Ankara Sağlık Bilimleri Dergisi



Journal of Ankara Health Sciences



e-ISSN: 2618-5989

# **Comparison of Health Education Perspectives of Children and Parents**

Çocukların ve Ebeveynlerin Sağlık Eğitimi Bakış Açılarının Karşılaştırılması

Alev Üstündağ<sup>1\*</sup>, Deniz Çalışkan<sup>2</sup>

<sup>1</sup> Sağlık Bilimleri Üniversitesi, Gülhane Sağlık Bilimleri Fakültesi, Çocuk Gelişimi Bölümü, Ankara, Türkiye <sup>2</sup> Ankara Üniversitesi, Tıp Fakültesi, Halk Sağlığı Anabilim Dalı, Ankara, Türkiye

Article Information	ABSTRACT					
Received:	Aim: In this study, it was aimed to reveal if there is a difference between the two groups by comparing the health					
02.11.2020	education knowledge levels of the children attending the third and fourth grades of primary education and the					
	knowledge levels of their parents. Subject and Method: In this quantitative study, the sample consists of 313					
Accepted:	children and their parents. Research data were obtained using a scale. In order to determine whether there is a					
31.05.2021	difference between the results of the scale between children and parents, the significance test of the difference					
	between the two independent groups was conducted. Results: As a result of the research, no significant difference					
	was found between the general results of the health education knowledge levels of the children and their parents. For					
	the sub-dimensions, there was no significant difference in personal safety and first aid, sleep, mental health and social					
	relations sub-dimensions, while a significant difference was found between the average scores of children and their					
	parents in the sub-dimensions of cleaning and self-care, nutrition, neglect and abuse. Conclusion: For a healthy					
	society and the future, children's health education and health literacy awareness should start as early as possible and					
	should be considered as part of the educational process of children.					
	Keywords: Health education, health education knowledge level, primary school children					
	<b>Reywords</b> , filedriff education knowledge level, primary school enhalen					
Makale Bilgisi	ÖZ					
<b>Makale Bilgisi</b> Geliş Tarihi:	ÖZ Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri					
*	•-					
Geliş Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve					
<i>Geliş Tarihi:</i> 02.11.2020	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri genel sonuçları arasında anlamlı fark bulunamamıştır. Alt boyutlarda yapılan inceleme sonucunda kişisel güvenlik					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri genel sonuçları arasında anlamlı fark bulunamamıştır. Alt boyutlarda yapılan inceleme sonucunda kişisel güvenlik ve ilkyardım, uyku, ruh sağlığı ve sosyal ilişkiler alt boyutlarında anlamlı fark bulunmazken temizlik ve öz bakım,					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri genel sonuçları arasında anlamlı fark bulunamamıştır. Alt boyutlarda yapılan inceleme sonucunda kişisel güvenlik ve ilkyardım, uyku, ruh sağlığı ve sosyal ilişkiler alt boyutlarında anlamlı fark bulunmazken temizlik ve öz bakım, beslenme, ihmal ve istismar alt boyutlarında çocuklarla ebeveynlerinin ortalamaları arasında anlamlı fark					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri genel sonuçları arasında anlamlı fark bulunamamıştır. Alt boyutlarda yapılan inceleme sonucunda kişisel güvenlik ve ilkyardım, uyku, ruh sağlığı ve sosyal ilişkiler alt boyutlarında anlamlı fark bulunmazken temizlik ve öz bakım, beslenme, ihmal ve istismar alt boyutlarında çocuklarla ebeveynlerinin ortalamaları arasında anlamlı fark bulunmuştur. Sonuç: Sağlıklı bir toplum ve gelecek için çocuklarda sağlık eğitimi ve sağlık okuryazarlığı bilinci					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri genel sonuçları arasında anlamlı fark bulunamamıştır. Alt boyutlarda yapılan inceleme sonucunda kişisel güvenlik ve ilkyardım, uyku, ruh sağlığı ve sosyal ilişkiler alt boyutlarında anlamlı fark bulunmazken temizlik ve öz bakım, beslenme, ihmal ve istismar alt boyutlarında çocuklarla ebeveynlerinin ortalamaları arasında anlamlı fark					
Geliş Tarihi: 02.11.2020 Kabul Tarihi:	Amaç: Bu araştırmada ilköğretim üçüncü ve dördüncü sınıflara devam eden çocukların sağlık eğitimi bilgi düzeyleri ile ebeveynlerinin bilgi düzeylerinin karşılaştırılarak iki grup arasında fark olup olmadığının ortaya çıkarılması amaçlanmıştır. Örneklem ve Yöntem: Nicel bir araştırma olarak tasarlanan araştırmanın örneklem grubunda 313 çocuk ve ebeveyn bulunmaktadır. Araştırma verileri ölçek kullanılarak elde edilmiştir. Ölçeğin çocuklar ve ebeveynlerin sonuçları arasında fark olup olmadığını belirleyebilmek için bağımsız iki grup arasındaki farkın anlamlılığı testi yapılmıştır. Bulgular: Araştırma sonucunda, çocuklarla ebeveynlerinin sağlık eğitimi bilgi düzeyleri genel sonuçları arasında anlamlı fark bulunamamıştır. Alt boyutlarda yapılan inceleme sonucunda kişisel güvenlik ve ilkyardım, uyku, ruh sağlığı ve sosyal ilişkiler alt boyutlarında anlamlı fark bulunmazken temizlik ve öz bakım, beslenme, ihmal ve istismar alt boyutlarında çocuklarla ebeveynlerinin ortalamaları arasında anlamlı fark bulunmuştur. Sonuç: Sağlıklı bir toplum ve gelecek için çocuklarda sağlık eğitimi ve sağlık okuryazarlığı bilinci					

