The Mediation Role of Reading Attitude and Parents' School Involvement in Correlation between Academic Self-Efficacy and Academic Success

Doç. Dr. Birsen ŞAHAN*

Zonguldak Bülent Ecevit Üniversitesi, Ereğli Eğitim Fakültesi, Eğitim Bilimleri Bölümü, Zonguldak / Türkiye, birsen.sahan@beun.edu.tr, ORCID: 0000-0001-5147-516X

Doç. Dr. Bahar DOĞAN-KAHTALI

İnönü Üniversitesi, Eğitim Fakültesi, Türkçe ve Sosyal Bilimler Eğitimi Bölümü, Malatya / Türkiye, bahar.dogan@inonu.edu.tr, ORCID: 0000-0001-6184-2306

Abstract

This study aims to determine the predictive power and mediation role of students' reading attitudes and parents' school involvement in the correlation between school success and academic self-efficacy of secondary school students. The research sample comprises 321 students (187 female, 134 male) attending 5th, 6th, 7th and 8th grades and their parents (193 mothers, 115 fathers and 13 others). Students were asked to complete Reading Attitude Scale and Academic Self-Efficacy Scale while parents filled Parent Involvement Scale. Student success was measured through the grade point averages at the end of the year. The path analysis model, one of the structural equation models, was used to detect correlations among research variables. The analysis revealed that students' attitude towards academic reading (β =-.14; *p*<.01), academic abilities (β =-.49; *p*<.01), school environment (β =21; *p*<.01), and their children's socio-cultural development (β =.16; *p*<.01) and their children's

^{*} Sorumlu Yazar. Tel: +90 372 322 1702 | Araştırma Makalesi Makale Tarih Bilgisi. Gönderim: 16.03.2023, Kabûl: 30.08.2023, Basım: Aralık, 2024

^{© 2024.} Kalem Eğitim ve Sağlık Hizmetleri Vakfi. Bütün Hakları Saklıdır. ISSN: 2146-5606, e-ISSN: 2687-6574

voluntary active involvement in school life (β =-.10; *p*<.05) were found to have a significant effect on students' academic success. Furthermore, students' attitudes towards academic reading have a mediation role between the school environment and their academic success. In order to increase the academic success of the students, and to make a realistic assessment of their academic self-efficacy, school family cooperation should be provided and activities should be organized for students to gain habits to read different resources.

Keywords: Academic success; Academic self-efficacy; Reading attitude; Parents' school involvement.

Akademik Öz-yeterlik ile Akademik Başarı Arasındaki İlişkide Okumaya Yönelik Tutumun ve Ebeveyn Okula Katılımının Aracılık Rolü

Öz

Bu çalışmada ortaokul öğrencilerinin okul başarılarını ile akademik özyeterlikleri arasındaki ilişkide, öğrencilerin okumaya yönelik tutumlarının ve velilerin okula katılımlarının yordama gücü ve aracılık rolünün belirlenmesi hedeflenmiştir. Araştırmanın örneklemini, 5, 6, 7 ve 8. sınıfa devam eden 321 öğrenci (187 kız, 134 erkek) ile bu öğrencilerin velileri (193 anne, 115 baba ve 13 diğer) oluşturmaktadır. Araştırmada, öğrencilere Okuma Tutumu Ölçeği ve Akademik Öz-Yeterlik Ölçeği uygulanırken, velilere de Veli Katılımı Ölçeği uygulanmıştır. Öğrenci basarısı ise öğrencilerin yılsonu genel not ortalamaları ile tespit edilmiştir. Araştırma değişkenler arasındaki ilişkileri tespit etmek amacıyla yapısal eşitlik modellerinden yol analizi modeli kullanılmıştır. Yapılan analizler sonucunda öğrencilerin akademik okumaya yönelik tutumu $(\beta = ..., 14; p < ..., 01)$, akademik vetenekleri ($\beta = ..., 49; p < ..., 01$), okul ortamları $(\beta=.21; p<.01)$, ebeveynlerin çocuklarının sosyokültürel gelişimlerini desteklemeleri (β =.16; p<.01) ve çocuklarının okul yaşamına gönüllü aktif katılımları (β =-.10; p<.05) öğrencilerin akademik başarılarını anlamlı olarak yordayan değişkenler olarak elde edilmiştir. Ayrıca öğrencilerin okul ortamı ile akademik başarıları arasında, akademik okumaya yönelik tutumları aracılık rolü oynamaktadır. Öğrencilerin akademik başarılarını artırmak ve gerçekçi bir akademik öz-yeterlik algısına sahip olmaları açısından okul aile iş birliği sağlanmalı ve öğrencilerin farklı kaynakları okumaları yönünde alışkanlık kazanmaları için etkinlikler düzenlenmelidir.

Anahtar Kelimeler: Akademik başarı; Akademik öz-yeterlik; Okuma tutumu; Ebeveyn okula katılımı.

Introduction

Students' academic success is affected by their intelligence, reading attitudes, courses, own ability and their potential to succeed. Students' positive perceptions of what they can achieve with their knowledge and skills enables them to adapt more quickly to new situations they experience. Personal expectations have a motivating effect on human behavior, self-efficacy in particular (Schunk, 1991). Academic self-efficacy is defined as students' selfassessment that one can perform academic tasks at an adequate level and achieve successful results in academic subjects (Schunk, 1991; Zimmerman, 1995). Bandura (1986) argued that people have the ability to behave appropriately and progress by making cognitive evaluations about current situations by using their past experiences. Academic self-efficacy affects students' preference towards more challenging learning tasks, their insistence on performing these tasks and making more effort to achieve higher success (Schunk, 1991). Otherwise, students usually do not want to fulfill difficult tasks and withdraw themselves. Moreover, students' beliefs in self-efficacy and expectations for success have a role in their academic performance (Bandura, 1994). Academic self-efficacy includes not only using effective cognitive strategies in the learning process, but also effective time management, organizing the environment, observing and evaluating self-efforts (Chemers, Hu and Garcia, 2001).

Students' belief for success has a motivating effect in trying to meet their expectations from themselves (Schunk, 1991). Dealing with a recently encountered problematic situation, taking necessary steps to overcome instead of running away from it and being determined is driven by strong self-efficacy beliefs (Bandura, 1977). Individuals with low self-efficacy beliefs prefer to withdraw instead of solving a problem, although they have the potential to succeed. Several variables affect some of the students having high self-efficacy and some of the students having low self-efficacy, although they have the potential to succeed. Bandura (1986) asserted that individual experiences, experiences from the lives of others, verbal persuasion messages from others, and individuals' awareness of their physiological and emotional states have an effect on their self-efficacy levels. The self-efficacy level is rooted in the perception and interpretation level of individuals' self-efficacy, in other words their cognitive structure. Students' belief in success increases their state of taking responsibility and making an effort required for success. As a matter of fact, contemporary scholarship indicates that there is a relationship between academic self-efficacy and academic success (Bong 1998; Caprara, Vecchione, Alessandri, Gerbino and Barbaranelli, 2011; Multon, Brown and Lent, 1991; Pajares and Graham, 1999). As Schunk (1991) reported that while starting a task, general abilities and experiences of individuals have significant effects on individuals' feeling themselves efficient, and the feedback obtained afterwards begins to be effective on self-efficacy. Feedback from parents, parents' approaches to education, studying, success and succeeding affect children's feelings and thoughts, in other words, their perception of success. Studies indicate that parents' involvement in school has positive effects on many aspects of student's education life, primarily their academic success (İpek, 2011; Sarıer, 2016; Şengönül, 2019).

