

## Impact of Reading Frequencies and Attitudes on Early Childhood Teachers' Teaching Efficacy for Sustainable Development

Hüseyin Kotaman

Harran University, Sanliurfa, Turkey

Aslı Balcı

Atatürk University, Erzurum, Turkey

Zeynep Nur Kılıç Aydın

Gazi University, Ankara, Turkey

### Abstract

The purpose of the study is to examine the impact of early childhood teachers' reading attitudes, the total number of the books they have read about their profession, the total number of the books they have read on general topics, and their teaching experience on their teaching efficacy. Participants consist of 362 early childhood teachers from 51 different cities in Turkey. Of the 362 participants, 333 are female (91%) and 29 are male (9%). The ages of the teachers range from 21 to 50, with a mean age of 27.47. The participants responded to a personal questionnaire; Early Childhood Teachers' Teacher Efficacy Scale (ECTTES) and Reading Attitude Scale (RAS). Stepwise regression analyses for subtests CM, SE, PI, P and for total teaching efficacy indicate that reading attitude and teaching experience are significant predictors. For subtest C, reading attitude and age appear as significant predictors. For subtest IS, only reading attitude appears as a significant predictor. Accordingly, in order to improve early childhood teachers' reading attitudes, book clubs and peer reading groups are recommended.

*Keywords:* early childhood teacher, reading frequency, reading attitude, teaching efficacy, sustainability.

### Introduction

A plethora of studies have revealed that self-efficacy is an important predictor of performance and a primary cause of the feelings of self-worth and perceived usefulness. Bandura (1997) indicated that teaching efficacy is a specific case of self-efficacy. Tschanen-Moran, Hoy and Hoy (1998) defined teaching efficacy as "the teacher's belief in his or her capability to organize and execute courses of action required to be successfully accomplished as specific teaching task in a particular context (p 233)." This definition

is accepted as the operational definition for teaching efficacy for the purpose of this study. The purpose of the study is to examine the relationship among early childhood teachers' self-report of their own teaching efficacy, the number and the types of the books they have read, and their reading attitudes.

Teaching efficacy has a direct impact on teachers' motivation, resilience, and performance and an indirect impact on students through their teachers. Studies have shown that teachers with a higher teaching efficacy belief than their colleagues display a higher commitment to teaching (Ware & Kitsantas, 2007, Fedosejeva et. al, 2018) and they experience higher job satisfaction in teaching, experiencing less stress (Tschannen-Moran, Hoy & Hoy, 1998) and less teacher burnout (Skaalvik & Skaalvik, 2007) during teaching. Teacher efficacy has an impact on teachers' use of teaching strategies. It was shown that efficacious teachers are more willing to implement new instructional ideas compared to their less efficacious colleagues (Gaith & Yaghi, 1997; Kabadayi & Bozkurt, 2015). In another study, Shchar and Shmulevitz (1997) have found that efficacious teachers are better at promoting learning in slow students than less efficacious teachers. It has been found that a high sense of teacher efficacy relates to less interventionist and more democratic classroom management (Gencer & Cakiroglu, 2007; Yeo, Ang, Chong, Huan & Quek 2008). Teachers with high teaching efficacy have been found to be more eager to adopt innovative teaching techniques than those with lower teaching efficacy (Gaith & Yaghi, 1997). These studies have revealed the impact of teaching efficacy on teachers' professional functioning. Better teachers mean better educational outcomes. Therefore, it is important to examine factors that could influence teachers' teaching efficacy (Kabadai, 2015) and it was claimed to contribute to sustainable professional development of teachers, which would increase their quality (El-Deghaidy, 2012; Zhukova, 2018; Drelinga, et al., 2016). Thus, it would be possible to increase teachers' teaching efficacy.

Studies have also shown that the students who have teachers with higher teaching efficacy have higher motivation (Mojavezi & Tamiz, 2012; Pan, 2014; Midgley, Feldlaufer, & Eccles, 1989), and display higher academic achievements (Shidler, 2009; Goddard, Hoy & Woolfolk-Hoy 2000; Muijs & Reynold, 2002; Caprara, Barbaranelli, Steca, & Malone, 2006; Goddard, Hoy & Woolfolk-Hoy, 2000; Muijs & Reynold, 2002; Ross, 1992; Shidler, 2009; Swanson, 2014; Tournaki & Podell, 2005; Tschannen-Moran & Johnson, 2011) than their peers who have teachers with lower teaching efficacy. The study of Muijs and Reynold (2002) is especially important because they have found that teachers' self-efficacy is related to student achievements even when it is controlled for prior achievements and background factors. They have also found that efficacious teachers are more open to innovations, more willing to work on their professional and personal improvement than less efficacious teachers. That is, students with more efficacious teachers perform better academically and are expected to do better in the future than their peers who have teachers with a low sense of teacher efficacy (Kotaman, 2010).

### **Knowledge and Teaching Efficacy**

Above-mentioned studies have emphasized the contribution of teachers' teaching efficacy beliefs on teachers' teaching performance and educational outcomes. Therefore, a plethora of studies have examined the factors that are related to teaching efficacy. Thus, it would be easier to implement applications which would increase current and prospective teachers' teaching efficacy beliefs.