#### Introduction

The first eight years after birth are defined as early childhood and the ages of eight and ten as middle childhood, and these periods are defined as critical periods in children's lives (UNESCO, 2015). In middle childhood, children can spend a long time on any subject that interests them, work on their own, learn and research. Attention span continue to improve. They can handle a situation in many ways, but they may be inadequate in abstract situations. After the age of twelve, children gain more competence in abstract situations. They can also make assumptions and draw logical conclusions about situations. They can solve complex events systematically (Gander & Gardiner, 2001). Abstract concepts such as right, responsibility, solidarity, cooperation, honesty, justice, time, socialization, profit and money have a meaning for children of this age group. Children are aware of what it means to be honest and fair (Wood, 1998). It is also known that the development of children in these years has significant and lasting effects on their later physical, social and emotional health, academic success and working life (Begg et al., 2007). Children's growth, learning and development are affected by environmental, familial, geographical and socio-economic factors and are generally noticed in the early stages of life (Pem, 2015). For example, there is a relationship between academic achievement and cognitive development and children's exposure to socioeconomic disadvantage (Ferguson et al., 2007).

Child health is a global issue. Considering the importance of a healthy childhood, it is seen that reducing child mortality is among the Sustainable Development Goals (UNDP, 2016). According to TURKSTAT (2019) data, the death rate of under five years in our country in 2018 was determined to be 11,4 per thousand. When the causes of child mortality were generally investigated, it was determined that diseases such as diarrhea, pneumonia, measles, tetanus and whooping cough were at the top and all of these diseases could be prevented by vaccines (Altınkaynak et al., 1991). These health problems require measures to be taken for the following years due to the relationship between poor health conditions in childhood and poverty. Studies have revealed that there is a relationship between poor health conditions and working in low-paid jobs in adulthood (Case et al., 2005; Currie, 2009). Apart from diseases, factors that indirectly lead to child deaths include malnutrition and lack of education (World Health Organization, 1986). The World Health Organization (1986) stated that lack of education in Health Goals for All and unconscious behaviour further increased childmortality.

Although health education educates people about health, it includes environmental health, physical health, social health, emotional health, mental health, and sexual and reproductive health education (Donatelle, 2009). There are National Health Education Standards (NHES) developed to encourage and support students at all grade levels, from kindergarten to twelfth grade, to acquire health-enhancing behaviors. While these standards raise students' awareness about health issues, they also help raise awareness of their families and society. The main purpose of a comprehensive health education is to create the learning experiences necessary for students to have conscious and desired attitudes and behaviors related to health problems. According to the National Health Education Standards (NHES) health education needs to cover topics such as human body, organs and its importance, personal hygiene, physical health, the effects of exercise on body systems and general health level, positive personal self-image, emotional health, nutrition and weight control, alcohol, tobacco, substance use, neglect and abuse, sexual relations and sexuality, sexually transmitted diseases, infectious diseases, disasters, life skills, health mistakes and myths, scientific, social and economic aspects of society and ecological health, environmental health, professional medical and the selection of services (Celebuski & Farris, 1996).