There is a correlation between a student's low academic performance and having emotional, behavioral, and family problems (Manrique Millones, Van Leeuwen and Ghesquière, 2013). These problems impede students from showing their true potential and hinder their learning process. Parental involvement (Hara, 1998) and parents' spending quality time with their children (Onatsu-Arvibani and Nurmi, 1997; Riley, 1996) affect the learning outcomes students achieve in academic life. School staff acting together with parents motivates students to learn and be successful in life and at school (Grace, Jethro and Aina, 2012). The parental involvement was defined in the literature as the involvement of parents only in school life, with a latent categorization into home-based and school-based involvement (Altschul, 2011; Domina, 2005; Hoover-Dempsey and Sandler, 1997). The school-based family involvement is now also categorized. Active school-related activities such as parents or family members interviewing teachers or staff at school, participating in classroom activities, helping children in the classroom are included in school-based involvement (Barnard, 2004; Cooper, Crosnoe, Suizzo and Pituch, 2010). Activities that parents or family members contribute to a child's learning, such as reading books, providing the necessary environment for completing homework, talking about child's school life and helping with homework constitute the home-based involvement (Barnard, 2004; Cooper et al., 2010). Epstein et al. (2002), on the other hand, mention six types of involvement; parenting, communication, volunteering, learning at home, decision making, and collaborating with the community in a way that connects parental involvement at home, school and society. Parental involvement includes educating families about the development of the child and enhancing parents' parenting skills. Communication involvement includes informing families about school and student development and involving families in the process. Voluntary involvement is the involvement of parents in activities that will enable them to take responsibility at school. Home learning involvement refers to conducting activities with child and parents at home to improve a child's education. Decision making refers to involvement of parents in decisions that will facilitate the development of schools. Collaboration with the community refers to informing families about social resources.

The secondary school coincides the period when students experience adolescence. This change brings along several biological and psychological changes for children. It is necessary to make rearrangements within the family according to the developmental needs of children during this period. While parents' visits to school, spending time with parents, and parents' thoughts are essential for children during primary school period; when they enter adolescence period, children experience a conflict between being together with family members and being autonomous from family. Active involvement of parents in school during primary school period and organizing activities at home for school are important sources of support for the academic success of children. Children might not want their parents to come to school during the secondary school period, especially when the autonomy urge is at the forefront (Hornby, 2011). However, since adolescence is an important period with potential triggers on risk factors, family involvement become much more important in this period (Elias, Patrikakou and Weissberg, 2007; Gutman and Midgley, 2000). Parents coming to school and interviewing with the teacher is not the only thing included in family involvement. As age increases, family involvement can be transformed in accordance with the needs of children (Jeynes, 2007; Spera, 2005). With the increase in grade, the families' involvement at school might decrease compared to the primary school period. Family involvement decrease can be caused by issues related to family, child or institution. Difficult school subjects because of the change of classes, and families feeling inadequate due to these changes; families finding a secondary school or high school environment insincere unlike primary school, the desire to act autonomously of family as children's age increases, and the effort to be independent from family are among reasons regarding the students (Harris and Goodall, 2007; Hornby, 2011). Family involvement has positive effects on the development of cognitive skills (Bodovski and Farkas 2008; Epstein et al., 2002; Greenman, Bodovski and Reed, 2011), school attendance and academic success of students, friendship relations, school attachment levels, social skills

and development of self-confidence (Grolnick and Slowiaczek, 1994; Hornby, 2011; Izzo, Weissberg, Kasprow and Fendrich, 1999; Miedel and Reynolds, 1999; Wilder, 2014). Parental involvement, which is an important source of support for children, can be performed in different ways considering each grade level, not only to increase academic success of students, but also to establish many desired behaviors.

Another parameter of academic success is the reading attitude. The development of attitudes is educators' concern and it is important to understand factors that influence changes in attitude, and interactive components that shape attitude-success correlation (Petscher, 2010). One of the efficacies that the Ministry of National Education wants students to acquire via the curriculum is the efficacy of learning to learn. This is easier for individuals, who continue their education outside of school, to apply what they learn outside of school, and to internalize the information they learn. The most important feature of individuals who learn to learn is that they have higher curiosity and a strong motivation to investigate the subjects they are curious about. Reading is a behavior that satisfies students' curiosity and increases their sense of curiosity at the same time (Guthrie and Wigfield, 2000; Wigfield and Guthrie, 1997). This also increases eagerness for learning. Reading also improves students' ability to reason between events and situations, their interpretation, and analysis and synthesis power. It is primarily necessary to understand the puzzle to understand and solve a problem encountered in a class. The academic self-efficacy and academic success of students, who can understand what they read, make connections on the concepts and information they learn, and reach new results, are positively influenced (Kızgın and Baştuğ, 2020; Yılmaz, 2012). The meta-analysis results of a study on the correlation between students' reading attitudes and success revealed that there was a moderately significant correlation between attitudes and success in reading although it was more significant for primary school students and relatively weak for secondary school students (Petscher, 2010).

The results of 2018 final report included in Program for International Student Assessment (PISA), Turkey, a developing country among the countries of "Organization for Economic Cooperation and Development" (OECD), is still below average in regards to academic success rates. Furthermore, Turkey is one of the countries at the top of the list regarding truancy compared to other countries (OECD, 2018). Besides, 550000 students, in the exam of the

Council of Higher Education in Turkey in 2020 for university education, could not achieve the exam threshold and 48228 students scored zero in the exam. This indicates that students face certain difficulties in their academic life. The academic success means receiving better education at the next stage. Determining the factors that affect students' success is one of the first steps to crystallize the factors leading to failure. Moreover, the program regarding learning, principles and techniques, factors affecting the success of children, family and institutions must be analyzed. Contemporary thought reveals that family involvement in school life, students' perception of their academic self-efficacy and reading attitudes affect academic success. Therefore, this research focuses on how students' academic self-efficacy, reading attitudes and parents' involvement in school affect their academic success. Accordingly, the following hypotheses were tested:

- Academic success is a construct whose relationship with academic selfefficacy, reading attitude and parents' school involvement can be explained within the scope of a model.
- Academic self-efficacy directly affects reading attitude, parents' school involvement and academic success.
- Reading attitude and parents' school involvement have a direct effect on academic success.
- Academic self-efficacy also indirectly affects academic success through reading attitude and parents' school involvement have mediator role in the relationship between academic self-efficacy and academic success.

Method

The study aims to determine the correlation between students' academic success and their academic self-efficacy, reading attitudes and parents' involvement in school. The path analysis model, one of the structural equation models, was developed and relationships between paths were tested in this regard. Moreover, the mediation role of parental involvement and reading attitude in the correlation between academic self-efficacy and academic success was determined.

Research Design

A structural equation model was established, and the model was tested to determine correlation between secondary school students' school success and academic self-efficacy, reading attitudes and parental involvement in school. Since multiple correlations were tested with the model, the research was a predictive study with a correlational survey design from the quantitative research methods. The correlational survey models determine the extent of correlation between multiple variables and the degree of any covariance.

