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Okul öncesi eğitimi öğretmenlerinin öz düzenleme becerilerini etkileyen faktörlerin incelenmesi

Understanding the factors that affect early childhood education teachers' self-regulation skills

Yusuf Ertan ELMA, https://orcid.org/0000-0003-0489-4761
Millî Eğitim Bakanlığı, y.ertanelma@hotmail.com

H. Gözde ERTÜRK KARA, https://orcid.org/0000-0001-7895-8938
Kocaeli Üniversitesi, Eğitim Fakültesi, gozde.erturk@kocaeli.edu.tr

Bu çalışma, H. Gözde Ertürk Kara danışmanlığında Yusuf Ertan Elma (2023) tarafından hazırlanan "*Investigation of preschool education teachers' self-regulation skills in terms of various variables*" başlıklı yüksek lisans tezinden üretilmiştir

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ÖZ

Bu çalışmanın amacı okul öncesi eğitimi öğretmenlerinin öz düzenleme becerilerini öğretmene ilişkin faktörler (yaş, hizmet içi eğitim sayısı, mesleki deneyim) ve çalıştıkları okullara ilişkin faktörler (okulların konumu, okul türü, sınıf mevcutları) açısından incelemektir. Araştırmada ilişkisel tarama modeli tercih edilmiştir. Araştırmanın örneklemini 239 okul öncesi eğitimi öğretmeni oluşturmaktadır. Katılımcılara ulaşmak için kolay ulaşılabilir örnekleme yöntemi kullanılmıştır. Verilerin toplanmasında Demografik Bilgi Formu ve Öğretmen Öz Düzenleme Ölçeği (ÖÖDÖ) kullanılmıştır. Veriler üzerinde doğrulayıcı faktör analizleri yapılmış ve model uyum indeksleri incelenmiştir. Ölçeğin alt boyutları için Cronbach Alpha iç tutarlılık katsayıları .70 ile .86 arasında değişmektedir. Okul öncesi eğitimi öğretmenlerinin dışsal hedef yönelimi alt boyutundaki puan ortalamalarının orta düzeyde olduğu, diğer alt boyutların puan ortalamalarının ise yüksek düzeyde olduğu görülmektedir. Öğretmen yaşının duygusal kontrol ve öz-değerlendirme alt boyutları üzerinde; mesleki deneyim, okul türü ve okulun bulunduğu yerin ise duygusal kontrol alt boyutu üzerinde anlamlı bir etkiye sahip olduğu görülmüştür. Hizmet içi eğitim sayısının hedef belirleme ve öz-değerlendirme alt boyutları üzerinde anlamlı bir etkiye sahip olduğu bulunmuştur. Ayrıca, sınıf mevcudunun hedef belirleme ve öz tepki alt boyutları üzerinde anlamlı bir etkisi vardır. Araştırmadan elde edilen sonuçlar ışığında, öğretmenlerin performans hedef odaklı becerilerini geliştirmek için teşvikler sağlanması ve deneyim paylaşımı toplantıları düzenlenmesini önerilebilir. Hizmet içi eğitimlerle öğretmenlerin öz düzenleme ve öz değerlendirme becerileri artırılabilir. Ayrıca, küçük sınıf mevcudu ve interaktif öğretim süreçleri, öğretmenlerin hedef belirleme ve kendini değerlendirme becerilerini geliştirmede önemli bir rol oynayabilir.

Anahtar Sözcükler: okul öncesi eğitim, okul öncesi eğitimi öğretmeni, öz düzenleme becerileri

ABSTRACT

This study aims to examine the self-regulation skills of early childhood education teachers in terms of teacher-related factors (age, number of in-service trainings, professional experience) and factors related to the schools they work in (the location of the schools, the type of school, classroom sizes). Descriptive correlational design was preferred. The sample of the study consists of 239 early childhood education teachers. The convenience sampling method was used to reach the participants. Demographic Information Form and Teacher Self-Regulation Scale (TSRS) were used to collect the data. Confirmatory factor analyses were performed on the data, and model fit indices were examined The Cronbach Alpha internal consistency coefficients for the subscales of the scale ranged from .70 to .86. It is seen that the mean scores of early childhood education teachers in the performance goal orientation sub-dimension are at a medium level, while the mean scores of the other sub-dimensions are at a high level. Teacher age had a significant effect on emotional control and self-evaluation subscale, while professional experience, school type and school location had a significant effect on emotional control subscale. The number of in-service training courses was found to have a significant effect on goal setting and self-evaluation subscales. In addition, class size has a significant effect on goal setting and self-reaction subscales. In the light of the results obtained from the research, it can be suggested that incentives should be provided and experience sharing meetings should be organized to improve teachers' performance goal-oriented skills. Teachers' self-regulation and self-evaluation skills can be improved through in-service training. In addition, small class size and interactive teaching processes can play an important role in developing teachers' goal setting and self-evaluation skills.

Keywords: early childhood education, early childhood education teachers, self-regulation skills

INTRODUCTION

Self-regulation of teachers is an active process in which they direct and maintain their meta-cognition and motivation to provide effective education and training. Throughout this process, teachers set goals and make plans for the circumstances they may experience under the opportunities and conditions, decide on the appropriate strategies to achieve these goals, evaluate their performance, and benefit from these previous learning and experiences in their future practices (Capa Aydin, Sungur, & Uzuntiryaki, 2009). Teachers need to use various strategies to maximize their educational performance and facilitate children's learning, as well as improve their own self-regulation skills. Owing to goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, emotional control, self-evaluation, self-reaction, and help-seeking, they contribute to their professional development and improve their efficiency in the education and training process (Parvaneh Shirazi, 2024; Heydarnejad, Baghaei, & Chehrzad, 2021). Teachers' self-regulation skills, as an area of professional competence, are factors linked to their classroom practices and thus affect children's learning outcomes. Two areas of competence can be mentioned here: teachers' own self-regulation skills (their experiences as a model of self-regulation in the classroom) and supporting children's self-regulation skills. Teachers' self-regulation skills play a role in creating a quality classroom atmosphere (Gordon, Dembo, & Hocevar, 2007), and this qualified atmosphere ultimately supports the development of children's self-regulation skills (Cadima et al., 2019; Moen et al., 2019; Erturk Kara, Gonen, & Pianta, 2017; Guler Yildiz, Erturk Kara, & Findik Tanribuyurdu, 2014).

