



## Factors Affecting Students' Academic Achievement according to the Teachers' Opinion

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Submitted: September 16, 2020; Accepted: June 17, 2021; Published Online: June 30, 2021

### Abstract

The aim of this research is to reveal the ideas of teachers serving in high schools regarding the factors that affect students' academic achievement. For this purpose, the aim is to investigate and reveal in depth the thoughts of teachers serving in high schools. The research was designed with the case study type of qualitative research method. The study group of this research consists of 11 female, 9 male branch teachers employed in high schools. The participants' professional experience ranged from 1 to 13 years. The participant group consisted of 5 Turkish language and literature teachers, 5 mathematics teachers, 3 English teachers, 2 history teachers, 1 biology teacher, 1 information technology teacher, 1 chemistry teacher, 1 physics teacher and 1 physical education teacher. The study group was determined with the criterion sampling type of purposive sampling method. The criteria determined for this research were that teachers should be working in high schools, be branch teachers and be serving in schools in the province and district. According to the research findings family education level effects students' academic success in terms of academic support, being a role model, concern, intellectual and motivation dimensions; school's physical conditions effects students' academic success in terms of learning, motivation and creativity; School Management effects students' academic success in terms of operation and attitude. School Environment effects students' academic success in terms of motivation, social effects and socio-economic effects. Teacher effects students' academic success in terms professional competence, being a role model, communication, attitude, motivation and guidance.

**Keywords:** Teacher, High School, Student, Academic Achievement

### Introduction

The student, who is one of the basic elements of the education system, has from past to present been regarded as the future of society, and in this sense, has been included in a continuous development process. Nations follow the global development process and attempt to foster knowledge, skills, behaviour, competence and ideas in line with this development. For this purpose, education systems aim for students to integrate with the world and speak the same language, attain success, acquire a profession, contribute to the nation, gain the habit of lifelong learning and most important of all, acquire 21st century skills. For countries to be able to realise these aims, it is expected that the factors of the family, the school's physical conditions, the school administration, the school environment and the teacher, which

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are among the characteristics of efficient schools (Sisman & Turan, 2005), will be continually updated and changed. As well as the realisation of these changes, it is essential that academic achievement, which is one of the basic aims of education institutions, should be enabled.

It is a fact that the student's academic achievement, which is one of the most basic and indispensable aims of education institutions, is also an expectation of society. Therefore, when education systems are setting their goals and objectives, they take academic achievement into consideration alongside a number of competences. Achievement is progress made towards attaining one's goals (Wolman, 1973). In other words, achievement can be expressed as progress made towards attaining the goals determined by individuals or institutions. In terms of the student, achievement means reaching the objectives framed in the curriculum (Kazazoglu, 2013). In education institutions, however, the aim of this achievement is to improve and advance academically. Academic achievement is the knowledge, skills, success and development instilled in students by the teacher in schools (Carter & Good, 1973). Academic achievement involves the student's changes in behaviour in all curriculum domains other than behaviours in the psychomotor and affective domains (Ahmann & Glock, 1975). In order to enable academic achievement, it is expected that students will successfully carry out the tasks given to them, display a perfectionist approach, show resistance in the face of obstacles and develop strategies for overcoming difficulties that they face (Cox, 1990). Among the important factors affecting students' academic achievement are the economic conditions they find themselves in, their habits for studying and for doing homework, their time management skills, their health conditions and their relationships within the family (Munoz & Portez, 2001). When the studies in the literature are examined, it can be said that academic achievement is among the indispensable goals of the education system and that the attainment of these goals plays an important role in the development of society and the increase of levels of welfare. The family, which is the main building block for the existence of society and for maintaining that existence, is equally important for the education system. An individual receives his/her first education in the family. Therefore, the family is the first teacher of the individual (Celik, 2003). The education level that the family possesses can have an impact on the student's way of thinking, viewpoint, belief in democracy and academic achievement. The family fosters love, responsibility, social roles, decision-making and use of creativity behaviours in the individual (Dil & Bulantekin, 2011). Family participation, participation in children's activities carried out at home, and more productive and better-quality family communication contribute towards shaping the child's future (Suh-Ruu & Reynolds, 2005). The attitude of the family towards school plays an important role in the maturation of the students' emotions and behaviours, and the recognition, orientation and skills development of the student (Argon & Kiyici, 2012). The family's behaviour, attitude and approach towards the child are factors that affect the development of the child's personality (Kaya, Bozaslan & Genc, 2012). When parental attitudes towards the individual are examined, it is seen that these attitudes are listed as authoritarian, apathetic/indifferent, liberal, unbalanced/indecisive, overprotective, perfectionist, tolerant, reassuring and democratic (Yavuzer, 1997). The most important factor that distinguishes students with low academic achievement and having to repeat the class from other students is little or complete absence of family support and concern (Diaz, 1989). It is to be expected that individuals raised in a family environment in which the family shows concern, approaches problems equably, prepares the study environment, makes plans and believes in success, will be more successful academically (Satir, 1996). Children with an expectation for academic achievement will expect their families to show an interest in the school and themselves and to give them affective support (Aslanargun, Bozkurt & Sarioglu, 2016). The family's participation in school and cooperation with teachers contributes to students' social, emotional and behavioural development, their academic competences, and their socialisation (Christenson & Sheridan, 2001). When the conducted studies are examined, it is seen that just as it does in all aspects, the family also has an important effect on the child in an academic sense from the early years onwards, and that children of families who are in communication with school, who improve themselves, and who are educated and follow the education system closely, are more successful than children of other families.