Sample

The research population comprises schools providing education at the secondary school level in a province located in the west of the Eastern Anatolia Region for the spring semester of the 2015-2016 academic years. The study sample consists of three secondary schools from three different districts, where families with different economic status live. A total of 418 volunteer students and parents of these students selected via random sampling from three schools. However, 97 scale forms in total, 26 scale form due to incomplete data and 71 forms due to single and multi-directional extreme values that violate normality, were excluded from the analysis. The study group comprises remaining 321 students (187 female, 134 male) and their parents. 74 (23.1%) of the students were in 5th grade, 95 (29.6%) in 6th grade, 92 (28.7%) in 7th grade and 60 (18.7%) were in 8th grade. 193 of the parents (60.1%) were mothers, 115 (35.8%) were fathers, and 13 (4.1%) were not parents (such as elder sisters, aunts, uncles etc.) who follow school life of the students. The age of parents ranges between 17 and 68.

Instruments

Personal Information Form

Two personal information forms, the Student and Parent Information Form, were prepared by the authors to gather information about students and their parents. The student information form includes questions about their gender, class, academic grade point average of the previous term and how they perceive academic success (low, medium, good, high) and the parent information form includes questions about parents' age, affinity with students, and how they perceive student's academic success (low, medium, good, high).

Academic Self-Efficacy Scale

The scale applied in this study was developed by Jinks and Morgan (1999) to determine the level of confidence students have while performing their academic duties, and it was adapted into Turkish culture by Öncü (2012). The scale comprises a three-factor structure Ability, Environment and Educational Quality. The ability sub-dimension includes questions regarding whether students can handle the lessons, homework and items successfully

such as "It is not difficult for me to get good grades at school.". The environment sub-dimension consists of items that measure students' attitudes towards classroom, teachers, and friends and school such as "My classmates usually get better grades than me". The educational quality sub-dimension comprises items that measure student's attitudes towards success, school and education such as "I am going to a good school.". Item weight values of 21 items in the scale range from .508 to .789, and item-total correlation range from .463 to .777. The reliability coefficient obtained with the test-retest method was calculated .80. All items explain 43.12% of the variance. Model fit indices of three-factor structure were obtained as χ^2 =788,05, (sd=184, p=.000), χ^2 /sd=4.283, RMSEA=.093, SRMR=.078, NNFI=.88, CFI=.90. In this study, goodness of fit values were X^2 =235,592, sd=1662 (X^2 /sd=1.454), CFI=.954, RMSEA=.038, IFI=.955, GFI=.931, AGFI=.910, TLI=.938 and SRMR=.058.

Reading Attitude Scale

The scale developed by Özbay and Uyar (2009) was used to determine the reading attitudes of primary school students. The scale has a four-factor structure; attitudes towards free reading, books, general reading and academic reading. Items that indicate the positive characteristics of reading books, including items such as "Reading has an important place in my life." were included in the general reading sub-dimension. Items for owning a book including, items such as "My books are my most precious things." were included in the reading books sub-dimension. Items measuring attitudes towards reading different sources in free time, including items such as "I enjoy reading the books I love in my spare time." were included in the free reading sub-dimension. Moreover, items measuring attitudes towards reading books for course purposes including items such as "Reading textbooks is a pain for me." were included in the academic reading sub-dimension. Four-factor structure of the scale consisting of 25 items explains 55.97% of the variance. Factor loads of items range from .517 to .762. It was concluded that goodness of fit values tested via confirmatory factor analysis of the scale were within desired ranges (GFI=.91; AGFI=.90; CFI=.99; NFI=.97; RMSEA=.041; SRMR=.042). Criterion validity of the scale was calculated as .79; internal consistency coefficient for the first factor was .853; it was .834 for the second factor; it was .850 for the third factor; it was .717 for the fourth factor; it was .911 for the whole scale. In this study, the goodness of fit values of the scale were tested [X²=379,573, sd=220 (X²/sd=1.725), CFI=.926, RMSEA=.048, IFI=.927, TLI=.915, GFI=.907, AGFI=.883; SRMR=.052] and values were obtained in

the desired ranges.

Parental Involvement Scale

The scale, which was used to measure parents' involvement in their children's education life, was developed by Gürbüztürk and Sad (2010). The scale comprise eight factors that include 39 items [Communication with School and Teacher (getting information from teacher and administrators about the progress of children), Supporting Child's Homework and Studies (supporting the development of children in home-based activities), Parent's Self-Improvement in Involvement (parents' self-development in efficient involvement), Voluntary Active Involvement (involvement of in-school and out-of-school activities), Communication with Children (establishing supportive and developing democratic communication), Creating a Home Environment Supporting Learning (providing a physical, psychological environment suitable for the child's learning), Supporting the Child's Personality Development (questioning, researching, learning and supporting the child to be open to communication), Supporting the Socio-Cultural Development of the Child (supporting children for participating in social and cultural activities)]. Factor loads of the scale range from .442 to .807. All items explain 60.86% of the variance. The goodness of fit values obtained from the confirmatory factor analysis were X^2 =1334.85, sd=636 (X^2 /sd=2.09), GFI=.90, AGFI=.88, NNFI=.92, CFI=.93, RMSEA=.042, RMR=.057, SRMR=.043. The test-retest consistency coefficient of the scale was .910, and the criterion validity coefficient was .88. The measurement model fit indices indicate that the scale was suitable for secondary school students' parents [X^2 =821,939, sd=532 (X²/sd=1.545), CFI=.938, RMSEA=.041, IFI=.939, TLI=.931, GFI=.875, AGFI=.852, SRMR=.061]. For this research, items in Supporting the Child's Homework and Studies factor and items in Parent's Self-Development in Involvement factor were gathered in one dimension. Since the items in both factors include items supporting the child's involvement in education, these two factors were named as Involvement in Child's Education dimension. Furthermore, it was observed that items in Communication with Children factor and Supporting Personality Development of the Child factor were grouped together. These factors were combined and named as the Supporting Self-Confidence dimension.

Process

Scales were conducted in the spring semester of 2015-2016 after selecting three different schools in districts with different socio-economic status. Personal Information Form, Academic Self-Efficacy Scale and Reading Attitude Scale were conducted on students in 5th, 6th, 7th and 8th grades. Parental Involvement Scale was given to students in an envelope to be filled by any of their parents. The students, whose parents were illiterate, were informed about filling the form by reading it for their parents. The names of the students were written on the envelope of both scales gathered from students and their parents to match the scales gathered from students and parents. The authors themselves collected all of the scales. The application, which was performed with students, took approximately twenty minutes.

Data Analysis

Confirmatory Factor Analysis was performed to test measurement models of all the applied scales. The correlations among variables were calculated using the Pearson correlation coefficient. The goodness of fit results regarding the scales was provided in the previous section, where the applied scales used in the research were introduced. The correlations among the variables included in the study were analyzed via path analysis, one of the structural equation models, and the Maximum Likelihood method was used to determine whether there was a mediation variable or not (Kline, 2011). The Monte Carlo parametric bootstrap method, with 1000 samples at a 95% reliability interval, was used to test the mediation effect of variables (Kline, 2011). Chi-square/degrees of freedom, RMSEA (root mean square error of approximation), SRMR (standardized root mean square residual), CFI (comparative fit index), and TLI (Tucker-Lewis Index) fit index values were examined to determine whether goodness of fit between research data and tested hypothesis model was obtained reliably (Bagozzi, 2010; Bagozzi and Yi, 2012). For these indices χ^2/df $\leq 2, p \geq .05$, RMSEA $\leq .06$, SRMR $\leq .07$, CFI $\geq .95$, and TLI $\geq .95$ was used as the criteria.

