are interpreted and discussed in relation to the results of the other studies in the related literature.

In this study, “*the relationship between the perceptions of the teachers in public primary schools about the physical conditions of the school buildings and their perceptions on organizational commitment*” was examined. The mean value obtained from the teachers' perceptions of the physical conditions of the school buildings was found to be (M= 2.99) in the level of *partially adequate*. In study of Kaplan (2014) titled “Evaluation of Physical Qualifications of School Buildings in terms of Teachers' Views” found that design of school buildings does not meet the needs and approaches of the developing educational reforms, the school buildings were not designed in line with the children's needs, the buildings do not have a structure to accommodate different organizations and they cannot be restored in a way that meet the future needs thus the teachers thinks that physical characteristics of the school buildings is inadequate. “However, students spend a significant part of their time in school buildings and classrooms. Therefore, educational environments should be places where students feel comfortable and peaceful in every way. Effective teaching and learning process cannot be carried out in places where students feel uncomfortable in physical and psychological aspects (Işık, 2014: 62)”. As known, well-designed educational environments create a livable environment promoting the relationship between teachers and students. Educational environments, which are accepted as scaffolding for education, both have contributive and preventive effects on education (Cohen, Manion & Morrison, 1996: 342).

Teachers' perceptions of the physical conditions of the school buildings were found to be in the level of “inadequate” for the dimension of “*Fields Reserved for Students*” (M= 2.44). This dimension consists of items related to the green spaces in the school yard, outdoor playgrounds for students, outdoor learning areas suitable for individual learning styles, classes suitable for individual learning styles, indoor and outdoor areas for eating, fields where students can make noise and engage in physical activities, quiet environments where students can relax and think on their own, the signs in the school building and in the school yard, the safe storages for the students, the places designed for each student's personal belongings, the meeting areas with the parents and the breadth of the school yard. The research conducted in Diyarbakır by Tösten, Han and Ergül (2016: 433) found that physical conditions of school buildings do not have enough lighting; physical conditions of school buildings such as ventilation, stairwells, corridor width etc.

are insufficient. In the same way, according to the research by Dağlı and Han (2017: 112) teachers participating in the research are the most frequently encountered physical problems in the process of education such as; lack of physical (social/sportive) areas, lack of classrooms/class size, lack of course material, lack of staff, lack of cleanliness, school location/safety, school temperature/coldness and lack of internet lines.

Teachers' perceptions of the physical conditions of the school buildings were found to be in the level of "partially adequate" (M=3,26) for the dimension of "*Maintenance and Security*". This dimension consists of items related to maintenance of the facade of the school building, maintenance of the internal structure of the school building, security in the school building and the school yard, height of the staircases, width of the classroom doors, maintenance and hygiene of the toilets, classrooms and the school yard, recycling bins in the school building, the lighting in corridors and notice boards.

Teachers' perceptions of the physical conditions of the school buildings were found to be in the level of "partially adequate" (M=2,77) for the dimension of "*Teaching Fields*". This dimension consists of items related to building structure suitable for learning, facilities for the disabled, building structure designed to suit the students' developmental characteristics, art classroom (music, painting, technology and design...), science classroom, width of teachers' room, comfortable classrooms, encouraging classroom environment for learning, appropriate level of heating in classrooms, the number of toilets and sinks for teachers and the echo level in the classrooms.

Teachers' perceptions of the physical conditions of the school buildings were found to be in the level of "quite adequate" (M=3,58) for the dimension of "*General View*". This dimension consists of items related to access to the garden from the school building, entrance of natural light through the windows, the appearance of the outside through the windows, the clear visibility of the main entrance of the building, the width of the school entrance, the lightening in the classrooms, the visual appeal of the school building and the size of the windows. Çağlayan (2014) in her study found that teachers' perception of physical condition of school building is the highest with the level of "Completely adequate" in the dimension of "*General View*".