Families can play a vital role in improving their children's health if they have the right health-related knowledge from the right sources because of their responsibility to protect, maintain and meet their basic needs. According to the literature, parents' knowledge of health education affects their children's health and health knowledge level in different ways. The most important of these are: a) employment and income (Currie, 2009); b) information and communication (Cutler & Lleras-Muney, 2006); c) health knowledge and behavior (Streatfield et al., 1990); d) preferences (Cutler & Lleras-Muney, 2010); and e) communication skills (Vikram et al., 2012). Studies have shown that working mothers have a more effective power in independent decision-making than mothers who do not work in child health issues (Vikram et al., 2012). Thomas (1990) showed that the financial resource control of a working mother has a greater effect on the child's health than the father's financial resource. Studies have shown that there is a positive relationship between a healthy lifestyle and health knowledge levels of educated and / or working parents, and parents with a high level of health consciousness seek positive health conditions for themselves and their children (Cutler & Lleras-Muney, 2006; 2010). While some researchers (Currie & Moretti, 2003; Chou et al., 2010) argue that parental health education knowledge has a positive effect on children's knowledge level, Lindeboom et al. (2009) argue that parents' level of knowledge has no effect on children's knowledge levels and even on their perspectives.

Parents' health education knowledge levels can affect children's health directly and indirectly in different ways. For this reason, in this study, it was aimed to find out whether there is a difference between the two groups by comparing the health education knowledge levels of children attending primary education third and fourth grades and their parents' knowledge levels.

Research hypotheses:

- 1. Is there a significant difference between children attending primary school's third and fourth grades and their parents' health education scale personal safety and first aid sub-dimensions?
- 2. Is there a significant difference between children attending primary school's third and fourth grades and their parents' health education scale cleaning and self-care subscale results?
- 3. Is there a significant difference between children attending primary school's third and fourth grades and their parents' health education scale nutrition sub-dimension results?
- 4. Is there a significant difference between children attending primary school's third and fourth grades and their parents' health education scale sleep sub-dimension results?
- 5. Is there a significant difference between children attending primary school's third and fourth grades and their parents' health education scale mental health and social relationships sub-dimension results?
- 6. Is there a significant difference between children attending primary school's third and fourth grades and their parents' health education scale neglect and abuse sub-dimension results?

## **Research Design**

This study was designed as a quantitative study in order to reveal the difference between the two groups by comparing the health education knowledge levels of children attending primary school's third and fourth grades and their parents' knowledge levels.

For the research, Ethics Committee Approval was obtained from the Health Sciences University Non-Invasive Research Ethics Committee with the date 11.02.2020 and decision number 2020-64. After obtaining the permission of the ethics committee of the study, permission was obtained from the institution, and schools were visited for implementation. An informed consent form was prepared for both parents and children. In addition to obtaining permission from parents, permission was also obtained from children. Participation in the research was carried out on a voluntary basis.

## **Research Universe and Sample**

The universe of the research consists of the third and fourth grades of primary schools affiliated to National Education Directorates of Çankaya and Altındağ Districts in Ankara Province Purposeful sampling method was used to determine the universe of the research.

The cluster sampling method, one of the random sampling methods, was used to determine the sample of the study. Schools were determined by simple random sampling until the sufficient number of parents was reached. In the cluster sampling method, the universe mostly consists of clusters with the same purpose and all clusters have the chance to be selected individually (Karasar, 2015).

With the cluster sampling method, 4 private and 4 state primary schools affiliated to Ankara Province Çankaya and Altındağ District National Education Directorate were determined. Participation in the study was voluntary. Table 1, shows the distribution of children in the sample group by age and gender.

	Girl		Boy		Total	
Age	n	%	n	%	n	%
8	114	60	75	60	189	60
9	70	37	36	29	106	34
10	5	3	13	10	18	6
Total	189	100	124	100	313	100

Table 1. Distribution of Children in the Sample Group by Age and Gender

In addition to filling out the scale form, only the gender of their children and the level of class they attend were asked to the families in the sample group, and other demographic information was not requested. The distribution of the children of the families in the sample group according to the gender and the classes they attend is given in Table 2.

	Girl		Boy		Total	
Gender and classes of attendance	n	%	n	%	n	%
8	8	5	5	3	13	4
9	63	40	72	46	135	43
10	87	55	78	50	165	53
Total	158	100	155	100	313	100

Table 2. Distribution of Children of Parents in the Sample Group by Gender and Classes of Attendance

## **Data Collection Tools**

The main data collection tool used to achieve the purpose of the study is the "Health Education Scale". The scale was developed by Aydos (2013). The reliability coefficient of the scale was, 945 and the validity coefficient was determined as ,621. It was concluded that the confirmatory factor analysis results of the Health Education Scale were at the desired level and the developed scale was valid and reliable for our country. Permission was obtained before the Health Education Scale was used.