Since the mastery experiences are the most effective sources of self-efficacy (Bandura, 1977, 1986), many studies have focused on the relationship between teacher training and teaching efficacy (Henson 2001; Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998; Woolfolk-Hoy & Burke-Spero, 2005). Effective teachers experience the mastery experiences and the characteristics of effectiveness in order to achieve a good command of content and pedagogical knowledge, and they are informed about a broad range of subjects (Bélanger and Longden 2009; Colker 2008; Watson et al. 2010). Bandura (1986) has pointed out that the knowledge level of individuals on a certain task may affect their level of efficacy on that task. Therefore, it is reasonable to expect that current and/or prospective teachers' high level of content and pedagogical (educational principles, alternative instruction techniques, etc.) and general knowledge might be related to teaching efficacy. Recent intervention studies have revealed that improving content (understanding the content to be taught) and cognitive pedagogical mastery (success in understanding how to teach a subject) increase prospective (An, Tillman & Paez, 2015; Bautista & Boone, 2015; Can, 2015; Çinici, 2016; Flores, 2015; McCall, 2017; Sancar-Tokmak, 2015; Tatar & Buldur, 2013; Kabadayı, 2007) and current teachers' teaching efficacy (Chao & Ho; 2016; Telese, 2016). For example, Sancar-Tokmak (2015) investigated the impact of curriculum-generated play instructions in mathematics on the teaching efficacies of early childhood education pre-service teachers. Every week, investigators adopted activities about such curriculum-generated play instructions as individually finding play activities according to the selected mathematical subject, preparing a curriculum-generated play lesson plan in 16-week Play in Early Childhood course, which is offered to prospective teachers in their second year. Sancar-Tokmak (2015) has found a significant increase in prospective early childhood teachers' mathematic teaching efficacy. Qualitative findings gathered through structured interviews with participating prospective teachers support quantitative findings. Prospective early childhood teachers stated that "we gained information about the early childhood mathematics program, instruction design, finding play activities suitable for instruction, learning how to teach using play activity, pedagogy and learning a variety of play activities to be used in the education (Sancar-Tokmak, 2015, p. 16)." Thus, they also mentioned that they believed that they would be able to teach mathematics after the course better (Sancar-Tokmak, 2015).

The above-mentioned studies have revealed the importance of content and pedagogical knowledge in the formation of teaching efficacy. Reading is one of the most important tools for obtaining information and learning (Cuningham & Stanovich, 1997; Spira, Bracken, & Fischel, 2005; McGuinness, 2004; Chall, 1996). Therefore, reading enables lifelong learning and development (Kızılet, 2017). Continuous learning and development are the basic qualities of good teachers (Bélanger & Longden, 2009; Colker 2008; Watson et al., 2010). Therefore, it is reasonable to assume that teachers who are good readers can improve their content and pedagogical knowledge through reading. Life-long learning and development are compatible with sustainable teacher development because teachers should be able to meet the needs of today's students as well as prospective students. Teachers can achieve the professional development through sustainable teacher development (Hiller & Reichart, 2017; Fedosejeva et. al. 2018; Salite, et. al., 2016).

Several studies have investigated the relationships between the reading attitudes and the reading habits of current and prospective teachers. Studies have revealed a positive relationship among prospective teachers' reading attitudes, reading habits and

critical thinking skills (Kırmızı, Fenli & Kasap, 2014; Kızılet, 2017). That is, prospective teachers' critical thinking ability is increased with their positive attitudes toward reading and the number of the books they have read or the time they allocate for reading. Studies with teachers have shown that teachers who have more positive attitudes toward reading and who read more than their colleagues use a greater number of instructional practices associated with the best practices (McKool, 2009; Burgess, Sargen, Hill & Morrison, 2011; Haverback). All these studies have exhibited the importance of reading habits and attitudes for teacher development. Therefore, reading can be an indispensable tool for sustainable teacher development. However, to the authors' knowledge, no studies have investigated the possible relationship between early childhood teachers' teaching efficacy, their sustainability and their reading attitudes and habits.

Early childhood teachers deal with small children who are curious. They have a wide range of interests and ask a lot of questions about the subjects that they are interested especially in story reading (Kabadayi, 2005).

Therefore, an early childhood teacher should be knowledgeable, at least at a basic level, on many subjects. As it was mentioned above a good teacher should have a good command of content and pedagogical knowledge. Reading is a tool, which would support early childhood teachers in their efforts to improve their content, pedagogical, and general knowledge thus, it would serve for early childhood teachers' sustainable development as it is really an effective tool to sustain the future teachers (Hiller & Reichart, 2017). Since several studies revealed an association between teaching efficacy and teachers' level of pedagogical and content knowledge (Şaşmaz-Oren, Ormanlı, & Evrekli 2011, Siegel & Wissehr, 2011), it is reasonable to investigate the relationship between early childhood teachers' teaching efficacy, their attitudes toward reading and their reading habits. Thus, the purpose of this study is to investigate the relationship among early childhood teachers' teaching efficacy, their reading attitudes, the total number of the books they have read about their profession, and the total number of the books they have read on general topics. The study also aims to display the numbers and averages of early childhood teachers' general and profession-related books.