Since regression analysis and correlations coefficients were used in SEM (Structural Equation Modeling) studies, it is necessary to test whether the assumptions are approved before starting the analysis. In SEM studies, while working with very large sample groups causes data loss, small sample groups lead to unreliable results. Although there is no definite consensus about the sample size in SEM studies, many researchers emphasize that there should be at least 200 participants (Hoe, 2008; Kline, 2015). Based on these assessments, it was concluded that the data regarding 321 students and parents in the study was sufficient. Another assumption to answer is to test whether any extreme values and missing data entry exists or not. Data was analyzed in terms of both one-way and multi-directional extreme values, and the data with z values out of -3 and +3 were not included in the analysis. Mahalanobis distance was calculated for the determination of multi-directional extreme values. Assumptions of normality, linearity and homogeneity of variances were tested. Moreover, for the multiple normality tests, scatterplot of variables was tested via the correlations (Kline, 2011). The relationship coefficients among variables included in the model were examined and it was decided that there was no multi-collinearity problem among variables. Furthermore, the tolerance values and variance increase factors shaped an analysis on 321 data (Pallant, 2005; Tabachnick and Fidell, 2007). The data was analyzed using SPSS 20.0 and Amos 20 package programs.

Results

The correlation among variables was examined in the first stage of the study. The correlation results for continuous variables used in the study are provided in Table 1. A negative correlation was determined between students' academic success and their Academic Self-Efficacy total scores at a moderate level (r=-.400, p<.01), and a positive significant correlation was found between total scores of Reading Attitude (r=.122, p<.05) and total scores of Parental School Involvement (r=.154, p<.01) at a low level. The negative correlation between students' Academic Self-Efficacy and their academic success indicates that students with high academic success were less confident of their own abilities. Moreover, negative significant correlations were obtained between students' Academic Self-Efficacy and Attitudes towards Reading and Parental School Involvement scores at low levels. The findings indicate that students with higher perceptions of themselves as academically successful show a negative attitude towards reading, and parents tend to have a perception that they participate less in school.

The students were also asked how they perceived their academic success besides the GPA and how their parents perceived the academic success of them. A positive correlation at the moderate level was found between students' perception of academic success (low, medium, good, high) and their academic success (r=.515, p < .01). A positive correlation at moderate level

was found between parents' perception of their children's academic success (low, moderate, good, high) and students' academic success (r=.569, p<.01)

	1.	2.	2.1.	2.2.	2.3.	3.	3.1.	3.2.	3.3.	3.4.	4.	4.1.	4.2.	4.3.	4.4.	4.5.	4.6.	5.	6.
1.	-	40**	52**	.23**	16**	.12*	.10	.05	.15*	.01	.15**	.10	40**	.15**	.11	.17*	.17**	.52**	.57**
2.		-	.91**	.23**	.37**	21**	20**	14**	23**	09	21**	19**	22**	07	12*	16**	14*	49**	30**
2.1.			-	17	.31**	30**	23**	20**	28**	18**	21**	18**	23**	02	14*	17**	13*	58**	.91***
2.2.				-	.20**	.27**	.11	.18**	.19**	.29**	.03	.01	.05	08	.08	.05	01	.20**	.23**
2.3.					-	31**	22**	25**	24**	26**	18**	17**	15**	07	13*	12*	11	22**	.37**
3.						-	.77**	.88**	.66**	.67**	.23**	.17**	.21**	.09	.17**	.17**	.14*	.11	.67**
3.1.							-	.62**	.42**	.29*	.24**	.18**	.22**	.11*	.14*	.14*	.18	.02	.29**
3.2.								-	.47**	.47**	.17**	.14*	.14*	.10	.09	.15**	.10	.06	.47**
3.3.									-	.34**	.09	.07	.07	.06	.08	.07	.02	.17*	.34**
3.4.										-	.14*	.10	.13*	02	.18**	.11	.08	.08	.10
4.											-	.79**	.84**	.48**	.75**	.65**	.76**	.11*	.24**
4.1.												-	.53**	.43**	.42**	.38**	.47**	.14*	.18
4.2.													-	.25**	.59**	.51**	.56**	.08	.22**
4.3.														-	.12*	.12*	.39**	05	.05
4.4.															-	.59**	.50**	.10	.22**
4.5.																-	.46**	.12*	.17**
4.6.																	-	.079	.18**
5.																		-	.52**
6																			-
Mean	81.65	50.04	22.59	23.58	3.87	97.61	26.04	27.11	27.14	14.75	140.68	27.38	14.75	27.13	39.69	17.83	12.79	2.99	3.07
SD	11.67	4.42	6.90	3.13	1.21	13.77	4.54	5.73	11.67	3.37	22.31	6.58	3.37	2.70	5.02	2.54	4.31	.745	.731
Kurtosis	62	.49	.46	97	1.43	34	79	01	-1.05	32	57	28	.49	-1.00	14	-1.30	23	536	315
Skewness	32	.27	17	.83	1.53	53	.52	60	.85	36	.09	29	.17	.85	2.13	1.27	68	.267	499

Table 1. Correlation Values Regarding Research Variables (N=321 students, 321 parents)

1. Academic success; 2. Academic Self-efficacy, 2.1. Ability, 2.2 Environment, 2.3. Educational Quality; 3. Reading Attitudes, 3.1. Attitude towards free reading, 3.2. Attitude towards books, 3.3. Attitude towards General reading, 3.4. Attitude towards academic reading; 4. Parental Involvement, 4.1. Communication with school and teacher, 4.2. Involvement in the education of the child 4.3. Voluntary active involvement, 4.4. Supporting the children's self-confidence, 4.5. Creating a home environment that supports learning, 4.6. Supporting the child's socio-cultural development; 5. How the student perceives academic success (low, medium, good, high) 6. How parents perceive their child's academic success (low, medium, good, high). *p<.05, **p<.01

However, a negative correlation at moderate level was found between students' perception of academic success and Ability sub-dimension of Academic Self-Efficacy Scale (r=-.576, p<.01). A positive correlation was found between the parents' perception of their children's academic success and Ability sub-dimension of Academic Self-Efficacy Scale (r=.907, p<.001). This finding indicates that children do not believe in their potential as much as their parents.

There was no correlation between students' perception of academic success and their Attitudes Towards Reading books (r=.107, p > .05), a positive correlation was found between parents' perception of their children's academic success and students' Attitudes Towards Reading books (r=.666, p < .01) These results indicate that parents consider their children much more willing to reading and books, however children do not consider themselves to have a positive attitude towards reading as much as their parents.

The structural equation model was completed in three stages. First, the tests via measurement models of the scales in the model were performed. Second, the correlations among variables were tested through the path analysis. Third, whether variables play a mediation role or not was determined by the bootstrap analysis. The confirmatory factor analysis, to test the observed variables', in each scale, potential to represent the latent variables, constitutes measurement models. The findings approving that the applied scales fit the data from the selected sample group adequately is detailed in the previous section. The second stage of analysis was conducted to determine whether path model that detects correlations among variables was fit for the data or not. The variables of Ability, Environment and Educational Quality, which are the sub-dimensions of Academic Self-Efficacy Scale, were included as the external (independent) variables; the sub-dimensions of parental involvement scale and reading attitude scale were included as mediating variables, and academic success was included as an external (dependent) variable in the analysis. The results indicate that tested path model and research data has a good fit $[X^2=35.955, sd=26 (X^2/sd=1.383; p=.092>.05), CFI=.992, RMSEA=.035,$ IFI=.992, TLI=.972, GFI=.984, AGFI=.937, SRMR=.043]. Standardized path coefficient values for this model are demonstrated in Figure 1. Only the paths that are significant are demonstrated in the figure to avoid complication.