The first of the strategies that enable teachers to advance their self-regulation skills is getting to know the child and setting goals in accordance with her/his individual needs (Groves Gillespie, & Seibel, 2006). According to Bodrova and Leong (2017), when deciding on the guidance for children to achieve the objective teachers have set, teachers should support children progressively by taking into consideration their current and potential developmental characteristics and interests. Teachers can also manage time well by regulating their own cognition, motivation, and behavior in line with their goals (Sáiz Manzanares, Carbonero Martín, & Román Sánchez, 2014). Another important strategy is emotional control. Teachers experience different kinds of emotions triggered by more than one factor and interactions among these factors (Schutz, 2014). However, the strongest trigger that enables teachers to reveal their positive and negative emotions is their interaction with children (Day & Gu, 2014). The perception, approach, and reaction of the teacher to the situations encountered in the classroom contain emotional control skills. As a result of advancement in these skills, it provides an opportunity to observe the child who is meeting with the school environment for the first time and cannot predict which behaviors and emotions are appropriate. Also, thanks to these skills, the teacher has a strong mechanism to make sense of the clues for the child's behaviors (Becker, Goetz, Morger, & Ranellucci, 2014). Teachers and children have many experiences and express their feelings in the classroom. Teachers usually want to regulate their own or children's emotions to create a positive climate in the classroom. For instance, they may direct the attention of the child who is disturbing the class to other experiences. Also, they may increase his/her interest in learning by guiding him to focus on another aspect of the subject to reduce her/his boredom instead of being harsh on a child who is annoyed about a given task or assisting the child to learn with animations (Taxer & Frenzel, 2015; Chang, 2009; Sutton, 2004). At the same time, teachers who have emotional control skills use effective classroom management strategies to assist children in managing and expressing their emotions while having an attitude against disruptive classroom behaviors (Evers, Tomic, & Brouwers, 2004; Pianta, 1999).

One of the effective self-regulation strategies is self-evaluation. Self-evaluation can help make inferences about what works or doesn't, considering the performance on various instructional tasks (Bransford, Brown, & Cocking, 1999). Through self-evaluation, teachers can form the basis for planning and improvement. Depending on this, being aware of the useful and unhelpful elements in the classroom environment, education process, and support services, teachers know what to build on and how they can improve their novel practices. Also, this awareness provides

the opportunity to recognize their strengths and weaknesses with self-discovery for teachers (Ross & Bruce, 2007). Thanks to this, teachers focus on improving their efficiency in the classroom and their expertise in the field, distinguishing the difference between desired and actual practices, and starting to create new options for development goals (Airasian & Gullickson, 1997).

Teachers are expected to be able to analyze children's learning motivations, desires, and needs, as well as how they manage their learning processes in learning-teaching environments (Degol & Bachman, 2015). Within these processes, the importance of self-direction skills comes to the surface. Through self-direction, the teacher is involved in a process where they take the initiative by identifying personal learning needs, goals, and appropriate learning strategies. In this process, they find the opportunity to adapt the teaching strategies according to the interests and needs of the children throughout the education process. Additionally, they can evaluate the learning-teaching process by implementing their target-specific plan (Loyens, Magda, & Rikers, 2008).

Another factor that affects teachers' self-regulation skills is their intrinsic interest. Teachers with high intrinsic interest enjoy working with students and are excited about teaching. They learn and use new approaches and strategies, strive for students' autonomy, and show perseverance in guiding student failures. Designing learning environments that meet the expectations and needs of teachers, ensuring the school climate aligns with their own goals and expectations, and receiving the expected feedback from students in the classroom are important factors that boost teacher motivation and internal interest (Capa Aydin et al., 2009).

Teachers need to establish supportive relationships to overcome problems they experience and cannot solve in the classroom (Hsu, 2005). Teachers should identify the problem, feel comfortable expressing themselves, ask for help from the right source, and be willing to receive support and assistance (Rickwood et al., 2005). By communicating with colleagues to seek help, teachers can develop different perspectives on the problems they encounter and have the opportunity to practice solutions in the classroom (Eshel & Kohavi, 2003). Another strategy to develop self-regulation is self-reaction. According to Zimmerman (2000), self-reaction refers to a person's satisfaction or dissatisfaction with their performance. Teachers with high self-reaction skills can evaluate the effectiveness of their teaching by considering their previous performances, the feedback they have received from students, and whether they have achieved their goals. As a result of these evaluation processes, they develop behavioral, cognitive, and emotional responses. When teachers feel successful in many ways, they become more motivated to work and enhance their self-reaction (Larsen & Samdal, 2012). Increasing a teacher's self-satisfaction creates a source of motivation for further learning initiatives, engagements, and efforts. In this sense, a teacher who sees themselves as a behavioral or social model can positively affect the behaviors of those around them. Consequently, their perceived importance of the activities practiced and experienced in the education process increases, leading to the development of behavioral reactions (Schunk & Zimmerman, 2009).

Internal and external goals are effective strategies for the development of self-regulation skills, which influence teachers' motivational beliefs. Mastery goal orientation can be defined as “the individual's responses, approach, and goals that emerge with a focus on a situation related to success” (Zusho, Pintrich, & Coppola, 2003). Teachers with mastery goal orientation set goals to improve their competence in teaching and master the teaching task against self-set standards. These teachers tend to think, “It is important to be a successful teacher in order to satisfy myself professionally.” Teachers with intrinsic goal orientation are development-oriented, acquiring new skills, developing competence, gaining insight into their work, and performing tasks according to the standards they set. For this reason, the internal target is the best indicator of professional performance (Kamyabi Gol & Royaei, 2013). In addition, individuals with intrinsic goal orientation base their tasks on mastery, curiosity, and difficulty while performing their responsibilities. The reasons for fulfilling the task depend on internal resources (Pintrich et al., 1991). On the other hand, performance goal orientation emphasizes external factors that motivate individuals in the learning process and the role of external stimuli (Schunk & Zimmerman, 2009). Teachers with performance goal orientation set goals to outperform others and to have others believe in their

competence. These teachers tend to think, "It is important to be a successful teacher to get a promotion." Teachers with extrinsic goal orientation focus on being superior to others in their professional lives and how their abilities and performances are evaluated by others. The reasons for performing tasks taken on by individuals with extrinsic goal orientation are based on performance-oriented goals, such as rewards and competition (Pintrich et al., 1991).

