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The Investigation of Orientation and Preparation Activities: In Terms of Mathematics and Social Studies Attainments

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Abstract

The preparedness of children in our country for primary education is performed based on the calendar age. With the changing system, children turning 66 months old begin primary school. However, in addition to the calendar age of the child, it is necessary for them to reach a certain level of maturity in terms of physical, social, emotional, cognitive, and self care areas. In such a case, it can be observed that some children begin primary school at earlier ages and without benefitting from preschool education. The child encountering new conditions in the transition from home or preschool to primary school can experience problems in adapting to the primary school curriculum and its implementation. For this reason, instead of directly starting off with an area of teaching such as reading and writing activities in the 1st grade, for the purpose of having them start off such activities in a sound manner, it is important that education and teaching is presented by means of blended activities. In line with this, in the primary school 1st grade curriculum that has been renewed, activities have been organized under the scope of "orientation and preparation activities" covering a period of twelve weeks. The attainments that these activities serve have not been specified in the renewed primary school curriculum in a clear and detailed manner. Primarily, in this study, by taking into account the attainments of the old curriculum prepared for 1st grade children and children that are 66 to 72 months old, attainments have been determined for the mathematics and social studies courses under the scope of the orientation and preparation activities. Based on this, the purpose of the study is to investigate the orientation and preparation activities of the students and their level of achieving the mathematics and social studies attainments in the curriculum. For the purpose of investigating the status of children that have and have not received preschool education achieving mathematics and social studies attainments in the orientation and preparation process, the "Mathematics and Social Studies Attainments Achievement Scales" was prepared.

Keywords: Primary school, orientation and preparation activities, mathematics attainments, social studies attainments, opinions of 1st grade teachers.

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INTRODUCTION

There is a widespread consensus on the importance of the early childhood period in the life of any individual (www.unicef.org). Children have a natural tendency for discovering and learning. Learning starts at very early ages and continues throughout life. From the first instance they are born, children have great ambition for discovering and learning, they learn to actively discover their environment and establish communication, and develop awareness towards their environment.

The preschool period is the period that brain development is experienced the most intense and fastest. Brain development constitutes robust grounds for the cognitive, language, social-emotional, and motor development of the child (MEB, 2012). As a matter of fact, the need for starting education at early ages in order to raise individuals is an incontrovertible fact. This fact is also supported by conducted studies. The fact that children that have received preschool education are different from their peers in terms of school achievement in future years is an important finding in study results. When children move from pre-school to primary school they experience a change of identity from being a child in pre-school to a student in school, which means they are expected to behave in a certain way and understand the classroom rules, to learn the language of the classroom and to "read" the teacher. When children enter school they often meet a larger physical environment and it can be difficult to find their way. In pre-school the child belongs to the eldest group of children, and suddenly he is the youngest and is forced to relate to older children. In school the social environment is much more complex; there is a greater number of children compared with the number of children in pre-school, and with that there will be much more competition. In school there are fewer adults, which mean less individual attention and interaction with adults than previously. In school children have less autonomy and they are often forced to discipline their own body movement. There is a shift in the academic demands of children; they now meet new, unfamiliar challenges (Docket & Perry, 2007; Fabian, 2007).

Furthermore, in conducted studies it has been concluded that the period, in which the child experiences most intense learning, acquires basic habits, and rapidly shapes and develops mental skills is between 0 and 72 months old (Yılmaz, 2003). Sevinç (2005) supports the view that the preschool years covering 0 to 6 years old is one of the most crucial periods of life due to the impact of the formation and shaping of the personality and the acquisition and development of basic knowledge, skills, and habits on future years. Thus, the most crucial step of education occurs in the preschool period.