An alternative path model was also tested through consideration of the subscales of Parental Involvement Scale as external variables, sub-dimensions

of Academic Self-efficacy and Attitudes towards Reading Scale as mediating variables, and academic success as an external variable. However, since the alternative model did not have a good fit as much as the first model discussed in the study, $[X^2=66,677, sd=14 (X^2/sd=5.406; p=.00<.05), CFI=.950, RMSEA=.117, IFI=.953, TLI=.674, GFI=.970, AGFI=.772, SRMR=.076],$ the results of the applied model are presented.

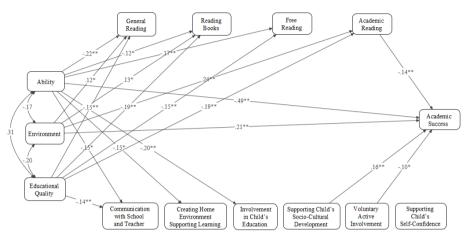


Figure 1. Standardized Path Coefficients regarding Structural Model (only significant paths are given)

It was indicated that there is a same directional correlation between Environment variable, which is one of the sub-dimensions of the Academic Self-Efficacy Scale, and attitudes towards General (β =.12; p<.05), academic $(\beta = .24; p < .001)$ and reading books $(\beta = .13, p < .01)$ sub-dimensions of Reading Attitude Scale and academic success (β =.21; p<.001). This indicates that students with positive perceptions of their friends, teachers and school, tend to have positive attitudes towards reading and their academic success tends to be higher. An inverse correlation was found between Ability variable, which is one of the sub-dimensions of Academic Self-efficacy Scale, and attitude variables regarding Reading Attitude Scale's sub-dimensions, general reading $(\beta=.22=; p<.01)$, free reading $(\beta=.17; p<.01)$ and reading books $(\beta=.12, p<.01)$ p < .05) and also between variables communication with school and teacher $(\beta=.15; p<.05)$, involvement in child's education ($\beta=.20; p<.01$), home environment that support learning (β =-.15; *p*<.01) and academic success (β =-.49; p < .01). Contrary to expectations, positive reading attitudes of students who perceive themselves as academically talented have lower rates of parents'

involvement in school and students' academic success. In other words, students who perceive themselves as academically incompetent, tend to have more positive attitudes towards reading, higher academic success, and parents' involvement in school. Another inverse correlation was found between educational quality, a sub-dimension of Academic Self-Efficacy Scale, and students' attitudes towards reading [general (β =-.15; p<.01), academic (β =-.19; p < .01), books ($\beta = .19$, p < .01), Free ($\beta = .15$, p < .01)] and parents' communication with school and teacher (β =-.14, p<.01). As students who think that they receive quality education tend to have a negative attitude towards reading, and their parents' communication with school and teacher tends to decrease. Moreover, while same directional correlation was obtained between parents 'supporting socio-cultural change of the child (β =.160, p<.01) and student's academic success, an inverse correlation was found between parents' voluntary active involvement in the school life (β =-.10, *p*<.01) and student's academic success. This indicates that children with parents who actively participate in activities with them in and out of school, tend to be more successful academically, as children with parents who support their them involvement in social, cultural and artistic activities, tend to be less successful academically.

Another inverse correlation between Academic Reading Attitude (β =-.14, p<.01) and academic success. This result indicates that students who have a positive attitude towards academic books tend to have less academic success.

It was also investigated whether parental involvement and attitude towards reading have a mediation role between academic self-efficacy and academic success. The significance of indirect effects and mediation correlations were determined by using the Maximum likelihood method and bootstrap sample bias corrected at a 95% confidence interval with 1000 samples (Cheung and Lau, 2008; Preacher and Hayes, 2008). The Bootstrap method enables to estimate confidence intervals of standard errors and parameters by creating a resampling over the existing sample (Nevitt and Hancock, 2001). Bias corrected method enables to calculate confidence interval and to comment on the significance of direct and indirect effects in path analysis (Lau and Cheung, 2010). The Bootstrap statistics values are detailed in Table 2.

Table 2 illustrates that students' attitudes towards academic reading play a mediation role between environment, a sub-dimension of Academic Self-Efficacy Scale, and academic success of the student (bootstrap coeff.=-

.037, \$95BC=-074, -.004). The value of squared multiple correlation coefficient (\mathbb{R}^2) was examined to determine the contribution of each latent variable in model to the variance of academic success and it was concluded that all latent variables explain 34.6% of academic success variance.

Table 2. Significant Path Coefficient Among Variables and Bootstrap Analysis Values

Path	В	%95 CI		
		Lower	Upper	
Direct Influence				
Ability \rightarrow Academic Success	485**	383	588	
Ability→General Reading	216**	108	316	
Ability \rightarrow Reading Books	115*	014	232	
Ability→Free Reading	173**	060	291	
Ability→Communication with School and Teacher	148*	030	275	
Ability \rightarrow Involvement in Child's Education	202**	084	322	
Ability \rightarrow Creating an environment that supports learning	146*	022	295	
Environment \rightarrow Academic Success	.209**	.302	.108	
Environment \rightarrow Academic Reading	.242**	.365	.105	
Environment \rightarrow General Reading	.118*	.231	.008	
Environment \rightarrow Reading Books	.127*	.228	.025	
Educational Quality→ Academic Reading	187**	070	287	
Educational Quality \rightarrow General Reading	152**	041	280	
Educational Quality→ Reading Books	186**	065	276	
Educational Quality→ Free Reading	154**	032	276	
Educational Quality \rightarrow Communication with School and Teacher	137**	018	246	
Academic Reading \rightarrow Academic Success	137**	039	239	
Voluntary active involvement \rightarrow Academic Success	100*	009	205	
Supporting child's socio-cultural development \rightarrow Academic Success	.160**	.287	.048	
Indirect Influence				
Environment \rightarrow Academic Reading \rightarrow Academic Success	037*	074	004	
BC interval: Bias corrected %95 confidence interval				

p<.01**; p<.001***

Discussion

This study revealed correlations between academic success and the selected variables such as environment, a sub-dimension of Academic Self-Efficacy Scale. Contrary to expectations, an inverse correlation was found between students' academic success and ability, another sub-dimension of Academic Self-Efficacy Scale. The correlation between Reading Attitude Scale and academic success revealed that there is a significant inverse correlation between academic reading and academic success. The correlation between Parental Involvement Scale and academic success showed that there is an inverse correlation between voluntary active involvement and academic success, and a significant correlation in same direction between supporting socio-cultural development of the child and academic success. Contemporary scholarship hints at fact that there is a similar correlation between academic self-efficacy and academic success (Alivernini and Lucidi, 2011; Bong 1998; Caprara et

al., 2011; Hwang, Choi, Lee, Culver and Hutchison, 2016; Koca and Dadandı, 2019; Multon et all., 1991; Pajares and Graham, 1999). Academic self-efficacy is a concept related to an individual's belief or perception that the one can achieve something. Therefore, academic self-efficacy might not reflect a person's true ability or poential. While a medium level of success is sufficient for some students, a high level of success might be insufficient for some students. From this perspective, while students may consider their academic performance as sufficient, their performance might not be a high academic performance in practical terms. Therefore, academic self-efficacy and performance might not coincide (Leithwood, 2007). Furthermore, talented students with high success may consider their performance inadequate and perceive themselves as academically inadequate due to the high goals they have (Goddard, Hoy and Woolfolk-Hoy, 2004). Students might also determine their own competencies by comparing themselves to their peers' level of knowledge. Students may observe what they can and cannot achieve by observing their peers in their age group (Schunk, 1986). Bandura (1997) states that when success of people is not valued by those who are important to them, their abilities harm others, or their group is ignored by the society, they can question their own worth even though they are quite competent. This might lead students to reach wrong conclusions about themselves. The finding that students with high academic success have lower self-efficacy compared to students with lower academic success suggests that this may be due to the high success of their peers, or that these students might feel inadequate because they have set very high goals. The students' perception as adequate or inadequate is rooted in the reference to others. However, academic self-efficacy is not the only variable affecting student success. There are several variables that affect this behavior. High academic self-efficacy does not automatically provide the desired performance without the knowledge and skills required for academic success (Schunk, 1986). It is necessary to determine the factors shaping this perception of students, who have low self-efficacy despite their success, through distinct research methods.

