



## International Journal of Contemporary Educational Research (IJCER)

[www.ijcer.net](http://www.ijcer.net)

### The School Readiness of 60-65 Months Old Students: A Case Study

Mecit Aslan<sup>1</sup>, İbrahim Çıkar<sup>1</sup>  
<sup>1</sup>Van Yüzüncü Yıl University

#### To cite this article:

Aslan, M. & Çıkar, İ. (2019). The school readiness of 60-65 months old students: A case study. *International Journal of Contemporary Educational Research*, 6(1), 86-99. DOI: <https://doi.org/10.33200/ijcer.555465>

This article may be used for research, teaching, and private study purposes.

Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles.

The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material.

## **The School Readiness of 60-65 Months Old Students: A Case Study\***

**Mecit Aslan<sup>1\*\*</sup>, İbrahim Çıkar<sup>1</sup>**

<sup>1</sup>Van Yüzüncü Yıl University

### **Abstract**

The aim of this study is to determine the school readiness of the 60-65 months first grade primary school students. The study was designed in accordance with qualitative case study. The participants of the study was composed of 20 teachers and 15 parents in Van/Turkey provincial districts in the 2017-2018 academic year. Semi-structured interview forms and an observation form were used as data collection tools in the study. Descriptive analysis was used in the analysis of the obtained data. As a result of the study, it was found that the students who start primary school in the age range of 60-65 months were not ready to start school and had difficulty in physical, emotional, cognitive and psycho-social readiness. In addition, this group falls behind the students in the 66-72 months in each of these areas.

**Key words:** Readiness, School starting age, School readiness, 60-65 months old students

### **Introduction**

The school is a small society where children remain separated from their families for a while, and get involved in a certain order and plan for the first time. The effect of entry to this society on the student determine his / her perspective on school and education in the following years. Starting school means a first and challenging environment change for an individual at that age (Seven, 2011). The child's keeping pace with the new society necessitate cognitive, physical, emotional and psycho-social preconditions. At this point, the basic concept that comes to mind is the school readiness.

### **School Readiness**

The readiness is getting prerequisite behaviors (Ülgen, 1997; Yılmaz & Sünbül, 2003), achieving a developmental role through learning and maturation (Başaran, 1998), the state of readiness of the nervous system to learn (Binbaşıoğlu, 1995), and the previous basic skills of organism learning a new task (Slavin, Karweit, & Wasik, 1994). The readiness is one of the important inputs of the teaching-learning process (Bloom, 1976). When the readiness is considered in terms of being ready for school, it can be expressed with different concepts such as "school maturity", "maturity to start school" or "school readiness" that is used more frequently (Mercan-Uzun, 2015).

School readiness can be expressed as a combination of emotional, behavioral, and cognitive skills necessary for a child to learn, study, and perform tasks (Rafoth, Buchenauer, Crissman & Halko, 2004; UNICEF, 2012). Factors affecting the school readiness are generally seen as physical, cognitive, emotional and social/environmental (Cinkilic, 2009; Çelenk, 2008; Özkesemen, 2008; Rafoth et al., 2004; Teke, 2010). It is possible that there will be differences in the dimensions of the readiness when it is taken as a whole. A student with the ability to physically start schooling may not be sufficient emotionally and will likely not overcome the "fear of being separated from the home / parent" (Yörükoğlu, 1993); it should not be overlooked a student who get along well with his / her peers and easily communicate / socialize may not develop the necessary cognitive competences related to the courses. Determining whether a child is ready for the tasks necessary to start the school is one of the important steps that will prevent him from failing in his first experience (Bağçeli-Kahraman & Başal, 2013; Oktay, 2010). Because cognitive, behavioral, emotional and social competences are significant

\* This study was presented as an oral presentation at International STEMES Congress (Muş, Turkey, 2018).

\*\* Corresponding Author: *Mecit Aslan, maslan4773@gmail.com*

predictors of school success in early childhood (Ladd & Burgess, 1999; McClelland, Morrison & Holmes, 2000; Ramey & Ramey, 2004).

The most basic feature of physical readiness is the healthy functioning of the five sensory organs. Small and large muscle development; eye-hand coordination; not being behind the peers in terms of height and weight; and a well speaking ability is included in the scope of this praxis. Physically, the individual who arrives at a level where he can perform the development tasks of the current period will also provide the necessary readiness for the next task. The fact that children are physically developed also has an important place in learning how to read and write (İnanç, Bilgin & Atıcı, 2005; Mercan-Uzun, 2015). While children in the five-year-old group develop in skills such as hand work, painting and drawing that require fine motor skills, these children have difficulties in drawing and writing the same things that are put in front of them. On the other hand, the children in the age group of six show a serious development in these issues (Kasten, 2017).

Scientific studies show that there is a direct relationship between learning and brain development (Ramey & Ramey, 2004). The cognitive readiness is expressed as the ability to learn and to have the prerequisite behavior and knowledge for a new learning (Tuna & Kaçar, 2005). The reason of the differences between the learning speed and level of students is explained by their cognitive readiness that is acquiring the necessary prior knowledge (Bloom, 1976). Asking questions about the correctness and inaccuracy of the learned knowledge, making analysis and synthesis, making evaluations and taking decisions are indicators whether an individual is cognitively ready or not (Ünal, 2005; Yenilmez & Kakmacı, 2008). At the age of five, children develop cognitively, especially in terms of establishing a cause-effect relationship. Besides, children, at the age of six, have significant improvements in problem solving, analogue thinking, deductive and inductive conclusions (Kasten, 2017). The ability of the students to perceive the directions, to follow them, to have the necessary cognitive ability to perform the task, and so on is related to cognitive readiness.

Emotional readiness can be defined as a child's self-awareness; being able to control his emotions in different situations; being able to balance between their own inner world and their expectations (Kandır, 2003). Children who are ready to study emotionally have a high level of school achievement while children who are not ready face serious emotional difficulties and risks, especially in the early years of school (Raver, 2003). Although IQ is emphasized more often, it is controversial whether emotional quotient (EQ) of children have a greater role in their following achievements which is the ability to understand and control their own emotions and the ability to read and respond to others' emotions. However, emotional quotient is a function of the brain. Both our emotional and social experiences are managed by a large neural structure known as the limbic system (Eliot, 2000). Therefore; it can be said that the physical, cognitive, emotional and psycho-social readiness, which are regarded as different dimensions of readiness, are not independent of each other. A student who starts primary school is supposed to develop some entrance behavior such as positive attitude towards reading, teaching and learning, confidence in class, and being able to cope with separation from parents.