As seen from the perceptions of the teachers, except for the dimension of "*General View*", the teachers perceptions related to other dimensions of physical condition of school building are very low. However, the school building has an important role in creating a visible entity for learning in society, raising the perceived value of education and strengthening the relationship between educational institutions and local people, families and schools. School buildings can have a positive impact as a flashlight in terms of physical conditions (Scottish Funding Council, 2012: 11). In many studies, the school building is not only a source of inspiration, but also a visible symbol of learning; evoking educational expertise (Price, Clark, Holland, & Emerton, 2009: 16). Some research shows the building as a social welfare agent (Cellini, Ferreira & Rothstein, 2010: 258). In this respect, the physical structure of the school, its appearance, its use should be attractive and appropriate in terms of health conditions. Because clean, well-maintained and well-equipped schools affect not only the employees' mood but also their behavior (Johnson, 1990: 67).

As for the teachers' perceptions of organizational commitment, it was found to be in the level of "undecided" for the whole scale (M= 3,19). According to this finding, it can be argued that teachers do not have enough awareness about the problems they will face with the organization and participation in the organization, the problems they will face in the event of leaving the organization and the obligation to continue their employment with the school. On the basis of dimension, it was found that the highest mean related to organizational commitment was in "*Affective Commitment*" dimension (M= 3.50; Agree) and the lowest mean was in "*Normative Commitment*" (M= 2.94; Undecided). This finding is in line with the studies carried out by Bozkurt and Yurt (2013), Boylu, Pelit and Güçer (2007), which show that this finding is supported by the relevant literature. As a matter of fact, the related literature emphasizes respectively the importance of these dimensions in that order: firstly high *affective commitment*, then *normative commitment* and finally *continuance commitment* in employees (Brown, 2003: 41; cited in Boylu, Pelit, & Göçer, 2007: 64)".

*Affective commitment* is the identification and participation of the individual with the organization (Allen & Meyer, 1990: 67; Meyer & Herscovitch, 2001: 307). Affective commitment is the reason why employees stay in the organization as they have affective commitment and identification with the aims of the organization. Those with strong affective commitment continue to stay in the organization, not because they need it but because they want it (Balay, 2014: 27). An employee's affective commitment is shown as psychological commitment to the organization and identification with the organization (Fields, 2002: 44). Bayram (2005: 132), on the other hand, states that in affective commitment, the employee strongly accepts the values of the organization and wishes to remain as a part of the organization as a result the employee has a high level of commitment and positive attitude towards organization thus ready to make additional efforts when necessary. It can be deduced that teachers internalize the aims and values

of the organization and this increases their commitment to the organization.

Teachers' perceptions of organizational commitment were found to be in the level of "undecided" ( $M=3, 14$ ) for the dimension of "*Continuance commitment*". Hunton and Norman (2010: 72) argue that continuance commitment is related to the perception of employer about the employee's separation from an institution and employee's perception that he is away from the requirements of this situation. Based on these findings, it is concluded that teachers have not yet been sufficiently aware of the problems they will face in case of leaving the organization and teachers still cannot afford the cost of leaving the organization.

Teachers' perceptions of organizational commitment were found to be in the level of "undecided" ( $M= 2, 94$ ) for the dimension of "Normative commitment". Normative commitment refers to senses of obligation and responsibility to continue to work for an institution (Meyer & Allen, 1991: 67). Normative commitment includes a value judgment and a sense of responsibility that can be sloganized as "I must stay in this organization" (İnce & Gül, 2005: 41). Normative commitment develops when employees adopt the organization's values and support the organization's mission (Fields, 2002: 44; Khalili & Asmawi, 2012: 100). An individual believes that there is responsibility to continue working in the organization sees the working in that organization as an assignment of his own and feels that staying in the organization or showing commitment to his organization is the right behaviour. For these reasons, he feels compelled to remain in the organization and maintain its membership (Meyer & Allen, 1990: 3; Meyer & Herscovitch, 2001: 319). Based on these findings, it is concluded that teachers don't have adequate level of awareness related to obligation or responsibility to work for the schools and have not developed a value judgment and sense of responsibility sloganized as "I must stay in this school" yet.