The study conducted by Ekinci (2001) aimed to compare cognitive, affective, and kinetic development and academic achievement in accordance with the objectives of the first grade of primary school between students receiving preschool education in the first grade of primary schools and students not receiving preschool education. According to the results of the study children in the first grade of primary school that have received preschool education were different from children that have not received preschool education in terms of mental, social, emotional development, skills, and health. This difference is in favor of children that have received preschool education. Furthermore, it has been observed that these differences have influenced

academic achievement significantly. Children that have received preschool education have been determined to have higher academic achievement than those that have not received preschool education.

Ergün (2003) compared the mathematics skills and mathematics achievement of first grade primary school children that have and have not received preschool education and obtained the finding that students that have received preschool education were more successful than those that have not received preschool education in terms of mathematical skills and mathematical achievement. Furthermore, it was observed that as the period of receiving preschool education increased, mathematical achievement and mathematical skill scores increased.

The study of Dağlı (2007) aimed to compare the Turkish and Mathematics course academic achievement of 1st grade primary school students that have and have not received preschool education. In line with obtained findings, students receiving preschool education were more successful than those that have not received preschool education in terms of academic achievement in the Turkish and Mathematics Courses. As the period of receiving preschool education increased, achievement score averages of students increased.

In the study conducted by Özkesemen, (2008) the academic achievement of students in the first grade of primary school that have and have not received primary education have been evaluated according to the new primary school first grade curriculum and it was asserted that preschool education had a positive impact on academic achievement.

In the study of Siva (2008) how preschool education influences the academic achievement of primary school students was investigated. Accordingly, it was asserted that the academic achievement of students that have received preschool education is higher than students that have not received preschool education. Furthermore, these children demonstrate a positive difference in comparison to those that have not received preschool education in terms of social-emotional, physical, cognitive, and language development.

Osakwe's study has shown that there is a significant difference in the cognitive ability between pupils with pre-primary education and those without. Several studies have shown that early childhood education has significant impact on the academic performance of pupils (Barnard 2001; Miedel and Reynolds 1999). Early childhood education has been observed to impact and influence the pupils' performance Mathematics, and Social Studies. (Osakwe, 2009)

Berlinski S. & Galiani S. & Gertler, P. (2006) investigated the effect of a large expansion of universal pre-primary school on subsequent primary school performance in Argentina. Results show that attending pre-primary school had a positive causal effect on subsequent third grade standardized Mathematics test scores and they found that pre-primary school attendance positively affects student's self-control in the third grade as measured by attention, class participation, and discipline.

İnel H., Çağdaş A., Temiz G. (2012)'s study aimed to look for an answer to the question of 'Does the pre-school education affect the school maturity levels of 1st grade primary school students?' School maturity included understanding words, sentences, general information, matching, numbers and copying skills. They found that pre-school education affect school maturity positively.

Studies and observations have revealed that there are great differences in terms of all areas of development between children that have and have not received preschool education. For this reason, having children in our county receive preschool education is important in terms of the future of our society and country. It is also important in terms of the future life of the individual. In the 2012-2013 academic year in Turkey formal education institutions were arranged in the form of compulsory education levels in as primary, middle and high school and the 8 year uninterrupted compulsory education system was replaced with the 12 year graded compulsory education system (MEB, 2012b). The mathematics and social studies lesson under the orientation and preparation program introduced as a result of the changes conducted in the education system is an introduction in terms of achieving its attainments. However, the levels of readiness and development of children receiving preschool education may demonstrate differences when compared to children that have not received preschool education. These differences influence the acquisition of attainments in the orientation and preparation process positively or negatively. The purpose of this study is to reveal in which manner receiving or not receiving preschool education influences the acquisition of mathematics and social studies attainments in the orientation and preparation process. Answers have been sought for the questions below:

1. Are there differences in the level of achieving mathematics attainments in the orientation and preparation process between children that have and have not received preschool education?

2. Are there differences in the level of achieving social studies attainments in the orientation and preparation process between children that have and have not received preschool education?