The scale has six sub-dimensions: personal safety and first aid, hygiene and self-care, nutrition, sleep, mental health and social relations, neglect and abuse. There are 25 items in personal security and first aid, 26 items in hygiene and self-care sub-dimension, 20 items in nutrition sub-dimension, 7 items in sleep sub-dimension, 20 items in mental health and social relations sub-dimension, and 19 items in neglect and abuse sub-dimension. The scale was prepared as a five-point Likert scale and was graded from strongly agree to strongly disagree. The scale is scored as 1.00-1.80, 1.81-2.60, 2.61-3.40, 3.41-4.20, 4.21-5.00. Results of the analysis show that scale has the best results in terms of validity and reliability (Aydos & Tugrul, 2015).

## Procedure

Participation in the study was voluntary. Data collection was carried out in 8 primary schools in Ankara Province Çankaya and Altındağ districts which are affiliated to the District National Education Directorate. Schools determined by cluster sampling method were visited and their principals were interviewed. Information was given about the purpose of the research and the method of implementation. As a result of the interview, it was decided that the best time for data collection was the counseling hour. Guidance counselor of primary schools were interviewed. Necessary information was given to them about the purpose of the research and the way it was applied. Forms were distributed to students attending the third and fourth grades of schools with the help of guidance counselor. The children filled in the forms in the classroom. Each child has been asked to set a nickname in order to match with their parents. The same form, the nicknames determined by the children, were sent to their parents in writing to fill in. Again, the participation of the parents in the study was voluntary. Guidance counselors have been contacted to gather the forms filled out by parents. The forms of the parents and their children who volunteered to participate in the study were paired using their nicknames and included in the analysis. Forms that parents did not fill in forms themselves, although they let their child participate, or that the children did not want to fill (which could not be matched) were not included in the study.

## Statistical Analysis of the Data

The demographic information of the families in the sample group was not requested as it would not be used in the analysis of the results.

The forms collected from the sample group were analyzed using the statistics program. In order to determine if there is a difference between the results of the children and parents of the Health Education Scale, the significance test of the difference between the two independent groups was conducted. The findings obtained are presented in a table.

#### Results

In the study, it was aimed to find out if there is a difference between the two groups by comparing the health education knowledge levels of the children attending primary education third and fourth grades and their parents' knowledge levels. The results of the significance test of the difference between two independent groups made to determine whether there is a difference or not are shown in Table 3.

Scale Fields	Groups	Ν	Μ	SD	t	р
Personal Safety and First	Children	313	1.12	0.56	1.03	0.59
Aid	Parents	313	1.05	0.69	1.05	0.39
Hygiene and Self-Care	Children	313	2.83	0.99	-4.20	0.00
	Parents	313	2.24	0.63		0.00
<b>N</b> T / */*	Children	313	2.03	0.78	-3.85	0.00
Nutrition	Parents	313	3,41	0.61		
CI.	Children	313	1.04	0.62	-1,48	0.20
Sleep	Parents	313	2.09	0.75		0,30
Mental Health and Social	Children	313	1,11	0,12	0.00	0.69
Relations	Parents	313	1,13	0,18	-0,26	0,68
Neglect and Abuse	Children	313	3.45	0.42	7 2 2	0.00
	Parents	313	2.27	0.63	-7.32	
	Children	313	2,16	0,06	0.07	0.70
Total	Parents	313	2,15	0,01	0,07	0,79

Table 3. Comparison of Children's and Parents' Health Education Knowledge Levels

When the personal safety and first aid sub-dimension results of the health education scale of children and their parents in the sample group were examined, it was seen that the average scores are close to each other and the answers are concentrated in the option I strongly agree (M = 1,12; M = 1,05). In addition, the difference between the arithmetic averages as a result of the significance test of the difference between two independent groups was not found to be statistically significant in the analysis (t = 1,03; p = 0,59). For this reason, it can be said that there is no significant difference between children attending the third and fourth grades of primary education and their parents' health education scale, personal safety and first aid sub-dimensions.

When the hygiene and self-care sub-dimension results of the health education scale of children and their parents in the sample group were examined, was is seen that the mean of the children is M = 2,83 and their answers are concentrated in the undecided option, while the average of the parents is M = 2,24 and their answers are concentrated in the I agree on option. In addition, the difference between the arithmetic averages was found to be statistically significant as a result of the significance test of the difference between two independent groups in the analysis (t = -4.20; p = 0.00). Therefore, it can be said that there is a significant difference between the children attending primary school's third and fourth grades and their parents' health education scale cleaning and self-care sub-dimension results.