"*Fields reserved for students*" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "*Affective Commitment*" dimension ( $r=.492, p<.01$ ), with "*Continuance Commitment*" dimension ( $r=.488, p<.01$ ), with "*Normative Commitment*" dimension ( $r=.438, p < .01$ ) and with the total of "Organizational Commitment Scale" ( $r= .561, p < .01$ ). In other words, green spaces in the schoolyard, outdoor playgrounds for students, open learning areas appropriate for individual learning styles, classes appropriate for individual learning styles, areas for eating inside the building, areas outside the building for eating, environments where students can make noise and make physical activities, the silent environments where the students are able to relax and think of themselves, signs in the school building and in the school yard, safe storage places for students, places designed for each student's personal belongings, meeting areas with parents and the width of the school yard lead to a positive relationship on organizational commitment.

"*Maintenance and Security*" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "*Affective Commitment*" dimension ( $r = .504, p < .01$ ), with "Continuance Commitment" dimension ( $r=.472, p<.01$ , with "*Normative Commitment*" dimension ( $r = .451, p < .01$ ) and with the total of "Organizational Commitment Scale" ( $r = .565, p < .01$ ). That means maintenance of the facade and internal structure of the school building, security in the school building and in the school yard, height of the staircases, width of class doors, maintenance and hygiene of the toilets, classrooms and the school yard, recycling bins at school building, the lightening in the corridors and the bulletin boards should be sufficient to lead a positive relationship on the organizational commitment.

"*Teaching Fields*" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r = .440, p < .01$ ), with "Continuance Commitment" dimension ( $r=.454,p<.01$ ), with "Normative Commitment" dimension ( $r = .379, p < .01$ ) and with the total of "Organizational Commitment Scale" ( $r = .503, p < .01$ ). In other words, the building structure suitable for learning, the opportunities for the disabled, the building structure designed to fit the physical characteristics of the students, art classroom (music, painting, technology and design...), science classroom, width of teachers' room, comfortable classrooms, encouraging classroom environment for learning, appropriate level of heating in classrooms, the number of toilets and sinks for teachers and the echo level in the classrooms lead to a positive relationship on organizational commitment.

"*General View*" dimension of "School Buildings Scale" was determined to have a positive moderate relationship with "*Affective Commitment*" dimension ( $r = .427, p < .01$ ), with "Continuance Commitment" dimension ( $r = .411, p < .01$ ), with "*Normative Commitment*" dimension ( $r = .331, p < .01$ ) and with the total of "Organizational Commitment Scale" ( $r=.462, p<.01$ ). That means the accessibility to the garden from the school building, the entrance of natural light through the windows, the appearance of the outside through the windows, the clear visibility of the main entrance of the building, the width of the school entrance, the lightening in the classrooms, the visual appeal of the school building and the size of the windows lead to a positive relationship on organizational

commitment.

As for the total score of the "School Buildings Scale" was determined to have a positive moderate relationship with "Affective Commitment" dimension ( $r = .492, p < .01$ ), with "Continuance Commitment" dimension ( $r = .488, p < .01$ ), with "Normative Commitment" dimension ( $r = .438, p < .01$ ) and with the total of "Organizational Commitment Scale" ( $r = .561, p < .01$ ). In short, a moderately positive and significant relationship was observed between the total and all dimensions of "School Buildings Scale" with the total and all dimensions of "Organizational Commitment Scale". This shows the fact that as the physical conditions of school buildings improve, the organizational commitment of teachers increase.

Teachers are much more affected from the physical environment than they realize. Malcom Seabourne, the historian of the school building in England, stated that the building was the teaching method (Grosvenor et al, 1999; cited in Sanoff, Pasalar, & Hashas, 2001: 28). The physical places, in which a large part of the teacher-student life takes place must contain a number of characteristics like being functional, awakening feeling of intensity in student, have the flexibility to serve different purposes and have an aesthetic value (Uludağ & Odacı, 2002). As Becher (1993: 37-41) states every variable in the physical environment supports or prevents education. Not only are those who exist in the environment, but also the arrangement and appearance (aesthetics) also educationally impressive. If the school buildings are designed in such a way that they can provide a good and productive education, people enjoy and feel safe; teachers' commitment to the organization will increase too. Employees who have a high level of organizational commitment are inclined to make extra efforts to fulfill their duties and reach organizational targets thus such employees establish positive relations with the organization and maintain their membership for longer