METHOD

The research design for this study was descriptive survey type, designed to look into the effect of pre-school education on the academic performance of primary school pupils. The study group consists of first grade teachers at 40 primary schools in the Central district of Balıkesir. The selection was based on simple-random sampling technique. Two survey questionnaires were used to collect information from teachers regarding the performance of children having and not having pre-school experience. When the data collection instrument was being prepared the attainments of the 1st grade curriculum implemented prior to 2012 and the preschool education curriculum for 60-72 month old children were examined. Based on these attainments, 32 mathematics and 35 social studies attainments were formed for the mathematics and social studies activities in the "orientation and preparation process". For the purpose of determining the level of achievement of these attainments, two 5 score likert type scales were prepared. Accordingly, the grading in the scales were specified as "completely, generally, neutral, rarely, and never". The scale evaluates students that have and have not received preschool education together. For reliability, the responses of 35 1st grade teachers to the scale were evaluated and statistical

analyses in the SPSS 21.0 were conducted. In this section of the study there are findings and interpretations on reliability and validity of scales developed by researchers on the achievement of mathematics and social studies attainments.

1) Scope Validity

Whether or not the items in the measurement instrument were relevant to the measurement instrument is related to whether or not they represented the area desired to be measured and is determined according to expert opinion (Karasar, 2005, p. 151). The scale was examined by three experts and in order to determine expert opinions on the validity of the items, a response format with two options in the form of "valid" and "invalid" was used (Büyüköztürk, 2006). For the validity of the scales opinions of mathematics, primary teaching, and preschool teaching academic staff and 1st grade teachers were received. The coder consistency of the scales coded by six experts were observed and respectively determined to be .94 and .95.

2) Construct Validity

The construct validity was examined with 3 analysis methods: Factor Analysis, Total Item Correlation, and Item Discrimination Property. Factor analysis is related to what the measured property is and is the most powerful method in examining construct validity (Büyüköztürk, 2006, p.124). In order to test the construct validity of the instrument, in other words, to test whether or not it measured a single structure, the "principal components analysis" which is a factor analysis technique, was implemented.

2.1. Factor analysis for the scale on the achievement of mathematics attainments

The factor analysis is a statistical technique that aims to explain measurement with a few numbers of factors by gathering variables measuring the same structure or characteristics together (Büyüköztürk, 2006:123). In order to determine whether or not data obtained from the study group are suitable for factor analysis, the Kaiser-Meyer-Olkin (KMO) test was conducted. The Kaiser-Meyer-Olkin (KMO) value was greater than .60 and determined as .89 and the Bartlett Test being determined to be significant (p= .000< .05) indicates that the data are fit for factor analysis (Büyüköztürk, 2006, p.123, 126). The core value of 32 items (variables) in the scale were observed to be gathered under 3 factors with core values greater than 1. However, the variance explained by these three factors according to the scale is 76.49%. The variance explained by the first factor in the scale is 41.13%. The variance rates explained by the second and third factors (6.27%, 5.08%) both decrease (in comparison to the first one) and the percentile rates between these two also get smaller. Similar cases can be also observed for core values (22.11, 1.26, 1.10). This table information reinforces the possibility that the scale may have a single factor (dimension). In the Scree Plot graph, there is a steep drop from the first point to the second point and after the second point; the gradient of the line follows a horizontal course. Thus, the number of points on the second point (or the number of

intervals until the second point) provides us information on the number of factors. The information on this graph indicates to us that our scale can be accepted as single dimension. After the factor number has been decided as 1, the factor analysis was conducted again. It was observed that items 10 and 12 were under the 0.40 threshold load value (0.35< 0.40 and 0.33<0.40). Thus, these items were omitted and the analysis was conducted again.

As a result of the new analysis, according to results of the KMO and Bartlett Test, it was observed that the KMO value increased from 0.89 to 0.90 and the Bartlett coefficient (p=.000<.05) was significant (Büyüköztürk, 2006, p.126). It was determined that the common variances (communalities) of the single factor defined regarding the items varied between 0.798 and 0.912. Accordingly, it was observed that the scale explained 72.98% of total variance of items under a single factor and the variance related to the scale. Below *The Factor Load Values of the Items of the Mathematics Attainment Achievement Scale with a Single Factor* have been provided in Table 1.