Social development refers to the child's ability to interact socially. It includes social skills such as school integration, cooperation (Kagan, Moore & Bredekamp, 1995) and the process of adaptation to the society in which the child lives (Kandır, 2003). First grade students enter a new social environment and this new social environment challenges children in many ways. These students find themselves in a social environment in which they have never been before under the control of a teacher who they have never met before. In the classrooms, students see new desks, books, postcards, clocks, chants, maps etc. that they have never seen before. They meet with many new elements and spend a few hours of their time there (Entwisle & Alexander, 1998). Therefore; it is necessary to have competencies to cope with this new social environment. Psycho-social readiness involves some behaviors that an individual as a social entity is expected to show at almost all ages: complying with the rules of a newly entered society, communicating with individuals in society, being a part of the society, and so on. The necessary competencies are related to the school starting age.

### **School Starting Age**

Starting school is considered as a very important development task, because it can be very effective on the child's future success and behavior patterns (Entwisle, Alexander & Olsen, 2005). The calendar age is regarded as the basic criterion for starting school. Although calendar age is an important criterion, it is hard to say that it is sufficient by itself. It is also possible that the students who are not at calendar age might be in good physical, emotional and psycho-social conditions; on the contrary, students at calendar age may not be good at abovementioned skills of readiness (Yörükoğlu, 1993). Despite all, taking calendar age as basis is a fair approach for students to start school (Rafoth et al., 2004). Furthermore, when taken into consideration that physical development, cognitive development and social development of children show certain characteristics at

certain ages/periods, it is understandable that calendar age is considered as a criterion for starting school. The important aspect is to identify the students who are too young but ready or old enough but not ready to start school.

States specify an age (usually 5 for kindergarten, 6 for primary) as school starting age, and when children reach that age, they can start school (Rafoth et al., 2004). In Turkey, according to the Primary Education Law No. 222 and the Regulation on Primary Education Institutions, it is fundamental for the children in the age group of 69-80 months to make primary education registration under the law 6287. Nonetheless, the registration of children who are not physically and mentally mature could be delayed for one year in the direction of their request. After the legal regulation known as "4+4+4 Education System" (The Intermittent Compulsory Education System for 12 Years), with the amendment on July 21, 2012, it is compulsory for the children who complete 66 months in 2012-2013 academic year to start school. Children between the ages of 60-65 months will be able to start school with their parents' request (Official Gazette of Turkey, 2012). One year later, children in the age range of 66-71 months were provided with more flexible conditions and the opportunity to postpone the registration of the children between 66-68 was given to parents and the registration of the children of 69-71 months could be postponed for one year by doctor report (Official Gazette of Turkey, 2013). The most important point in this process is that whether 60-65 months old students have the necessary readiness to start school. Because, age is an important factor in school success, and those who are younger are less successful than older ones (Davis, Trimble & Vincent, 1980; Sharp & Hutchison, 1997; Shepard & Smith, 1986). Development in early childhood is known to be rapid. Although a five-month process doesn't make a significant difference for adults, for children, this process is of crucial importance. In this context, it is important to examine the readiness of these students to start school.

### **Purpose of the Research**

In this research, it is aimed to examine the school readiness of 60-65 months old students who are in the first grade in primary school. In response to this general purpose, the answers to the following questions are sought: (1) How is the physical readiness of the 60-65 month old students at the beginning of the first semester? (2) How is the cognitive readiness of the 60-65 month old students at the beginning of the first semester? (3) How is the emotional readiness of the 60-65 month old students at the beginning of the first semester? (4) How is the psycho-social readiness of the 60-65 month old students at the beginning of the first semester?

### **Method**

#### **Research Design**

This research is a qualitative case study investigating the school readiness of 60-65 months old students. The case study is a multidimensional, systematic and in-depth empirical research pattern that involves collecting data from multiple sources within the real-world context (Creswell, 2012; Patton, 2002; Yin, 2009). We define this study as a case study, because the school readiness of the students was evaluated in four dimensions (physical, cognitive, emotional and psycho-social) by collecting data from teachers, parents and students through interviews and observations in the real world context.

The case of the study is first grade students between 60-65 months. With the law adopted in Turkey, these children may start school at the request of their parents. These children are, in particular, younger than their classmates (66-72 months old). Thus, whether children are ready for school or not is a controversial issue.

#### **Participants**

The participants of the study are composed of 20 primary school teachers who work in state schools and 15 parents in Van province in Turkey in 2017-2018 academic year. Criterion sampling method was used to select participants. This sampling method is used when there are observation-interview units consisting of people, events, objects or situations with certain qualities in the research (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2013). The cases that meet predetermined criterion are selected in this sampling method (Patton, 2002). The basic criterion of this study is the presence of 60-65 month-old students in the classroom of interviewed teachers; and that the parents should have children aged between 60-65 months who start the school. Demographic information of participants is given in Table 1.

Table 1. Demographic information of participants

| Participant        | Variable         | n                            |    |
|--------------------|------------------|------------------------------|----|
| Teachers           | Gender           | Female                       | 11 |
|                    |                  | Male                         | 9  |
|                    | Seniority        | 1-5 years                    | 3  |
|                    |                  | 6-10 years                   | 4  |
|                    |                  | 11-15 years                  | 10 |
| 16 years and above |                  | 3                            |    |
| Parents            | Occupation       | Laboratory worker            | 1  |
|                    |                  | Housewife                    | 14 |
|                    | Monthly income   | 1000-1500 Turkish Liras (TL) | 5  |
|                    |                  | 1501-2000 TL                 | 7  |
|                    |                  | 2001 TL and over             | 3  |
| Graduation         | Not literate     | 3                            |    |
|                    | Primary school   | 5                            |    |
|                    | Secondary school | 2                            |    |
|                    | High school      | 3                            |    |
|                    | Associate degree | 1                            |    |
|                    | Under-graduate   | 1                            |    |

Of the 20 teachers in the study group, 11 are female and 9 are male. The seniority of 3 teachers is 1-5 years; of 4 teachers is 6-10 years; of 10 teachers is 11-15 years; of 3 teachers is 16 years and above. 2 teachers are Education Institute graduates, and the remaining 18 teachers are bachelors of Faculty of Education. All 15 parents interviewed are females / mothers. One of them works as a laboratory worker and the other 14 are housewives. The numbers of families' students who continue to study at the schools vary between 2 and 4. Of 15 parents, 5 have 1000-1500 Turkish Liras (TL) monthly income; 7 have 1501-2000 TL monthly income; and 3 have 2001 TL and over monthly income. 3 of the interviewed parents are not literate. Of the remaining parents, 5 are primary school graduates, 2 are secondary school graduates, 3 are high school graduates, 1 has associate degree and 1 is under-graduate.