When the nutrition sub-dimension results of the health education scale of children and their parents in the sample group were examined, it was seen that the mean of the children was M = 2,03 and their answers were concentrated in the I agree

option, while the mean of the parents was M = 3,41 and their answers were concentrated in the undecided option. In addition, the difference between the arithmetic averages as a result of the significance test of the difference between the two independent groups was found to be statistically significant (t = -3,85; p = 0,00). Therefore, it can be said that there is a significant difference between the children attending primary school's third and fourth grades and their parents' health education scale nutrition sub-dimension results.

When the sleep sub-dimension results of the health education scale of children and their parents in the sample group were examined, it was seen that the mean of the children is M = 1.04 and their answers are concentrated in the option I strongly agree, while the mean of the parents is M = 2.09 and their answers are more concentrated in the I agree on option. In addition, the difference between the arithmetic averages as a result of the significance test of the difference between the two independent groups was not found to be statistically significant (t = -1,48; p = 0,30). Therefore, it can be said that there is no significant difference between the children attending primary school's third and fourth grades and their parents' health education scale sleep sub-dimension results.

When the mental health and social relations sub-dimension results of the health education scale of children and their parents in the sample group were examined, it was seen that the averages are close to each other and the answers are concentrated in the option I strongly agree (M = 1.11; M = 1.13). In addition, the difference between the arithmetic averages as a result of the significance test of the difference between two independent groups was not found to be statistically significant in the analysis (t=-0,26; p=0.68). For this reason, it can be said that there is no significant difference between children attending primary school's third and fourth grades and their parents' health education scale mental health and social relations sub-dimension results.

When the neglect and abuse sub-dimension results of the health education scale of children and their parents in the sample group were examined, it was observed that the mean of the children was M = 3,45 and their answers were concentrated in the undecided option, while the mean of the parents was M = 2,27 and their answers were more concentrated in the I agree on option. In addition, the difference between the arithmetic averages as a result of the significance test of the difference between two independent groups was found to be statistically significant in the analysis (t=-7.32; p=0.00). For this reason, it can be said that there is a significant difference between the children attending primary school's third and fourth grades and their parents' health education scale neglect and abuse sub-dimension results.

When the general results of the health education scale of children and their parents in the sample group were examined, it was seen that the averages (M = 2.16; M = 2.15) are close to each other and the answers are concentrated in the I agree on option. In addition, the difference between the arithmetic averages as a result of the significance test of the difference between two independent groups was not found to be statistically significant in the analysis (t=0,07; p=0,79). For this

reason, it can be said that there is no significant difference between children attending primary school's third and fourth grades and their parents' health education scale general results.

#### Discussion

8-10 years old is considered to be middle childhood. Rapid development is observed in children's ability to establish cause and effect relationships in middle childhood. As a reflection of the development of skills for establishing cause and effect relationships, communication skills also improve considerably. Children with better language skills and increased attention span are able to cope with more complex situations (Yavuzer, 2000). For this reason, it can be said that children have awareness of their own health and that they can have personal perspectives. As a result of the research, the fact that the general results of the scale are concentrated in the I agree option supports this idea.

In order to create health awareness in children, health education should be given importance. In addition to increasing the health level of the society, it is considered necessary to carry out health education studies in order for children to protect their own health and benefit from treatment services. The pandemic process we are in has made us realize how important it is to be healthy and to benefit from health services. As a result of the general scale of the study, it was determined that the health knowledge levels of children in the middle childhood period were at a "good" level, and it was observed that children needed education and information in some sub-dimensions. For example, the nutritional sub-dimension. Nutrition is among the basic conditions for the healthy growth and development of children. Adequate and balanced nutrition is very important for a child to grow up. The findings of the study show that there is a significant difference in the nutritional sub-dimension results of the health education scale of children and their parents, and this difference is due to the children's average scores. Parents, especially mothers, can be considered to be hypersensitive to nutrition. It is basically the responsibility of the family to give children the right and conscious eating habits. Therefore, besides the nutritional habits given/gained within the family, this difference made us think that the social environment also has an effect on children's nutritional knowledge level. Considering this effect of the environment on children's behavior and habits, it is thought that it is necessary to work with families and teachers in order to support children's behaviors in nutrition. With a similar inference, Alphan et al. (2002) stated that as a result of their research with secondary school students that both parents and teachers needed a systematic and regular education on adequate and balanced nutrition. This finding is consistent with the results of the research. When considered within the scope of health promotion objectives, schools have an obligation to educate and encourage young people to eat healthily and be physically active. Among the aims of the Nutrition-Friendly Schools Program, which was initiated by the Republic of Turkey Ministry of Health in 2010, is to increase awareness in schools on healthy nutrition and active living. In other words, it is seen that it is a program that serves the stated purpose (Republic of Turkey Ministry of Health, 2020). This difference seen in the average scores of the children may be due to the effect of the program implemented in schools.