Table 1. The factor load values of the items of the mathematics attainment achievement scale with a single factor

Items	1.Factor
I29	,912
I28	,904
I2	,900
I27	,889
I20	,884
I18	,880
I7	,876
I22	,876
I19	,875
I25	,872
I5	,865
I21	,864
I24	,860
I11	,857
I15	,856
I30	,855
I9	,854
I26	,851
I16	,844
I8	,843
I3	,841
I23	,837
I1	,833
I13	,826
I17	,825
I31	,818
I14	,816
I6	,803
I4	,798
I32	,798

The item-total score correlation, explains the relation between the scores obtained from test items and the total score of the test. The item-total correlation being positive and high demonstrates that the items sampled similar behaviors and the test has a high internal consistency. The scale is a likert type and the item-total correlation of this scale is calculated with the Pearson correlation coefficient. The item-test correlation is also utilized to interpret the extent to which the items distinguished the individuals in terms of the measured characteristic and is called the item discrimination index. It can be said that items with an item-total correlation of .30 and higher can be taken in the scale or the item can be corrected when considered necessary and items smaller than .20 cannot be taken in the scale (Büyüköztürk,2006,p.171). The Pearson correlation coefficient values were calculated in the study and these values have been provided in Table 2.

Table 2. Item analysis results

Item Number	The item-total score correlation[1]	t*
I1	,822	-11,38
I2	,892	-16,63
I3	,829	-13,71
I4	,785	-16,55
I5	,855	-12,20
I6	,791	-11,81
I7	,868	-16,41
I8	,832	-13,40
I9	,843	-12,23
I11	,847	-13,23
I13	,812	-11,25
I14	,802	-10,98
I15	,844	-13,97
I16	,831	-10,48
I17	,812	-12,56
I18	,870	-12,04
I19	,864	-12,05
I20	,875	-16,07
I21	,852	-14,80
I22	,865	-13,59
I23	,825	-10,69
I24	,850	-13,54
I25	,862	-12,36
I26	,840	-11,24
I27	,879	-12,67
I28	,895	-16,59
I29	,905	-17,90
I30	,845	-11,09
I31	,805	-12,93
I32	,785	-09,45

2.2. Factor analysis for the scale on the achievement of social studies attainments

The factor analysis is a statistical technique that aims to explain measurement with a few numbers of factors by gathering variables measuring the same structure or characteristics together (Büyüköztürk, 2006:123). In order to determine whether or not data obtained from the study group are suitable for factor analysis, the Kaiser-Meyer-Olkin (KMO) test was conducted. The Kaiser-Meyer-Olkin (KMO) value was greater than .60 and determined as .90 and the Bartlett Test being determined to be significant (p= .000< .05) indicates that the data are fit for factor analysis (Büyüköztürk, 2006, p.123, 126). The core value of 32 items (variables) in the scale were observed to be gathered under 4 factors with a core value greater than 1. However, the variance explained by these 4 factors regarding the scale is 76.51%. The variance explained by the first factor in the scale is 65.41%. The variance rates explained by the other factors are respectively 4.356%, 3.637% 3.115% and these values both decrease in comparison to the first and also the percentile rates among these values become smaller. A similar circumstance can be observed in core values (22.894, 1.525, 1.273, 1.090). This information reinforces the possibility that the scale may have a single factor (dimension). A similar circumstance can be observed in the Scree Plot graph. Thus, the factor number was decided as 1 and the factor analysis was conducted again. As a result of the new analysis, according to KMO and Barlett test results, it was observed that the KMO value remained the same as 0.90 and the Bartlett coefficient (p=.000<.05) was significant (Büyüköztürk, 2006, p.126). It was determined that the common variances (communalities) of the single factor defined regarding the items varied between 0.668 and 0.907. Accordingly, it was observed that the scale explained 65.41% of total variance of items under a single factor and the variance related to the scale. Below The Factor Load Values of the Items of the Social Studies Attainment Achievement Scale with a Single Factor have been provided in Table 3.