In addition to participants interviewed in the study, a student in the 60-65 months age range was regularly observed. Observed student is a girl born on 06.07.2012. Therefore, as of the date (18.09.2017) when the school started, she was 62-months and 12-days old. She is the youngest member of a family with 3 children. Her father is a construction worker; her mother is a housewife. The student didn't receive pre-school education and started school at the request of her family. At the beginning of the first semester this pupil was measured as 107 centimeters in height and 16 kilograms in weight.

### Data Collection

Interviews and observations were performed for data collection. Two semi-structured interview forms and one observation form developed by the researchers were used as data collection tool in the research.

#### Interviews

Interview is considered as the most appropriate way of collecting data in terms of discovering the thoughts and perceptions of others and the diversity in viewpoints (Patton, 2002). Semi-structured interview forms, developed by researchers, were used to obtain the views of teachers and parents in this research. This type of interview, in which regulations can be made in the questions and the sequence of questions, can be structured during the interview, depending on the knowledge and ability of the investigator, to reach a structured interview level (Breakwell, 1995; cited in Büyüköztürk et al., 2013).

In the development process of the interview forms, literature was reviewed, draft forms were prepared, 2 field experts and 1 language expert were consulted about the draft form prepared. At the end of these stages, teacher and parent interview forms, each consisting of 5 questions, were prepared. Before the application, the teacher form was examined by 3 teachers, the parent form was examined by 2 parents, the forms were read aloud and the interview forms were finalized after the appropriateness was confirmed.

Interviews took approximately 30 minutes. The interviews were recorded with the permission of participants. In this way, it is aimed to listen to the answers repeatedly and to prevent data loss. The answers were arranged and analyzed according to the rules of writing and orthography.

### Observations

In order to diversify the data and follow the teaching process, a student between 60-65 months age was observed by the researchers for 6 weeks in a class. During these observations, the observation form developed by the researchers was used. During the development of the observation form, the literature was reviewed and expert opinion was taken. Observations were made at a point in the class where the focused student could be observed, without intervention in the process. Observations focused on the students' physical, cognitive, emotional and psycho-social readiness in accordance with research questions. The actual name of the student observed in the study was not used, but nickname (Elif) was used instead.

### Analysis of Data

Descriptive analysis technique was used in the analysis of the data. In this analysis technique, the obtained data is summarized and interpreted on the basis of the predetermined themes or the research questions (Yıldırım & Şimşek, 2011). In the process of data analysis, firstly, the notes from the observations and the answers of the teachers and parents to the interview questions were arranged in accordance with writing rules. After this stage, the written document was read several times by the researchers for general understanding. Some codes were determined (research questions) and the data was analyzed on the basis of these codes at the next stage. After then, the codes were gathered under themes (physical readiness, cognitive readiness, emotional readiness, and psycho-social readiness). Lastly, the data were summarized, interpreted, and the relationships among these themes were noted. The followings are sample codes and themes for the analysis of the research data:

| Theme                   | Code                    | Data   |
|-------------------------|-------------------------|--|
| Physical readiness      | Fine motor skills       | <i>"In general, they are insufficient in terms of fine motor skills. That affects their writing abilities. In this regard, they are like inclusive students. They have trouble with holding the pen. "</i>                                   |
| Cognitive readiness     | Perception              | <i>"The younger students understand the instructions late while dealing with the tasks. Students of 66-72 months are better."</i>  |
| Emotional readiness     | Attitude towards school | <i>"Somehow, the student did not like the teacher and the school"</i>  |
| Psycho-social readiness | Socializing             | <i>"These children are not very social. They are egoistic, they play parallel games, and it is not a problem for them to be independent. The 66-72 months old students are better for cooperation. They easily enter groups and adapt. "</i> |

### Validity and Reliability

Various strategies can be used to ensure trustworthiness/validity and reliability in qualitative studies. The main strategies used in this study are given below (Lincoln & Guba, 1985; Merriam, 1995):

- **Triangulation:** Multiple sources (teachers, parents and a student) and data collection methods (interviews and observations) were used for triangulation.
- **Member Checks:** Participants (two teachers and two parents) checked the findings and confirmed that the results reflect their experiences.
- **Peer Examination:** An expert in Curriculum and Instruction Department examined the data, codes, themes and interpretations and confirmed them.
- **Detailed Descriptions:** The research design, participants, data collection process, and findings were explained in detailed and the results were quoted directly.
- **Reliability Formula:** Miles & Huberman (1994) reliability formula [ $\text{Reliability} = \frac{\text{Opinion Union}}{\text{Consensus Unit} + \text{Opinion Separation}}$ ] was used in the analysis of data. The researchers analyzed the data separately, after then compared the results and tried to reach a consensus. As a result of this process, the agreement between the researchers was determined as 92%. More than 70% of the value of reliability indicates that the results are reliable.

## Results

In this section, results obtained in the study are presented. The main themes of physical, cognitive, emotional and psycho-social readiness are detailed with sub-themes determined in the interviews with teachers (T) and parents (P) and observations (O) made in class.

### Physical Readiness

#### *Height and Weight*

As a result of the interviews and observations, it was found that 60-65 months old students are inadequate physically. The participants asserted that the length and weight of these students are less than those of the students aged between 66-72 months. The participants stated these students cannot carry their school bags, cannot wash their hands in the washbasins and have difficulty in the school canteen when shopping because of their insufficient weight and height. It has also been determined that the observed student writes and draws standing because of her shortness.

*"Compared with the other children, they are short, weak and their hand muscles are not developed. They hardly carry their bags." (T10)*

*"I think they are not physically ready. School sinks are not short enough, they have difficulty in washing their hands. They are weaker and shorter than others." (T11)*

*"His weight is good, but he's a bit short in height. He said it was difficult when shopping in the school canteen." (P1)*

*"His hand does not reach to the sink; he cannot wash his hands. He's a little short, his bag is heavy on him, I carry his bag." (P3)*

*"The boy is a bit short compared to his classmates. His desk is a little big." (P6)*

*"Elif is sitting on the ringside desk. She is a little short; the table is too big for her. While she is studying on her desk, she writes and draws standing." (O1)*

#### *Thin Muscle Development*

Most of the teachers agree that thin muscles of pupils aged between 60-65 months are not developed sufficiently. For this reason, these students have trouble holding a pencil, and they cannot complete their studies like writing which is one of the critical gains of the first class. A teacher remarked that these students are like inclusive students because of their low physical readiness level.