It is known that teachers' use of strategies to develop self-regulation skills significantly impacts children's self-regulation skills and their social, emotional, and academic development (Downer, Sabol, & Hamre, 2010). A review of the national literature reveals that, although there are studies examining teachers' self-regulation skills, there is a limited number of studies focused on early childhood education teachers' self-regulation skills (Kurt & Dikici Sigirtmac, 2021; Yilmaz, 2016). Enhancing self-regulation skills during early childhood is critical for children, both in the short term and the long term (Bronson, 2000). One strategy that can be employed to promote these skills is modeling. It is expected that early childhood education teachers, who are important figures in children's lives after their families, will serve as role models for children in developing self-regulation skills. As part of the preschool education institution, teachers are also important and active collaborators in creating a positive and productive school climate. Teachers who can self-regulate will contribute to the institution's management processes. Furthermore, the results of the current research are thought to contribute to efforts aimed at involving children in a high-quality educational process. While many factors influence children's learning—such as family background, skills, and motivation, the most significant factor affecting learning in schools is the experiences provided by teachers. Teachers interact with children daily and help them acquire the knowledge and skills they are expected to have when they leave school. Given the pivotal role of teachers in learning, ensuring a high-quality teaching workforce is a priority on policy agendas for early childhood education. Educational policymakers design teacher education processes by determining the type of teacher profile desired. In this context, it is believed that the findings of the current research will contribute to this process by revealing teachers' self-regulation skills, which are components of professional competencies and include skills such as goal setting, goal-oriented motivation, and self-monitoring, as well as the factors that affect them. Since teacher quality emphasizes the ongoing professional development of teachers, the results of this research are expected to illuminate early intervention studies designed to support teachers' professional development (OECD, 2024). Considering these views, the current study aims to examine the self-regulation skills of early childhood education teachers concerning teacher-related factors (age, number of in-service trainings, professional experience) and factors related to the schools they work in (location of the schools, type of school, classroom sizes). In accordance with this purpose, the research questions of the current study are as follows:

1. What is the level of self-regulation skills of early childhood education teachers participating in the study?
2. Is there a significant difference in the self-regulation skills of the participating early childhood education teachers concerning teacher-related factors (teacher age, professional experience, number of in-service trainings received)?
3. Is there a significant difference in the self-regulation skills of the participating early childhood education teachers concerning the factors related to the schools they work in (type of school, classroom sizes, and location of the schools)?

METHOD

The current study uses a descriptive correlational design. Because it is aimed at examining the self-regulation skills of early childhood education teachers in terms of teacher-related factors (age, number of in-service trainings, professional experience) and factors related to the schools they work in (the location of the schools, the type of school, classroom sizes). The descriptive correlational design is a quantitative research model that aims to investigate the relationship between variables without making any claims about cause and effect (Karasar, 2017).

Participants

The sample of the study consists of 239 teachers working in early childhood education institutions in Batman located in the Southeastern Anatolia region of Turkey and its districts. It was ensured that the sample size was at least 5 times the number of items (Tinsley & Tinsley. 1987). In the stage of determining the sampling method, the researchers evaluated the situation of reaching preschool teachers in Batman and decided that there was no possibility to use random, stratified, etc. sampling types. This decision was influenced by the following circumstances. First, it was seen that limited data was obtained when teachers were reached with digital data collection method (Google form) and that the process of filling out the scale by establishing face-to-face communication was healthier. The districts and villages of Batman are in rural areas and are far from the provincial center. Since Batman province and its surroundings are among the provinces with high development potential, the high number of road construction works and the negative effects of this situation on transportation in terms of time and security; the researchers' full-time work and the fact that they work at almost the same hours as the teachers, there was a limited time to data collection. According to this evaluation, the convenience sampling method, which is recommended to be used when there is no possibility to use other sampling types, was preferred for this research (Stratton, 2021; Kılıc, 2012). Demographic characteristics of the participants are presented in Table 1.

Table 1
Demographic Characteristics of the Participants

Variables		f	%
School location	City center	91	38,1
	District center	76	31,8
	Village	72	30,1
School type	Kindergarten	95	39,7
	Kindergarten classroom in primary school	113	47,3
	Kindergarten classroom in secondary school	31	13,0
Teacher's age	23-33 years old	205	85,8
	34 years and older	34	14,2
Class size	Between 0-10 children	70	29,3
	Between 11-20 children	149	62,3
	21 and more children	20	8,4
Number of in-service trainings teacher attended	Between 0-5 times	124	51,9
	Between 6-10 times	49	20,5
	Between 11-15 times	31	13,0
	16 and more times	35	14,6
Professional experience	Between 0-5 years	167	69,9
	Between 6-10 years	43	18,0
	Between 11-15 years	29	12,1

Thirty-eight-point one percent of the schools are in the city center, 31.8% in the district center, and 30.1% in the village. Thirty-nine-point seven percent of the participant teachers work in kindergarten, 47.3% in the kindergarten classroom in primary school, and 13% in the kindergarten classroom in secondary school. While 85.8% of the teachers' ages range from 23 to 33, 14.2% of them are at the age of 34 and over. Twenty-nine-point three percent of the teachers work with 0–10 children, 62.3% with 11–20 children, and 8.4% with 21 or more children. Fifty-one-point nine percent of the teachers have attended 0-5 in-service training, 20.5% of them 6-10, 13% of them 11-15, and 14.6% of them 16 or more in-service training. While 69.9% of the

teachers have 0–5 years of professional experience, 18% of them have 6–10 years and 12.1% of them have 11–15 years of professional experience.

Instruments

Demographic Information Form

The form consists of questions about teacher-related factors (age, number of in-service trainings, professional experience) and factors related to the schools they work in (the location of the schools, the type of school, and classroom sizes).

Teacher Self-Regulation Scale (TSRS)

This scale was developed by Capa Aydin et al. (2009) to assess teachers' self-regulation skills. The scale consists of 40 items and includes nine subscales (goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, emotional control, self-instruction, self-evaluation, self-reaction, and help-seeking). It is in the 6-point Likert type, scored between the statements "I totally agree" and "I totally disagree". The reliability coefficients for the subscales of the scale were calculated as .85 for the intrinsic interest/value, .78 for performance goal orientation, .67 for mastery goal orientation, .86 for goal setting, .78 for self-instruction, .73 for emotional control, .72 for self-evaluation, .66 for self-reaction, and .78 for help-seeking (Capa Aydin et al., 2009).