## Method

Originally, 391 questionnaires were returned to the investigators. However, among 391 questionnaires, 29 had missing data. Therefore, they were discarded from the data set. Finally, the data set of the study consisted of 362 questionnaires from 51 different cities in Turkey. There are 83 cities in Turkey. Of the 362 early childhood teachers, 333 were female (91%) and 29 were male (9%). The ages of the teachers ranged from 21 to 50, with a mean age of 27.47 (SD= 4.5). The teachers' experiences ranged from 1 to 20 years, with a mean of 4,37 (SD= 3,52).

## Instruments

The participants responded to a personal questionnaire: Early Childhood Teachers' Teacher Efficacy Scale (ECTTES) developed by Tepe and Demir (2012) and Reading Attitude Scale (RAS) developed by Gömleksiz (2004). The personal questionnaire contained six questions, which were about the participants' gender, age, and years of experience in teaching, the total number of books they have read on general topics, and

the total number of books they have read on early childhood teaching. The ECTTES is a reliable and valid instrument that contains 37 items and it is divided into six sub-dimensions: efficacy for instructional strategies (IS; five items, e.g., “I can design learning environments to foster problem solving skills”); classroom management (CM; six items, e.g., “I can control students’ disruptive behaviours in the classroom”); communication (C; seven items, e.g., “I can praise children’s positive behaviours”); student engagement (SE; nine items, e.g., “I can encourage children to express themselves”); parent involvement (PI; five items, e.g., “I can involve parents in decision making processes”) and planning (P; five items, e.g. “I can determine developmentally appropriate goals for children”). The participants were asked to respond to each item in terms of their level of belief in being able to achieve each item. The responses ranged from 1 (Never) to 5 (Always). High scores on every subscale indicated higher levels of teaching efficacy. In the current study, Cronbach alpha coefficients for the general and sub dimensions (IS, CM, C, SE, PI, P) of ECTTES were found to be 0.964, 0.836, 0.836, 0.816, 0.894, 0.867, 0.856 respectively.

RAS is a five point Likert type scale. It contains 21 positive and 9 reverse items on attitudes towards reading (Gömleksiz, 2004). Maximum and minimum scores which can be obtained from RAS are 150 and 30 respectively. RAS does not have sub-dimensions. Cronbach alpha coefficients for RAS were found to be 0.875. These Cronbach’s coefficients are considered to be indicative of sound reliability for education (Issac & Michael 1995).

## Data Collection

The data were collected through the personal dissemination of online surveys and questionnaires. The investigators prepared online versions of questionnaires and announced them through social media such as Facebook, Twitter, Instagram, Whatsapp, etc. Thus, the investigators reached their former students who were currently working as early childhood teachers and created a message chain to reach the maximum number of early childhood teachers. Beside online application, the investigators also visited schools in the city centre and, after they explained the purpose of the study to teachers and informed them that they could quit any time, they gave questionnaires to the teachers who indicated a willingness to participate and left the school. The teachers answered the questionnaires privately. A week later, the investigators visited the same schools again and gathered the questionnaires.

## Results

Table 1  
*Descriptive Statistics for Teacher Reading*

	Max	Min	Average
Total Number of Books	1500	4	237
Professional Books	700	0	43

Descriptive statistics revealed the maximum minimum number, the total number of the general topic books and the total number of the professional books read by the teachers. Several stepwise multiple regressions were calculated to predict the total and

the six sub-dimensions of the early childhood teachers' teacher efficacy (IS, CM, C, SE, PI, P) based on their age, years of experience, reading attitudes, the total number of the books they have read about their profession, and the total number of the books they have read on general topics. The teachers' ages and years of experience were included in the analysis because previous studies indicated that these variables were among the predictors of teachers' efficacy.

The total number of the general topic books read by the teachers ranged between 4 and 1500. The average numbers of the general topic books read by the teachers were 237. The total number of the professional books read by the teachers ranged between 0 to 700. The average number of the professional books read by teachers was 43.

Table 2  
*Stepwise Regression for IS, CM, C, SE, PI, P and Total Teaching Efficacy Score*

	B	SE b	$\beta$	Adjusted $R^2$	$R^2$ Change	F
Constant	9.828	1.58				
Reading Att.	0.085	0.012	0.344*	0.116*	0.118	48.86
Constant	12.97	1.69				
Reading Att.	0.089	0.013	0.335*	0.109*	0.112	
Teaching Exp.	0.153	0.041	0.183*	0.141*	0.033	30.86
Constant	13.41	1.88				
Reading Att.	0.115	0.013	0.422*	0.175*	0.177	
Age	0.096	0.031	0.145*	0.194*	0.021	44.89
Constant	17.609	2.318				
Reading Att.	0.161	0.018	0.428*	0.180*	0.183	
Teaching Exp.	0.148	0.055	0.126*	0.194*	0.016	44.96
Constant	4.145	1.923				
Reading Att.	0.116	0.015	0.375*	0.138*	0.140	
Teaching Exp.	0.196	0.046	0.203*	0.177*	0.041	40.21
Constant	9.231	1.602				
Reading Att.	0.088	0.012	0.351*	0.120*	0.123	
Teaching Exp.	0.093	0.038	0.118*	0.132*	0.014	28.78
Constant	69.146	9.253				
Reading Att.	0.654	0.071	0.432*	0.184*	0.186	
Teaching Exp.	0.755	0.221	0.159*	0.207*	0.025	48.76

