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The Relationship Between Parents' Attitudes Towards Reading with Their Children and Primary School Students' Attitudes Towards the Life Science Course and Reading

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Abstract

This study was conducted to determine the relationship between parents' attitudes towards reading with their children and primary school students' attitudes towards the life science course and reading. Relational survey was used as the research design in the study. A total of 416 students studying in the 2nd and 3rd grades of primary school in Yozgat province and their parents were included in the study through simple random sampling. Data were collected from parents with the *Parent and Child Reading Together Attitude Scale* and from students with the *Life Science Course Attitude Scale" and the Attitudes toward Reading Scale*. The statistically significant differences in the demographic characteristics of parents' attitudes towards reading with their children and primary school students' attitudes towards the Life Science course and reading were analyzed with the help of the Mann Whitney U and Kruskal Wallis tests. In addition, the relationship between parents' attitudes towards reading with their children and primary school students' attitudes towards the Life Science course and reading was determined by correlation analysis. The results indicate that parents' attitudes towards reading with their children and students' Life Science course attitudes and reading attitudes are highly positive.

Keywords: Reading attitude; life science; reading with parents

1. Introduction

Life science is a concept that enables the individual to learn the meaning of the life he/she is in, provides him/her with knowledge, skills, behaviors and attitudes that can facilitate his/her life, prepares him/her for life and is expressed as a life course (Gültekin,

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2015). Life science course is a course that reflects positive traces in the life of the individual, where basic skills related to life are gained in addition to individual qualities in order to make sense of the events around the individual and to adapt to these events, as well as reading, understanding and making sense of life (Aktepe & Gündüz, 2020; Batmaz, 2021). Life science coursework aims to enable students to learn about the culture and social environment in which they live, to make investigations, to acquire real information about their environment, to keep up with society and to gain good habits (Binbaşıoğlu, 2003). Therefore, the child has the opportunity to experience many situations, experiences or issues that he/she will encounter in life through Life science, which he/she encounters from his/her early years. For example, when a mother sends her child to a neighbor to provide a food that is not available at home while cooking, it is an important step for the child to make sense of neighborhood relations (Batmaz, 2021). Gültekin (2015) also states that children learn knowledge, skills, behaviors and attitudes about life from their environment or their families from the first days of life. Life science course is defined as a course that bases its topics around the family and the environment in which the child is located, includes topics that help the child to recognize himself/herself in physiological and psychological terms, and contributes to the child's preparation for life based on previous experiences (Kabapınar, 2014).

Apart from the important role of the Life science course in preparing children for life and supporting their developmental areas, this course aims to help children get to know themselves, learn about nature and the environment, follow the rules, learn about social values, learn about their country, and acquire attitudes, values, skills and knowledge about healthy life (Güven & Püsküllü, 2017). Students' attitudes towards a subject affect both their eagerness to learn about that subject and their level of knowledge about it (Bloom, 1995). The importance of the concept of "attitude" increases even more when age levels and developmental characteristics are taken into consideration, especially in primary education. Because a positive attitude of the child in this period can allow many situations to emerge, such as expressing their feelings and thoughts freely, expressing themselves correctly, and being eager for further learning. In the evaluation of student achievement, their liking and interest in the lesson is related to the attitude they develop towards the lesson. Therefore, effective planning of the learning and teaching process is ensured by determining students' attitudes (Batmaz, 2021). Manne and Mete (2020) also state that student attitudes have a significant effect on their success in the course.

Activities with families in the preschool period can influence students' attitudes towards the Life science course, because families are the first to teach children life-related information that will help them lead their daily lives in a healthy way. Parents teach healthy living topics such as personal care, healthy food and drinks, balanced nutrition, precautions to protect their health, safe living topics such as safety rules at home, things to consider when communicating with people around them, learning about animals and plants in the immediate environment and taking care to protect them.

Through illustrated children's books, parents also introduce their children to life in nature such as the importance of keeping nature and the environment clean, learning about the sun, moon and the earth, understanding the changes in the seasons, recognizing historical, natural and touristic places in the immediate vicinity, and knowing where they live. Then, they try to teach information about life in subjects that are appropriate to the child's interests and wishes and that he/she can relate to his/her life by reading fairy tales and stories and talking about them together. However, Turkish parents are observed not to show sufficient interest in this regard (Progress in International Reading Literacy Study [PIRLS], 2001). This may be due to parents' busy work lives or household chores. In other countries, however, financial support is given to families to increase their reading activities with their children (Harper, Platt, & Pelletier, 2011). The reason for providing financial support to families may be that it leads to important contributions to the child, the family, and the relationship between the child and the family because reading activities that families and children do together increase verbal communication between the family and the child (Atim & Azihar, 2012), help families understand the problems experienced by children (Çelebi-Öncü, 2016), increase families' awareness of reading with their children, increase their reading strategies and questioning skills (Feit, 2009; Zevenbergen, Worth, Dretto, & Travers, 2016), and improve children's literacy, storytelling, language skills and vocabulary (Huennekens & Xu, 2016; Kotaman, 2013; Lever & Sénéchal, 2011; Yıldız-Bıçakçı, Er, & Aral, 2018).