The finding that students, who perceive themselves as talented and have high academic reading attitudes, tend to have lower academic success, or, conversely, the students, who are academically successful and do not consider themselves as talented and have low academic reading attitudes, brings along the school burnout into the discussion. Several studies conducted in Turkey

revealed that students with high academic success tend to indicate higher levels of burnout (Sert-Ağır 2018; Şahan and Duy, 2017). Students who experience burnout feel inadequate in school related issues (Salmela- Aro, Kiuru and Nurmi, 2008; Salmela-Aro, Kiuru, Leskinen and Nurmi, 2009). These students experience a feeling of suffocation as the expectations of their family, friends, and teachers do not match their own expectations (Ryan, 2001; Yang and Farn, 2005). The study results may be an indicator of burnout and academic pressure experienced by the students who live in Turkey. According to PISA student welfare research conducted with the involvement of 540.000 students from 72 countries in 2015, it was determined that Turkish students were the unhappiest students. More than half of the students, who participated in this study, stated that they felt anxious despite being well prepared for exams. Besides, more than half of them feel stressed while studying. Also success motivation of students who live in Turkey (answers such as I want to get the best grades in all courses, I want to be the best whatever I do, I would like to be the best student in my class) are above the average (OECD, 2017). Students who have higher academic success can feel less competent than students who are less academically successful. This can be due to the fact that students who are academically successful are exposed to high expectations by both their families and teachers. As a matter of fact, when the correlations among variables were examined in the study, a medium negative correlation was obtained between student's ability to perceive academic success (not academic success), while a highly positive correlation was obtained between student's Ability Self-efficacy and parents' perception of student's academic success. In other words, while parents of students, who perceive themselves as talented, consider their children as successful, these students consider themselves as unsuccessful. This finding indicate that especially academically successful students are exposed to high expectations from their families. This situation suggests that exam anxiety leads students to be successful without error, and that exam anxiety and unhappiness have a role in this. The perception of efficacy slightly above the real capacity of a person creates a positive effect on academic performance (Goddard et al., 2004), if this perception is radically high or low to distort reality then it causes the student to make wrong decisions. When academic self-efficacy does not coincide with the reality it has a negative effect on the individual's self-confidence. Students, who have high self-efficacy but cannot perform adequately, experience disappointment in achieving their goals. In the cases which the students with high success despite

their low self-efficacy and goals lower than their potentials, student's ability to make realistic decisions is hindered. Furthermore, it is thought that this situation might lead to unhappiness in school and life as it will increase the gap between students' real and ideal self-confidence. The desire to achieve admissions from quality schools puts pressure on both families and students. This may sometimes facilitate academic success only by omitting the fact that the knowledge obtained in schools is useful in life, which is the main purpose of education.

Another finding of the study is that as higher active voluntary involvement of parents in school life decreases their children's academic success, while the academic success tends to increase with involvement in supporting socio-cultural development of the child. Involvement in school life includes activities such as active involvement of parents in school trips, attending classes to help students and teachers, participating in classroom activities. Moreover, supporting the socio-cultural development of the child involves parents' involvement in artistic, social and cultural activities with their children, supporting and encouraging their children to participate in these activities (Gürbüztürk and Şad, 2010). The age group on which the study was focused includes the adolescence period. Students in this age group strive to separate from their family and become individuals (Blos, 1979). Separation and individuation is not rejection of the family or drifting away from them. It is the process of children in adolescence to evaluate themselves in realistic ways and to understand that they are different individuals from their parents. Therefore, students at this age prefer to be together in home and social activities and to share their families' school-related experiences at home instead of their families coming to school and taking part in school activities (Desforges and Abouchaar, 2003; Harris and Goodall, 2007; Hornby, 2011). Supporting the socio-cultural development of students by parents, preparing students for life outside school life and directing students to activities that will satisfy them besides academic success provide support for students to discover themselves. Moreover, the significant inverse correlation between ability, and educational quality, communication with school and teacher, child's involvement in education and creating a home environment supporting learning indicate that they prefer to be supported themselves in social life and home environment not by active involvement at school.

The detected correlations between Academic Self-efficacy subscales

and Reading Attitude subscales were also detailed. Contrary to expectation, a significant inverse correlation was found between educational quality, a subdimension of Academic Self-efficacy scale, and all sub-dimensions of Reading Attitude Scale, besides the inverse correlation between efficacy sub-dimension and general reading, reading books and free reading dimensions. A positive significant correlation was discovered between environment sub-dimension and sub-dimensions of academic reading, general reading, and reading books. Moreover, students who expressed that they are enrolled at a quality school and who had high beliefs in their own abilities tend to have lower attitudes towards reading, while students who had a positive attitude towards their teachers, friends and class had positive attitudes. Students, who were satisfied with school environment and did not consider themselves in a race in the classroom environment, and therefore not focusing only on courses and exams, might have better opportunities to develop their attitudes towards reading positively. The Reading Attitude and Academic Self-Efficacy Scales are perception based scales. No further information was collected about how many hours students read daily, and the contents of these books. However, these findings can show that low attitudes of students who feel academically competent, but feel inadequate to meet the expectations of their relatives about reading. This might also be rooted in students' perception that they need to create a schedule focused only on lessons and exams due to the pressures from their families and their environment. The development of reading skill is one of the basic skills required to acquire, collect, use and generate knowledge (Chiu, Hong and Hu, 2015). According to 2015 PISA results, average success of students from Turkey regarding reading skill was below the average of all the countries participated in the exam (Taş, Arıcı, Özarkan and Özgürlük, 2016). The PISA report indicated that students in Turkey had problems in terms of synthesizing high level analysis through comprehending what is read; reaching new conclusions with reassembling what is read, interpreting latent concepts, deriving new insights beyond what is explained, and having a critical point of view.

Conclusion

Academic success is essential for students to show their performance and proceed to a higher quality education institution. However, the results indicate that academic success is transformed into purpose of life for the students in Turkey. The aim of education is to enable individuals to realize their own potential and make decisions in line with this potential and ultimately realize themselves. When this goal is reached, it will be possible for individuals to reach a life where they will be more satisfied. For most families, good education means a good job. Especially for families with economic concerns, school is the only way to gain status. However, this puts pressure on both students and the parents. This pressure sometimes become distant from the true goals of education and creates unhappy individuals for whom achieving good grades becomes the only goal. Although the problem experienced depends on the individual or family, it turns into a problem for the whole nation. Thus, it is necessary to take national measures and taking personal and familyoriented precautions.