## 5. Suggestions

Some suggestions for practitioners and researchers have been mentioned below:

### 5.1 Suggestions for Practitioners

1. In the study, the teachers' perceptions of physical conditions of school buildings was found to be in the level of partially adequate. In order to raise this perception to completely adequate level, some efforts should be made like allocating funds from the general budget. In this way, teachers' professional and organizational demands should be taken into consideration and the physical conditions of school buildings should be improved in line with these expectations.
2. In the study, it was found that when the physical conditions of the school buildings improve, the teacher commitment to organization increase accordingly. If so the school buildings are designed in such a way as to provide a good teaching and comfort and safety to people, the teachers' commitment to their school will also increase. Moreover, quiet and silent places should be preferred for school campuses.
3. In the design of school buildings an interdisciplinary approach should be followed and participation of many stakeholders, such as architects, senior education managers, school administrators, environmental scientists, teachers and students should be ensured.
4. Teachers' perceptions of organizational commitment were found to be in the level of *Undecided*. This finding shows that teachers do not sufficiently aware about the importance of participation in the organization, the problems they face in case of leaving the organization and the sense of responsibility and obligation to continue their employment with the school. For this purpose, teachers should be informed about such issues as reducing work stress, creating an appropriate learning climate, participating in strategic decisions and creating learning opportunities via in-service training from time to time.

### 5.2 Suggestions for Researchers

1. Related studies can be carried out in other schools type.
2. Related studies can be carried out by using qualitative research methods.
3. The effect of physical conditions of school buildings on student achievement can be investigated.
4. Related studies can be carried out by comparing public and private schools.
5. Related studies can be carried out based on the opinions of school administrators.

## Acknowledgements

This study has been produced from the master thesis of Gülsen GENÇDAL whose supervisor is Assoc. Prof. Dr. Abidin DAĞLI.

## References

- Akbaba, A., & Turhan, M. (2016). İlköğretim okul binalarının fiziksel sorunlarına ilişkin öğretmen görüşlerinin incelenmesi (Van ili örneği). *KTÜ Sosyal Bilimler Enstitüsü Dergisi*, 12, 341-357.
- Aksu, Ö., & Demirel, Ö. (2011). Trabzon kenti ilköğretim okul bahçelerinde tasarım ve alan kullanımları. *SDÜ Orman Fakültesi Dergisi*, 12, 40-46.