Three field education experts evaluated whether the scale items could be used to assess preschool teachers' self-regulation skills in terms of their scope and reached a consensus on their appropriateness. Sample items related to the scale are as follows: "When I prepare activities, I identify the goals I want children to achieve" (goal setting). "Being a successful teacher is important for self-development" (intrinsic interest). "It makes me happy to see children learn something" (performance goal orientation), "Being a successful teacher is important to get promoted" (mastery goal orientation), "I learn from the mistakes I make during the activity"(self-evaluation), "I guide myself to use time effectively" (self-instruction), "I ask for help from other teachers when there are problems I cannot solve" (help-seeking), "I appreciate myself when everything goes according to plan"(self-reaction), "I act calmly when faced with a problem"(emotional control).

In addition, statistical evidence was obtained regarding the validity and reliability of the scale data. Confirmatory factor analysis was conducted to examine the scale data in the same factors in this group and to measure whether it had the same effect. The fit values calculated as a result of confirmatory factor analysis (CFA) indicate an acceptable fit (X 2 /sd=2,302; RMSEA=0,072, SRMR=0,087, NFI=0,92, NNFI=0,95 and CFI=0,96). This constitutes evidence for the construct validity of the data obtained from the scale. In addition, the reliability of the data obtained in the current study was analysed. The Cronbach Alpha internal consistency coefficient was calculated as .93. The Cronbach Alpha internal consistency coefficients for the subscales of the scale ranged from .70 to .86. These coefficients are respectively as follows: .86 for goal setting, .86 for intrinsic interest, .78 for performance goal orientation, .82 for mastery goal orientation, .85 for self-instruction, .81 for emotional control, .75 for self-evaluation, .70 for self-reaction, and .80 for help-seeking. The obtained values provide evidence of a high level of reliability.

Data Analysis

In the normality analyses, the skewness and kurtosis coefficients of the data obtained from the Teacher Self-Regulation Scale were examined. Since the data did not show a normal distribution (MCSS=-2.854, BBSDS=13.746), the analysis of the data was carried out with non-parametric tests. The Kruskal Wallis H test was used to analyse the location of the schools, the type of school, classroom sizes, the professional experience of the teachers, and the number of in-service trainings they have attended before. The analyses of the scale scores in terms of the age of the teacher were carried out with the Mann-Whitney U test. The results were interpreted based on the significance level of .016 for the three-category independent variables and .008 for the four-

category independent variables after doing Bonferroni correction. The significance of the difference between the results of the groups was found by calculating the effect sizes. Accordingly, the "r" value was used in the Mann Whitney U test, and the "η2" value in the Kruskal Wallis test. For η2 value, .02 shows a low impact, .13 the medium impact, and .26 the high impact. When it comes to the r2 value, below .30 indicates a low effect size, between .30-.50 medium, and .50 and above indicate a high effect size (Cohen, 1988).

Research Ethics

All the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed in the entire process from the planning, implementation, data collection to the analysis of the data. None of the actions specified under the second section of the Directive, "Scientific Research and Publication Ethics Actions" have been carried out.

During the writing process of this study, scientific, ethical and citation rules were followed; no falsification was made on the collected data and this study was not sent to any other academic media for evaluation.

Teachers were asked to sign a voluntary participation form to indicate whether they were willing to complete the "Demographic Information Form" and "Teacher Self-Regulation Scale (TSRS)". The scales in the study were used after obtaining the necessary permissions from the researcher who developed the scale. For the "Teacher Self-Regulation Scale (TSRS)", the necessary permission for the use of the scale was obtained from Yesim Capa Aydin on 20.12.2020. To collect data from official early childhood education institutions affiliated to the Ministry of National Education, the necessary permissions were obtained from the Ministry of National Education General Directorate of Basic Education (14.04.2021 dated and E-40456018-44-24050937 numbered letter).

Research ethics committee approval information

Name of the ethics committee: Aksaray University Rectorate Human Research Ethics Committee

Date of the decision: 22.02.2021

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RESULTS

Findings Related to Descriptive Statistics of the Teacher Self-Regulation Scale and its Subscales

Table 2

Descriptive Statistics of the Teacher Self-Regulation Scale and Its Subscales

Teacher Self-Regulation Scale and its Subscales	Frequency	Arithmetic Mean	Standard Deviation	Minimum Value	Maximum Value
Goal setting	239	31,38	4,26	6,00	36,00
Intrinsic interest	239	27,24	3,99	5,00	30,00
Performance goal orientation	239	15,67	5,26	5,00	30,00
Mastery goal orientation	239	21,80	3,05	4,00	24,00
Self-instruction	239	21,14	2,87	4,00	24,00
Emotional control	239	23,95	3,91	5,00	30,00
Self-evaluation	239	20,75	2,92	4,00	24,00
Self - reaction	239	19,97	3,55	4,00	24,00
Help-seeking	239	15,05	2,58	3,00	18,00
Total score	239	196,94	22,22	46,00	237,00

The maximum scores that can be obtained from the sub-dimensions of the scale are 36.00 for goal setting; 30.00 for intrinsic interest, performance goal orientation and emotional control sub-dimensions; 24.00 for mastery goal orientation, self-instruction, self-evaluation, and self-reaction sub-dimensions; and 18.00 for help-seeking sub-dimension. As shown in Table 1, it is seen that the mean score of the performance goal orientation sub-dimension of the early childhood education teachers is at a medium level, while the mean scores of the other sub-dimensions are at a high level. The maximum score that can be obtained from the total score of the scale is 240.00. When the arithmetic mean of the total score is examined, it is seen that the self-regulation skill levels of early childhood education teachers are at a high level.

The Effect of Teachers' Age on Self-Regulation Skills

Emotional control and self-evaluation subscales of the Teacher Self-Regulation Scale differ significantly according to the age of the teachers with a low effect (respectively Z=-2.306, p=0.021, r=-0.14; Z=-2.108, p=0.035, r=-0.13). In both subscales, participant teachers over the age of 33 scored significantly higher than the teachers whose ages range from 22 to 33. Scores of goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, self-reaction, and help-seeking did not show a significant difference in terms of the age of the teachers.