*"I do not think they're ready. They are physically inadequate. Their thin muscles are not sufficiently developed." (T1)*

*"They are generally insufficient in terms of fine motor skills. This also affects the writings of students. In this regard, they are like inclusive students. They have trouble holding a pencil." (T6)*

*"I do not think they are physically ready. Muscle structures are weak, small and students are weak. They often fall into place." (T8)*

#### *Fatigue*

Another result related to the physical readiness is that the students aged between 60-65 months get tired much faster than those who are aged between 66-72 months. Participants have attributed this to the abovementioned physical development in general, particularly the muscular development which is not sufficiently developed. In addition, it has been found that students are slow to work due to their rapid fatigue. It is stated by the participants that the students between the ages of 60-65 months are behind the 66-72 months old students in performing the assigned tasks. Also, the observations made support the expressions of the participants. Below are some interviews and observation notes on this topic.

*"I do not think they are physically ready to start the school. Because their muscles are not developed enough, they get tired quickly and stop writing. There is a gap between them and 66-72 months old students." (T13)*

*"They are not physically ready to carry this load. They cannot write, they get tired and are fed up with the events quickly. Students who are aged between 66-72 months are more comfortable." (T15)*

"S/he pauses a lot when doing his/her homework. S/he says 'We have already written at school, I'm very tired'." (P9)

"We have difficulty when he studies at home. He often complains that his hands are tired." (P14)

"They fulfill the task given as a whole class. When entering into the last 10 minutes of class, Elif stopped writing and waited still while her head was on the desk." (O3)

"They are not able to completely write vertical basic letters because of the inadequacy of their muscular skills. They write more slowly than students who are 66-72 months old." (T3)

"Their psycho-motor development is less than 66-72 months old students, so, they fulfill their tasks slowly and awkwardly. Despite the children's desire, their strength falls short." (T7)

"He writes one-page homework in 2-3 hours." (P2)

"After dinner, he does his homework partly and slowly and extends his homework over a period of time till sleeping." (P11)

"The teacher asked them to fulfill the tasks given on the pages which are about the letters from they have learned through fascicule. At the moment, while most of the students in the class are doing the tasks on the 9<sup>th</sup> or 10<sup>th</sup> page, Elif is doing the tasks on the fourth page" (O2)

## Cognitive Readiness

### Perception

One of the results in the study related to cognitive readiness is that students who are aged between 60-65 months have more difficulties in perceiving and following the directives than students who are between the ages of 66-72 months. It has been found out that the teachers especially point out to negative opinions in this regard. In addition, through the observations made, it was determined that the children aged between 60-65 months have problems in comprehending and fulfilling the tasks given. Below are some interviews and observation notes on this topic.

"60-65 months aged students do not listen to the lesson. Listeners do not understand, either. They understand what they will do later than other students." (T5)

"Younger students have trouble in perception. They quickly forget what is said, they cannot fulfil their duties." (T8)

"Students in the age range of 60-65 months have difficulty in pursuing, generalizing, reasoning. Students older than 66 months old students are more active in the class and their perceptions are clearer." (T10)

"Younger students double-take what is said when they fulfil their tasks. The students who are aged between 66-72 months are more ready, and able to understand and practice better." (T17)

"I observed that the students aged between 60-65 months have more difficulty in perceiving directives and establishing a connection between subjects." (T20)

"The teacher said they would fold the corner of the page that is open in front of them and paint the page at home. Elif did not fold the corner of the page. She turned the next page." (O2)

"Teacher called Elif to the blackboard. Write 'ka' said teacher. Elif wrote 'el'." (O3)

It has been determined that some of the parents have different views on the cognitive readiness of the students who are aged between 60-65 months. These parents stated that they don't have problems in perceptions and fulfilment of their assigned tasks. These participants asserted that their children's perception is good, and they understand everything. Here are some interviews related to this:

"His perception is good. He understands everything you say." (P1)

"When I want something from him at home, he immediately understands it and does it beautifully." (P6)

"My child's perception is very clear. He does the work that needs to be done at home and does what we want from him without repetition." (P14)

### Fulfil the Tasks

It has been reached that the students who are aged between 60-65 months do not fulfil the tasks given in the lesson or homework, cannot complete them, and sometimes parents do their homework. Teachers stated that these students have a limited time of attention, that they did wrong tasks, and that they were late to read. Parents also stated that their children were not able to perform the assigned tasks adequately. When the opinions are



examined; it is seen that physical deficiencies are also the cause of cognitive problems. Below are some observations and interviews related to this topic:

*"Students aged between 60-65 months need more help. Attention time is shorter than students aged between 66-72 months. They cannot do the given missions on time or they do wrong." (T3)*

*"Students aged between 60-65 months cannot do assignments-homework, they have their families done it. They fall behind in the class." (T6)*

*"Students aged between 60-65 months have a harder time of fulfilling the duties given in comparison to those in the range of 66-72 months. Especially, it can be said that they reach the level of reading later." (T20)*

*"He starts doing the homework. Towards the end, I hold his hand and we write together. Suddenly, I notice that I keep writing and he watches me. What can I do? The child cannot do it alone." (P4)*

*"The teacher gave the task of painting the open page in front of them, the ones with the "I" letter. There are 10 pictures on the page, Elif painted only 2 of the 7 pictures that need to be painted." (O1)*

### **Emotional Readiness**

#### *Attitude towards School*

Another dimension of the 60-65-month-old children's readiness is the emotional readiness. At this point, important findings obtained is that the students aged between 60-65 months have a negative attitude towards students, teachers and school. Teachers have indicated that those children have developed negative attitudes towards the school, the lesson and the teaching because they are not emotionally prepared and that 66-72 months old children are ready. Similarly, some parents reported that their children don't like school and teachers. It has been noted by some participants that the 60-65 months old students exhibit a negative attitude towards school when they cannot overcome the task they are supposed to do.