\* $p < 0.001$

For IS, regression analyses indicated reading attitudes as a significant predictor. A significant regression equation was found ( $F(1,364) = 48,86$   $p < 0.0001$  with an adjusted  $R^2$  0.116). The participants' predicted IS was equal to  $9,83 + 0.085$  (reading attitudes). The participants' IS increased 0.085 points for each point that they received from reading attitudes. Reading attitudes were a significant predictor of the early childhood teachers' teacher efficacy for IS. It explained 11% of the variance in IS.

For CM, regression analyses showed teaching experience and reading attitudes as significant predictors. A significant regression equation was found ( $F(2,363) = 45,86$   $p < 0.0001$  with an adjusted  $R^2$  0.142). The participants' predicted CM was equal to  $13,67 + 0.096$  (reading attitudes)  $+ 0.153$  (teaching experience). The participants' CM increased 0.089 points for each point that they received for reading attitude and 0.153 points for each year that they spent in their profession. Reading attitudes and teaching

experience were the significant predictors of the early childhood teachers' teacher efficacy for CM. Together, they explained 14% of the variance in CM. The unique contributions of each independent variable (reading attitudes and teaching experience) for predicting CM were 11% and 3% respectively.

For C, regression analyses indicated reading attitudes and ages as significant predictors. A significant regression equation was found ( $F(2,363) = 44,89$   $p < 0.0001$  with an adjusted  $R^2$  0.194). The participants' predicted C was equal to  $13,41 + 0.115$  (reading attitudes)  $+ 0.096$  (ages). The participants' C increased 0.115 points for each point that they received for reading attitudes and 0.096 points for each year that they lived. Reading attitudes and ages were the significant predictors of the early childhood teachers' teacher efficacy for C. Together, they explained 19% of the variance in C. The unique contributions of each independent variable (reading attitudes and ages) for predicting C were 17% and 2% respectively.

For SE, regression analyses indicated reading attitudes and teaching experience as significant predictors. A significant regression equation was found ( $F(2,363) = 44,96$   $p < 0.0001$  with an adjusted  $R^2$  0.194). The participants' predicted SE was equal to  $17,609 + 0.161$  (reading attitudes)  $+ 0.148$  (teaching experience). The participants' SE increased 0.161 points for each point that they received for reading attitudes and 0.148 points for each year that they have worked as an early childhood teacher. Reading attitudes and teaching experience were the significant predictors of the early childhood teachers' teacher efficacy for SE. Together, they explained 19.9% of the variance in SE. The unique contributions of each independent variable (reading attitudes and teaching experience) for predicting SE were 18% and 1.9% respectively.

For PI, regression analyses indicated reading attitudes and teaching experience as significant predictors. A significant regression equation was found ( $F(2,363) = 40,209$   $p < 0.0001$  with an adjusted  $R^2$  0.177). The participants' predicted PI was equal to  $4,145 + 0.116$  (reading attitudes)  $+ 0.196$  (teaching experience). The participants' PI increased 0.116 points for each point that they received for reading attitudes and 0.196 points for each year that they worked as an early childhood teacher. Reading attitudes and teaching experience were the significant predictors of the early childhood teachers' teacher efficacy for PI. Together, they explained 18% of the variance in PI. The unique contributions of each independent variable (reading attitudes and teaching experience) for predicting PI were 14% and 4% respectively.

For P, regression analyses indicated reading attitudes and teaching experience as significant predictors. A significant regression equation was found ( $F(2,363) = 28,787$   $p < 0.0001$  with an adjusted  $R^2$  0.132). The participants' predicted P was equal to  $9,231 + 0.088$  (reading attitudes)  $+ 0.093$  (teaching experience). The participants' P increased 0.088 points for each point that they received for reading attitudes and 0.093 points for each year that they worked as an early childhood teacher. Reading attitudes and teaching experience were the significant predictors of the early childhood teachers' teacher efficacy for P. Together, they explained 13% of the variance in P. The unique contributions of each independent variable (reading attitudes and teaching experience) for predicting P were 12% and 1% respectively.

For the total teacher efficacy score, regression analyses indicated reading attitudes and teaching experience as significant predictors. A significant regression equation was found ( $F(2,363) = 48,764$   $p < 0.0001$  with an adjusted  $R^2$  0.207). The participants' predicted total efficacy was equal to  $69,146 + 0.654$  (reading attitudes)  $+ 0.755$  (teaching

experience). The participants' total efficacy increased 0.654 points for each point that they received for reading attitudes and 0.755 points for each year that they worked as an early childhood teacher. Reading attitudes and teaching experience were the significant predictors of the early childhood teachers' total teacher efficacy. Together, they explained 20% of the variance. The unique contributions of each independent variable (reading attitudes and teaching experience) for predicting the total teacher efficacy were 18% and 1% respectively.