Nowadays, school no longer consists merely of classrooms, a teachers' room and an administrative unit. It is inevitable that for education to be provided at a proficient level, the school should have a multifaceted structure. When considered in terms of the student's development and academic achievement, the school can be regarded as being an effective factor in many respects and in this regard, the physical conditions of the school can be thought to contribute to the student's academic achievement. The school's physical conditions can be listed as the classroom structure and equipment, library, outdoor and indoor sports areas, conference hall, exhibition hall, science laboratories, map room, foreign language classroom, science and technology classroom, and study centre. The school's physical conditions and infrastructure can be listed as the appearance, equipment and safety features of the school building, area surrounding the school, sports hall, library, attention to hygiene conditions and cleanliness, staff's attention to their appearance, and school's green areas (Nartgun & Kaya, 2016). The school's physical conditions and infrastructure, practicability, favourable hygiene conditions, attractiveness, planning suited to education, and orientation of the student for school are important factors in the student's academic achievement and development (Basar, 1994). The adequacy of the physical conditions that make up the school, such as the sports hall, information technology facilities, location, library and media facilities, hygiene, and schoolyard are among the factors that play an important role in the student's academic achievement. The design of educational institutions in such a way as to attract children's attention and interest, a building image that stimulates interest and desire in children, and a school environment that evokes the home environment that children are familiar with will enable them to display a positive attitude towards school (Baran, Yilmaz & Yildirim, 2007). It is known that principal among the physical conditions of the school are the student's seating and study areas within the classroom, the equipment and materials used, the course books and the board, and that these have an impact on academic achievement (Glewwe, Hanushek, Humpage & Ravina, 2011). The ideal physical conditions of the school should be suitable for the continuance of teaching and learning, the students' development levels, transport, the number of students attending the school, and protection from disasters and other hazards (İsik, 2004). Within the school's physical conditions, the colours of the equipment, number of students, heating, lighting, hygiene, appearance and acoustics play an important part in enabling the student's adaptation to the school and classroom (Basar, 2001). It is undeniable that for achieving academic success at school, for generating high-quality outcomes and for the student to be able to spend time in the school environment, the school should possess areas like classrooms, laboratories, a library, sports hall, workshop and lecture theatre that are equipped with education technologies (Sammons et al. 1998). When the conducted studies are examined, it is seen that adequate physical conditions at the school are an important factor in ensuring the student's adaptation to and acceptance of school and his/her desire to spend time there, and that this situation is reflected in his/her academic achievement.

The school administration, management structure and managers, who have particular importance among the main building blocks of the school, are among the significant factors for enabling academic achievement. School principals who have leadership skills and a broad worldview can enable objectives to be achieved in an academic sense, just as they can in every aspect, at the school where they are managers. School principals who are mentors are people-oriented, are at peace with themselves and other people, are tolerant towards errors, place value on the institution where they work and increase its performance, believe in themselves, are highly confident, successfully direct those around them, are sensitive and respectful towards the needs of staff, are flexible and creative, share their knowledge, have strong communication skills, have a positive attitude towards the institution, have professional experience, respect others' opinions and differences of opinion, and are willing to spend their time and energy on the school (Aydin, 2008; Stueart & Sullivan, 2010). A strong school leader defines the priority issues in teaching and learning, devotes himself to the school's goals and objectives, creates resources to enable these goals and objectives to be achieved and uses these resources in line with the aims, creates a positive climate aimed at the expectation of academic achievement and other activities within the school, has strong communication skills, participates in in-service training activities, motivates the staff towards innovation, organises activities aimed at increasing academic achievement, instils vision in the school,

makes decisions together with the other stakeholders, gives importance to teacher development, and establishes order and discipline in the functioning of the school (Smith & Andrews, 1989). When the executive characteristics of school managers are examined, it is inevitable that in a school where the managers have these characteristics or put them into practice, the students' levels of academic success will also be high.

Another factor that has an important effect on the academic success of the school is the school environment. The school environment expresses families' socio-economic and socio-cultural values, their perspective on education, and the meaning and importance of the school in terms of society. Furthermore, the environment where the school is located can be expressed as transport facilities and activities that reinforce or inhibit teaching and learning. Important environmental factors can be listed as adequacy of the infrastructure of the area served, housing and heating, activities for personal development, facilities for social activities, transport and safety, access to healthcare services, and hygiene training (Ozdemir, et al., 2015). A safe and organised environment and school-family cooperation are among effective school characteristics (Lezotte, 1992). Anxiety, achievement motivation, the family's social and economic level, the school and education conditions, environmental factors, and nutrition and health conditions all have an impact on the student's academic achievement (Ozguven, 1998).