*"Students who are not emotionally ready are unhappy at school and have trouble. These troubles cause students to develop a negative attitude towards school and teacher and a feeling of inadequacy." (T13)*

*"The 60-65 month old children are at play age. They are far behind the students aged between 66-72 months old in terms of interest to lessons, teachers and school" (P18)*

*"School, homework, lectures turn into torment for students aged between 60-65 months. They do not like it, they have hard times, and as a result they take a dislike to school and teacher." (T11)*

*"Before the school starts, he would be very happy to mention about the school. But starting from the first day, he began to show a bad attitude towards the teacher and dislike school. This still continues. I do not understand why." (P10)*

*"The bell rang. Some of the female students ran to hold their teacher's hands and walk in the corridor with her. Up to now, it hasn't been observed that Elif approached her teacher and held her teacher's hand" (O6)*

#### *Separation from Families*

Another result related to emotional dimension is that children who are aged between 60-65 months, experience problems when separated from their families. It has been stated by the teachers and parents that the students aged between 60-65 months are not easily able to leave their families when starting the school and that the school is more difficult for them than the students aged between 66-72 months. The teachers stated that some of the younger students have come to lesson with their parents for weeks. Also, a parent marked that her child cries and hides when it is time to go to school. Here are some opinions on this topic:

*"I cannot say they are very prepared emotionally. Separation of 60-65 months old children from their family is a dramatic situation compared to 66-72 months old children. They want more attention than others." (T4)*

*"I do not think 60-65 months old students are emotionally ready to start school. They do not want to leave the family. One of the students came to lesson with his mother for 3 weeks." (T12)*

*"They want a lot of care. This level of care can only be found within the family. That is why they do not want to be separated from their parents." (T15)*

*"To tell you the truth, each day of the first two weeks was a torment for us. She did not want to leave us. She cried and didn't want to come to school, and was hiding when it was time to go school." (P5)*

*"He did not warm up to school. He thought as if the school takes her away from her family. He did not go into class without me or his father." (P8)*

*"He once said to me, "I do not like school, I like my family, I do not want to leave you." (P12)*

### *Self-Confidence*

The students aged between 60-65 months don't trust themselves, during the events they remain in the background and they became introverted. The participants stated that these students are insufficient in terms of self-confidence, sense of success, self-expression. It has been expressed by some participants that this is a consequence of not having an adequate physical and cognitive readiness level. Here are some notes on this topic:

*"When these students (60-65 months) fall behind in literacy activities, they begin to have confidence issues. They keep themselves in the background" (T5)*

*"The younger children are insufficient in terms of self-confidence, sense of success, self-expression. The students who are aged between 66-72 months are much better in these matters." (T12)*

*"Students aged between 60-65 months are also far behind emotionally. They are more emotional than the others. They feel bad when they fall behind in certain subjects. Their self-esteem disappears" (T16)*

*"Students who are aged between 60-65 months have lower self-confidence. They cannot express themselves, they turn in upon themselves and live in their own world." (T20)*

*"Normally, he is an active boy who makes a mess of the house. But he becomes introverted at school, as if he wasn't the same self-confident child as in the house." (P4)*

*"The school is very crowded for her. He is also small. He feels himself in danger and alone. The school is an unsafe place for him." (P15)*

*"The teacher writes the letters learned at the beginning of the lesson. He wants the students to read letters-syllables. While most of the class repeat the letters aloud. Elif does not, she watches her friends around." (O4)*

### **Psycho-Social Readiness**

#### *Socialization*

It has been found that students aged between 60-65 months had difficulty in socialization and involving in group work, and that they were not as successful as students in the age range of 66-72 months. In interviews, teachers stated that 60-65 month old children didn't participate in playgroups, their communication was not good, they were not participative, they spent time alone and developed more close relationships with their own family members than their friends. Parents seem to have similar expressions. In addition, observation data supporting these findings have been obtained. The citations about this subject are as follows:

*"The 66-72 month old students make friends more quickly; they can create a play group. Younger students spend time alone or around their teacher." (T3)*

*"These children are not very social. They are egoists, play parallel games; it is not a problem for them to be independent. The 66-72 month old students are better for cooperation. They easily enter groups and adapt." (T6)*

*"The 60-65 month old students experience a more dominant relationship with their parents and siblings which keeps them away from sharing, cooperating, and expecting acceptance in the school." (T7)*

*"Since 60-65 month old students cannot perform the necessary tasks in the games, they are not included to the games by other students because they are slow. That's why their communication with their friends is not very good." (T14)*

*"60-65 month old students have problems in friendships. They do not know how to share." (T18)*

*"Young students who have difficulty academically also have difficulty in socializing. The feeling of failure turns them into independent, group-independent individuals." (T20)*

*"He's fallen behind on some issues because he's a few months younger than the others. In that case, they did not include him the games." (P7)*

*"Some students in the class have known each other since kindergarten. Ours did not go to kindergarten. It's a bit difficult to establish friendship." (P12)*

*"The bell rang. Everybody ran out. Elif walked out. He ran alone for a while, then sat on the bench. I approached her when the bell rang and I asked why she walked alone. She said, "I have no friends." (O1)*

### *Obey the Rules*

Another important result related to psycho-social readiness is the adoption of students aged between 60-65 months to class and school rules. Particularly, teachers consider students to be problematic in adhering to the rules of class and school, while parents are of different opinions. The teachers stated that these students don't accept the rules, consider themselves at home, go to class late, and sleep in the class. While some parents stated that their children obey class and school rules, some said they did not.

*"They always stand up and have trouble keeping up with class rules, which makes it hard for other students to accept them." (T2)*

*"Students between the ages of 60-65 months have trouble getting use to the school rules. They tend to consider themselves at home and exhibit behaviors such as sleeping, going to class late, eating late and collecting their stuff late. The students who are older never lose their leadership in the games." (T11)*

*"In terms of acceptance by colleagues, adoption of class rules, adaptations, students aged between 66-72 months are better than those aged between 60-65 months." (T16)*

*"They have trouble keeping up with school and classroom rules, and have problems with interiorizing classroom rules." (T18)*

*"My child follows the rules, sit quietly, make no noise at all" (P11)*

*"My child is a little hyperactive. He cannot sit for a long time. He stands, wonders and jumps. That's why he cannot adopt the rules anyhow." (P6)*

*"My daughter was not accustomed to classroom rules, lessons, sitting and listening because she did not go to kindergarten. It was a little difficult. But now it looks good." (P5)*

## **Discussion and Conclusion**

In this study, it was aimed to determine the school readiness of the first grade students who started school at the ages of 60-65 months. The results were presented and discussed in four dimensions (physical, cognitive, emotional, psycho-social readiness).