The effect of number of in-service trainings on self-regulation skills

The results showed that the subscales of goal setting and self-evaluation differ significantly with a low effect according to the number of in-service trainings which the participant teachers have attended (respectively X2(3) =10,443, p=0,015, η2 =0,04; X2 (3) =10,200, p=0,017, η2 =0,04). The self-evaluation subscale scores of the teachers who have attended 16 or more in-service training (100.89) were significantly higher than the scores (74.10) of teachers who have attended in-service training between 0 and 5 (p<0.008). The goal-setting subscale scores of the teachers who have attended 16 or more in-service training (96.66) were significantly higher than the scores of the teachers who have attended in-service training between 0 and 5 (75.30) (p<0.008). Intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, emotional control, self-reaction, and help-seeking dimension scores did not show a significant difference in terms of the number of in-service trainings.

The effect of professional experience duration on self-regulation skills

The professional experience duration of teachers has a low effect on emotional control subscale scores (X2(2) =6,729; p<0,05; η2=0,03). Mann Whitney U test was carried out to assess which subgroups are significantly different from each other. According to the results of Mann Whitney U test, the scores of the teachers with 11–15 years of professional experience (122.02) were significantly higher than the scores of teachers with 0–5 years of professional experience (94,42) (p<0.016) in terms of the emotional control subscale. The scores of goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, self-evaluation, self-reaction, and help-seeking subscales did not show a significant difference according to teachers' professional experience duration.

The effect of teacher's school location on self-regulation skills

Emotional control skills differed significantly with a low effect compared to the school location (X2(2) =6,271; p<0,05; η2=0,03). This significant difference between the scales was calculated by the Mann-Whitney U test. As a result of the analysis, the emotional control subscale scores (82.91) of the teachers working in the district centre were found to be significantly higher than the subscale scores (65.63) of the teachers working in the village centre (p<0.016). Goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, self-evaluation, self-reaction, and help-seeking scores were not significantly different from each other according to the school location.

The effect of the school type on self-regulation skills

The results showed that the emotional control subscale differs significantly with a low effect in terms of the school types ($X2(2) = 8{,}296$; $p<0{,}05$; $\eta2=0{,}03$). The Kruskal-Wallis H Test was used to assess which school types made a significant difference in the self-regulation skills of the participant teachers. Accordingly, it was found that the emotional control scores (88.45) of the teachers working in the kindergarten classrooms in the secondary school were significantly higher than the scores (68.12) of the teachers working in the kindergarten classrooms in the primary school ($p<0.016$). Goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, self-evaluation, self-reaction, and help-seeking scores were not significantly different from each other in terms of the type of school in which the participant teachers work.

The effect of the classroom size on self-regulation skills

Goal setting and self-reaction subscales showed a significant difference with a low effect in terms of the classroom sizes (respectively $X2(2) = 8{,}000$, $p=0{,}018$, $\eta2 = 0{,}03$; $X2(2) = 8{,}734$, $p=0{,}013$, $\eta2 = 0{,}04$). The goal-setting scores of the teachers who have 21 or more children in the class (58.55) were significantly higher than the scores of the teachers who have 0–10 children in the class (41.77) ($p<0.016$). The self-reaction scores of the teachers who have 21 or more children in the class (109.98) were significantly higher than the scores of the teachers who have 11–20 children (81.65) ($p<0.016$). Intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, emotional control, self-evaluation, and help-seeking subscales scores did not show a significant difference in terms of the classroom size.

DISCUSSION, CONCLUSION and FUTURE DIRECTIONS

It is seen that the total score of self-regulation skills of the teachers participating in the study ($\bar{x} = 196.94$) is at a high level. The mean scores of the sub-dimensions of self-regulation skills are at a high level in the sub-dimensions of goal setting, intrinsic interest, mastery goal orientation, self-instruction, emotional control, self-evaluation, self-reaction and help-seeking, while it is at a medium level in the sub-dimension of performance goal orientation. According to this result; it can be said that participant teachers set goals and prepare their plans in line with the interests, needs and levels of children, increase their intrinsic interest by noticing the change and development in children, set intrinsic goals by motivating themselves to be a successful teacher, and self-instruct by using different methods and strategies in order to increase the quality of education, It can be said that they self-evaluate by checking whether the set goal has been achieved or not, they show the behavior of getting help from their colleagues in the face of problems that they cannot find a solution, they show more motivation and develop self-reaction by seeing themselves successful, and they maintain emotional control by staying calm in the face of unexpected situations in the education and training process (Kamyabi Gol & Royaei, 2013; Capa Aydin et al., 2009: Schunk & Zimmerman, 2009: Loyens et al., 2008). In addition, because of the interrelatedness of the sub-dimensions, the fact that the skill developed for one sub-dimension affects the other sub-dimensions may be because teachers have a high motivation and successfully reflect their knowledge and learning strategies to learning environments. The reason why the mean of the performance goal orientation sub-dimension was found to be at the medium level may be due to the insufficiency of the incentives (promotion, grade-grade, certificate of achievement, etc.) offered to teachers to see themselves as successful. Ergen and Gunay (2019) examined the views of preschool education teachers on managerial problems and found that the problems most frequently mentioned by teachers were “not glorifying teachers sufficiently when necessary” and “not rewarding teachers for motivation”. Koyebakan (2020) conducted a study with a group of teachers, including preschool education teachers, and found that the expectations of teachers from school administrators included the expectation of being appreciated and rewarded to a great extent.

The results of this study, which aimed to measure and evaluate various factors affecting early childhood education teachers' self-regulation skills, showed that all the variables considered influenced self-regulation skills. It was found that there was a significant difference in the scores of emotional control and self-evaluation subscales in the Teacher Self-Regulation Scale in terms of the age of the participant teachers. It was concluded that the emotional control and self-evaluation scores of the teachers over the age of 33 were higher than those of the teachers aged 23-33. The reason for this finding may be derived from teachers' increasing awareness of their strengths and weaknesses as they get older, and their objective and realistic evaluation of their own performance and development. Like the current research findings, the results of several studies have shown that teachers tend to have more advanced self-regulation skills as they get older (Ghonsooly & Ghanizadeh, 2013; Ghanizadeh, 2011; Yilmaz, 2016).