There are some things that parents should pay attention to in order to ensure that their reading activities with their children benefit their children. First of all, when choosing the books to read with their children, parents should choose books that their children can enjoy (Beach, 2015). Stories are a type of book that children enjoy (Yurtbakan & Erdoğan, 2020). The reason why children enjoy stories is that they associate the events in the stories with their own lives and make connections between them (Akbaba et al., 2009). In order for families' reading activities with their children to benefit children, families should create a friendly environment with their children while reading and then try to improve children's reading attitudes (Collins & Svensson, 2008; DeBaryshe, Binder, & Buell, 2000). For this, first of all, families should have a strong motivation to read (Evans, Valleley & Allen, 2002), make their children feel that they love reading (Wise & Buffington, 2004), gift books to their children (Wray & Medwell, 2015), and make reading a fun activity because fun reading activities in the past affect children's reading attitudes in the following years (Guthrie & Greaney, 1991).

Just as parents have duties to improve children's reading attitudes in the preschool period, teachers also have duties at school age. Teachers should first of all model reading to students and cooperate with their families (Fletcher, 2017). They should carry out activities to improve their students' reading attitudes (Eminoğlu & Bağçeci, 2020). The reading environment should be organized taking into account the interests and needs of

the students (Krashen, 2003). They should ensure that students read texts with their favorite characters (Uysal-Dede, 2019). Reading methods that students will be active in the reading process can be used. Students can be helped to create mental images during reading (Kocaarslan, Akyol, & Güneş, 2017). Teachers can create bookshelves in their classrooms with books appropriate to students' interests and abilities. They can create reading corners in the classroom with cushions, stools and beanbags. They can also improve their students' reading attitudes by instilling the habit of using the library (Oyelude, 2013) because reading attitude increases students' reading motivation, reading success, reading fluency and reading comprehension skills, reading habits and academic achievement, and decreases their reading anxiety (Bıyık & Melanlıoğlu, 2022; Boz & Ulusoy, 2019; Kush, Watkins, & Brookhart, 2005; Lazarus & Callahan, 2000; Nuttall, 2016; Şahin, 2019).

1.1. Research questions

In the related literature, there are some studies examining the effects of parents' reading with their children on children's early literacy, language skills and vocabulary, and parents' depression levels (Baker, 2010; Switalski, 2012; Wood, 2017), but there is no study examining parents' attitudes towards reading with their children. Although there are many studies examining the relationship between primary school students' reading attitudes and their academic achievement, reading comprehension skills, reading motivation and anxiety (Baştuğ, 2014; Chang Wu, Shang Su, ChunChang, & Wen Liao, 2016; Kuşdemir, 2019; Logan & Johnston, 2009; Sam & Sam, 2015; Taşkın & Aygün, 2017), there is no study examining the relationship between reading attitudes and parents' attitudes towards reading with their children. Although there are studies examining primary school students' attitudes towards Life science courses (Çetin, 2020; Kaynar, 2020; Oker & Tay, 2020; Sarı, 2020; Tiryaki, 2018; Yavuz, 2017), there is no study examining the relationship between parents' attitudes towards reading with their children and students' attitudes towards Life science courses. However, parents provide their preschool children with a lot of information about life through reading. It is a matter of curiosity how the reading activity that takes place between parents and children in the preschool period is reflected on children's attitudes towards the Life science course in the school period. Therefore, this study is expected to contribute to the understanding of the value of reading activities that parents do with their children in preschool period.

The current study aimed to determine the relationship between parents' attitudes towards reading with their children and elementary school students' attitudes towards Life science and reading. In line with this purpose, answers to the following questions were sought:

1. Do parents' attitudes towards reading with their children differ statistically significantly according to their demographic characteristics?

2. Do the Life science course attitudes of students differ statistically significantly according to their demographic characteristics?

3. Do the reading attitudes of students differ statistically significantly according to their demographic characteristics?

4. Is there a statistically significant relationship between parents' attitudes towards reading with their children and students' attitudes towards Life science and reading?

2. Method

In this part of the research, it includes information about the research model, research sample, data collection and analysis.

2.1. Research design

In order to test the relationship between parents' attitudes towards reading with their children and elementary school students' attitudes towards Life science and reading, a correlational survey design was used. The correlational survey design aims to determine the degree and existence of change between two or more variables. In correlational studies, possible relationships are examined by the researchers, and in this way, the phenomena can be better understood. It also allows researchers to make predictions while determining the relationships (Karasar, 2020; Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz & Demirel, 2020).

2.2. Participants

The population of the study consists of 2nd and 3rd grade primary school students and their parents in the Yozgat province of Türkiye. The sample of the study consisted of 416 primary school students and their parents in Yozgat province who were determined by simple random sampling technique. In simple random sampling, participants are randomly assigned from the population (Ekiz, 2015). Information about the students and their parents is shown in Table 1.

Table 1. Demographic information of students and their parents

Participant	Demographic	Variables	f	%
Parent	Gender	Female	368	88,5
		Male	48	11,5
	Education status	Pri. school	51	12,3
		Sec. school	69	16,6
		High school	135	32,5
		University or post gradu.	161	38,7
	Income status	Low	63	15,1
		Medium or higher	353	84,9
	Attitudes towards reading with their children	Middle or lower	83	20,0
		High	111	26,7
		Very high	222	53,3
Student	Gender	Girl	212	51,0
		Boy	204	49,0
	Grade	2nd grade	235	56,5
		3rd grade	181	43,5
	Favorite subject	Mathematics	240	57,7
		Science	46	11,1
		Life science	62	14,9
		Turkish	49	11,8
		Other	19	4,6

It is clear that the majority of the parents of the elementary school students participating in the study are female (88.5%), almost three-quarters of them are high school and university graduates, the majority of them have a medium or higher income, and one-fifth of them have high or very high reading attitudes with their children. The ratio of male and female students participating in the study is close, more than half of the students are in the second grade, and they like mathematics the best.