Table 3. The factor load values of the items of the social studies attainment achievement scale with a single factor

Item	1.Factor
I16	,907
I21	,877
I26	,874
I25	,874
I15	,863
I4	,861
I19	,857
I11	,849
I22	,842
I27	,836
I10	,836
I17	,833
I8	,833
I24	,832
I9	,828
I18	,824
I14	,816
I13	,812
I23	,808
I35	,806
I3	,805
I20	,796
I2	,795
I29	,794
I28	,787
I5	,781
I7	,778
I33	,762
I31	,758
I30	,758
I34	,749
I12	,721
I1	,720
I6	,707
I32	,668

The item-total score correlation, explains the relation between the scores obtained from test items and the total score of the test. The item-total correlation being positive and high demonstrates that the items sampled similar behaviors and the test has a high internal consistency. The scale is a likert type and the item-total correlation of this scale is calculated with the Pearson correlation coefficient. The item-test correlation is also utilized to interpret the extent to which the items distinguished the individuals in terms of the measured characteristic and is called the item discrimination index. It can be said that for items with an item-total correlation of .30 and higher can be taken in the scale or the item can be corrected when considered necessary and items smaller than .20 cannot be taken in the scale (Büyüköztürk, 2006, p. 171). The Pearson correlation coefficient values were calculated in the study and these values have been provided in Table 4.

Table 4. Item analysis results

Item Number	The item-total score correlation[1]	t*
I1	,704	-11,02
I2	,782	-12,50
I3	,794	-17,85
I4	,852	-19,49
I5	,766	-09,99
I6	,691	-07,37
I7	,764	-11,28
I8	,821	-11,32
I9	,816	-08,94
I10	,824	-11,59
I11	,838	-11,86
I12	,704	-12,04
I13	,798	-17,38
I14	,802	-09,06
I15	,852	-14,93
I16	,899	-18,00
I17	,820	-11,68
I18	,812	-10,44
I19	,846	-11,24
I20	,781	-09,34
I21	,867	-10,88
I22	,831	-09,69
I23	,796	-11,15
I24	,820	-11,47
I25	,864	-10,76
I26	,865	-13,70
I27	,826	-09,11
I28	,772	-09,26
I29	,779	-09,36
I30	,745	-08,07
I31	,743	-07,12
I32	,652	-05,73
I33	,749	-11,35
I34	,735	-06,88
I35	,794	-10,55

3) Reliability of the Scale

Reliability is the consistency between the responses provided to the items of the scale by individuals and is associated to the extent the scale correctly measures the characteristic it wishes to measure. The correlation calculated as the reliability coefficient of the scale (r) was used to interpret the extent to which individual differences related to test scores are dependent on real and error factors. The Cronbach Alpha reliability coefficient being .70 and higher are considered to be adequate for the reliability of the scores of the scale. (Büyüköztürk, 2006, p. 169-170, 171). The Cronbach Alpha reliability coefficient of both scales has been calculated as .98.

FINDINGS AND INTERPRETATION

For the purpose of seeking an answer to the question of "Are there differences in the level of achieving mathematics attainments in the orientation and preparation process between children that have and have not received preschool education?", the data obtained from the opinions of 1st grade teachers were analyzed using the t-test for independent samples in the SPSS.20 package program. According to the analysis results, the averages of mathematics attainment achievement scores of children that have received preschool education is 132.87 and this is 74.40 for children that have not received preschool education. According to the independent sample t-test conducted for the purpose of understanding whether or not the difference of 58.47 observed between average scores was in favor of students that received preschool education, t = 10.45 and the significance value is p=.00< .01. Accordingly, it was concluded that there was a significant difference between mathematics attainment achievement scores of children that have and have not received preschool education and this difference is in favor of children that have received preschool education. In this context, it can be said that children that have received preschool education are more successful in achieving mathematics attainments in the orientation and preparation period. The table on analysis findings is below.