There was a significant difference in the subscale scores of the teachers' goal setting and self-evaluation in terms of the number of in-service trainings they attended. Therefore, the self-regulation skills of teachers who have attended 16 or more in-service training were significantly higher than the self-regulation skills of those who have attended 0-5 in-service training. According to Velyentienko (2012), teachers' attendance at in-service training has a positive effect on their professional self-esteem. Tzivinikou (2015) found that attending a 6-month in-service training program increased teachers' sense of self-efficacy in cooperative educational activities for their students. It can be inferred that in-service training increases teachers' self-efficacy and professional self-esteem. Accordingly, it contributes to teachers' goal-setting skills in terms of guiding and monitoring the process in the self-regulated learning process, identifying criteria for self-evaluation, and motivating teachers depending on the quality of the determined goals.

There was a significant difference in the emotional control scores of the participant teachers in terms of their professional experience. The emotional control scores of the teachers who have 11–15 years of professional experience were significantly higher than the emotional control scores of the teachers whose professional experience is between 0–5 years. Considering this finding, it can be said that the duration of professional experience may affect the diversity of instructional behaviours and practices and accordingly, increasing awareness of the profession may be effective in the development of teachers' emotional control skills. Buyuktaskapu Soydan et al. (2024) found that preschool teachers with 1-10 years of experience had more emotion regulation difficulties in the impulsivity dimension compared to teachers with 21 years of experience or more. Zimmerman (2000) emphasized that self-regulation skills are not fixed skills, they can improve in progress over time by offering the opportunity to control their own learning to the individuals through active participation in environments that offer repeated experiences. It can be said that teachers with more years of experience have more opportunities to improve their skills as they have more repeated experiences. A variety of studies have recommended that teachers' professional experience has a significant effect on their self-regulation skills (Iriogbe-Efionayi, 2020; Soliman & Alenazi, 2017; Yilmaz, 2016; Ghonsooly & Ghanizadeh, 2013; Ghanizadeh, 2011).

The emotional control skills of the participant teachers showed a significant difference in terms of the location of their schools. Results of the current study indicated that the emotional control scores of the teachers working in the district centre were significantly higher than the teachers working in the village. Based on this finding, it may be since teachers working in the district centre have the chance to interact with many teachers, while teachers working in the village have the chance to interact with few or even no teachers during the day. Therefore, the teachers working in the district centre may have the opportunity to interact with more colleagues, and interaction with colleagues is one of the various ways in which teachers learn in their professional journey. They may have the opportunity to socialize with other teachers who can be a model and a mentor in terms of analysing and discussing various situations experienced compared to the teachers working in the village (Gore & Rosser, 2022).

There was a significant difference between teachers' emotional control scores and the type of school the teachers work in. The self-regulation skills of the teachers working in the kindergarten classroom which is bounded to the secondary school were significantly better than the teachers

working in the kindergarten classroom bound to the primary school. According to Brackett et al. (2010), there is an indirect relationship between burnout level and self-regulation skills. Moreover, Alkevli (2021) suggested that the teachers working in kindergartens within primary schools feel more burnout than their colleagues working in other school types. Within this regard, the limited physical conditions, having a limited number of materials, and interacting with a limited number of teachers due to the working conditions may cause feeling more burnout and, accordingly, these teachers may tend to show lower emotional control.

There was a significant difference in the scores of the teachers' goal-setting and self-reaction in terms of classroom sizes. Therefore, the goal-setting subscale scores of the teachers who have 21 or more children in the class were significantly higher than the scores of the teachers who have 0–10 children in their class. The results showed that the self-reaction scores of the teachers who have 21 or more children in their classes were higher than the scores of the teachers who have 11–20 children in their classes. This finding may be stemmed from the fact that teachers may have more opportunities to practice with children of various interests, needs, and characteristics depending on higher class size, thus having various observation data, and learning outcomes to develop new strategies. According to Ghonsooly & Ghanizadeh (2013), there is a highly significant relationship between teachers' self-efficacy and their ability to set goals. The reason for the higher goal-setting scores of the teachers who work with 21 or more children may be derived from their higher self-efficacy due to their greater effort towards the determined goals and their strong will against difficulties.

The current research results may provide several suggestions for researchers and educators. For instance, based on the necessity to improve teachers' performance goal orientation skills, adequate incentives should be offered to teachers for their efforts. In addition, supportive practices for performance goal orientation skills can be included by encouraging teachers to share through publications such as magazines, books, brochures, etc. to make them feel productive and productive in certain periods. However, experience-sharing meetings can be organized where younger teachers have an opportunity to listen to the professional experiences of older colleagues about controlling reactions to sudden events and staying calm, checking whether the set goal has been reached, and recognizing the deficiencies in reaching the goal. Depending on the increase in the number of in-service trainings, it can be stated that teachers make their plans in line with the developmental characteristics and needs of the children in the classroom, and accordingly, their goal-setting skills may be enhanced. Because of this, teachers may show progress in self-evaluation skills by checking whether the set goal has been achieved thanks to the in-service training and by noticing the deficiencies. In this sense, it can be recommended to encourage teachers to participate in courses, seminars, and in-service training activities aimed at supporting their self-regulation skills. It is recommended to design learning environments where teachers who are new to the teaching profession can be benefitted from the professional experiences and knowledge of more experienced teachers. Teachers should be provided collaborative learning environments through systematically in-service training to share their experiences with each other. Through meaningful practices that may increase communication and interaction between the teachers working in the district centre and the teachers working in the village, they may have the opportunity to share their experiences on self-regulation skills. In addition, distance/face-to-face training seminars can be organized to support the self-regulation skills of the teachers who work in the villages. The participation of the teachers working in primary schools in high-quality professional development programs aimed at enhancing their self-regulation skills can be encouraged by the school administration or provincial-district national education principalities. In-depth investigations can be conducted on the elements of the school environment that influence the emotional control skills of early childhood education teachers working in secondary schools. It is suggested that the average class size of 20 has positive effects on teachers' self-regulation skills. Because appropriate class size plays a significant role in effective classroom communication and dynamics. For this reason, it is recommended that teachers with a small class size keep the classroom dynamic and active by including all children in the activity process as much as possible, increasing the variety of materials they use in educational activities, or using

audio-visual stimuli more within the learning and teaching processes. Because of the increase in participation in classroom activities, active and dynamic processes can enhance the quality of teacher-child communication. Concordant to these processes in the classroom, the teacher may be able to diversify the content to fulfil learning and developmental objectives appropriately by re-designing the objectives or improving self-evaluation and self-reaction skills for different situations they encounter. In this regard, these interactive processes may play a significantly positive role in the development of teachers' self-regulation skills.