Another factor that can have a significant effect on the student's academic achievement and is located at the centre of the education system is the teacher. The teacher can be described as a building block that contributes to the student's cognitive, affective and behavioural development, provides careers, raises compatible individuals for society, fosters thinking styles, perspectives on life and a broad worldview, and shapes the society of the future. The teacher's sympathetic approach, warm-hearted behaviours, and tolerance towards errors made have a positive effect on relations between teacher and student (Sadik, 2002). In the development of students' academic achievements, teachers display behaviours aimed at enabling students to grasp the subject of the lesson and reinforcing it with exercises, applying the correct assessment methods, using time efficiently, keeping students active in class, and enabling them to generate ideas (Can, 2004). In efficient schools, teachers behave in a planned and disciplined way, target the academic success of the school and students, have sufficient knowledge in their field, consolidate students' positive behaviours, move on to the next stage for education to be provided in full, work in cooperation with students, and provide students with suitable feedback (Smith, 1994). Efficient teachers' preparation of the classroom for teaching, and setting and imposing the class rules together with the students, enables retention of learning and allows students to display learning behaviours (Agaoglu, 2002). An effective teacher trusts students and accepts them as they are, gives priority to students' achievements, appreciates them, stimulates interest towards the lesson in students, rewards them, prepares the classroom for education, is tolerant and flexible, makes the right decisions, and accepts and respects individual differences (Dilekman, 2008). Teachers who are successful in their profession are patient and controlled, respect differences, are open to development and criticism, stimulate students, display role model behaviours, establish discipline in class, have leadership characteristics, encourage and support students, are affectionate, witty and sincere, find solutions to problems, monitor homework and facilitate learning (Celikten, Sanal & Yeni, 2005). When the characteristics of an effective teacher are examined, it is seen that when a teacher has these qualities, academic success can be enabled in the student.

Education systems are in constant change and development around the world. Countries following this change and development achieve success in education as well as in many other fields. Until the last century, the industrial society was dependent on steam machines and was not in search of information, but when the changes and developments with the 21st century are examined, it is seen that the societies that have made the transition to the information society have achieved development in science and technique, reached and used information (Sonmez, 2008). In parallel with the changes and developments experienced in education, considering the educational programs of successful countries,

MoNE prepared its programs in a student-centered progressive, constructivist and collaborative manner, giving importance to individual differences and with a modern understanding (Arslan, 2005). The main purpose of today's education is to raise individuals with 21st century competencies. In this context, it aims to raise individuals who are open to success and learning, self-confident and responsible individuals who add value to the society (Collwill & Gallagher, 2007).

There are a number of goals that education systems aim to be achieve today. These goals can be listed nowadays as 21st century skills. Academic achievement, which is included in these skills and has special importance among them, has been the subject of many scientific studies and has been researched from many different aspects.

In this context, the aim of this study is to examine the factors that affect high school students' academic achievement according to the views of teachers. For this purpose, the following questions were addressed to the participants:

1. What are the effects of the family's education level on students' academic achievement?
2. What are the effects of the school's physical conditions (library, laboratory, smart board, sports hall, etc.) on students' academic achievement?
3. What are the effects of the school management on students' academic achievement?
4. What are the effects of the school environment on students' academic achievement?
5. What are the effects of the teacher on students' academic achievement?

## Research Method

### Design

The aim of this research is to reveal the ideas of teachers serving in high schools regarding the factors that affect students' academic achievement. The research was designed with the case study type of qualitative research method. Qualitative studies are research methods in which data collection techniques such as document analysis are used to reveal perceptions and events holistically in a natural environment (Yidirim & Simsek, 2013). The case study is a research approach which makes it possible to describe and examine in depth a case or event that occurs within a specific period of time using data collection tools such as observation and interviews (Creswell, 2013). The case that is the subject of this research consists of factors that affect high school students' academic achievement. For this purpose, the aim is to investigate and reveal in depth the thoughts of teachers serving in high schools.

### Participants

The study group of this research consists of 20 branch teachers employed in high schools. The study group was determined with the criterion sampling type of purposive sampling method. The criteria determined for this research were that teachers should be working in high schools, be branch teachers and be serving in schools in the province and district. Purposive sampling is a method of forming the sample from which the researcher considers collecting the data needed within the scope of the research (Fraenkel, Wallen & Hyun, 2012). Criterion sampling consists of working with participants who meet the criteria determined within the scope of the research (Buyukozturk, Kilic Cakmak, Akgun, Karadeniz & Demirel, 2015). This study was conducted with participants who met the required criteria. Within this scope, criteria were sought from the participants to the effect that they should be working in a state high school, be a branch teacher and be serving in schools located in the province or district. A total of 20 participants (11 female, 9 male) were included in the research. The participants' professional experience ranged from 1 to 13 years. The participant group consisted of 5 Turkish language and literature teachers, 5 mathematics teachers, 3 English teachers, 2 history teachers, 1 biology teacher, 1 information technology

teacher, 1 chemistry teacher, 1 physics teacher and 1 physical education teacher. The teachers who were included in the study agreed to share their views on the factors affecting students' academic achievement on a voluntary basis. The participants were informed that their views would not be used anywhere outside the research or for inappropriate purposes.

Table 1. Demographic characteristics of participants

Participants Code	Gender	Branch	Professional Experience	Education Level	Working Area
P-1	Female	Information Technologies	5	Undergraduate	Town
P-2	Male	Mathematics	8	Undergraduate	City
P-3	Female	English	13	Undergraduate	Town
P-4	Female	English	5	Undergraduate	City
P-5	Female	Turkish Language and Literature	11	Postgraduate	Town
P-6	Female	Mathematics	7	Undergraduate	City
P-7	Male	History	9	Undergraduate	Town
P-8	Male	Mathematics	8	Undergraduate	Town
P-9	Male	Chemistry	12	Postgraduate	Town
P-10	Female	Physics	13	Undergraduate	Town
P-11	Female	Turkish Language and Literature	12	Postgraduate	Town
P-12	Female	Turkish Language and Literature	11	Postgraduate	Town
P-13	Female	English	1	Undergraduate	Town
P-14	Male	Turkish Language and Literature	9	Undergraduate	City
P-15	Male	Mathematics	8	Undergraduate	City
P-16	Female	Turkish Language and Literature	9	Undergraduate	City
P-17	Male	History	12	Undergraduate	Town
P-18	Female	Biology	4	Undergraduate	Town
P-19	Male	Physical Education	6	Undergraduate	Town
P-20	Male	Mathematics	13	Undergraduate	City