2.3. Data collection tools

The data in the study were collected from parents using the *Parent and Child Reading Together Attitude Scale* and from primary school students using the *Life science course Attitude Scale* and the *Attitudes toward Reading Scale*.

2.3.1. Parent and child reading together attitude scale

The 5-point Likert scale developed by Yurtbakan (2022) to evaluate parents' attitudes towards reading with their children is unidimensional and consists of 19 questions. It was determined that the KMO value required for validity was 0.915; Bartlett's test value was sd=171; x^2=4318,247 (p=0.00) and the Cronbach Alpha reliability value was .913. In the study, Cronbach's alpha value was .949.

2.3.2. Life science course attitude scale

The scale developed by Oker and Tay (2020) to determine the Life science course attitudes of primary school students has a total of 16 questions. The scale consists of three factors: 6 questions in the dimension of negative attitudes towards Life science course, 5 questions in the dimension of positive attitudes towards Life science course

content, and 5 questions in the dimension of positive attitudes towards Life science course. The KMO test result of the scale was .84, Bartlett's test result was significant (*p<0.00*), and Cronbach alpha value was .81. In this study, it was .83.

2.3.3. Attitudes toward reading scale

The Garfield Visual Reading Attitude Scale developed by McKenna and Kear (1990) for grades 1-6 and adapted into Turkish by Kocaarslan (2016) consists of two sub-dimensions and 20 questions (the first 10 questions are reading for entertainment and the last 10 questions are reading for academic purposes). The Cronbach Alpha value of the scale was .88 and the value in the study was .935.

2.4. Data Analysis

The data were collected in the second semester of the 2022-23 academic year. Primary school students filled out the Life science course attitude scale on the first day and the Garfield reading attitude scale on the second day in the presence of the researchers. The scales were distributed to the students to take home to be filled in by their parents to determine the reading attitudes of the parents of primary school students with their children. Informative messages about the scale were written to parent groups by the teachers of primary school students. The scales filled out by the parents were delivered to their teachers through their children. The data obtained were analyzed with the help of SPSS 21.0 program. The analyses started with a normality test and the Kolmogorov-Smirnov test showed that the reading attitude scores obtained from the parents and the Life science course attitude and reading attitude scale scores obtained from the primary school students were not normally distributed (p<.05). In cases with two variables where the scores are not normally distributed, Mann Whitney U test is performed, and in cases with more than two variables, Kruskal Wallis test is performed. In cases where the Kruskal-Wallis test results are significant, the Mann Whitney U test is used to determine in whose favor the significance is. The differentiation of parents' attitudes towards reading with their children according to their demographic characteristics was analyzed with Mann Whitney U test for gender and income status variables, and the differentiation according to educational status was analyzed with Kruskal Wallis test. In the case of changes in primary school students' Life science course attitudes and reading attitudes according to their demographic characteristics, Mann Whitney U test was analyzed according to gender and class variables, and Kruskal Wallis test was analyzed according to favorite courses variables. The reading attitude levels of the parents with their children were determined according to the difference obtained by subtracting the lowest score from the highest score obtained from the scale and dividing it by the Likert number. Accordingly, the attitude levels of parents towards reading with their children are 4,21-5,00 very high, 3,41-4,20 high, 2,61-3,40 medium, 1,81-2,60 low, 1,00-1,80 very low. The relationship between parents' attitudes towards reading with their children and primary school students' Life science course and reading attitudes was analyzed with

Spearman correlation analysis because the scores were not normally distributed. The correlation coefficient is defined as "very weak relationship between 0.00 and 0.25 points; weak relationship between 0.26 and 0.49 points; medium relationship between 0.50 and 0.69 points; high relationship between 0.70 and 0.89 points; very high relationship between 0.90 and 1.00 points" (Köse, 2008).

3. Results

In this section, the results of the analysis conducted to reveal the statistical differentiation of parents' attitudes towards reading with their children and primary school students' Life science course attitude and reading attitude levels according to demographic characteristics and the relationship between them are presented.

The results of the descriptive analysis obtained from parents' attitudes towards reading with their children and primary school students' attitudes towards Life science course and reading are shown below in Table 2.

Table 2. Descriptive results

Scales	N	X	Sd	Min.	Max.	Kolmogorov-Smirnov
Parental attitude	416	4,06	,82	1,05	5,00	,00
Life science course attitude	416	2,76	,28	1,69	3,00	,00
Reading attitude	416	3,47	,49	1,00	4,00	,00

Parents' attitudes towards reading with their children, and students' attitudes towards Life science and reading are observed to be above average.

The relationship between parents' attitudes towards reading with their children and the variables of gender, income and educational status was analyzed and the results are shown in Table 3.

Table 3. Parents' attitudes towards reading with their children according to their demographic characteristics

Demographic	Variable	n	M. R	S. R.	U	Z	p
Gender	Female	368	205,94	75786,00	7890	-1,203	,23
	Male	48	228,13	10950,00			
Income status	Low	63	209,17	13177,50			
	Middle or higher	353	208,38	73558,50	11077,50	-,048	,96

There was no significant change in parents' attitudes towards reading with their children according to gender and income status variables (p>.05).

The Kruskal-Wallis test was performed to examine the differentiation of parents' attitudes towards reading with their children according to their educational status and the results are presented in Table 4.

Table 4. The effect of parents' educational status on their attitudes towards reading with their children

Status	Variables	n	M. R.	sd	χ^2	p
Education Status	Pri. Sch.	51	195,37	3	1,517	,68
	Sec. sch.	69	204,51			
	High sch.	135	205,67			
	Uni. or post gradu.	161	216,74			

The educational status of the parents did not make a statistically significant difference in their attitudes towards reading with their children (p>.05).