Limitations of the Study

This research is limited to 239 pre-school education teachers working in private and state pre-school education institutions, including private independent kindergartens, private kindergartens, public kindergartens, and public independent kindergartens in the 2020-2021 academic year. Second, although the sample of participants was diverse in terms of age, experience, type of school they work, school location and number of in-service trainings the attended, they all came from the same urban center, which limits the generalizability of the findings. Therefore, the results of this study are generalizable to other teachers in a similar geographical location.

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As authors, we do not declare any support or acknowledgment for the process of conducting the research.

Statement of Contribution Rate

This study is derived from a master's thesis entitled "Investigation of early childhood education teachers' self-regulation skills in terms of various variables", conducted by the first author under the supervision of the second author who is the corresponding author of the study.

Declaration of Conflict of Interest

As the authors of the study, we declare that we do not have any declaration of interest/conflict.

Statement of Publication Ethics

In the entire process from the planning and implementation of this research to the collection and analysis of data, all the rules specified in the "Directive on Scientific Research and Publication Ethics of Higher Education Institutions" were followed. None of the actions specified under the second section of the Directive, "Actions Contrary to Scientific Research and Publication Ethics", have been carried out.

During the writing process of this study, scientific, ethical and citation rules were followed; no falsification was made on the collected data and this study was not sent to any other academic publication environment for evaluation.

Teachers were asked to sign a voluntary participation form to indicate whether they were willing to complete the "Demographic Information Form" and "Teacher Self-Regulation Scale (TSRS)". The scales in the study were used after obtaining the necessary permissions from the researcher who developed the scale. For the "Teacher Self-Regulation Scale (TSRS)", the necessary permission for the use of the scale was obtained from Yesim Capa Aydin on 20.12.2020. To collect data from official early childhood education institutions affiliated to the Ministry of National Education, the necessary permissions were obtained from the Ministry of National Education General Directorate of Basic Education (14.04.2021 dated and E-40456018-44-24050937 numbered letter).

Research ethics committee approval information

Name of the ethics committee: Aksaray University Rectorate Human Research Ethics Committee

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REFERENCES

Airasian, P. W., & Gullickson, A. R. (1997). *Teacher self-evaluation tool kit*. Corwin Press.

Alkevli, S. (2021). *Okul öncesi öğretmenlerinin tükenmişlik düzeyleri ile örgüt iklimi algıları arasındaki ilişkinin incelenmesi* [Yayımlanmamış yüksek lisans tezi]. Çukurova Üniversitesi.

Becker, E. S., Goetz, T., Morger, V., & Ranellucci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions: An experience sampling analysis. *Teaching and Teacher Education, 43*, 15-26. https://doi.org/10.1016/j.tate.2014.05.002

Bodrova, E., & Leong, D. J. (2017). *Zihnin araçları: Erken çocukluk eğitiminde Vygotsky yaklaşımı* (G. Haktanır, Çev. Ed.). Anı Yayıncılık.

Brackett, M. A., Palomera, R., Mojsa, J., Reyes, M., & Salovey, P. (2010). Emotion regulation ability, job satisfaction, and burnout among British secondary school teachers. *Psychology in the Schools, 47*, 406-417. https://doi.org/10.1002/pits.20478

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (1999). *How people learn: Brain, mind, experience, and school*. National Academy Press.

Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. Guilford Press.

Buyuktaskapu Soydan, S., Akalin, N., & Korkmaz, A. (2024). The effect of preschool teachers' emotion regulation skills and levels of cognitive flexibility on classroom management. *Bartın University Journal of Faculty of Education, 13*(2), 301-318. https://doi.org/10.14686/buefad.1212588

Cadima, J., Barros, S., Ferreira, T., Serra-Lemos, M., Leal, T., & Verschueren, K. (2019). Bidirectional associations between vocabulary and self-regulation in preschool and their interplay with teacher–child closeness and autonomy support. *Early Childhood Research Quarterly, 46*, 75-86. https://doi.org/10.1016/j.ecresq.2018.04.004

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.

Chang, M. L. (2009). Teacher emotional management in the classroom: Appraisals, regulation, and coping with emotions. *Paper presented at the American Educational Research Association*.

Capa Aydin, Y., Sungur, S., & Uzuntiryaki, E. (2009). Teacher self-regulation: Examining a multi-dimensional construct. *Educational Psychology, 29*(3), 345-356. https://doi.org/10.1080/01443410902927825

Day, C., & Gu, Q. (2014). *Resilient teachers, resilient schools: Building and sustaining quality in testing times*. Routledge.

Degol, J. L., & Bachman, H. J. (2015). Teachers' classroom behavioral socialization practices and low-income children's self-regulation skills. *Early Childhood Research Quarterly, 31*, 89-100. https://doi.org/10.1016/j.ecresq.2015.01.002

Downer, J., Sabol, T. J., & Hamre, B. (2010). Teacher-child interactions in the classroom: Toward a theory of within-and cross-domain links to children's developmental outcomes. *Early Education and Development, 21*(5), 699-723. https://doi.org/10.1080/10409289.2010.497453

Ergen, H., & Günay, T. (2019). Okul öncesi öğretmenlerinin çalıştığı kurumlarda yaşadığı yönetsel sorunlar ile ilgili görüşleri. *Uşak Üniversitesi Eğitim Araştırmaları Dergisi, 5*(2), 63-89.

Erturk Kara, H. G., Gonen, M., & Pianta, R. (2017). The examination of the relationship between the quality of teacher-child interaction and children's self-regulation skills. *Hacettepe Eğitim Dergisi, 32*(4), 880-895. https://doi.org/10.16986/huje.2016018694

Eshel, Y., & Kohavi, R. (2003). Perceived classroom control, self-regulated learning strategies, and academic achievement. *Educational Psychology, 23*(3), 249-260. https://doi.org/10.1080/0144341032000060093.

Evers, W. J. G., Tomic, W., & Brouwers, A. (2004). Burnout among teachers: Students' and teachers' perceptions compared. *School Psychology International, 25*(2), 131–148. https://doi.org/10.1177/0143034304043670

Ghanizadeh, A. (2011). An investigation into the relationship between self-regulation and critical thinking among Iranian EFL teachers. *Technology of Education Journal (TEJ), 5*(2), 117-124.