### Instruments

The research data were gathered by means of interviews conducted with telecommunications devices from branch teachers working in high schools during the 2019-2020 academic year. The aim of the interview method is to obtain participants' opinions related to the aim of the research systematically by means of interview questions and additional questions addressed to participants during the interview process (Rasmussen & Yikmis, 2020). The data collection tool used for the interview was a semi-structured interview form made up of two parts. The first part of the form includes demographic information related to participants' gender, branch, professional experience, education level and area

where they worked. In the second part, questions aimed at revealing participants' views on students' academic achievement are included. A pilot study was carried out with 3 participants using a draft form that was prepared. As a result of the pilot study, the draft form was revised and the views of 3 experts were sought for their evaluation of the form in terms of language and wording. Following the assessment of the form according to the experts, the draft form was given its final shape and the implementation stage was begun. 20 high school teachers employed in state schools affiliated to the Ministry of National Education took part voluntarily in the study.

### **Data collection procedures**

The interviews were carried out with telecommunications devices. To enable the interviews to be conducted, the teachers were contacted and given information about the aim of the research, and interviews were held by specifying a suitable time period with the teachers who agreed to take part in the interviews. Prior to the interviews, conversations were held with the participants and detailed explanations related to the interviews were given. Each interview lasted between 25 and 45 minutes. During the interviews, the 5 questions included in the semi-structured research form were addressed to the participants, and the responses they gave were put into writing. In cases where responses given by the participants did not encompass the aim of the research or were insufficient, participants were asked additional questions and more detailed data were obtained.

### **Data analysis procedures**

The data obtained in this research were analysed with the content analysis method. Content analysis is a research approach that enables unspecified characteristics to be revealed based on specified characteristics of social contents (Gokce, 2006). In other words, content analysis is a type of research revealing concepts and relationships that explain the data. At the first stage, the data obtained from the interviews are rearranged to make them ready for analysis. At the second stage, codes are created for the data prepared for analysis, themes are created by combining the coded data, the codes and themes are organised, and the organised themes are defined and interpreted (Yildirim & Simsek, 2013). In this research, the gathered data were analysed with NVivo 10 software.

### **Validity and Reliability**

Different perspectives and methods have been specified for researchers (Brantlinger, Jimenez, Klingner, Pugach & Richardson, 2005; Creswell, 2013; Erlandson, Harris, Skipper & Allen, 1993; Lincoln & Guba, 1985; Yildirim & Simsek, 2013) to ensure validity and reliability of studies conducted in qualitative research. For this study, the plausibility, transferability, consistency and confirmability methods specified by Erlandson, Harris, Skipper and Allen (1993) were used. To enable plausibility in the study, participants who had different experience and characteristics were interviewed, and the methods of diversification and examination of the obtained data by 3 field specialists were applied (Yildirim & Simsek, 2013). To ensure transferability, participants' views were given impartially as they were and described in detail, and the purposeful sampling method was applied, whereby the criteria that the participants should be working in schools affiliated to the Ministry of National Education in provincial and district centres, at high school level and as branch teachers, were determined. To ensure consistency in the research, the views of field specialists were obtained at the stages of conceptualisation of the research, development of the data collection tool, data analysis and interpretation of the findings. Furthermore, to enable reliability of the research, the formula developed by Miles and Huberman (1994) was used [Consensus = Number of Agreements / (Number of Agreements + Disagreements) X 100]. Following the comparison, coding consistency between the experts was determined to be 87%. This finding reveals that the research was suitable for its aim. According to Miles and Huberman (1994), consensus of 80% and over between experts is sufficient in terms of reliability of research. Confirmability

in the study was ensured by archiving of the gathered data so that they could be examined again if the need arose.

### Findings

This study, which aims to investigate the factors affecting students' academic achievements, consists of five themes. The themes and codes of this study, which was conducted with content analysis, are given in the tables and graphs below.

#### Effect of family's education level on students' academic achievement

The first problem question of the research was aimed at revealing the effect of the family's education level on students' academic achievement. The results of the content analysis performed for this purpose are given in the table and graph below.

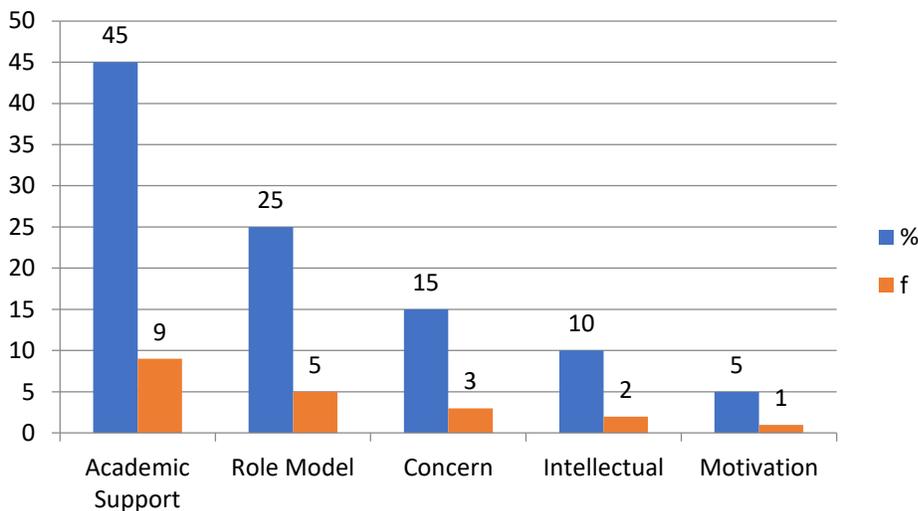


Figure 1. Family Education Effect

When Figure 1 is examined, it is seen that factors of the family's education level affecting students' academic achievement are stated to be in the dimensions of academic support by 9 (45%) participants, being a role model by 5 (25%) participants, concern by 3 (15%) participants, intellectual by 2 (10%) participants and motivation by 1 (5%) participant. Views of some participants are given below.