Table 5. T-Test Results of Orientation and Preparation Process Mathematics Attainment Achievement Scores based on the Status of Receiving Preschool Education

Preschool Education	N	X	SS	Sd	t	p
Receiving	40	132,87	26.32	78	10.45	.00
Not Receiving	40	74,40	23.63			

p<.01

For the purpose of seeking an answer to the question of "Are there differences in the level of achieving social studies attainments in the orientation and preparation process between children that have and have not received preschool education?", the data obtained from the opinions of 1st grade teachers were analyzed using the t-test for independent samples in the SPSS.20 package program. According to the analysis results, the averages of social studies attainment achievement scores of children that have received preschool education is 139.97 and this is 82.22 for children that have not received preschool education. According to the independent sample t-test conducted for the purpose of understanding whether or not the difference of 57.75 observed between average scores was in favor of students that received preschool education t = 16.25 and the significance value is p=.00< .01. Accordingly, it was concluded that there was a significant difference between social studies attainment achievement scores of children that have and have not received preschool education and this difference is in favor of children that have received preschool education. In this context, it can be said that children that have received preschool education are more successful in achieving social studies attainments in the orientation and preparation period. The table on analysis findings is below.

Table 6. T-Test results of orientation and preparation process social studies attainment achievement scores based on the status of receiving preschool education

Preschool Education	N	X	SS	Sd	t	p
Receiving	40	139.97	11.36	78	16.25	.00
Not Receiving	40	82.22	19.38			

p<.01

Studies have shown that children who attended quality early education programs are more likely to have better test scores, grades and early childhood education has significant impact on the academic performance of students (Wana, 2010; Barnard, 1999). Children with no pre-school experience (the 'home group') had poorer cognitive attainment, sociability and concentration when they started primary school. (Sylva, K. & Melhuish, E.& Sammons, P.& Siraj-Blatchford, I. & Taggart, B.(n.d.). Similar to the findings of a study, (Bibi & Ali, 2012) pupils who had pre-school education perform better in academics than pupils who did not attend preschool education. Besides, in their study, it was revealed that pre-school learning has great impact on the academic achievement of students. Similar findings are to be found in these studies: (Ekinci (2001), Ergun (2003), Highlander (2007); Özkesemen; (2008), Siva, (2008); Osakwe, 2009; Berlinski, Galiani & Gertler (2006); İnel, Modern & Clean (2012) and Barnard 2001, Miedel and Reynolds, 1999))

CONCLUSION AND RECOMMENDATIONS

According to findings obtained in this study, the following was concluded that:

1) In this study conducted for the purpose of revealing in which direction receiving or not receiving preschool education influences achieving mathematics and social studies attainments in the orientation and preparation process, there was a need to develop a scale. The reason for this can be the achievement score of children being taken into consideration as a variable in domestic studies with similar subjects and not encountering adequate findings on reliability and validity even though observation forms have been formed. Furthermore, it was determined that there is no process in foreign studies called "orientation and preparation" and the impact of preschool education was investigated using achievement scores in the same manner. In this context, two scales on the achievement of mathematics and social studies attainments in the orientation and preparation process, whose validity and reliability have been ensured, can be applied to more teachers in various regions of Turkey.

2) For the purpose of investigating the status of children that have and have not received preschool education achieving mathematics attainments in the orientation and preparation process, the "Mathematics Attainments Achievement Scale" was prepared. In the preparation of the scale items attainments such as ordering, comparing, remembering, pairing, using numbers in daily life, performing basic measurement works, grouping objects, recognizing patterns, and supporting visual

perception were included. It is possible to say that the mathematics attainments in the scale were formed in a manner addressing all areas of development of the child.