Personal and family-based measures are among the issues that must be emphasized by psychological counselors in schools. The student's unrealistic academic self-efficacy perception affects the important decision in its life. Unrealistic assessments lead to disappointment of both the student and their parents. Thoughts of parents, peers and teachers are very important for the students in adolescence. The relationship between how the student perceives his academic success and the perspective of his parents, teachers and peers should be distinguished. Especially by using systemic therapy approaches and cognitive behavioral approaches, individual and group studies should be carried out on unrealistic assessments of the students and the parents. In addition, not only for the increase in academic achievement in schools, but also in terms of children to express themselves and gain different skills, they need to be supported to gain the habit of reading and activities that will gain reading habit must be done. It will also positively affect academic success increasing the capacity of reading comprehension.

Validity of the study was increased with the data collection in different sources. However, contrary to the hypotheses, it was found that ability dimension, a sub-dimension of academic self-efficacy of the students, and their attitudes towards academic reading did not positively predict academic success, and parental involvement did not have much effect on academic success other than socio-cultural support for student. The research findings are limited to the data collected from the applied scales. The underlying reasons for these results may not be obtained through the quantitative data collection methods. Especially the finding that students with high academic success have low levels of ability and self-efficacy needs further elaboration. It is necessary to make different measurements regarding this issue through interviews with both students and parents.

Declaration of Conflicting Interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.

Compliance with Ethical Standards

During the planning, data collection, analysis and reporting of this research, all rules included in the "Directive for Scientific Research and Publication Ethics in Higher Education Institutions" have been adhered to, and none of the "Actions Contrary to Scientific Research and Publication Ethics" included in the second section of the Directive have been implemented

References

Alivernini, F. and Lucidi, F. (2011). Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: A longitudinal study. *The Journal of Educational Research*, *104*(4), 241-252.

Doi: 10.1080/00220671003728062

- Altschul, I. (2011). Parental involvement and the academic achievement of Mexican American youths: what kinds of involvement in youths' education matter most? *Social Work Research*, 35(3), 159-170. Doi: 10.1093/swr/35.3.159
- Bagozzi, R. P. (2010). Structural equation models are modeling tools with many ambiguities: comments acknowledging the need for caution and humility in their use. *Journal of Consumer Psychology*, 20(2), 208-214. Doi: 10.1016/j.jcps.2010.03.001
- Bagozzi, R. P. and Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8-34.
 - Doi: 10.1007/s11747-011-0278-x
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. New Jersey: Englewood Cliffs, Prentice-Hall.
- Bandura, A. (1994). Self-Efficacy. In V. S. Ramachaudran, (Ed.), *Encyclopedia of human behavior* (Vol. 4) (71-81). New York: Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, 26(1), 39-62. Doi: 10.1016/j.childyouth.2003.11.002
- Blos, P. (1979). The adolescent passage. Madison: International University Press.
- Bodovski, K. and Farkas, G. (2008). "Concerted cultivation" and unequal achievement in elementary school. *Social Science Research*, 37(3), 903-919. Doi: 10.1016/j.ssresearch.2008.02.007

- Bong, M. (1998). Tests of the internal/external frames of reference model with subject-specific academic self-efficacy and frame-specific academic self-concepts. *Journal of Educational Psychology*, 90(1), 102-110. Doi: 10.1037/0022-0663.90.1.102
- Caprara, G. V., Vecchione, M., Alessandri, G., Gerbino, M. and Barbaranelli, C. (2011). The contribution of personality traits and self-efficacy beliefs to academic achievement: A longitudinal study. *British Journal of Educational Psychology*, 81(1), 78-96.

Doi: 10.1348/2044-8279.002004

Chemers, M. M., Hu, L. and Garcia, B. F. (2001). Academic self- efficacy and firstyear college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55-64.

Doi: 10.1037/0022-0663.93.1.55

- Cheung, G. W. and Lau, R. S. (2008). Testing mediation and suppression effects of latent variables: Bootstrapping with structural equation models. *Organizational Research Methods*, 11(2), 296-325. Doi: 10.1177/1094428107300343
- Chiu, S., Hong, F. and Hu, H. (2015). The effects of family cultural capital and reading motivation on reading behavior in elementary school students. *School Psychol*ogy International, 36(1), 3-17. Doi: 10.1177/0143034314528488
- Cooper, C. E., Crosnoe, R., Suizzo, M. A. and Pituch, K. A. (2010). Poverty, race, and parental involvement during the transition to elementary school. *Journal* of Family Issues, 31(7), 859-883. Doi: 10.1177/0192513X09351515
- Desforges, C. and Abouchaar, A. (2003). *The impact of parental involvement, parental support and family education on pupil achievement and adjustment: a literature review.* Retrieved from https://www.openschools.eu/wp-content/uploads/2017/09/The-inpact-of-parental-involvement.pdf accessed.
- Domina, T. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*, 78(3), 233– 249.

Doi: 10.1177/003804070507800303

- Elias, M. J., Patrikakou, E. N. and Weissberg, R. P. (2007). A competence-based framework for parent-school-community partnerships in secondary schools. *School Psychology International*, 28(5), 540-554. Doi: 10.1177/0143034307085657
- Epstein, J. L., Sanders, M. G., Sheldon, S., Simon, B. S., Salinas, K. C., Jansorn, N. R. and Van Voorhis, F. L. (2002). School, family, and community partnerships: your handbook for action. California: Corwin Press.
- Goddard, R. G., Hoy, W. K. and Woolfolk Hoy, A. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researcher*, 33(3) 3-13.
 Doi: 10.3102/0013189X033003003
- Grace, A. M., Jethro, O. O. and Aina, F. F. (2012). Roles of parent on the academic performance of pupils in elementary schools. *International Journal of Academic Research in Business and Social Sciences*, 2(1),196-201.

- Greenman, E., Bodovski, K. and Reed, K. (2011). Neighborhood characteristics, parental practices and children's math achievement in elementary school. *Social Science Research*, 40(5), 1434-1444. Doi: 10.1016/j.ssresearch.2011.04.007
- Grolnick, W. S. and Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivation model. *Child Development*, 65(1), 327-350.
- Guthrie, J. T. and Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson and R. Barr, (Eds.), Handbook of reading research (Vol. 3) (403-422). New Jersey: Lawrence Erlbaum Associates Publishers.
- Gutman, L. M. and Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence*, 29(2), 223-248. Doi: 10.1023/A:1005108700243
- Gürbüztürk, O. and Şad, S. N. (2010, February). *Turkish parental involvement scale: Validity and reliability studies*. Paper presented at the World Conference on Educational Sciences-WCES 2010, Bahçeşehir University-İstanbul.
- Hara, S. R. and Burke, D. J. (1998). Parent involvement: The key to improved student achievement. *The School Community Journal*, 8(2), 9-19.
- Harris, A. and Goodall, J. (2007). Engaging parents in raising achievement. Do parents know they matter? Retrieved from https://dera.ioe.ac.uk/6639/1/DCSF-RW004.pdf accessed.
- Hoover-Dempsey, K. V. and Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3-42. Doi: 10.2307/1170618
- Hornby, G. (2011). Parental involvement in childhood education: building effective school-family partnerships. New York: Springer.
- Hwang, M. H., Choi, H. C., Lee, A., Culver, J. D. and Hutchison, B. (2016). The relationship between self-efficacy and academic achievement: A 5-Year Panel Analysis. Asia-Pacific Education Researcher, 25(1), 89-98. Doi: 10.1007/s40299-015-0236-3
- Izzo, C. V., Weissberg, R. P., Kasprow, W. J. and Fendrich, M. (1999). A longitudinal assessment of teacher perceptions of parent involvement in children's education and school performance. *American Journal of Community Psychology*, 27(6), 817-839.
- İpek, C. (2011). Velilerin okul tutumu ve eğitime katılım düzeyleri ile aileye bağlı bazı faktörlerin ilköğretim öğrencilerinin seviye belirleme sınavları (SBS) üzerindeki etkisi. *Pegem Eğitim ve Öğretim Dergisi*, 1(2), 69-79.
- Jeynes, W. H. (2007). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. Urban Education, 42(1), 82-110.