'The family is the basic institution in which the student receives his first education. Education begins in the family, while the school is merely an institution which assists with education. The higher the education level of the family, the greater the intellectual state of the individual will be. Moreover, since an educated family will help the child with his lessons, it will have a significant effect on the child's academic success. It is the family which supports the education and homework given at school. A family with an adequate education level can explain to the child the parts of the subject that he does not understand, and this also will enable the child to be academically successful in that subject and in general.' (P.1)

'The higher the family's education level, the greater will be its contribution to the child's educational life. The family plays a big part in the homework and research that the child does, and even in setting future goals. The family is the place where the student is first shaped. The more knowledgeable the family is, the more the child will take the mother and father as a role model.' (P.6)

'I believe that a student whose family's education level is high will also achieve high academic success, since as far as I can see in my own students, they take more interest in them and are more supportive with their lessons. This also increases success.' (P.20)

### Effect of school's physical conditions on students' academic achievement

The second problem question of the research was aimed at revealing the effect of school's physical conditions on students' academic achievement. The results of the content analysis performed for this purpose are given in the table and graph below.

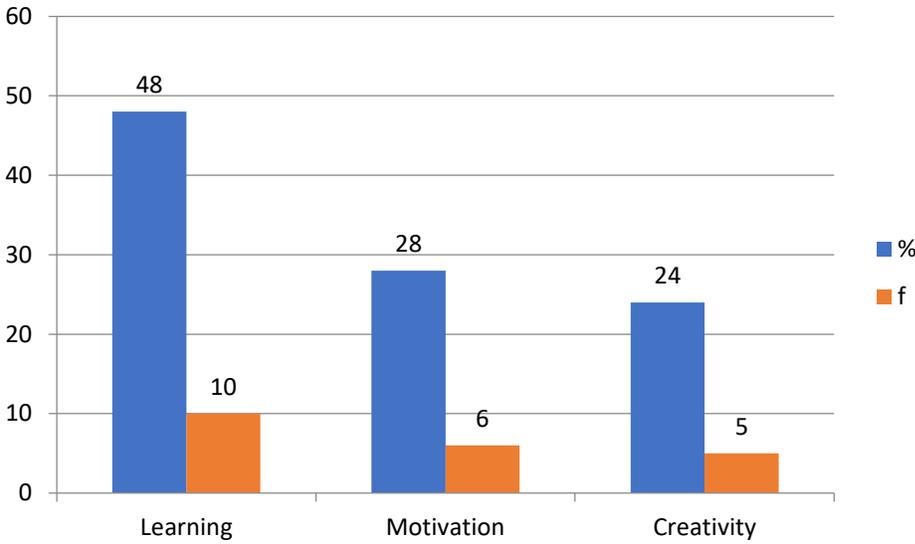


Figure 2. School's physical conditions effect

When Figure 2 is examined, it is seen that factors of effects of school's physical conditions on students' academic achievement are stated to be in the dimensions of learning by 10 (48%) participants, motivation by 6 (28%) participants and creativity by 5 (24%) participants. Views of some participants are given below.

'If the school's physical conditions are good, for example if there is a smart board, access to information is easier. Good physical conditions facilitate learning. Motivation towards lessons is higher. Students in such environments are more social. Their creativeness is greater. For example, a laboratory will orient them towards doing experiments.' (P.2)

'Students can read more books in a school that has a library. In a school that has a basketball court, students with ability can reveal those abilities, gain confidence, and become happier, and this situation will also affect their academic achievement. Students in a school with a laboratory learn more concrete information and acquire more permanent knowledge.' (P.9)

'I believe that educational tools that include practical activities are one of the factors that increase students' motivation to learn, and therefore, variation of teaching methods and techniques will have a positive effect on achievement.' (P.12)

### Effect of school management on students' academic achievement

The third problem question of the research was aimed at revealing the effect of Effect of school management on students' academic achievement. The results of the content analysis performed for this purpose are given in the table and graph below.