Life science course attitudes of school students were analyzed according to their gender, grade, favorite subject, and the level of their parents' attitudes towards reading with their children, and the results are shown in the tables.

Table 5. The effect of gender and grade level of primary school students on their life science course attitude

Demographic	Variable	n	M. R.	S. R.	U	Z	p
Gender	Girl	212	213,67	45297,00	20229,00	-,905	,37
	Boy	204	203,13	41439,00			
Grade	Second	235	208,78	49063,00	21202,00	-,055	,96
	Third	181	208,14	37673,00			

As can be seen, the students' attitudes towards Life science course do not differ statistically significantly according to gender and grade level (p>.05).

Students' attitudes towards the Life science course, their favorite course and their parents' attitudes towards reading with their children were examined by applying the Kruskal-Wallis test and the results are presented in Table 6.

Table 6. The effect of favorite subject and parents' reading attitude levels with their children on primary school students' attitudes towards life science course

Status	Variables	n	M. R.	sd	χ^2	p	Significance
Favorite subject	Mathematics	240	205,24	4	5,899	,21	
	Science	46	185,51				
	Life science	60	236,12				
	Turkish	49	217,38				
	Other	19	192,37				
Level of parents' attitudes towards reading with their children	Mid and lower	83	158,55	2	28,298	,00***	Very high> mid-low Very high>high > mid-low
	High	111	192,01				
	Very high	222	235,42				

While the Life science course attitudes of students did not differ statistically according to their favorite course (p>.05), it was revealed that there was a statistically significant difference according to the parents' attitudes towards reading with their children (p< .05). Significance was found to be more significant for those with very high attitudes towards reading with their children than for those with high and below medium attitudes, and for those with high positive attitudes than for those with medium and below positive attitudes towards Life science course.

The reading attitudes of students were analyzed according to gender, grade, favorite subject and the level of their parents' reading attitudes with their children and the results are shown in the tables.

Table 7. The effect of gender and grade level of primary school students on their reading attitude

Demographic	Variable	n	M. R.	S. R.	U	Z	p
Gender	Girl	212	229,11	48571,00	17255,00	-3,571	,00***
	Boy	204	187,08	38165,00			
Grade	2	235	202,84	47668,00	19938,00	-1,096	,27
	3	181	215,85	39068,00			

No significant difference could be found in the reading attitudes of the students according to the grade level (p>.05), but there was a difference according to the gender variable (p<.05), which was in favor of males.

The results of the Kruskal-Wallis test conducted to determine the variation of students' reading attitudes according to the level of their favorite subject and their parents' attitudes towards reading with their children are presented in Table 8.

Table 8. The effect of favorite course and parents' reading attitude levels with their children on primary school students' reading attitudes

Status	Variables	n	M. R.	sd	$\times^2$	p	Significance
Favorite subject	Mathematics	240	211,58	4	5,293	,26	-
	Science	46	187,58				
	Life science	60	190,35				
	Turkish	49	234,49				
	Other	19	212,47				
Parents' level of reading with their children	Mid and lower	83	134,81	2	65,571	,00***	high>mid-low very high>mid-low very high>high
	High	111	179,02				
	Very high	222	250,79				

Although there was no statistically significant difference in the reading attitudes of students according to their favorite course variable, a statistically significant difference was identified according to the parents' attitudes towards reading with their children ($p>.05$). The significance is observed to be in favor of those who have high and very high positive attitudes towards reading with their children compared to those who have medium- and low- level positive attitudes, and in favor of those who have very high positive attitudes compared to those who have highly positive attitudes.

The relationship between parents' attitudes towards reading with their children and students' attitudes towards Life science course and reading was determined by Spearman correlation analysis.

Table 9. Correlation analysis results

Scales	Correlation	Parents' attitude towards reading with their children	Life science course attitude	Reading attitude
Parents' attitude towards reading with their children	r	1	,300	,499
	p		,00***	,00***
Life science course attitude	r	,300	1	,480
	p	,00***		,00***
Reading attitude	r	,499	,480	1
	p	,00***	,00***	

It was found that there was a weak relationship between parents' attitudes towards reading with their children and students' attitudes towards Life science course and reading. The strongest relationship was found between parents' attitudes towards reading with their children and students' attitudes towards reading.

4. Discussion

According to the findings of this study, parents' attitudes towards reading with their children, students' Life science course attitudes and reading attitudes are high. In addition, it was determined that income, gender and education level variables made a significant difference in parents' attitudes towards reading with their children. Although the Life science course attitudes of students did not differ statistically significantly according to gender, grade level and favorite course variable, it was determined that they differed according to the level of parents' reading with their children. It was determined that the Life science course attitudes of those whose parents' attitudes towards reading with their children were very high were more significant than those whose attitudes were high and below medium, and those whose attitudes were high were more significant than those whose attitudes were medium and below. While the grade level did not create a significant difference in the reading attitudes of students, the gender variable created a significant difference. It was determined that the significant difference was in favor of

males. Although there was no statistically significant difference in the reading attitudes of students according to their favorite course variable, it was revealed that there was a statistically significant difference according to the parents' attitudes towards reading with their children. The significance is observed to be in favor of those with high and very high positive reading attitudes compared to those with positive reading attitudes at the medium and low level, and in favor of those with very high positive reading attitudes compared to those with high positive reading attitudes. A weak relationship between parents' attitudes towards reading with their children and primary school students' attitudes towards Life science course and reading and between students' Life science course attitudes and reading attitudes was found. The strongest relationship was found between parents' attitudes towards reading with their children and primary school students' reading attitudes.