### Discussion

The sub-purpose of the study was to figure out early childhood teachers' reading frequencies. In this study, the early childhood teachers reported an average of 237 general topic books and 43 professional books with ranges between 4 and 1500 and between 0 and 700 respectively. These numbers are not in line with the other studies that had reported reading frequencies of the Turkish public and the Turkish elementary and middle school teachers (Odabaşı, 2005; Aslantürk, & Saracaloğlu, 2010; Konan & Oğuz, 2013). Odabaşı (2005) reported that Turkish people annually read one sixth of a book. Aslantürk, and Saracaloğlu, (2010) have found that elementary school teachers read 1.5 books per month. In another study, Konan and Oğuz (2013) emphasized that 59% of the elementary and middle school teachers did not read regularly and 55% of them read less than five books the previous year. In consideration with the mean age (27.47) of the participants, it seems that early childhood teachers read more than the general public and the elementary school teachers. The Turkish elementary school curriculum is more subject-oriented than the early childhood school curriculum. In the elementary school curriculum, there are certain subjects to teach such as reading, writing, arithmetic, problem solving, and social studies. Compared to the early childhood school curriculum, it is a more teacher-directed program. The early childhood school curriculum is more flexible and open-ended compared to the elementary school curriculum. Therefore, early childhood teachers may encounter more questions than elementary school teachers and they may feel obligated to equip themselves. In order to do that, they may read more than elementary school teachers. However, we have to keep in mind the self-reported nature of the data which allows inflation of numbers.

The main purpose of the study was to examine the impact of teachers' reading attitudes, years of experience, ages, the number of the books they read and the number of the professional books they read on their teaching efficacy. For all the subtests of teacher efficacy such as instructional strategies (IS), classroom management (CM), communication (C), student engagement (SE), parent involvement (PI), planning (P) and their total, reading attitudes appeared as a significant predictor. Stepwise regression analyses for the subtests CM, SE, PI, P and for the total teaching efficacy indicated reading attitudes and teaching experience as significant predictors. For the subtest C, reading attitudes and ages appeared as significant predictors. Neither teaching experience nor ages were among the significant predictors for SE. Stepwise regression revealed reading attitudes as the sole predictor of IS. All analyses yielded reading attitudes as the main predictor. The highest rate of the variance that was explained by teaching experience was 4%, which was for PI. Ages explained 2% of all the variance for C.

Mastery experiences are known as the most effective sources of self-efficacy (Bandura (1977; 1986). It is also true for teaching efficacy (Chao & Ho, 2016; Telese, 2016;

Kotaman, 2010). Therefore, the appearance of teaching experience as a predictor for five out of the six subtests and the total teaching efficacy score is consistent with the teaching efficacy literature. Only in C (communication) subtest, ages entered into the model as one of the predictor variables. The findings revealed that as ages increased, so did the communication efficacy of the teachers. Older teachers may be parents longer than younger teachers and that may positively affect their communication skills.

Teaching is an intellectual profession. We live in an age of information and knowledge which requires lifelong learning. Therefore, sustainable professional teacher development is a necessity for teachers (El-Deghaidy, 2012; Hiller & Reichart, 2017; Zhukova, 2018) because, in order to awaken students' interests, guide them in their efforts to construct, transform and acquire knowledge, teachers have to be well-equipped. Thus, reading functions as an effective tool that would enable teachers' sustainable professional development for their lifelong development and improvement (Bélanger and Longden 2009; Colker 2008; Watson et al. 2010; Cunnigham & Stanovich, 1997). The findings of the study partially emphasize the importance of reading attitudes for teachers. Reading attitudes appeared as a significant predictor of all the subtests and the total teaching efficacy score. As the teachers' reading attitudes increased, so did their teaching efficacy. Several studies revealed the positive relationship between prospective teachers' reading attitudes and their teaching related competencies such as critical thinking skills and reading habits (Kırmızı, Fenli, & Kasap, 2014; Kızılet, 2017). For example, in their study, Kırmızı, Fenli and Kasap (2014) investigated prospective teachers' reading attitudes and critical thinking skills. Two hundred twelve prospective teachers participated in their study. They have found a positive and significant relationship between reading attitudes and critical thinking skills such as being open-minded, analysing facts, being curious, searching for facts and thinking systematically. Another study that Benevides and Peterson (2010) conducted with 227 prospective K-12 teachers revealed that participants' reading habits and attitudes were correlated significantly with high and composite reading and writing scores. Teachers' positive attitudes toward reading is important because they can be good models for their students and, thus, support the development of positive reading attitudes in their students (Benevides & Peterson 2010). However, having positive reading attitudes does not guarantee reading. Reading frequencies and reading attitudes are expected to be related but they are still two different things.