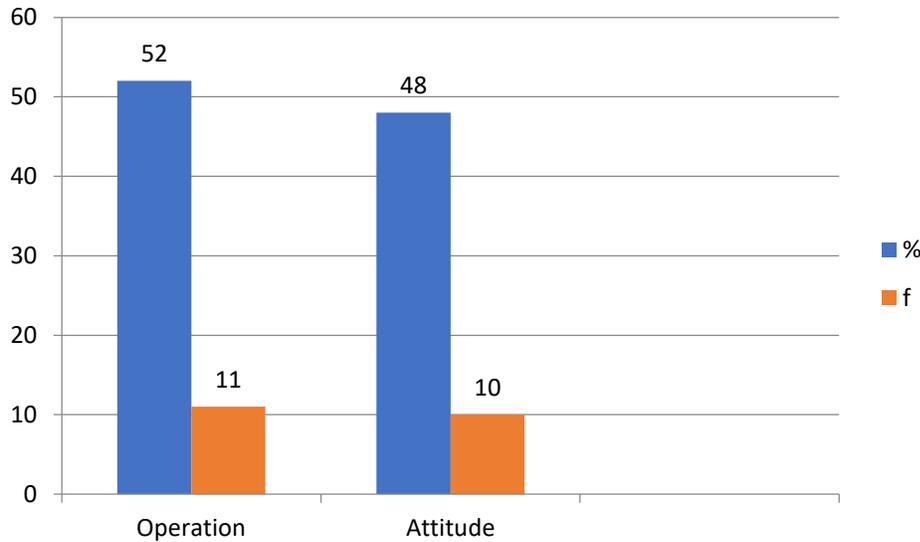


Figure 3. School management effect

When Figure 3 is examined, it is seen that factors of revealing the effect of school management on students' academic achievement are stated to be in the dimensions of operation by 11 (52%) participants and attitude by 10 (48%) participants. Views of some participants are given below.

'I also consider that the school management is very effective for student success, as I have experienced many examples of this myself. We cannot expect a school that is carelessly run or managed negligently with an undisciplined understanding to be very successful. In my opinion, in a school whose management is undisciplined or too easy-going, the teachers and students will also enter a similar state of complacency. In short, good quality management means good-quality education.' (P.10)

'If the school administration does not implement the rules, mission and visions decisively, the school will be regarded by the student not as a seat of learning, but merely as a place to spend time. The facilities provided have a positive impact.' (P.13)

'The school management is one of the factors that encourage students, but the main factor is the student himself and his own desire to succeed. If we assume that this desire exists in the student at the required level, then of course, a positive attitude by the school management will also have a positive effect on the student's achievement.' (P.1)

'In my opinion, if the attitude and behaviours of the school administration are compatible with each other and with the teachers, then the student's sense of belonging will increase, thereby having an effect on increasing his academic success.' (P.12)

### **Effect of school environment on students' academic achievement**

The fourth problem question of the research was aimed at revealing the effect of effect of school environment on students' academic achievement. The results of the content analysis performed for this purpose are given in the table and graph below.

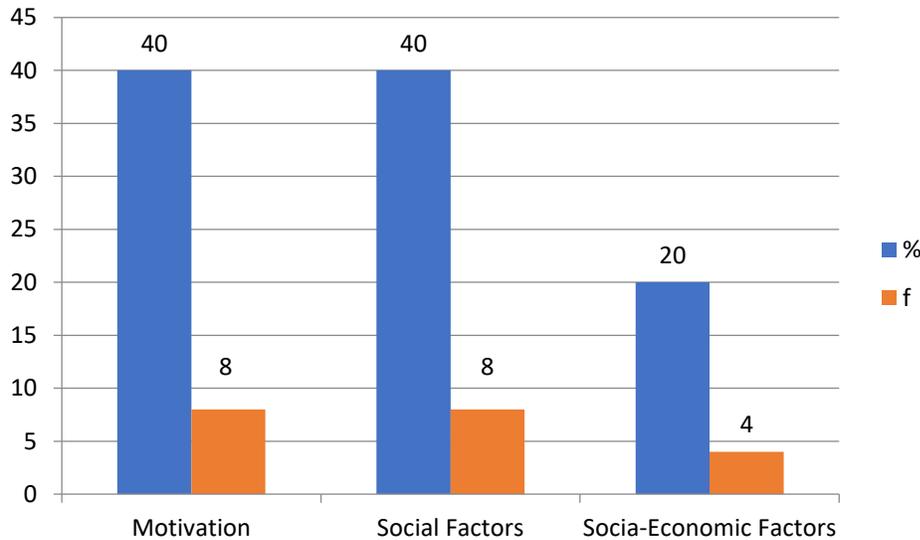


Figure 4. School environment effect

When Figure 4 is examined, it is seen that factors of revealing the effect of school management on students' academic achievement are stated to be in the dimensions of motivation by 8 (40%) participants, social effects by 8 (40%) participants, and socio-economic effects by 4 (20%) participants. Views of some participants are given below.

'If the environment where the school is located is not surrounded by factors that will distract the student from lessons, then a negative effect on these children's interest in lessons will have been prevented. In this case, students' academic achievement will also be positively affected. The more distracting factors there are for students in the school environment, the more their attention for lessons will decrease and consequently, the more their academic success will also be negatively affected.' (P.19)

'I believe that the presence of social influences around the school that can distract the student's attention, such as cafes and shopping centres, will have a negative impact on students' achievement.' (P.5)

'The environment in which the school is located will also affect the school's academic success. In my opinion, the more conscious, the higher the cultural level of the area around the school, the greater will be the academic achievement of its students. The nucleus of society is the family, and the better the families, that is the environment, are, the better the students will be, and this will have a positive effect on the students of the school in that area.' (P.16)

### Effect of teacher on students' academic achievement

The fifth problem question of the research was aimed at revealing the effect of teacher on students' academic achievement. The results of the content analysis performed for this purpose are given in the table and graph below.