Another finding of the current study is that parents' attitudes towards reading with their children are highly positive. The fact that parents spend quality time with their children by reading books together and include activities such as animation and design in reading activities positively reflects on their children's cognitive, affective and social skills (Yurtbakan, Erdoğan, & Erdoğan, 2021). With teachers and child development experts on social media emphasizing the importance of reading, parents may be increasing their desire to read with their children in order to continuously support and closely monitor their children's development. In this way, parents' attitudes towards reading with their children may be improving. In fact, as in the study, demographic characteristics such as gender, educational status and income status may not make a difference in the attitudes of parents with this awareness towards reading with their children.

In the study, students' Life science attitudes were found to be highly positive. Although the Life science course attitudes of students did not differ statistically significantly according to gender, grade level and favorite course variable, they differed according to the level of reading with their children. The Life science course attitudes of the parents who had a very highly positive reading attitude with their children were found to be more significant than those who had a high and below-medium positive attitude, and those who had a highly positive attitude were more significant than those who had a medium and below-medium positive attitudes. Many studies have reported that students' Life science course attitudes are highly positive (Batmaz, 2021; Oker & Tay, 2020; Tiryaki, 2018). The fact that the attitude (George, 2006), which enables learning to take place as a result of affecting students' behaviors and decision-making processes, is highly positive in the Life science course is due to the fact that students have more skills, knowledge and experience related to the course they acquired in the preschool period (Batmaz, 2021). Students' Life science course attitudes may be affected by teachers' attitudes towards the course, teaching methods and demographic characteristics of students. For example, although gender did not make a significant difference in students' Life science attitudes

in many studies (Eren, Bayrak, & Benzer, 2015; Palavan, 2012; Tiryaki, 2018), Çetin (2020) found that male students' attitudes were highly positive and Batmaz (2021) found that female students' Life science course attitudes were highly positive. In addition, in some studies, it was observed that the grade level made a significant difference in students' Life science attitudes (Çetin, 2020; Oker, 2019), while in some studies it did not make a difference (Batmaz, 2021; Sarı, 2020). However, it has been proven by experimental studies that attitudes towards Life science courses can be improved (Ceylan, 2016; Ekinci-Işık 2007; İra, Ira & Geçer, 2019; Yavuz, 2017). Therefore, regardless of the demographic characteristics of the students, teachers play an important role in the development of their students' attitudes towards the Life science course.

Although Hayes (2000) stated that positive reading attitudes decrease as the grade level increases, the current study found that the reading attitudes of students were highly positive. Similar to our study, Kuşdemir (2019) found that the reading attitudes of 4th grade primary school students were high. However, Chotitham and Wongwanich (2014) determined that the reading attitudes of 3-5th grade students were neither high nor low. In the current study, the comparison of students' reading attitudes by grade level revealed that students' reading attitudes were similar. In other studies, the differentiation of students' reading attitudes by grade level may be affected by situations such as having a library at home, reading frequency, reading habits, positive attitudes of family and teachers towards reading (Çakıcı, 2005; Edmunds & Bauserman, 2006; Gür-Erdoğan & Demir, 2016; Yurdakul, Beyazıt, Bütün-Ayhan, & Şimşek, 2020). These reasons may cause students' reading attitudes to differ according to the variables of gender, favorite subject and parents' attitudes towards reading with their children. In the current study, the reading attitudes of students are observed to differ statistically significantly in favor of female students. Although many studies have concluded that girls have higher positive reading attitudes (Gür-Erdoğan & Demir, 2016; Kızıltaş, 2018; Kuşdemir, 2019; Logan & Johnston, 2009; Ökcü & Akgül, 2021) Taşkın and Aygün (2017) found that gender had no effect on reading attitude. In the current study, it was found that the reading attitudes of students did not differ according to the variable of their favorite course. In contrast to this result, it was determined that the positive reading attitudes of students are directly proportional to the high level of parents' attitudes towards reading with their children. Many studies have reported that the increase in the education and income levels of students' parents positively affects students' reading attitudes (ChangWu et al., 2016; Gür-Erdoğan & Demir, 2016; Kızıltaş, 2018; Kuşdemir, 2019). As such, it can be concluded that parents' demographic characteristics, education level, and level of awareness about the importance of reading have a significant effect on their children's reading attitudes.

The current study revealed a weak relationship between parents' attitudes towards reading with their children and elementary school students' reading attitudes. Kotaman (2013) also reported that the positive reading attitudes of children who read with their

parents increased. Children who read with their parents have also been observed to develop language and early literacy skills, increase their vocabulary, strengthen their communication with their parents, and improve their ability to find solutions to problems (Fung, Chow, & McBride-Chang, 2005; Huebner & Payne, 2010; Öncü, 2016; Petchprasert, 2014; Yıldız-Bıçakçı et al., 2018). In this sense, children need to spend a lot of time with their parents. It can be argued that supporting this time with activities that support children's improvement such as reading books, playing games and designing positively affects children's cognitive, affective and social development.