3) For the purpose of investigating the status of children that have and have not received preschool education achieving social studies attainments in the orientation and preparation process, the "Social Studies Attainments Achievement Scale" was prepared. In the preparation of the scale items, skills supporting attainments such as self care skills, daily living skills, communication, emotion management, decision making, self recognition-monitoring personal development, participation-sharing-teamwork, and cooperation, and ethical behavior were included.

4) It was concluded that in the first grades of primary schools, students that have received preschool education are more successful in achieving mathematics and social studies attainments under "orientation and preparation" process in comparison to children that have not received preschool education. It can be said that this asserts the importance of preschool education and may positively influence the success of students that have received preschool education in the field of mathematics and social studies in the future.

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Uyum ve Hazırlık Çalışmalarının Matematik ve Hayat Bilgisi Kazanımları Açısından İncelenmesi

Özet

Ülkemizde çocukların ilköğretime hazır oluşları, takvim yaşı baz alınarak yapılmaktadır. Değişen sistemle birlikte 66 ayını dolduran çocuklar ilkokula başlamaktadır. Ancak çocuğun takvim yaşının yanı sıra fiziksel, sosyal, duygusal, bilişsel ve özbakım alanları açısından da belirli bir olgunluk düzeyine ulaşması gerekmektedir. Bu durumda bazı çocukların daha küçük yaşlarda ve okul öncesi eğitimden faydalanamadan ilkokula başladıkları görülmektedir. Evden ya da anaokulundan ilköğretime geçişte yeni bir durumla karşılaşan çocuk ilkokul programı ve bunların uygulanmasına uyum sağlamada sorunlar yaşayabilir. Bu sebeple ilkokul 1. sınıfa doğrudan okuma yazma çalışmaları gibi bir öğretim alanı ile başlamak yerine onların bu tür öğretim alanlarına sağlıklı bir başlangıç yapabilmelerini sağlamak için eğitim ve öğretimin harmanlanmış etkinliklerle sunulması önemlidir. Bu doğrultuda yenilenen ilkokul 1. sınıf programında on iki haftalık bir süreyi içeren "uyum ve hazırlık çalışmaları" kapsamında etkinlikler düzenlenmiştir. Bu etkinliklerin hizmet ettiği kazanımlar programda açık ve detaylı bir şekilde belirtilmemiştir.

Okul öncesi eğitimi alan ve almayan çocukların bütün gelişim alanları açısından büyük oranda aralarında farklar olduğunu araştırmalar ve gözlemler ortaya koymaktadır. Bu yüzden ülkemizdeki çocukların okul öncesi eğitim alması toplumumuzun ve ülkemizin geleceği açısından oldukça önemlidir. Bireyin ileriki hayatı için de oldukça önem arz etmektedir. Türkiye'de 2012-2013 eğitim-öğretim yılında örgün eğitim kurumları ilkokul, ortaokul ve lise kademeli zorunlu eğitim kurumları olarak düzenlenerek 8 yıllık kesintisiz zorunlu eğitim sistemi yerine 12 yıllık kademeli zorunlu eğitim sistemine geçilmiştir (MEB, 2012). Eğitim sisteminde yapılan değişikliklerin bir sonucu olarak ilköğretim 1. Sınıflara getirilen uyum ve hazırlık programı hayat bilgisi ve matematik dersi kazanımlarının gerçekleştirilmesi açısından bir giriş niteliği taşımaktadır. Ancak okul öncesi eğitimi alan çocukların hazır bulunuşlukları ve gelişim düzeyleri almayan çocuklara göre farklılık gösterebilir. Bu farklılık uyum ve hazırlık sürecinde yer alan kazanımların kazandırılmasını olumlu veya olumsuz yönde etkilemektedir. Bu çalışmanın amacı okul öncesi eğitim almış olup olmanın uyum ve hazırlık sürecinde yer alan matematik ve hayat bilgisi kazanımlarını kazandırmayı hangi yönde etkilediğini ortaya çıkartmaktır. Bu amaç doğrultusunda aşağıda yer alan sorulara yanıt aranmıştır:

1. Okul öncesi eğitimi alan ve almayan çocukların uyum ve hazırlık dönemindeki matematik kazanımlarını gerçekleştirme düzeyleri arasında farklılık var mıdır?
2. Okul öncesi eğitimi alan ve almayan çocukların uyum ve hazırlık dönemindeki hayat bilgisi kazanımlarını gerçekleştirme düzeyleri arasında farklılık var mıdır?