The other sub-dimension with a significant difference in the health education knowledge levels of children and their parents in the study was determined as cleaning and self-care. The difference is due to the parents' average scores. Like nutrition, hygiene is one of the most important factors for children to grow up and develop healthily and to protect them from diseases. In the middle childhood period, children who have insufficient hygiene knowledge and not being able to meet their selfcare needs properly, attend school and touch many places during the day, which may bring the risk of infection. It is also stated by Firinci and Çoban (2016) that the perception of cleanliness, hygiene, and self-care in children has an important place, especially in primary education. Similarly, other studies have revealed that children's hygiene knowledge levels do not differ between genders and that socioeconomic level does not affect the results (Kahveci & Demirtaş, 2012). The fact that the average score of children concentrates on the indecisive response suggests that there are situations in which they have difficulty in making decisions. This led to the conclusion that they needed training and information. In other words, it reveals that schools have an important role in providing opportunities to motivate children to improve their health behaviors and to reduce their risky behaviors.

Another sub-dimension with a significant difference in the health education knowledge levels of children and their parents was negligence and abuse, and it was determined that this difference was due to the parents' average scores. As in the hygiene and self-care sub-dimension, we can say that children need education and information about neglect and abuse because their answers are concentrated on the option of indecisive. It is thought that parents have a fundamental duty to develop and maintain the attitudes, values, and behaviors that their children should have in order to improve their health. Parents are also primarily responsible for providing essential resources that support children's health promotion. Negligence and abuse are an important issue and are among the taboo subjects in our society. Similarly, studies show that parents have obstructing factors such as lack of knowledge to talk and educate their children about neglect and abuse, not knowing how to do the conversation, not knowing the appropriate time, believing that their children are at low risk for abuse, lack of selfconfidence and trust in their children (Burgess & Wurtele, 1998; Deblinger et al., 2010). In addition to the responsibility of parents to raise awareness about neglect and abuse, schools also have a similar responsibility because children are present during the school period. For this reason, it can be assumed that the education to be given to students to prevent neglect and abuse will indirectly affect their parents. There are studies that show that children's gaining healthy behaviors at school affects their parents positively (Cosgun, 2014). Reaching children can make it easier to reach their parents. Since the duties and responsibilities of parents over their children continue throughout their lives, school-supported family pieces of training can be provided. In this way, it can be ensured that the health education given to children at school is supported by their parents at home because family dynamics can significantly affect health both positively and negatively. Having a family that is connected and supportive increases the general health levels of children by providing emotional support and economic well-being (George & Durham, 2016). However, the opposite may also happen. In other words, the presence of stress and conflict situations in family life tends to affect the health of family members negatively (Ross, et al., 1990).

According to Nutbeam (2000), in order to create a positive health culture, it is first necessary to ensure that health awareness is at a higher level. In summary; for health promotion, children need health education to help them develop their personal, cognitive, and social skills that will enable them to develop their ability to access, understand, and use information. At this point, schools are considered as an important environment that can help students gain health literacy skills by taking health education. Teaching critical thinking can help students understand why, when, where, what and how to access health services.

### Conclusion

In the study, it was aimed to find out if there is a difference between the two groups by comparing the health education knowledge levels of the children attending primary education third and fourth grades and the knowledge levels of their

parents. Health education knowledge level was examined in six sub-dimensions: personal security and first aid, hygiene and self-care, nutrition, sleep, mental health and social relations, neglect and abuse.

As a result of the study, a significant difference was not found between the general results of the health education knowledge levels of the children and their parents. As a result of the examination in the sub-dimensions, there was no significant difference in personal security and first aid, sleep, mental health and social relations sub-dimensions, while a significant difference was found between the average scores of children and their parents in the sub-dimensions of hygiene and self-care, nutrition, neglect and abuse.

Family life is important as parents provide their children with unconditional love, support and awareness of value. Parents represent the structure in which children share their joy, sorrows, and interdependence and learn from each other during their growth process and throughout their lives. The first environment provided for personal development is the family environment. So family is the most important factor in a child's life. Research results show that families also need to be informed and supported about health education. At this stage, the responsibilities of the schools that take over the education task after the family begins. It is known that the skills acquired in childhood have a lifelong effect. For this reason, schools can contribute to the development of children's health education and health literacy knowledge with both their curriculum and the opportunities they provide. In addition, school-based health education programs can be designed to motivate and support students to develop knowledge and skills about health because schools are considered as an important environment to protect and encourage the safety, health, personal, and social development of all children and young people who continue their education life. For a healthy society and the future, children's health education and health literacy awareness should start as early as possible and should be considered as part of the education process of children. Although the family is the first educational environment for the children, it should be ensured that all children graduate with health education skills that will help them lead a healthier life, as the children spend most of their daily time in schools. In this process, it should not be forgotten that the primary duty of schools is education, not health. Therefore, health promotion approaches and health literacy approaches at school can be adapted to the current educational objectives, goals, principles and concepts of the Republic of Turkey Ministry of National Education.