A weak relationship was found between parents' attitudes towards reading with their children and primary school students' attitudes towards Life science course and reading, and between students' Life science course attitudes and reading attitudes. The strongest relationship was found between parents' attitudes towards reading with their children and students' reading attitudes. Since parents not only read storybooks that teach life science topics such as life at home, healthy and safe life, but also read storybooks that teach science topics such as the five senses, planets, living things, Turkish topics such as values, visual reading, listening and speaking skills, and mathematics topics such as numbers and spatial relationships, it can be thought that the subject of the books that parents read with their children plays an important role in the fact that parents' attitudes towards reading with their children are more highly related to reading attitudes than students' attitudes towards Life science course. This leads to students getting to know different subjects at an early stage. By reading books on different subjects, students can develop an interest in different subjects. In addition to the educational aspect of the book, parents also focus on the entertaining aspect of reading such as animating, imitating and designing while reading books to improve their child's interest, motivation and attitude towards reading. In this way, the relationship between parents' reading attitudes with their children and students' reading attitudes may be strengthened as students' positive feelings towards reading are fostered.

References

Akbaba, S.. Ceyhan, A. A., Ceyhan, E., Cihangir-Çankaya, T., Güven, M., Hamamcı, Z., Kalkan, M., Küçükahmet, L., Şahin, H., Şahin, M., Palancı, M., & Yazıcı, H. (2009). Eğitim psikolojisi [Educational psychology]. Y. Özbay, & S. Erkan (Ed.), *Eğitim psikolojisi* içinde [In educational psychology] (p. 1-19). Ankara: PegemAcademy.

Aktepe, V. ve Gündüz, M. (2020). K*uramdan uygulamaya hayat bilgisi öğretimi [Life science teaching from theory to practice].* Ankara: Pegem Academy.

Atim, A., & Azihar, Z. N. (2012). Mother-child dialogic discourse in shared reading sessions: use ofliteral and inferential questions. *Procedia - Social and Behavioral Sciences, 66*, 321–329.

Baker, C. N. (2010). *Relationships between contextual characteristics, parent implementation and child outcome within an academic preventive interventionfor preschoolers* [Unpublished doctoral dissertation]. Massachusetts Amherts University.

Baştuğ, M. (2014). The structural relationship of reading attitude, reading comprehension and academic achievement. *International Journal Social Science & Education, 4* (4).

Batmaz, O. (2021). Investigating the relationship between primary school students' enjoyment levels in life science course and their attitudes towards the course. *Nevşehir Hacı Bektaş Veli University Journal of ISS, 11*(3), 1535-1547. **http://dx.doi.10.30783/nevsosbilen.934527**

Beach, J. D. (2015). Do children read the children's literature adults recommend? A comparison of adults' and children's annual "best" lists in the United States 1975–2005. New Review of Children's Literature and Librarianship, 21(1), 17-41.

Bıyık, Z., & Melanlıoğlu, D. (2022). The relationship of fluent reading skills of secondary school students with reading comprehension, reading attitude and anxiety during the covid-19 process. *Blacksea Research. XIX*/76: 1311-1330.

Binbaşıoğlu, C. (2003). *Hayat bilgisi öğretimi [Life science teaching].* Ankara: Nobel Publishing.

Bloom, B. S. (1995). *İnsan nitelikleri ve okulda öğrenme [Human qualities and learning at school],* (Tra.) Durmuş Ali Özçelik, İstanbul: National Education Press.

Boz, İ., & Ulusoy, M. (2020). Investigating the relationship between reading attitude, reading comprehension level and non-routine problem solving success of 4th grade primary school students. *Journal of Anatolian Cultural Research, 4*(1),13-24.

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., ve Demirel, F. (2020). *Bilimsel araştırma yöntemleri [Scientific research methods].* Ankara: Pegem Academy.

Ceylan, T. (2016). *The effect of concept teaching with scenario-based learning method on students' achievement, attitude and retention in life science coursende* [Unpublished master thesis]. Recep Tayyip Erdoğan University.

Chang Wu, C., Shang Su, M., Chun Chang, T., & Wen Liao, C. (2016). A study on the relation between junior high school students' extracurricular reading attitude and learning-associated well-being. *International Journal of Information and Education Technology, 6*(10), 765-771.

Chotitham, S., & Wongwanich, S. (2014). The reading attitude measurement for enhancing elementary school students' achievement. *Procedia-Social and Behavioral Sciences*, *116*, 3213-3217.

Collins, F. M., & Svensson, C. (2008). If I had a magic wand I'd magic her out of the book: the rich literacy practices of competent early readers. *Early Years*, *28*(1), 81-91.

Çakıcı, D. (2005). *The effects of pre-organizers on attitudes towards reading and reading comprehension* [Unpublished doctoral dissertation]. Dokuz Eylül University.

Çelebi Öncü, E. (2016). Examining the effects of parental dialogical book reading on preschool children's approaches to social conditions. *Journal of Mother Tongue Education, 4*(4), 489-503.

Çetin, B. (2020). Investigation of scond and third grade elementary school students' attitudes towards life science course in terms of various variables. *Trakya University Journal of Social Science, 22*(2), 979-990.

DeBaryshe, B. D., Binder, J. C., & Buell, M. J. (2000). Mothers' implicit theories of early literacy ınstruction: Implications for children's reading and writing. *Early Child Development and Care*, *160*(1), 119-131.

Edmunds, K. M. and Bauserman, K. L. (2006). What teachers can learn about reading motivation through conversation with children. *The Reading Teacher, 59(5)*, 414-424.

Ekinci-Işık, D. (2007). *The effect of project-based learning in life science teaching on academic achievement, creative thinking, retention and attitude towards life science course* [Unpublished master thesis]. Dokuz Eylül University.

Ekiz, D. (2015). *Bilimsel araştırma yöntemleri [Scientific research methods],* Ankara: Anı Publishing.