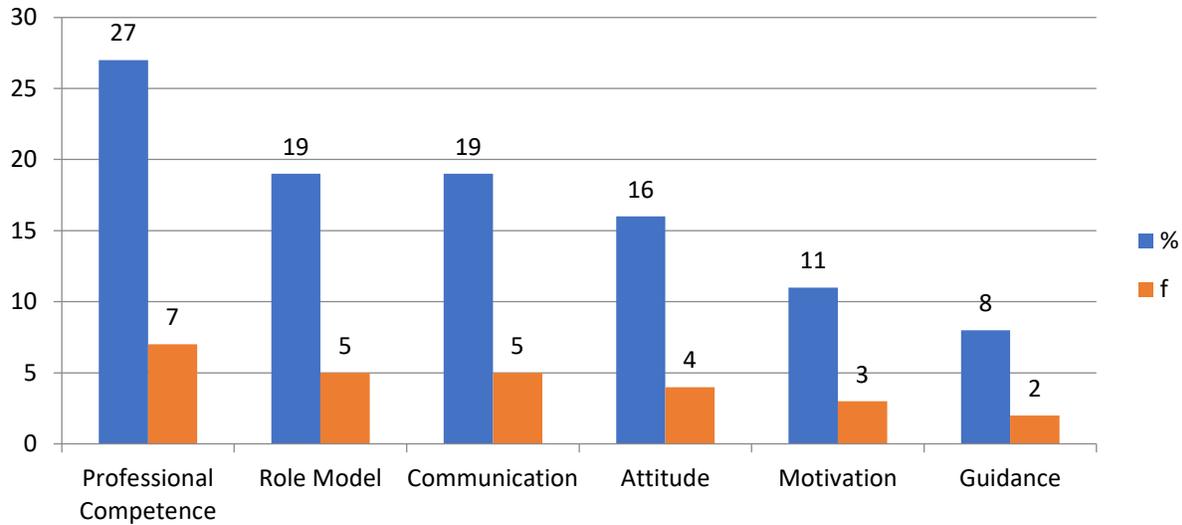


Figure 5. Teacher effect

When Figure 5 is examined, it is seen that factors of revealing the effect of teacher on students' academic achievement are stated to be in the dimensions of professional competence by 7 (27%) participants, being a role model by 5 (19%) participants, communication by 5 (19%) participants, attitude by 4 (16%) participants, motivation by 3 (11%) participants, and guidance by 2 (8%) participants. Views of some participants are given below.

'The teacher has a key task in this respect. As well as his academic knowledge; his attitude towards life, his self-adaptation and his concern for education light the fuse of learning in students. Moreover, he will be an invaluable guide for them.' (P.3)

'The teacher is one of the main factors affecting academic success. There is no student that a teacher cannot influence if he pursues his profession with great devotion.' (P.17)

'A positive relationship between teacher and student will make the student into a confident individual. The student will be more active in class. A student who knows that the teacher listens to him in every subject will be more compatible and will trust his teacher. His interest in the lesson will increase, and in this way, his academic achievement will increase.' (P.2)

'A teacher who motivates, or who, on the contrary, demotivates, can create very different situations. A student's affection for his teacher is the most important factor for academic achievement.' (P.20)

## Discussion

The aim of this study was to reveal the factors affecting students' academic achievement according to the views of teachers. Within this scope, the research data were collected from 20 teachers of 9 different subjects employed in schools affiliated to the Ministry of National Education and located in different provinces, using telecommunications tools and the interview method. In the research, 5 questions were addressed to the teachers, and based on these questions, the themes and codes of the study were revealed. In this section of the study, the research findings are compared with those of parallel studies.

The first problem question of the research aimed to reveal the effect of the family's education level on students' academic achievement. When the findings obtained in relation to this question are examined, it is seen that factors of the family's education level affecting students' academic achievement

were stated to be in the dimensions of academic support by 9 (45%) participants, being a role model by 5 (25%) participants, concern by 3 (15%) participants, intellectual by 2 (10%) participants and motivation by 1 (5%) participant. When the conducted studies are examined, it is seen that while the mother's education level does not make a significant difference to the student's academic achievement, the father's education level has a significant effect on the student's academic achievement (Soner, 2000). While the mother's education level is a predictor of the student's academic achievement, the father's education level does not predict the student's academic achievement (Pishghadam & Zabihi, 2011). As the parents' education level increases, the student's academic achievement and attitude towards lessons increase in parallel (Bolukbas, 2010). The family's education level has a significant effect on students' academic success (Tavani & Losh, 2003). As the mother's education level increases, the facilities at home also increase, and in parallel with this, have a significant impact on students' academic success (Gelbal, 2008). There is a significant relationship between the parents' education level and academic achievement, and the academic success scores of children with parents who are university graduates are higher (Arslantas, Ozkan & Kulekci, 2012). However, there is no relationship between the family's education level and university students' academic achievement scores (Shapiro, 2009). When the first finding of the study is compared with similar research findings, it is understood that family education has been an important factor in the academic success of students from past to present, however the importance of this is better understood with the increase in education level with compulsory education. Families with a high level of education are more consciously interested in their children's academic development as well as their entire development.

The second problem question of the research aimed to reveal the effect of the school's physical conditions (library, laboratory, smart board, sports hall, etc.) on students' academic achievement. When the findings obtained in relation to this question are examined, it is seen that factors of the school's physical conditions affecting students' academic achievement were stated to be in the dimensions of learning by 10 (48%) participants, motivation by 6 (28%) participants, and creativity by 5 (24%) participants. When the conducted studies are examined, it is seen that one of the factors affecting academic performance is the school's physical working conditions (Mattar, 2012). In schools with inadequate physical conditions, students' academic achievements are lower due to less frequent attendance at school (Duran-Narucki, 2008). The research findings reveal that the school's physical conditions are an important factor affecting academic success (Berman et. al., 2018). The quality of the school buildings is a predictor of students' academic achievements and socio-emotional development (Simon, Evans & Maxwell, 2007). The physical conditions of the classroom have an effect on the student's motivation to take part in class and therefore, on his success (Akbasli, Kosece, & Ucan, 2018). When the second finding of the study is compared with similar research results, the importance of investment in the education system is understood. In particular, the country's economy is an important determinant of the investment made in the education system. Along with the development of the country, as in all fields, development is observed in the field of education. Parallel to this, the laboratories, sports centers, conference centers, recreation centers, and activity centers of the schools are also more modern and efficient for students and education compared with previous school forms.