- Allen, N.J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational and Organizational Psychology*, 63(1), 1-18. <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Atabay, S. (2014). Mekan ve mimarinin eğitimde başarıya etkisi. *Eğitim yapıları. Vitra çağdaş mimarlık dizisi* (Editörler: Banu Binat, Neslihan Şık). İstanbul: A4 Ofset Matbaacılık.
- Bakırcıoğlu, R. (2012). *Eğitim ve psikoloji sözlüğü*. Ankara: Anı Yayıncılık.
- Balay, R. (2000). *Özel ve resmi liselerde yönetici ve öğretmenlerin örgütsel bağlılığı: Ankara ili örneği* (Yayınlanmamış doktora tezi). Ankara Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- Balay, R. (2014). *Yönetici ve öğretmenlerde örgütsel bağlılık*. Ankara: Pegem Akademi.
- Başar, M. A. (2000). İlköğretim okullarının işgören ve fiziki olanakları. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 8(8), 134-140.
- Başaran, İ. E. (1982). *Örgütsel davranış*. Ankara Üniversitesi Eğitim Fakültesi Yayınları.
- Başaran, İ. E. (1989). *Eğitime giriş*. Ankara: Sevinç Matbaası.
- Başaran, İ. E. (1994). *Türkiye eğitim sistemi*. Ankara: Sevinç Matbaası.
- Bayram, L. (2005). Yönetimde yeni bir paradigma: Örgütsel bağlılık. *Sayıştay Dergisi*, 59, 125-139.
- Becher, R. (1993). The Aesthetic Classroom environment and student attitude toward school. *Dissertation Abstracts International*, 53(9), 37-41.
- Blyth, A., Almeida, R., Forrester, D., Gorey, A., & Hostens, G.. (2012). *Modernising secondary school buildings in portugal*. Paris OECD Publishing.
- Boylu, Y., Pelit, E., & Güçer, E. (2007). Akademisyenlerin örgütsel bağlılıkları üzerine bir araştırma. *Finans Politik ve Ekonomik Yorumlar*, 44(511), 55-74.
- Bozkurt, Ö., & Yurt, İ. (2013). Akademisyenlerin örgütsel bağlılık düzeylerini belirlemeye yönelik bir araştırma. *Yönetim Bilimleri Dergisi*, 11(22), 121-139.
- Bursalıoğlu, Z. (2015). *Okul yönetiminde yeni yapı ve davranış*. Ankara: Pegem A Yayıncılık.
- Büyüköztürk, Ş. (2010). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem Akademi Yayınları.
- Can, A. (2014). *SPSS ile bilimsel araştırma sürecinde nicel veri analizi*. Ankara: Pegem Akademi.
- Cellini, S., Ferreira, F., & Rothstein, J. (2010). The value of school facility investments: evidence from a dynamic regression discontinuity design. *The Quarterly Journal of Economics*, 125(1), 215-261. <https://doi.org/10.1162/qjec.2010.125.1.215>
- Cheng, Y. C. (1994). Classroom environment and student affective performance: An effective profile. *Journal of Experimental Education*, 62(3), 221-239. <https://doi.org/10.1080/00220973.1994.9943842>
- Cohen, L., Manion, L., & Morrison, K. (1996). *A guide to teaching practice*. (4th ed.). London: Routledge.
- Çağlayan, E. (2014). *Okul binaları ve örgüt iklimi* (Yayınlanmamış doktora tezi). Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.
- Çağlayan, E., & Yılmaz, E. (2011). *Okul Binası Değerlendirme Ölçeği Geçerlik ve Güvenirlik Çalışması. Yayınlanmamış Araştırma Raporu*. İzmir: Dokuz Eylül Üniversitesi.
- Çırpan, H. (1999). *Örgütsel öğrenme iklimi ve örgüte bağlılık ilişkisi: Bir alan araştırması* (Yayınlanmamış doktora