Eminoğlu, N. &. Bağçeci, B. (2020). Investigation of change in reading and writing attitudes of primary school students. *E-International Journal of Educational Research, 11*(2), 92-104. doi. 10.19160/ijer.706766.

Eren, C. D., Bayrak, B. K., & Benzer, E. (2015). The examination of primary school students' attitudes toward science course and experiments in terms of some variables. *Procedia - Social and Behavioral Sciences,* 174, 1006–1014.

Evans, J. H., Valleley, R. J., & Allen, K. D. (2002). Parent implementation of an oral reading intervention: A case study. *Child ve Family Behavior Therapy*, *24*(4), 39-50.

Feit, S. (2009). *Exploring the power of the read-aloud relationship between White middle class fathers and their sons* [Unpublished doctoral dissertation]. Columbia University.

Fletcher, A. J. (2017). Applying critical realism in qualitative research: Methodology meets method. *International Journal of Social Research Methodology: Theory & Practice, 20*(2), 181–194. https://doi.org/10.1080/13645579.2016.1144401

Fung, P. C., Chow, B. W-Y., & McBride-Chang, C. (2005). The impact of a dialogic reading program on deaf and hard-of-hearing kindergarten and early primary school–aged students in Hong Kong. *Journal of Deaf Studies and Deaf Education, vol. 10,* no. 1, 82-95. doi:10.1093/deafed/eni005.

George, R. (2006). A Cross-domain analysis of change in students' attitudes toward science and attitudes about the utility of science. *International Journal of Science Education,* 28(6), 571-589.

Guthrie, J., & Greaney, V. (1991). *Handbook of reading research*. New York: Longman.

Gültekin, M. (2015). *Hayat bilgisi öğretimi [Life science teaching].* Ankara: Nobel Publishing.

Gür Erdoğan, D., & Demir, Y. E. (2016). An examination of primary (4th grade) students' attitudes towards reading regarding various variables. *Sakarya University Journal of Faculty of Education, 0*(32), 85-96.

Güven, S., & Püsküllü, M. A. (2017). The content analysis of the studies about life science textbooks. The Journal of International Lingual Social and Educational Sciences, 3(2), 75-86.

Harper, S., Platt, A., & Pelletier, J. (2011). Unique effects of a family literacy program on the early reading development of English language learners. *Early Education & Development*, *22*(6), 989-1008.

Huebner, C. E. & Payne, K. (2010). Home support for emergent literacy: Follow-up of a community-based implementation of dialogic reading. *Journal of Applied Developmental Psychology, 31,*195–201.

Huennekens, M. E., & Xu, Y. (2016). Using dialogic reading to enhance emergent literacy skills of young dual language learners. *Early Child Development and Care, 186*(2), 324-340.

İra, N., İra, G. O., & Geçer, A. (2019). The effect of life science activities based on the orff approach on students' attitudes and success levels. *Mediterranean Journal of Educational Research,* 13(30), 270-287.

Kabapınar, Y. (2014). *Kuramdan uygulamaya sosyal bilgiler öğretimi [Social studies teaching from theory to practice*]. Ankara: Pegem Academy.

Karasar, N. (2020). *Bilimsel araştırma yöntemi [Scientific research method].* Ankara: Nobel Publishing-Distribution.

Kaynar, B. (2020). *The effect of educational and digital game-based activities on academic achievement, attitude and retention in life science coursework* [Unpublished Master thesis]. Atatürk University.

Kızıltaş, Y. (2018). Investigation of reading attitudes of 4th grade students of the primary school according to various variables. *Turkish Studies Educational Sciences, 13*(27), 1767-1783.

Kocaarslan, M. (2016). Adaptation of reading attitude survey with "Garfield "Picture for 1-6th grade students to Turkish. *Elementary Education Online, 15*(4), 1217-1233. **http://dx.doi.org/10.17051/io.2016.25140.**

Kocaarslan, M., Akyol H., & Güneş, F. (2017). The effect of mental image formation instruction on 4th grade students' reading comprehension, reading attitude and mental image clarity. *Hacettepe University Journal of Education, 32*(1), 63-80. **http://dx.doi.org/10.16986/HUJE.2016016670.**

Kotaman, H. (2013). *Impacts of dialogical storybook reading on young children's reading attitudes and vocabulary development*. Retrieved March 17, 2020, from https://www.semanticscholar.org/paper/Impacts-of-Dialogical-Storybook-Reading-on-Young-Kotaman/31d86dc42c4e0264c96d07796ddc56155b68e1d6

Köse, S. K. (2008). *Korelasyon ve regresyon analizi [Correlation and regression analysis*]. http://file.toraks.org.tr/TORAKSFD23NJKL4NJ4H3BG3JH/mse-ppt-pdf/Kenan_KOSE3.pdf.

Krashen, S. D. (2003). *Free voluntary reading*: Still a Very Good Idea.

Kush, J.C., Watkins, M. W., & Brookhart, S. M. (2005). The temporal-interactive influence of reading achievement and reading attitude. *Educational Research and Evaluation, 11*(1), 29-44.

Kuşdemir, Y. (2019) İlkokul dördüncü sınıf öğrencilerinin okumaya yönelik tutumlarının incelenmesi [Investigation of fourth grade primary school students' attitudes towards reading]. *Ahi Evran University Journal of Kirsehir Faculty of Education, 20*(1), 75-86

Lazarus, D. B., & Callahan, T. (2000). Reading attitude expressed with primary schools student with learning disability. *Journal of Reading Psychology, 21*(4), 271-282.

Lever, R., & Senechal, M. (2011). Discussing stories: On how a dialogic reading intervention improves kindergartners'oral narrative construction. *Journal of Experimental Child Psychology, 108*(1), 1-24.