The third problem question of the research aimed to reveal the effect of the school management on students' academic achievement. When the findings obtained in relation to this question are examined, it is seen that factors of the school management affecting students' academic achievement were stated to be in the dimensions of operation by 11 (52%) participants and attitude by 10 (48%) participants. When the conducted studies are examined, it is seen that school principals who have instructional leadership skills establish the school system on increasing teachers' knowledge levels and on students' academic success (Ovando & Ramirez, 2007). In a meta-analysis study conducted on schools' academic success and school management between the years 1986-1996, it was concluded that instructional leadership at primary school level had an impact on academic achievement (Witziers, Bokser & Kruger, 2003). The strategic efforts made by school managers contribute to the social and academic goals of the schools

where they are managers (Hoog, Johansson & Olofsson, 2005). When school principals and teachers carry out their duties by making joint decisions, this contributes to the curriculum, instruction and students' academic success (Marks & Nance, 2007). Although instructional leaders do not directly affect the student's academic achievement, they have an indirect, positive effect (Alig-Mielcarek, 2003). There is a positive, significant relationship of academic achievement with the knowledge-based role, confrontational role and "supporting the vision of the trainee" role, which are sub dimensions of the mentoring roles of school principals at primary school level, and with the confrontational role and "supporting the vision of the trainee" role, which are sub dimensions of the mentoring roles of school principals at secondary school level. When the third finding of the study is compared with similar research results, it is seen that the management style of the school, which has the educational management skills of school administrators, has also transformed into a modern structure. The management of the school together with the student and the involvement of students in the school management are part of the modern school management model. The academic success of the student who takes part in the school administration is also high.

The fourth problem question of the research aimed to reveal the effect of the school environment on students' academic achievement. When the findings obtained in relation to this question are examined, it is seen that factors of the school environment affecting students' academic achievement were stated to be in the dimensions of motivation by (40%) participants, social effects by 8 (40%) participants, and socio-economic effects by 4 (20%) participants. When the conducted studies are examined, it is seen that the school environment and environmental factors are correlated with academic performance. A poor school environment increases the perception of an insecure school (Berman et. al., 2018). Student participation and families' structural support are at low levels in schools that do not create a safe and organised environment for learning (Finn & Rock, 1997). The school's social environment has an immediate effect on the student's academic achievement (Rosenblatt & Peled, 2002). When the fourth finding of the study is compared with similar studies, it is concluded that the school environment should be surrounded by learning activities and the student's attention should not be directed outside the school. In ensuring the academic success of the student, the school environment is expected to be reliable and include library, social activity, and cultural activity activities.

The fifth problem question of the research aimed to reveal the effect of the teacher on students' academic achievement. When the findings obtained in relation to this question are examined, it is seen that factors of the teacher affecting students' academic achievement were stated to be in the dimensions of professional competence by 7 (27%) participants, being a role model by 5 (19%) participants, communication by 5 (19%) participants, attitude by 4 (16%) participants, motivation by 3 (11%) participants, and guidance by 2 (8%) participants. When the conducted studies are examined, it is seen that teachers' personal self-efficacy beliefs affect students' academic success (Caprara, Barbaranelli, Steca, & Malone, 2006). It can be expected that teachers who possess social and emotional competence, who create a warmer classroom atmosphere with an instructional quality, who feel responsible towards their students, who establish supportive and cooperative relations, who regularly communicate with school managers and colleagues, and who display a sensitive approach to students, will increase their students' academic success (Jennings & Greenberg, 2009). Teachers' who display democratic behaviours in class increases students' creativity levels. Students' academic success levels will increase in parallel with the increase in their creativity levels (Erdogdu, 2006). When the fifth finding of the study is compared with similar studies, it is seen that teachers have a significant effect on students' academic achievement. The education and development of teachers is improved by scientific studies. While a teacher-centered education is adopted in the traditional approach, a student-centered education system is applied in the modern education system applied today. With the application of this modern system, students gain the ability to search and questionnaire, thinking critically, and as a result, their academic success increases.

## **Conclusion and Recommendations for Future Research**

When the results of the study are examined, it is seen that the family's education level, the school's physical conditions, the school management, the school environment and the teachers are factors that influence students' academic achievement, and that the findings of this study are in parallel with those of previous and similar studies. Accordingly, education levels can be increased by creating future family structures in advance. Schools can be better equipped in terms of physical conditions, the students can learn by doing and experiencing, and the school can possess a design that will increase students' academic achievement. School principals can organise meetings with student representatives by distancing themselves from bureaucratic tasks, they can focus on the school's academic success, and they can give importance to teachers' professional development. All types of social and entertainment areas around the school that will decrease students' motivation to study can be minimised, while a school environment that will support the student's academic achievement, such as study centres, and social and sports clubs, can be created. Finally, by giving importance to their own personal and professional development and to their communication skills, and by teaching student-centred lessons, teachers can contribute to students' academic achievement.

## **Acknowledgements**

None. No funding to declare.

## **Conflict of Interest**

Author has no conflict of interest to report.

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