- tezi). İstanbul: İstanbul Üniversitesi Sosyal Bilimler Enstitüsü.
- Dağlı, A., Elçiçek, Z., & Han, B. (2017). Örgütsel bağlılık ölçeği'nin Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışması. *12. Uluslararası Eğitim Yönetimi Kongresi, The 12th International Congress on Educational Administration*, 11-13 May 2017, Ankara.
- Dağlı, A., & Han, B. (2017). Öğretmen görüşlerine göre Diyarbakir ili eğitim sorunları ve çözüm önerileri. *Electronic Journal of Education Sciences*, 6(12), 108-124.
- Dinç, P., & Onat, E. (2002). Bir ilköğretim yapısının bina programı ve tasarımı bağlamında değerlendirilmesi. *Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi*, 17(3), 35-55.
- Earthman, G. I. (2002). *School facility conditions and student academic achievement*. Virginia. Polytechnic Institute and State University. Retrieved from [https://nctaf.org/wp-content/uploads/ucla\\_2002\\_article.pdf](https://nctaf.org/wp-content/uploads/ucla_2002_article.pdf) Erişim Tarih: 28.05.2018.
- Erden, M. (1998). *Öğretmenlik mesleğine giriş*. İstanbul: Alkım Yayınları.
- Eren, E. (2010). *Örgütsel davranış ve yönetim psikolojisi*. Beta Basım Yayım Dağıtım A.Ş. İstanbul.
- Erman, O., & Ayalp-Gümüşburun, G. (2012). Okul yapılarında mimari karakterin rolü. *Güney Mimarlık Dergisi*, 9, 23-28.
- Fields, D. L. (2002). *Taking the measure of work: A guide to validated scales for organizational research and diagnosis*. Sage publications. <https://doi.org/10.4135/9781452231143>
- George, D., & Mallery, M. (2010). *SPSS for windows step by step: A Simple guide and reference, 17.0 update (10 e.)* Boston: Pearson Education India.
- Gök H., & Gürol M. (2002). Zaman ve ergonomik açıdan ilköğretim okul binalarının kullanım durumu (Elazığ ili örneği). *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 12(2), 263-273.
- Harner, D. P. (1974). Effects of thermal environment on learning skills. *CEFP Journal*, 12(2), 4-6.
- Hathaway, W. E. (1988). Educational facilities. Designing to enhance learning and human performance. *Education Canada, Winter / Hiver*, 28(4), 28-35.
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools/healthy schools: Measuring organizational climate*. Newbury Park: SAGE Publications.
- Hunton, J. E., & Norman, C. (2010). The impact of alternative telework: Insights from a longitudinal field experiment. *Journal of Information Systems*, 24(1), 67-90. <https://doi.org/10.2308/jis.2010.24.1.67>
- Işık, H. (2014). Öğrenme ortamlarının fiziksel düzeni. *Sınıf yönetimi* (Editörler: Mehmet Şişman ve Selahattin Turan). Ankara: Pegem Akademi.
- İnce, M., & Gül, H. (2005). *Yönetimde yeni bir paradigma: Örgütsel bağlılık*. Konya: Çizgi Kitabevi.
- Johnson, S. M. (1990). *Teachers at work. Achieving success in our schools*. Basic Book Inc. New York.
- Kangas, M. (2010). Finnish children's views on the ideal school and learning environment. *Learning Environment Research*, 13(3), 205-223. <https://doi.org/10.1007/s10984-010-9075-6>
- Kaplan, C. (2014). *Okul binalarının fiziksel yeterliğinin öğretmen görüşlerine göre değerlendirilmesi*. (Yayınlanmamış yüksek lisans tezi). Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü, Hatay.
- Kaptan, S. (1991). *Bilimsel araştırma ve istatistik teknikleri*. Ankara: Rehber yayınevi.
- Karasar, N. (2006). *Bilimsel araştırma yöntemi*. Ankara: Nobel Akademi Yayıncılık.
- Khalili, A., & Asmawi, A. (2012). Appraising the impact of gender differences on organizational commitment: Empirical evidence from a private sme in Iran. *International Journal of Business and Management*, 7(4), 100-110. <https://doi.org/10.5539/ijbm.v7n5p100>
- Leemans, G. (2009). Monitoring the quality of school buildings in belgium's flemish community, *CELE Exchange, Centre for Effective Learning Environments*, 2009/08, OECD Publishing, Paris. <http://dx.doi.org/10.1787/220808504374>
- Lemasters, L. K. (1997). Asynthesis of studies pertaining to facilities, student achievement, and student behavior (Doctoral dissertation Virginia Tech). Retrieved 28.05.2018 from <https://vtechworks.lib.vt.edu/handle/10919/29503>