As a result of the study, it was found that the first grade students who start school at the age of 60-65 months old do not have the necessary physical readiness. 60-65 month old students fall behind in terms of height, weight, thin muscle development compared to those in the age range of 66-72 months; they get tired quickly in writing activities; when they fulfil their assigned tasks, and it was concluded that they show a slow progress and finish the tasks lately. This result coincides with the result of the study by Ünver, Dikbayır & Yurdakul (2015). In their study, they concluded that "students who are younger in terms of a few months have difficulty in studies that require fine muscle skills such as cutting and writing". Moreover, Arı (2014) concluded that 60-65 months old students are not able to close the scissors, cannot close the button of the zipper / trousers and are smashed due to shortness in breaks. In the study conducted by Sak, Şahin-Sak & Tuncer (2016), it was concluded that children attending pre-school education stated that they expect a new physical environment in primary school. Therefore, it is necessary to be physically ready to cope with this new physical environment.

It was concluded that students aged between 60-65 months have more cognitive problems than older students. Most of 60-65 months old students are faced with problems in perceiving and fulfilling their tasks given properly. These students have problems with reading, writing and learning the letters. Students between the ages of 66-72 months perform better in terms of perceiving, fulfilling and learning letters. Gündüz & Çalışkan (2013) reached a similar result. In their study, they examined the school maturity and literacy skills of children aged between 60-84 months, it was found that the perception levels, school maturity and literacy skills of the students aged between 66-72 and 72-84 months are better than 60-65 month old students. Öztürk & Uysal (2013) concluded that "the students who are 60-66 months old have difficulty in the visual perception, in writing the letters, in defining the visual expressions" as a result. In another study, Sharp & Hutchison (1997) found that autumn-born (older) children achieved better test scores than summer-born (younger) ones in England and Wales. Additionally, Hámori (2007) concluded that there is a positive correlation between school starting age and academic performance. On the other hand, in this study, some parents stated that their children are ready

cognitively and they have no deficiencies in perception contrary to opinions of teachers. In this sense, it cannot be said that the views of teachers and parents completely overlap.

Starting school at early ages have a negative impact on self-esteem and learning motivation to learn and can increase anxiety (Sharp, 2002). Emotional factors such as self-confidence, self-esteem, and mother dependence have a significant impact on school readiness (Birch & Ladd, 1997). The results obtained from the study revealed that the students between the ages of 60-65 months have some emotional problems. Students in this age group have difficulty in remain separate from their families; they were introverted and showed lack of self-confidence; self-esteem; and they have negative attitude towards school, teachers, and learning. Similar results were obtained in the related studies. Canbulat (2007) reached the conclusion that the adaptation level of 66 months old and older students to school is better than those aged between 60-65 months. In another study, Yoleri & Tanış (2014) reached the conclusion that the adaptation level of 72 months old students is better than 60 months old students. Similarly, Kerimoğlu (2014) reached the conclusion that 5-year-old group (60-month-old) are more likely to experience problems of restlessness, anxiety and shyness than 6-and 7-year-old groups (72-84-month-old).

In the study, it was concluded that the students who started school at the age of 60-65 months have psychosocial problems and thus they are not fully ready. The most important result related to socialization defined as becoming a group and acquire the values of that group (Gander & Gardiner, 2004). This age group is far behind in terms of socializing, participating in groups, spending time with other students and teachers, communicating, adopting class and school rules, and adhering to rules than the students aged between 66-72 months. However, student-teacher and student-student relations have an important role in adapting to school (Birch & Ladd, 1997; Gülay, 2011; Ogelman & Erten, 2013). According to this result, which also coincides with the results of Kapçı, Asar, Çelik, Daşcı & Avşar (2013), students aged between 60-65 months suffer social problems both in the beginning of the process and in the following periods. Kerimoğlu (2014) carried out a study and reached a similar result that five-year-old students have problems in social relationships such as carelessness, hyperactivity and that they don't follow the directions and obey the rules. Erdoğan-Işıkoğlu & Şimşek (2014) approached this issue from a different perspective and stated that sharing the same environment with the older students cause the younger students aged between 60-65 months have difficulty in communication and socialization. The children in this situation should be encouraged and supported for their personal enterprises and they should be cared (Kasten, 2017). In this study, it was also found that physical disability is one of the obstacles that hinders the socialization of children aged between 60-65 months. Because, psychomotor readiness serves as a tool for learning and child's social relationships (Cobb, 2001).

When the results obtained in this study are evaluated as a whole, 60-65 months old students come out to have experienced some important problems related to the school readiness. Although these problems were investigated in different dimensions, it was observed that these dimensions affect each other. Especially, students who are not ready physically do not fulfil their tasks, socialize adequately and develop positive attitudes towards school/teacher/learning. Thus, school success of these students is less than 66-72 months old students. Similarly, in the study conducted by Şahin, Sak & Tuncer (2013), it was determined that the most emphasized dimension affecting school readiness by participants was physical readiness.

## **Recommendations**

In the light of the results obtained in the study, some suggestions can be made. Firstly, it can be said that the school starting age policy in Turkey should be revised, and specialized reports and readiness tests (e.g. the Metropolitan Readiness Tests) can be utilized instead of parental preference. Because, it is known that school starting age have a positive effect on school success (Hámori, 2007), and developed countries tend to keep the school starting age higher (Dee & Sievertsen, 2018). Secondly, the school and the families should collaborate to ensure the physical, cognitive, emotional and psycho-social readiness of students and the parents whose children's school readiness is insufficient should be informed. In addition, families should be encouraged to send their children to pre-school education. Because, pre-school education has a positive effect on development areas of children and therefore, it is important for their primary school readiness (Şahin, Sak & Tuncer, 2013). Lastly, the size of the desks and sinks, and the materials used in the teaching process should be suitable for all students.