Çalışma grubunu Balıkesir il merkezinde bulunan 40 ilköğretim birinci sınıf öğretmenleri oluşturmaktadır. Veri toplama aracı hazırlanırken 2012 öncesinde uygulanan 1. Sınıf öğretim programı ve 60-72 aylıklar için okul öncesi öğretim programı kazanımları incelenmiştir. Bu kazanımlardan yola çıkılarak "uyum ve hazırlık programı" nda yer alan matematik ve hayat bilgisi etkinliklerine yönelik 32 matematik ve 35 hayat bilgisi kazanımı oluşturulmuştur. Bu kazanımların gerçekleştirilme düzeyini belirlemek amacıyla beşli likert tipinde 2 ölçek hazırlanmıştır. Buna göre ölçeklerdeki derecelendirme "tamamen, genellikle, kararsızım, nadiren ve hiç" şeklinde belirtilmiştir. Ölçekler, okul öncesi eğitimi alan ve almayan öğrencileri bir arada değerlendirmektedir. Güvenilirlik için 35 1. Sınıf öğretmeninin ölçeğe verdikleri yanıtlar değerlendirilerek SPSS 21.0 programında yer alan istatistik analizleri yapılmıştır. Her iki ölçeğin Cronbach Alpha güvenirlik katsayısı .98 olarak hesaplanmıştır. Bu değerler ölçeklerin güvenilir olduğunu göstermektedir. Ölçeklerin kapsam ve yapı geçerliliği açısından uygun oldukları tespit edilmiştir.

Okul öncesi eğitim almış olup olmamanın uyum ve hazırlık sürecinde yer alan matematik ve hayat bilgisi kazanımlarını kazandırmayı hangi yönde etkilediğini ortaya çıkartmak amacıyla yapılan bu çalışmada ölçek geliştirme ihtiyacı duyulmuştur. Bunun nedeni olarak yurt içinde benzer konulu çalışmalarda çocukların değişken olarak başarı puanlarının dikkate alındığı, gözlem formları oluşturulsa dahi geçerlilik ve güvenilirliklerine ilişkin yeterli düzeyde bulguya rastlanmadığı verilebilir. Ayrıca yurt dışı çalışmalarında "uyum ve hazırlık" adı altında bir süreç bulunmadığı ve benzer şekilde başarı puanları kullanarak okul öncesi eğitimin etkisi incelendiği tespit edilmiştir. Bu bağlamda, uyum ve hazırlık sürecinde yer alan matematik ve hayat bilgisi kazanımlarının gerçekleştirilmesi üzerine geçerliliği ve güvenilirliği sağlanmış iki ölçek, daha çok sayıda öğretmene Türkiye'nin farklı bölgelerinde uygulanabilir. Bu araştırmayla ilköğretim okullarının birinci sınıflarındaki okul öncesi eğitim alan öğrencilerle okul öncesi eğitim almayan öğrencilerin "uyum ve hazırlık" sürecinde yer alan matematik ve hayat bilgisi kazanımlarını gerçekleştirmede daha başarılı oldukları sonucuna ulaşılmıştır. Bu durumun okul öncesi eğitimin önemini ortaya koyduğu ve okul öncesi eğitim alan öğrencilerin gelecekteki matematik ve sosyal bilgiler alanlarındaki başarılarını olumlu yönde etkileyebileceğini söylemek mümkündür.

Anahtar Sözcükler: İlkokul, uyum ve hazırlık çalışmaları, matematik kazanımları, hayat bilgisi kazanımları, 1. sınıf öğretmen görüşleri.