- Lyons, J. B. (2001). Do school facilities really impact a child's education. Retrieved 23.09. 2017 from <https://files.eric.ed.gov/fulltext/ED458791.pdf>
- MEB.(2015). *Eğitim Yapıları Asgari Tasarım Standartları Kılavuzu* Retrieved from [https://iedb.meb.gov.tr/meb\\_iys\\_dosyalar/2015\\_08/17032245\\_2015asgaritasarmklavuzu.pdf](https://iedb.meb.gov.tr/meb_iys_dosyalar/2015_08/17032245_2015asgaritasarmklavuzu.pdf) (Erişim Tarihi: 28.05.2017).
- Meyer, J. P., & Allen, N. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*, 61-89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*, 538-551. <https://doi.org/10.1037//0021-9010.78.4.538>
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review, 11*, 299-326. [https://doi.org/10.1016/S1053-4822\(00\)00053-X](https://doi.org/10.1016/S1053-4822(00)00053-X)
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*, 20-52. <https://doi.org/10.1006/jvbe.2001.1842>
- Özkalp, E., & Kirel, Ç. (2013). *Örgütsel davranış*. Ekin Basım Yayın Dağıtım. Bursa.
- Price, I., Clark, E., Holland, M., & Emerton, C. (2009). *Condition Matters: pupil voices on the design and condition of secondary schools*. Berkshire: Sheffield Hallam University. CfBT Education Trust.
- Resmi Gazete. (2009). "Millî Eğitim Bakanlığı ortaöğretim kurumları yönetmeliği". Sayı.27305. Retrieved from <https://www.otizmvakfi.org.tr/milli-egitim-bakanligi-ortaogretim-kurumlari-yonetmeliği> (Erişim Tarihi: 28. 05. 2018.)
- Sanoff, H., Clean-Pasalar, AIA & Hashas, M. (2001). *School building assessment methods*. Retrieved from <http://www.ncef.org/pubs/sanoffassess.pdf> (Erişim Tarihi:28.05.2018.)
- Schnedier, M. (2002). Do school facilities affect academic outcomes? *National Clearinghouse for Educational Facilities*. Washington, DC. Retrieved from <https://files.eric.ed.gov/fulltext/ED470979.pdf> (Erişim Tarihi: 28.05. 2018.)
- Scottish Funding Council (2012). *Matching post-16 estate investment to educational outcomes* Retrieved from <https://www.ncl.ac.uk/media/wwwnclacuk/cflat/files/matching-post-16-estate-investment.pdf> (Erişim Tarihi: 28.05.2018.)
- Steers, R. M. (2002). Antecedents and outcomes of organizational commitment. C. R. COOPER (Ed.) *Fundamentals of organizational behavior: Sage Publications*, 299-309. London.
- Şensoy, S. A., & Sağsöz, A. (2015). Öğrenci başarısının sınıfların fiziksel koşulları ile ilişkisi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD), 16*(3), 87-104.
- Taylor, R. (1990). Interpretation of the correlation coefficient: A Basic review. *Journal of Diagnostic Medical Sonography, 6*, 35-39. <https://doi.org/10.1177/875647939000600106>
- Taymaz, H. (1989). *Okul yönetimi*. Ankara: Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları.
- Tösten, R., & Han, B. (2015). Okul profili çalışması: Diyarbakır ili örneği. *Siirt Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 4*, 93-106.
- Tösten, R., Han, B., & Ergül, H. F. (2016). Diyarbakır'daki kamu okullarının yönetim sorunları. *EKEV Akademi Dergisi, 20*(65), 433-450. <https://doi.org/10.17753/Ekev560>
- Uludağ, Z., & Odacı, H. (2002). Eğitim öğretim faaliyetlerinde fiziksel mekan. *Millî Eğitim Dergisi, (153/ 154)*.
- UNICEF, (2009). Chapter 3 location, design and construction. *Manual child friendly schools*. United Nations Children's Fund (UNICEF). Retrieved from [https://www.unicef.org/publications/files/Child\\_Friendly\\_Schools\\_Manual\\_EN\\_040809.pdf](https://www.unicef.org/publications/files/Child_Friendly_Schools_Manual_EN_040809.pdf) (Erişim Tarihi: 28.05.2018.)
- Usta, H. G., & Şimşek, A. S. (2014). Okul büyüklüğü ile öğrenci başarısı arasındaki ilişkide okul özelliklerinin aracılık etkisi: PISA 2012 Türkiye. Retrieved from <https://www.researchgate.net/publication/269988139> (Erişim Tarihi: 28.05. 2018.)

- Yenice, M. S. (2013). İlköğretim okulları için mekânsal yeterlilik analizi (Burdur örneği). *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education)*, 28(3), 430-439.
- Yılmaz, M. (2009). *Okul yapıları. Eğitim hakkı eğitimde haklar uluslararası insan hakları belgeleri ışığında ulusal mevzuatın değerlendirilmesi* (Derleyen: Işık Tüzün). İstanbul: Yelken Basım. Retrieved from <http://www.egitimreformugirisimi.org/wp-content/uploads/2017/03/Egitim-Hakk%C4%B1-ve-E%C4%9Fitimd-e-Haklar.pdf> (Erişim Tarihi: 28.05. 2018.)
- Yılmaz, A. (2012). İlköğretim okullarının fiziksel yapılarının eğitim ve öğretim açısından değerlendirilmesi. *Balikesir University The Journal of Social Sciences Institute*, 15(28), 77-107.