## References

- Arı, A. (2014). İlkokul birinci sınıfa başlama yaşına ilişkin öğretmen görüşleri [Teacher views about the starting age of the first grade elementary school]. *Kuram ve Uygulamada Eğitim Bilimleri*, 14(3), 1031-1047.
- Bağçeli-Kahraman, P., & Başal, H. A. (2013). Okula hazırbulunuşluğu değerlendirme testinin uyarlama çalışması [The adaptation study of school readiness evaluation test to Turkish]. *The Journal of Academic Social Science Studies*, 6(1), 889-911.
- Başaran, İ. E. (1998). *Eğitim psikolojisi [Educational psychology] (5th Edition)*. Ankara: Aydan Press.
- Binbaşıoğlu, C. (1995). *Eğitim psikolojisi [Educational psychology] (9th Edition)*. Ankara: Yargıcı Press.
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61-79.
- Bloom, B. S. (1976). *Human characteristics and school learning*. McGraw-Hill.
- Büyüköztürk, Ş., Çakmak, E., Akgün, Ö.E., Karadeniz, Ş., & Demirel, F. (2013). *Bilimsel araştırma yöntemleri [Scientific research methods]*. Ankara: Pegem Akademi Press.
- Canbulat, T. (2007). Kesintili zorunlu eğitimden etkilenen ilkököl birinci sınıf öğrencilerinin okula uyum ve okula hazır bulunuşluk düzeylerinin değerlendirilmesi [Evaluation of school compliance levels and readiness for school of freshmen's who are affected from intermittent mandatory training]. *Kastamonu Eğitim Dergisi*, 25(4), 1573-1586.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. California: Sage Publications Ltd.
- Cobb, N. J. (2001). *The child: Infants and children*. California: Mayfield Pub. Co.
- Çelenk, S. (2008). İlköğretim okulları birinci sınıf öğrencilerinin ilkökölme ve yazma öğretimine hazırlık düzeyleri [Level of readiness for reading and writing education among first grade students of primary schools]. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 8(1), 83-90.
- Davis, B. G., Trimble, C. S., & Vincent, D. R. (1980). Does age of entrance affect school achievement?. *The Elementary School Journal*, 80(3), 133-143.
- Dee, T. S., & Sievertsen, H. H. (2018). The gift of time? School starting age and mental health. *Health economics*, 27(5), 781-802.
- Eliot, L. (2000). *What's going on in there?: how the brain and mind develop in the first five years of life*. USA: Bantam Books.
- Entwisle, D. R., & Alexander, K. L. (1998). Facilitating the transition to first grade: The nature of transition and research on factors affecting it. *The Elementary school journal*, 98(4), 351-364.
- Entwisle, D. R., Alexander, K. L., & Olsen, L. S. (2005). First grade and educational attainment by age 22: A new story. *American Journal of Sociology*, 110(5), 1458– 1502.
- Erdoğan-Işkoğlu, N., & Şimşek, Z. C. (2014). Birinci sınıfa başlayan çocukların, velilerin ve öğretmenlerin okula uyumlarının incelenmesi [Investigation of school readiness of first grade children, parents and teachers]. *International Journal of New Trends In Arts, Sports & Science Education*, 3(2). 62-70.
- Gander, M. J., & Gardiner, H. W. (2004). *Çocuk ve ergen gelişimi [Child and adolescent development]*. (Translate: A. Dönmez, N. Çelen & B. Onur.). Ankara: İmge Press.
- Gülay, H. (2011). 5-6 yaş grubu çocuklarda okula uyum ve akran ilişkileri [School adjustment and peer relationships of 5-6 years old children]. *Elektronik Sosyal Bilimler Dergisi*, 10(36), 1-10.
- Gündüz, F., & Çalışkan, M. (2013). 60-66, 66-72, 72-84 Aylık Çocukların Okul Olgunluk ve Okuma Yazma Becerilerini Kazanma Düzeylerinin İncelenmesi [Investigating the level of 60-66, 66-72, 72-84 monthold children's school readiness and acquisition of literacy skills]. *Turkish Studies – International Periodical For The Languages, Literature and History of Turkish or Turkic*, 8(8), 379-398.
- Hámori, S. (2007). *The effect of school starting age on academic performance in Hungary* (No. BWP-2007/2). Budapest Working Papers on the Labour Market.
- İnanç, B. Y., Bilgin, M., & Atıcı M. K.(2005). *Gelişim psikolojisi [Development psychology]*. Adana: Nobel Press.
- Kagan, S.L., Moore, E. & Bredekamp, S. (Eds.). (1995). *Reconsidering children's early development and learning: Toward common views and vocabulary*. Report of the National Education Goals Panel, Goal 1 Technical Planning Group. Washington, DC.
- Kandır, A. (2003). *Gelişimde 3-6 yaş çocuğum büyüyor [My 3-6 years old child is growing in development]*. İstanbul: Morpa Kültür Press.
- Kapçı, E., Artar, M., Çelik, E.G., Daşcı, E., & Avşar, V. (2013). *İlkoköl birinci sınıfa farklı yaşlarda başlayan çocukların ruhsal ve sosyal gelişimi ile akademik benlik algılamaları açısından karşılaştırılması [A comparison between the psychological, social development and academic self-perceptions of children who started at different ages of primary school]*. Unpublished Project, Ankara University.
- Kerimoğlu, F. (2014). *Farklı yaştaki çocukların oluşturduğu ilkököl 1. sınıflara ilişkin öğretmen değerlendirmesi [Teachers' evaluations of 1st grade elementary school classrooms consisting of*