Although reading attitudes appeared as the main predictor of teaching efficacy, the number of general topic and professional books did not enter into the model as a predictor for neither the subtests nor the total teaching efficacy. Several studies revealed that although teachers emphasized the importance of reading, they themselves had not read as much as a person who would value reading (Mckool, & Gespass, 2009; Rimensberger, 2014). Mckool and Gespass (2009) have found that while most elementary school teachers value reading, only half of them read for pleasure on a daily basis. In another study, Rimensberger (2014) in South Africa reached similar findings. In his study, prospective teachers displayed positive attitudes toward reading and they strongly agreed on the importance of reading. However, they spared very little time for reading. Therefore, there may be discrepancy between participants' reading attitudes and their actual reading performances. On the other hand, a strong relationship between reading attitudes and reading behaviours is expected. Therefore, it is reasonable to claim that these variables work in accordance as independent variables. Therefore, as the main predictor of teaching

efficacy, reading attitudes may have shadowed the variables about reading behaviours. Even though attitudes and behaviours are not the same, our data have revealed the importance of reading attitudes for early childhood teachers' teaching efficacy. This outcome is consistent with teaching efficacy literature because it has been defined as a belief (Bandura, 1997; Tschannen-Moran, Hoy, & Hoy 1998).

### **Implications**

As it was mentioned above, compared to their colleagues with less teaching efficacy, teachers with higher teaching efficacy tend to be more open to the use of new instructional ideas and strategies, to be better at promoting learning of slow students, to display higher professional commitment, motivation, job satisfaction and less teacher burnout and to have more academically successful students (Shidler, 2009; Goddard, Hoy, & Woolfolk-Hoy 2000; Muijs & Reynold, 2002; Gaith & Yaghi, 1997; Shchar & Shmuelevitz, 1997; Skaalvik & Skaalvik, 2007; Tschannen-Moran, Hoy, & Hoy, 1998; Ware & Kitsantas, 2007). Therefore, increasing teachers' teaching efficacy is a worthwhile effort, which would support their sustainable professional development. The study revealed reading attitudes as a significant factor that is related to all the dimensions of early childhood teachers' teaching efficacy beliefs. Therefore, efforts to increase early childhood teachers' reading attitudes may have a positive impact on their teaching efficacy beliefs. Braithwaite (1999) stated that "It apparently does matter what teachers think. The evidence is that teaching is a complex and cognitively and attitudinally demanding task and that beliefs affect implementation processes and to some degree, student outcomes" (p. 20). Therefore, striving for increasing early childhood teachers' reading attitudes may be worthwhile. It may increase their actual reading and, in return, a positive effect may occur for both themselves and their students. Book clubs and peer reading groups can be promoted among teachers in order to foster reading.

### **Limitations**

The data were gathered from self-reports from volunteer participants. These were the main limitations of the study. It is possible that the teachers who read more were willing to participate in the study. We asked the teachers the total number of the general topic and professional books they read until then. They may have difficulty figuring out the exact number. Therefore, there may be some deviations in the data. Also, because reading is a socially respected habit and the society demands exemplary behaviours from teachers, the teachers may have inflated the numbers they reported. Future studies can focus on these issues. For example, asking teachers for library memberships and how many books they have borrowed or listing the names of the books they have read may improve the validity of the data. Also, the impact of the types of the books that teachers read on their teaching performances and on the other aspects of the professional life such as job satisfaction and burnout can be investigated in the future studies.

## References

- An, A. S., Tillman, A. D., & Paez, R. C. (2015). Music-themed mathematics education as a strategy for improving elementary preservice teachers' mathematics pedagogy and teaching self-efficacy. *Journal of Mathematics Education At Teacher College*, 6(1), 9–24.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84, 191–215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory* (1th ed.). New Jersey: Prentice-Hall, Inc.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bautista, U. N., & Boone, J. W. (2015). Exploring the impact of Teach METM lab virtual classroom teaching simulation on early childhood education majors' self-efficacy beliefs. *Journal of Science Education*, 26, 237–262, doi: 10.1007/s10972-014-9418-8.
- Bélanger, H. C., & Longden, B. (2009). The effective teacher's characteristics as perceived by students. *Tertiary Education and Management*, 15(4), 323–340 doi.org/10.1080/13583880903335456
- Benevides, T., & Peterson, S. S. (2010). Literacy attitudes, habits and achievements of future teachers. *Journal of Education for Teaching*, 36(3), 291–302 doi: doi.org/10.1080/02607476.2010.497375
- Braithwaite, J. (1999). Does it matter what I think? An exploration of teachers' constructions of literacy and their classroom practices. Paper presented at the *European Conference on Educational Research*, Lahti, Finland, September 22–25.
- Burgess, R. S., Sargent, S., Smith, M., Hill, N., & Morrison, S. (2011). Teachers' leisure reading habits and knowledge of children's books: Do they relate to the teaching practices of elementary school teachers? *Reading Improvement*, 48(2), 88–102.
- Can, H. (2015). Sources of teaching efficacy beliefs in pre-service science teachers. *Elementary Education Online*, 14(1), 333–348, doi: 10.17051/ieo.2015.84390
- Caprara, G. V., Barbaranelli, C., Steca, P., and Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of school psychology*, 44(6), 473–490.
- Chall, J. S. (1996). *Learning to read: The great debate* (3<sup>rd</sup> ed.). Orlando, FL: Harcourt Brace.
- Chao, G. C. N. & Ho, F. (2016). Improving teaching self-efficacy for teachers in inclusive classrooms in Hong Kong. *International Journal of Inclusive Education*, 20 (11), 1142–1154, doi: 10.1080/13603116.2016.1155663.
- Colker, J. L. (2008). Twelve characteristic of effective early childhood teachers. *Young Children*, 63(2), 68–73.
- Çinici, A. (2016). Pre-service teachers' science teaching self-efficacy beliefs: The influence of a collaborative peer microteaching self-efficacy beliefs: The influence of a collaborative peer microteaching program. *Mentoring & Tutoring: Partnership in Learning*, 24(3), 228–249. doi: 10.1080/13611267.2016.1222812
- Cunningham, E. A., & Stanovich, E. K. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934–945.
- Drelinga, E, Iliško, Dz., & Zarina, S. (2016). Latvian primary school teachers' views: Contemporary learner and future society. *Contemporary Educational Researches Journal* (6) 3, 69–77.