Logan, S., & Johnston, R. (2009). Gender differences in reading ability and attitudes: examining where these differences lie. *Journal of Research in Reading, 32*(2), 199-214.

Manna, R., and Mete, J. (2020). Attitude Towards Life Science and Its Effects on Academic Achievement at Secondary School Student. *Editorial Board*, 9(2), 17-24.

Nuttall, J. (2016). Relationship between motivation, attribution ve performance expectancy in children's reading. *The Plymouth Student Scientist*, *9*(1), 214-228.

Oker, D. (2019). *Development of life science course attitude scale and students' attitudes and opinions towards life science course* [Unpublished master thesis]. Kırşehir Ahi Evran University.

Oker, D., & Tay, B. (2020). Development of life science course attitude scale and students' attitudes towards life science course. *Kalem Eğitim ve İnsan Bilimleri Dergisi [Kalem International Journal of Education And Human Sciences]*, 10(2), 731-756.

Oyelude, A. A. (2013). Teachers'/ students'library use and reading habits in Ido Local Government Area. *Ibadani Nigeria. School Libraries Worldwide*, *19*(2), 69-80.

Ökcü, M., & Akgül, S. (2021). A comparative analysis of the reading comprehension levels and reading attitude skills of gifted and nongifted fifth grade students. *Erzincan University Journal of Education Faculty, 23*(2), 442-457. **http://dx.doi.10.17556/erziefd.786115**

Özdemir, Y., & Kıroğlu, K. (2021). Reading attitudes of primary school students. *Atatürk University Journsl of Kazım Karabekir Education Faculty, 43*, 408- 424. **http://dx.doi.10.33418/ataunikkefd.829740.**

Palavan, Ö. (2012). *The effect of brain-based learning on students' achievement, attitudes and critical thinking skills in life science course* [Unpublished doctoral dissertation]. Ondokuz Mayis University.

Petchprasert, A. (2014). The ınfluence of parents' backgrounds, beliefs about english learning, and a dialogic reading program on Thai kindergarteners' English lexical development. English Language Teaching, 7(3), 50-62. doi:10.5539/elt.v7n3p50.

PIRLS (2003). PIRLS international report. US: International Association for the Evaluation of Educational Achievement (IEA).

Sam, E. F., & Sam, L. G. (2015). *The relationship between attitude towards reading and academic achievement.*https://www.researchgate.net/publication/280527574_The_relationship_between_attitude_tow ards_reading_and_academic_achievement.

Sarı, S. (2020). *Investigation of 2nd and 3rd grade primary school students' social skill levels and attitudes towards life science course: The case of Kars and Bursa* [Unpublished master thesis]. Bursa Uludag University.

Switalski, S. O. (2012). *An investigation of the additive benefits of parent dialogic reading techniques in older preschool children* [Unpublished Doctoral dissertation]. Duquesne University]. U. S.

Şahin, N. (2019). Investigation of the relationship between secondary school students' attitudes towards reading and motivations for reading. *Journal of Mother Tongue Education, 7*(4), 914-940.

Taşkın, Ç. Ş., & Aygün, H. E. (2017). Investigating primary students' reading attitudes with respect to different variables. *Elementary Education Online, 16*(3), 1120-1136

Tiryaki, B. (2018). *The relationship between primary school 3rd grade students' attitudes towards life science course and their democratic attitudes* [Unpublished master thesis]. Fırat University.

Uysal-Dede, K. (2019). *The effect of texts featuring primary school students' favorite characters on reading motivation and attitude towards reading* [Unpublished master thesis]. Sakarya University.

Wise, J., & Buffington, S. (2004). *The Ordinary parent's guide to teaching reading*. Virginia: Peace Hill Press.

Woods, L. S. (2017). *Interactive book reading: promoting emergent literacy skills in preschool children through a parent training program* [Unpublished doctoral dissertation]. North Carolina University.

Wray, D., & Medwell, J. (2015). Exploring a national bookgifting scheme: parents' and children's reactions. *Education, 3*(13), 209-222.

Yavuz, A. (2017). *The effect of information technologies supported reflective thinking activities on students' course achievement and attitude in primary school life science coursework* [Unpublished master thesis]. Recep Tayyip Erdoğan University.

Yıldız-Bıçakçı, M., Er, S., & Aral, N. (2018). Effects on the language development of children in the ınteractive storybook reading process *Kastamonu Education Journal, 26*(1), 201-208.

Yurdakul, Y., Beyazıt, U., Bütün Ayhan, A., & Şimşek, Ş. (2020). An examination of primary school students' reading habits in their spare time and their reading attitudes. *Journal of Ankara Health Sciences, 9*(2), 217-229.

Yurtbakan, E. (2022). *The effect of teacher- and parent-guided interactive reading practices on the reading skills of 2nd grade primary school students* [Unpublished doctoral dissertation]. Trabzon University.

Yurtbakan, E., & Erdoğan, T. (2020). Determining reading habits of fourth grade elementary school students: A mixed methods desing. *Journal of Mother Tongue Education*, *8*(2), 240-257.

Yurtbakan, E., Erdoğan, Ö., & Erdoğan, T. (2021). Impact of dialogic reading on reading motivation. *Education and Science, 46*(206), 161-180.

Zevenbergen, A. A., Worth, S., Dretto, D. ve Travers, K. (2016): Parents' experiences in a home-based dialogic reading programme. Early Child Development and Care, 188(6), 862-874. **http://dx.doi.10.1080/03004430.2016.1241775**