- children from different ages] (Unpublished Master Thesis). Ankara University Educational Sciences Institute, Ankara.
- Kasten, H. (2017). *4-6 yaş çocuk gelişimi & gelişim psikolojisinin temel esasları II [Basic principles of 4-6 years old child development and developmental psychology II]* (Translate Edt. Oğuz Emre). Ankara: Anı Press.
- Ladd, G. W. & Burgess, K. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70(4), 910-929.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), 307-320.
- Mercan-Uzun, E. (2015). *Okul öncesi dönemde uygulanan "okula hazırız" eğitim programının ilkököl birinci sınıf öğrencilerinin okula uyum ve hazırbulunuşluk düzeylerine etkisi [The effects of 'we're ready for school' education program - applied in preschool year - on school adaptation and school readiness of 1st grade elementary school students]* (Unpublished Doctorate Thesis). Ondokuz Mayıs University Educational Sciences Institute, Samsun.
- Merriam, S. (1995). What can you tell from an N of 1?: Issues of validity and reliability in qualitative research. *PAACE Journal of lifelong learning*, 4, 50-60.
- Official Gazette of Turkey. (2012). *Millî eğitim bakanlığı ilköğretim kurumları yönetmeliğinde değişiklik yapılmasına dair yönetmelik [Regulation on amendments to the regulation of the Ministry of National Education]*. Date: 21.07.2012, Number: 28360.
- Official Gazette of Turkey. (2013). *Millî eğitim bakanlığı ilköğretim kurumları yönetmeliğinde değişiklik yapılmasına dair yönetmelik [Regulation on amendments to the regulation of the Ministry of National Education]*. Date: 14.08.2013, Number: 28735.
- Ogelman, H. G., & Erten, H. (2013). 5-6 yaş çocuklarının akran ilişkileri ve sosyal konularının okula uyum düzeyleri üzerindeki yordayıcı etkisi (boylamsal çalışma) [Following relations of 5-6 year-old children, who attend preschool education, in terms of social position, peer relationships and school adjustment levels (longitudinal study)]. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 30, 153-163.
- Oktay, A. (2010). *İlköğretime hazırlık ve ilköğretim programları [Preparation for primary education and primary school curricula]*. Ankara: Pegem Akademi Publishing.
- Özkesemen, A. (2008). *Okul öncesi eğitimi alan ve almayan 1. sınıf öğrencilerinin akademik başarılarının yeni müfredat programına göre değerlendirilmesi [In terms of the new curriculum an assesment of the academic success of the first grade students who had preschool education and who had not.]* (Unpublished Master Thesis). Kafkas University Social Sciences Institute, Kars.
- Öztürk, E., & Uysal, K. (2013). İlkokul 1.sınıf öğrencilerinin okuma-yazma süreçlerinin takvim yaşı yönünden karşılaştırılması [Comparison of primary school first graders' literacy process in terms of chronological age]. *Turkish Studies- International Periodical for the Languages, Literature and History of Turkish or Turkic*, 8(8), 1041-1054.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods (3rd ed.)*, California: Sage Publications, Inc.
- Rafoth, M. A., Buchenauer, E. L., Crissman, K. K., & Halko, J. L. (2004). School readiness-preparing children for kindergarten and beyond: Information for parents. *School and Home*, 1-3.
- Ramey, C. T., & Ramey, S. L. (2004). Early learning and school readiness: Can early intervention make a difference?. *Merrill-Palmer Quarterly*, 50(4), 471-491.
- Raver, C. C. (2003). Young children's emotional development and school readiness. *Social policy report*, 16(3), 3-19.
- Sak, R., Şahin-Sak, İ. T., & Tuncer, N. (2016). Turkish preschool children's perceptions and expectations related to 1st-grade education. *Childhood Education*, 92(2), 149-154.
- Seven, S. (2011). Okula uyum öğretmen değerlendirmesi ölçeği'nin geliştirilmesi [Developing of adaptation to school teacher assessment scale]. *Türk Eğitim Bilimleri Dergisi Kış*, 9(1), 29-42.
- Şahin, İ. T., Sak, R., & Tuncer, N. (2013). Okul öncesi ve birinci sınıf öğretmenlerinin ilköğretime hazırlık sürecine ilişkin görüşlerinin karşılaştırılması [A comparison of preschool and first grade teachers' views about school readiness]. *Kuram ve Uygulamada Eğitim Bilimleri*, 13(3), 1691-1713.
- Sharp, C. (2002, November). School starting age: European policy and recent research. In *LGA Seminar "When Should Our Children Start School?"*.
- Sharp, C., & Hutchison, D. (1997). *How do season of birth and length of schooling affect children's attainment at key stage 1?: A question revisited*. Slough: NFER.
- Shepard, L. A., & Smith, M. L. (1986). Synthesis of research on school readiness and kindergarten retention. *Educational Leadership*, 44(3), 78-86.
- Slavin, R., Karweit, N., & Wasik, B. (1994). *Preventing early school failure: Research, policy, and practice*. Needham Heights, MA: Allyn & Bacon.

- Teke, H. (2010). *Ana sınıfı öğretim programının ilköğretim 1. kademe 1. sınıf öğrencilerinin hazırbulunuşluk düzeylerine etkisinin öğretmen görüşlerine göre incelenmesi [Analysing the effect of pre-school curriculum in first grade level on student's level of school readiness according to the views of teachers]* (Unpublished Master Thesis). Selçuk University Social Sciences Institute, Konya.
- Tuna, A., & Kaçar, A. (2005). İlköğretim matematik öğretmenliği programına başlayan öğrencilerin lise 2 matematik konularındaki hazır bulunuşluk düzeyleri [Level of mathematics teacher candidates' readiness to high school 2 mathematics subjects]. *Kastamonu Eğitim Dergisi*, 13(1), 117-128.
- UNICEF. (2012). *School readiness: A conceptual framework*. United Nations Children's Fund: New York.
- Ülgen, G. (1997). *Eğitim psikolojisi [Educational psychology]*. İstanbul: Alkım Press.
- Ünal, M. (2005). *Eğitim fakültelerinde ortak ders olarak okutulan yabancı dil derslerinde öğrencilerin bilişsel hazırbulunuşluk düzeylerinin akademik başarıya etkisi (The effects of students' cognitive readiness on their academic accomplishment in foreign language courses in the faculties of education)* (Unpublished Master Thesis). Gazi University Educational Sciences Institute, Ankara.
- Ünver, G. B., Dikbayır, A., & Yurdakul, B. (2015). Kesintili zorunlu eğitim ilkököl birinci sınıf uygulamalarının incelenmesi [Investigation of first grade applications in discrete compulsory education]. *K. Ü. Kastamonu Eğitim Dergisi* 23 (4), 1647-1664.
- Yenilmez, K., & Kakmacı, Ö. (2008). İlköğretim yedinci sınıf öğrencilerinin matematikteki hazır bulunuşluk düzeyi [Level of mathematics readiness of primary school seventh grade students]. *Kastamonu Eğitim Dergisi*, 16(2), 529-542.
- Yılmaz, H., & Sünbül, A. M. (2003). *Öğretimde planlama ve değerlendirme [Planning and evaluation in teaching]*. Ankara: Mikro Publishing.
- Yin, R. K. (2009). *Case study research: design and methods*. Los Angeles: Sage Publications.
- Yoleri, S., & Tamış, H. M. (2014). İlkokul birinci sınıf öğrencilerinin okula uyum düzeylerini etkileyen değişkenlerin incelenmesi [Determination of the factors affecting adjustment levels of first class students at elementary school]. *Karabük Üniversitesi Sosyal Bilimler Dergisi*, 4(2), 130-141.
- Yörükoğlu, A. (1993). *Çocuk ruh sağlığı [Child's mental health]*. İstanbul: Özgür Press.