- El-Deghaidy, H. (2012). Education for sustainable development: Experiences from action research with science teachers. *Discourse and Communication for Sustainable Education*, 3, 23–40. doi: 10.2478/v10230-012-0002-1.
- Fedosejeva, J., Boče, A., Romanova, M., Iliško, Dz., & Ivanova, O. (2018). Education for sustainable development: The choice of pedagogical approaches and methods for the implementation of pedagogical tasks in the anthropocene Age. *Journal of Teacher Education for Sustainability*, 20(1), 157–179.
- Flores, M. I. (2015). Developing preservice teachers' self-efficacy through field-based science teaching practice with elementary students. *Research in Higher Education Journal*, 27, 1–19.
- Gencer, S. A., & Cakiroglu, J. (2007). Turkish preservice science teacher' efficacy beliefs regarding science teaching and their beliefs about classroom management. *Teaching and Teacher Education*, 23, 664–675.
- Ghaith, G., & Yaghi, H. (1997). Relationship among experience, teacher efficacy, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 13, 451–458.
- Goddard, D. R., Hoy K. W., & Hoy W. A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37, 479–507.
- Gömleksiz, N. M. (2004). Kitap okuma alışkanlığına ilişkin bir tutum ölçeğinin geçerlik ve güvenilirliği [Validity and reliability of an attitude scale towards reading habit]. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 14(2), 185–195.
- Haverback, H. R. A. (2009). Fresh perspective on preservice teacher reading efficacy beliefs. *Reading Improvement*, 46(4), 214–220.
- Hiller, K. & Reichhart, B. (2017). Motivation of civic education teachers-in-training in the field of education for sustainable development. *Discourse and Communication for Sustainable Education*, 8(1), 81–89. doi: 10.1515/dcse-2017-0006
- Isaac, S., & Michael, W. (1995). *Handbook in research and evaluation: a collection of principles, methods, and strategies useful in the planning, design, and evaluation of studies in education and the behavioural sciences*. San Diego: EdITS Publisher.
- Kabadayı, A., & Bozkurt, E. (2015). Okul öncesi öğretmenlerinin yapılandırmacı yaklaşım ile ilgili yeterlik düzeylerinin incelenmesi [Investigating proficiency levels of preschool teachers regarding constructivist approach]. *Journal of Research in Education and Teaching*, 4(2), Retrieved from <http://www.jret.org>
- Kabadayı, A. (2015). Analyzing prospective preschool teachers' reasons and motives for entering a teaching career, *Didactica Slovenica-Pedagoska Obzorja*, 30(2), 103–123.
- Kabadayı, A. (2007) Analyzing the cognitive teaching styles of preservice and cooperating preschool teachers in Turkey. *Early Child Development and Care*, 177(3), 275–293.
- Kabadayı, A. (2010). Investigating demographic characteristics and teaching perceptions of Turkish preschool teachers. *Early Child Development and Care*, 180(6), 809–822.
- Kabadayı, A. (2005). A story-based model from Turkey to foster preschool children's communicative input and performance in the process of mother tongue acquisition. *Contemporary Issues in Early Childhood*, 6(3), 301–307.
- Kırmızı-Susar, F., Fenli, A., & Kasap, D. (2014). Sınıf öğretmeni adaylarının eleştirel düşünme eğilimleri ile okuma alışkanlıklarına yönelik tutumları arasındaki ilişki