Doi: 10.1177/0042085906293818

Jinks, J. and Morgan, V. (1999). Children's perceived academic self-efficacy: An inventory scale. *The Clearing House*, 72(4), 224-230. Doi: 10.1080/00098659909599398 Kızgın, A. and Baştuğ, M. (2020). Okuma motivasyonu ve okuduğunu anlama becerisinin akademik başarıyı yordama düzeyi. *Dil Eğitimi ve Araştırmaları Dergisi*, 6(2), 601-612.

Doi: 10.31464/jlere.767022

- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Koca, F. and Dadandı, İ. (2019). Akademik öz-yeterlik ile akademik başarı arasındaki ilişkide sınav kaygısı ve akademik motivasyonun aracı rolü. *İlköğretim Online, 18*(1), 241-252.

Doi: 10.17051/ilkonline.2019.527207

Lau, R. S. and Cheung, G. W. (2010). Estimating and comparing specific mediation effects in complex latent variable models. Organizational Research Methods, 000(00), 1-14.

Doi: 10.1177/1094428110391673

- Leithwood, K. (2007). The emotional side of school improvement: a leadership perspective. In T. Townsend, (Ed.), *The international handbook on school effectiveness and improvement* (615-634). New York: Springer. Doi: 10.1007/978-1-4020-5747-2 34
- Manrique Millones, D. L., Van Leeuwen, K. and Ghesquière, P. (2013). Associations between psychosocial functioning and academic achievement: The Peruvian case. Universitas Psychologica, 12(3), 725-737. Doi: 10.11144/Javeriana.UPSY12-3.apfa
- Miedel, W. T. and Reynolds, A. J. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37(4), 370-402.
- Multon, K. D., Brown, S. D. and Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38(1), 30-38.
- Nevitt, J. and Hancock, G. R. (2001). Performance of bootstrapping approaches to model test statistics and parameter standard error estimation in structural equation modeling. *Structural Equation Modelling*, 8(3), 353-377. Doi: 10.1207/S15328007SEM0803_2
- OECD. (2017). PISA 2015 results (Volume III): Students' well-being. Paris: PISA, OECD Publishing.

Doi: 10.1787/9789264273856-en

- OECD. (2018). PISA 2015 results in focus, PISA, OECD. Retrieved from https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf
- Onatsu-Arvibani, T. P. and Nurmi, J. (1997). Family background and problems at school in society: The role of family compositional, emotional atmosphere, and parental education. *European Journal of Psychology of Education*, *13*(2), 315-330.
- Öncü, H. (2012). Akademik Özyeterlik Ölçeği'nin Türkçeye uyarlanması. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 13(1), 183-206.
- Özbay, M. and Uyar, Y. (2009). İlköğretim ikinci kademe öğrencileri için okumaya yönelik tutum ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışması. *e-Journal of New World Sciences Academy*, 4(2), 632-651.

- Pajares, F. and Graham, L. (1999). Self-efficacy, motivation constructs and mathematics performance of entering middle school students. *Contemporary Educational Psychology*, 42, 190-198.
- Pallant, J. (2005). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Version 12). Crow's Nest NSW: Allen and Unwin.
- Petscher, Y. (2010). A meta-analysis of the relationship between student attitudes towards reading and achievement in reading. *Journal of Research in Reading*, *33*(4), 335-355.

Doi: 10.1111/j.1467-9817.2009.01418.x

- Preacher, K. J. and Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Riley, R. W. (1996). Promoting family involvement in learning. *Professional Psychology: Research and Practice*, 27(1), 3-4. Doi: 10.1037/0735-7028.27.1.3
- Ryan, A. M. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development*, 72, 1135-1150.
- Salmela-Aro, K., Kiuru, N., Leskinen, E. and Nurmi, J. E. (2009). School burnout inventory: reliability and validity. *European Journal of Psychological Assessment*, 25(1), 48-57. Doi: 10.1027/1015-5759.25.1.48
- Salmela-Aro, K., Kiuru, N. and Nurmi, J. E. (2008). The role of educational track in adolescents' school burnout: a longitudinal study. *British Journal of Educational Psychology*, 78(4), 663-689. Doi: 10.1348/000709908X281628
- Sarıer, Y. (2016). Türkiye'de öğrencilerin akademik başarısını etkileyen faktörler: bir meta-analiz çalışması. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 31(3), 609-627.

Doi: 10.16986/HUJE.2016015868

- Schunk, D. H. (1986). Vicarious influences on self-efficacy for cognitive skill learning. *Journal of Social and Clinical Psychology*, 4(3), 316-327. Doi: 10.1521/jscp.1986.4.3.316
- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26, 207-231.

Doi: 10.1080/00461520.1991.9653133

- Sert-Ağır, M. (2018). An analysis on the secondary school students' burnout in terms of academic self-efficacy, parental monitoring, social support and leisure time activities. *International Journal of Eurasia Social Sciences*, 9(34), 2313-2341.
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review*, *17*(2), 125-146.

Doi: 10.1007/s10648-005-3950-1

Şahan, B. and Duy, B. (2017). Okul tükenmişliği: öz-yeterlik, okula bağlanma ve sosyal desteğin yordayıcı rolü. Mersin Üniversitesi Eğitim Fakültesi Dergisi, 13(3), 1249-1270.

Doi: 10.17860/mersinefd.297590

Şengönül, T. (2019). Anne-baba ilgisinin çocukların okul başarısı üzerindeki etkisi.

Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi, 17(4), 268-292. Doi: 10.18026/cbayarsos.549463

- Tabachnick, B. G. and Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). New York: Allyn and Bacon.
- Taş, U. E., Arıcı, Ö., Özarkan, H. B. and Özgürlük, B. (2016). Uluslararası öğrenci değerlendirme raporu, PISA 2015 ulusal raporu. T.C. Milli Eğitim Bakanlığı Ölçme Değerlendirme ve Sınav Hizmetleri Genel Müdürlüğü, Ankara.
- Wigfield, A. and Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth or their reading. *Journal of Educational Psychology*, 89(3), 420-432.

Doi:10.1037/0022-0663.89.3.420

- Wilder, S. (2014). Effects of parental involvement on academic achievement: A meta synthesis. *Educational Review*, 66(3), 377-397. Doi:10.1080/00131911.2013.780009
- Yang, H. J. and Farn, C. K. (2005). An investigation the factors affecting MIS student burnout in technical-vocational college. *Computers in Human Behavior*, 21(6), 917-932.

Doi: 10.1016/j.chb.2004.03.001

- Yılmaz, B. (2012). Okuma alışkanlığının okul başarısına etkisi: Ankara Keçiören Atapark İlköğretim Okulu öğrencileri üzerine bir araştırma. Retrieved from http://bby.hacettepe.edu.tr/yayinlar/Y%C4%B1lmaz.pdf
- Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura, (Ed.), *Self-efficacy in changing societies* (202-231). Cambridge: Cambridge University Press.