#### Ethical Approval of the Study

For the research, Ethics Committee Approval was obtained from the Health Sciences University Non-Invasive Research Ethics Committee with the date 11.02.2020 and decision number 2020-64.

## **Conflict of Interest**

The authors declare that they have no conflict of interest.

#### References

- Alphan, E., Keskin, Y., & Tatlı, F. (2002). Özel okul ve devlet okulunda öğrenim gören adolesan dönemindeki çocukların beslenme alışkanlıklarının karşılaştırılması. *Beslenme ve Diyet Dergisi, 31*(1), 9-17. https://beslenmevediyetdergisi.org/index.php/bdd/article/view/477
- Altınkaynak, S., Yaman, U. S., & Handan, A. L. P. (1991). Dünyadaki ve Türkiye'deki çocuk ölüm nedenleri ve bunların önlenmesine yönelik öneriler. *Sosyal Politika Çalışmaları Dergisi, 2*(2), 1-4. <u>https://dergipark.org.tr/en/download/article-file/198119</u>
- Aydos, E. H. (2013). Okul öncesi çocukları için sağlık eğitimi ölçeğinin geliştirilmesi ve çeşitli değişkenler açısından incelenmesi. [Yayınlanmamış yüksek lisans tezi], Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü
- Aydos, E. H., & Tugrul, B. (2015). Development of personal safety and first aid, hygiene-self-care, and nutrition subscales in health education scale for preschool children. *Procedia-Social and Behavioral Sciences*, 186, 337-343. <u>https://doi.org/10.1016/j.sbspro.2015.04.114</u>
- Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., & Lopez, A. D. (2007). The burden of disease and injury in Australia 2003, Australian Institute of Health and Welfare, Canberra, A. C. T. <u>http://dro.deakin.edu.au/eserv/DU:30046702/stevenson-burdenofdisease-2003.pdf</u>
- Burgess, E. S., & Wurtele, S. K. (1998). Enhancing parent-child communication about sexual abuse: A pilot study. *Child Abuse & Neglect*, 22(11),1167–1175. <u>https://doi.org/10.1016/S0145-2134(98)00094-5</u>
- Case, A., Fertig, A., & Paxson, C. (2005). The lasting impact of childhood health and circumstance. *Journal of Health Economics*, 24(2), 365-389. <u>https://doi.org/10.1016/j.jhealeco.2004.09.008</u>
- Celebuski, C., & Farris, E. (1996). *Nutrition education in public elementary and secondary schools*. National Center For Education Statistics Survey Report. Westat, Inc.
- Chou, S. Y., Liu, J. T., Grossman, M., & Joyce, T. (2010). Parental education and child health: evidence from a natural experiment in Taiwan. *American Economic Journal: Applied Economics*, 2(1), 33-61. <u>https://doi.org/10.1257/app.2.1.33</u>
- Coşgun, M. (2014). Ortaokul öğrencilerine verilen sağlık eğitiminin öğrencilerin bilgi tutum ve davranışlarına etkisinin değerlendirilmesi. [Yayınlanmamış doktora tezi], Selçuk Üniversitesi Sağlık Bilimleri Enstitüsü.
- Cutler, D. M., & Lleras-Muney, A. (2006). *Education and health: Evaluating theories and evidence*. National Poverty Center Working Paper Series 06-19. National Poverty Center, University of Michigan. <u>https://files.eric.ed.gov/fulltext/ED539500.pdf</u>
- Cutler, D. M., & Lleras-Muney, A. (2010). Understanding differences in health behaviors by education. *Journal of Health Economics*, 29(1), 1-28. <u>https://doi.org/10.1016/j.jhealeco.2009.10.003</u>
- Currie, J. (2009). Healthy, wealthy, and wise: Socioeconomic status, poor health in childhood, and human capital development. *Journal of economic literature*, 47(1), 87-122. <u>https://doi.org/10.1257/jel.47.1.87</u>
- Currie, J., & Moretti, E. (2003). Mother's education and the intergenerational transmission of human capital: Evidence from college openings. *The Quarterly journal of economics*, *118*(4), 1495-1532. <u>https://doi.org/10.1162/003355303322552856</u>
- Deblinger, E., Thakkar-Kolar, R. R., Berry, E. J., & Schroeder, C. M. (2010). Caregivers' efforts to educate their children about child sexual abuse: A replication study. *Child Maltreatment*, 15(1),91–100. <u>https://doi.org/10.1177/1077559509337408</u>
- Donatelle, R. (2009). Promoting healthy behavior change. Health: The basics. 8th edition. San Francisco, CA: Pearson Education, Inc.