- [The relationship between classroom teacher candidates' critical thinking tendencies and attitudes towards reading habit]. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi*, 3(1), 254–367.
- Kızılet, A. (2017). Investigation of critical thinking attitudes and reading habits of teacher candidates. *Educational Research Review*, 12 (6), 323–328. doi: 10.5897/ERR2016.2939
- Kotaman, H. (2010). Turkish early childhood educators' sense of teacher efficacy. *Electronic Journal of Research in Educational Psychology*, 8(2), 603–616.
- McCall, M. (2017). Elementary preservice science teaching efficacy and attitude toward science: Can a college science course make a difference? *Electronic Journal of Science Education*, 21(6), 1–12.
- Mckool, S. S., & Gespass, S. (2009). Does Johnny's reading teacher love to read? How teachers' personal reading habits affect instructional practices. *Literacy Research and Instruction*, 48(3), 264–276. doi: 10.1080/19388070802443700
- McGuinness, D. (2004). *Early reading instruction*. Cambridge, MA: The MIT press.
- Midgley, C., Feldlaufer, H., & Eccles, S. J. (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology*, 81, 247–258.
- Mojavezi, A., & Tamiz, M. P. (2012). The impact of teacher self-efficacy on the students' motivation and achievement. *Theory and Practice in Language Studies*, 2(3), 483–491.
- Muijs, D., & Reynolds, D. (2002). Teacher beliefs and behaviors: What really matters? *Journal of Classroom Interaction*, 37, 1–15.
- Pan, Y. H. (2014). Relationships among teachers self-efficacy and students motivation, atmosphere, and satisfaction in physical education. *Journal of Teaching in Physical Education*, 33(1), 68–92.
- Rimensberger, N., (2014). Reading is very important, but...: Taking stock of South African student teachers reading habits. *Reading & Writing*5(1), 1–9. doi: <http://dx.doi.org/10.4102/rw.v5i1.50>
- Ross, A. J. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education*, 17, 51–65.
- Salite, I., Drelinga, E., Iliško, Dz., Oļehnoviča, E., & Zariņa, S. (2016). Sustainability from the transdisciplinary perspective: An action research strategy for continuing education program development. *Journal of Teacher Education for Sustainability* 18(2),135–152. doi: <https://doi.org/10.1515/jtes-2016-0020>
- Sancar-Tokmak, H. (2015). The effect of curriculum-generated play instruction on the mathematics teaching efficacies of early childhood education pre-service teachers. *European Early Childhood Education Research Journal*, 23(1), 5–20. <http://dx.doi.org/10.1080/1350293X.2013.788315>
- Shachar, H., & Shmuelevitz, H. (1997). Implementing cooperative learning, teacher collaboration and teachers' sense of efficacy in heterogeneous junior high schools. *Contemporary Educational Psychology*, 22, 53–72.
- Shidler, L. (2009). The impact of time spent coaching for teacher efficacy on student achievement. *Early Childhood Education Journal*, 36, 453–460.
- Siegel, M. A., & Wissehr, C. (2011). Preparing for the plunge: Preservice teachers' assessment literacy. *Journal of Science Teacher Education*, 22, 371–391.

- Skaalvik, M. E., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99*, 611–625.
- Spira, E. G., Bracken, S. S., & Fischel, E. J. (2005). Predicting improvement after first-grade reading difficulties: The effects of oral language, emergent literacy, and behavior skills. *Developmental Psychology, 41*, 225–234.
- Swanson, P. (2014). The power of belief: Spanish teachers' sense of efficacy and student performance on the national Spanish examinations. *Hispania, 97*(1), 5–20. doi: 10.1353/hpn.2014.0015.
- Şaşmaz-Oren, F., Ormanci, U., & Evrekli, E. (2011). The science and technology pre-service teachers' self-efficacy levels and opinions about alternative assessment and evaluation approaches. *Theory and Practice in Education, 11*(3), 1690–1698.
- Tatar, N., & Buldur, S. (2013). Improving preservice science teachers' self-efficacy about the use of alternative assessment: Implication for theory and practice. *Journal of Baltic Science Education, 12*(4), 452–464.
- Telese, A. J. (2016). Improving elementary teachers' self-efficacy for mathematics teaching. *Teacher Education and Practice, 29*(4), 615–629.
- Tepe, D. ve Demir, K. (2012). Okul öncesi öğretmenlerinin öz-yeterlik inançları ölçeği [Development of declaratory scale for preschool teachers' self efficacy beliefs]. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 12*(2), 137–158.
- Tournaki, N. and Podell, D. M. (2005). The impact of student characteristics and teacher efficacy on teachers predictions of student success. *Teaching and Teacher Education, 21*(3), 299–314. doi: 10.1016/j.tate.2005.01.003
- Tschannen-Moran, M. & Johnson, D. (2011). Exploring literacy teachers self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education, 27*(4), 751–761.
- Tschannen-Moran, Hoy, A. W., & Hoy, K. W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*, 202–248.
- Ware, H., & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research, 100*, 303–310.
- Watson, S., Millet, T., Davis, L., & Carter, P. (2010). Teachers' perceptions of the effective teacher. *Research In The Schools, 17*(2), 11–22.
- Yeo, L. S., Ang, R. P., Chong, W. H., Huan, V. S. & Quek, C. L. (2008). Teacher efficacy in the context of teaching low achieving students. *Current Psychology, 27*(3), 192–204.
- Zhukova, O. (2018). Novice teacher' concerns, early professional experience and development: Implications for theory and practice. *Discourse and Communication for Sustainable Education, 9*(1), 100–114. doi: 10.2478/dcse-2018-0008

Correspondence concerning this paper should be addressed to Dr. Hüseyin Kotaman Harran Univeristy, Turkey. Email: huskotaman@hotmail.com