- Ferguson, H. B., Bovaird, S., & Mueller, M. P. (2007). The impact of poverty on educational outcomes for children. *Pediatrics & Child Health*. 12(8):701–706. <u>https://doi.org/10.1093/pch/12.8.701</u>
- Fırıncı, N., & Çoban, G. İ. (2016). Erzurum ilinde yatılı bir ortaokuldaki öğrencilerin temizlik ve hijyen algıları. Balıkesir Sağlık Bilimleri Dergisi, 5(1), 7-12. <u>https://dergipark.org.tr/en/pub/balikesirsbd/issue/38437/452406</u>
- Gander, M. J., & Gardiner, H. W. (2001). Çocuk ve ergen gelişimi. İmge Kitabevi.
- George, L. K., & Durham, N. C. (2016). *The health-promoting effects of social bonds*. Department of Sociology Center for the Study of Aging and Human Development Duke University. Durham, NC.
- Kahveci, G., & Demirtaş Z. (2012). İlköğretim okulu 6.,7. ve 8. sınıf öğrencilerinin temizlik ve hijyen algıları. *Pegem Eğitim ve Öğretim Dergisi*, 2(2), 51-61. <u>https://pegem.net/dosyalar/dokuman/135142-20120724101947-5.pdf</u>
- Karasar, N. (2015). Bilimsel araştırma yöntemi. Nobel Yayın Dağıtım.
- Lindeboom, M., Llena-Nozal, A., & Van Der Klaauw, B. (2009). Parental education and child health: Evidence from a schooling reform. Journal of Health Economics, 28(1), 109-131. <u>https://ssrn.com/abstract=954711</u>
- Nutbeam, D. (2000). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health promotion international*, *15*(3), 259-267. <u>https://doi.org/10.1093/heapro/15.3.259</u>
- Pem, D. (2015). Factors affecting early childhood growth and development: golden 1000 days. Journal of Advanced Practices in Nursing, 1(101), 1-7. <u>https://doi.org/10.4172/2573-0347.1000101</u>
- Republic of Turkey Ministry of Health. (2020). *Beslenme dostu okullar programı*. <u>https://hsgm.saglik.gov.tr/tr/okul- sagligi/beslenme-dostu-okullarprogram%C4%B1.html</u>
- Ross, C., Mirowsky, J., & Goldsteen, K. (1990). The impact of the family on health: The decade in review. *Journal of Marriage and the Family*, *52*(4), 1059-1078. <u>http://www.jstor.org/stable/353319</u>
- Streatfield, K., Singarimbun, M., & Diamond, I. (1990). Maternal education and child immunization. *Demography*, 27(3), 447-455. https://doi.org/10.2307/2061378
- Thomas, D. (1990). Intra-household resource allocation: An inferential approach. *Journal of Human Resources*, 25(4), 635-664. https://doi.org/10.2307/145670
- Türkiye İstatistik Kurumu. (2019). Türkiye 2018 ölüm istatistikleri. <u>https://www.bik.gov.tr/turkiyenin-2018-olum-istatistikleri-aciklandi/</u>
- United
   Nations
   Development
   Programme.
   (2016).
   Sustainable
   development
   objectives.

   <a href="https://www.tr.undp.org/content/turkey/tr/home/sustainable-development-goals.html">https://www.tr.undp.org/content/turkey/tr/home/sustainable-development-goals.html</a>
- United Nations Educational, Scientific and Cultural Organization. (2015). *Early childhood care and education 2015*. https://en.unesco.org/themes/earlychildhood-care-and-education
- Vikram, K., Vanneman, R., & Desai, S. (2012). Linkages between maternal education and childhood immunization in India. Social Science & Medicine, 75(2), 331-339. <u>https://doi.org/10.1016/j.socscimed.2012.02.043</u>
- Wood, D. (1998). *How children think and learn. U.K.: The Social Contets of Cognitive Development (Second Edition).* Blackwell publishers.
- World
   Health
   Organization.
   (1986).
   Health
   goals
   for
   all.
   Kophenhag.

   https://www.who.int/healthpromotion/Milestones\_Health\_Promotion\_05022010.pdf
   Kophenhag.
   Kophenhag.

Yavuzer, H. (2000). Okul çağı çocuğu. Remzi Kitapevi.