Ghonsooly, B., & Ghanizadeh, A. (2013). Self-efficacy and self-regulation and their relationship: A study of Iranian EFL teachers. *The Language Learning Journal, 41*(1), 68-84.

Gordon, S. C., Dembo, M. H., & Hocevar, D. (2007). Do teachers' own learning behaviors influence their classroom goal orientation and control ideology? *Teaching and Teacher Education, 23*, 36-46. https://doi.org/10.1016/j.tate.2004.08.002

Gore, J., & Rosser, B. (2022). Beyond content-focused professional development: Powerful professional learning through genuine learning communities across grades and subjects. *Professional Development in Education, 48*(2), 218-232. https://doi.org/10.1080/19415257.2020.1725904

Groves Gillespie, L., & Seibel, N. (2006). Self-regulation: A cornerstone of early childhood development. *Young Children*, 1-6.

Guler Yıldız, T., Erturk Kara, H. G., & Findik Tanribuyurdu, E. (2014). Examining self-regulation skills according to teacher-child interaction quality. *Education and Science, 39*(176), 329-338. https://doi.org/10.15390/EB.2014.3648

Heydarnejad, T., Hosseini Fatemi, A., & Ghonsooly, B. (2021). The interplay among self-regulation, emotions and teaching styles in higher education: A path analysis approach. *Journal of Applied Research in Higher Education, 14*(2), 594-609. https://doi.org/10.1108/jarhe-08-2020-0260

Hsu, S. (2005). Help-seeking behavior of student teachers. *Educational Research, 49*(3), 307-318. https://doi.org/10.1080/00131880500287716

Iriogbe-Efionayi, S. (2020). Promoting self-regulation in early childhood education: Teachers' knowledge of self-regulation. *Urban Education Research & Policy Annuals, 7*(1).

Kamyabi Gol, A., & Royaei, N. (2013). EFL teachers' self-regulation and job performance. *Theory and Practice in Language Studies*, *3*(10), 1855-1861. https://doi.org/10.4304/tpls.3.10.1855-1861

Karasar, N. (2017). *Bilimsel araştırma yöntemi*. Nobel Yayıncılık.

Kilic, S. (2013). Örnekleme yöntemleri. *Journal of Mood Disorders, 3*(1), 44-6. https://doi.org/10.5455/jmood.20130325011730

Koyebakan, A. (2020). Öğretmenlerin okul yöneticilerinden beklentileri: Denizli ili Kale ilçesi örneği [Yayımlanmamış tezsiz yüksek lisans tezi]. Pamukkale Üniversitesi.

Kurt, Ş. H., & Dikici Sigirtmac, A. (2021). Okul öncesi öğretmenlerinin öz düzenleme becerisi ve öz düzenlemeli öğrenmeyi destekleyen uygulamalarının sınıf yönetimi becerisi üzerine etkisi. *Journal of Early Childhood Studies 5*(1), 135-151. https://doi.org/10.24130/eccd-jecs.1967202151245

Larsen, T., & Samdal, O. (2012). The importance of teachers' feelings of self-efficacy in developing their pupils' social and emotional learning: A Norwegian study of teachers' reactions to the second step program. *School Psychology International, 33*(6), 631-645. https://doi.org/10.1177/0143034311412848

Loyens, S. M. M., & Gijbels, D. (2008). The impact of students' motivation on their learning: A review of the literature. In J. A. G. Van Merriënboer, & D. Gijbels (Eds.), *Learning and instruction in the digital age* (pp. 151-181). Routledge.

Moen, A. L., Sheridan, S. M., Schumacher, R. E., & Cheng, K. C. (2019). Early childhood student–teacher relationships: What is the role of classroom climate for children who are disadvantaged? *Early Childhood Education Journal, 47*(3), 331–341. https://doi.org/10.1007/s10643-019-00931-x

OECD. (2024). Education GPS. Retrieved June 4, 2024, from http://gpseducation.oecd.org

Parvaneh Shirazi, H. (2024). EFL teachers' self-regulation strategies and teaching effectiveness: A mixed-method study. *Mixed Methods Studies in English Language Teaching (MMSELT), 1*(1), 89-106.

Pianta, R. C. (1999). Enhancing relationships between children and teachers. Washington, DC: American Psychological Association.

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of motivated strategies for learning*. School of Education Building, The University of Michigan.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. V. (2005). Young people's help-seeking mental health problems. *Australian e-Journal for the Advancement of Mental Health, 4*(3), 1-34. https://doi.org/10.5172/jamh.4.3.218

Ross, J. A., & Bruce, C. D. (2007). Teacher self-assessment: A mechanism for facilitating professional growth. *Teaching and Teacher Education, 23*(2), 146-159. https://doi.org/10.1016/j.tate.2006.04.035

Sáiz Manzanares, M. C., Carbonero Martín, M. Á., & Román Sánchez, J. M. (2014). Self-regulation skills learning in children aged 5 to 7. *Universitas Psychologica, 13*(1), 369-380. https://doi.org/10.11144/Javeriana.UPSY13-1.ahan

Schunk, D., & Zimmerman, B. J. (2009). *Motivation and self-regulated learning: Theory, research, and applications*. New York, NY: Taylor & Francis.

Schutz, P. A. (2014). Inquiry on teachers' emotion. *Educational Psychologist, 49*, 112. https://doi.org/10.1080/00461520.2013.864955

Soliman, M. S. S., & Alenazi, M. M. (2017). Primary teachers' beliefs and knowledge about self-regulated learning in the Kingdom of Saudi Arabia. *International Journal of Educational Sciences, 18*(1-3), 1-15. https://doi.org/10.1080/09751122.2017.1346573

Stratton S. J. (2021). Population Research: Convenience Sampling Strategies. *Prehospital and disaster medicine*, *36*(4), 373–374. https://doi.org/10.1017/S1049023X21000649

Sutton, R. E. (2004). Emotional regulation goals and strategies of teachers. *Social Psychology of Education: An International Journal, 7*(4), 379–398. https://doi.org/10.1007/s11218-004-4229-y

Taxer, J. L., & Frenzel, A. C. (2015). Facets of teachers' emotional lives: A quantitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and Teacher Education, 49*, 78-88. https://doi.org/10.1016/j.tate.2015.03.003

Tinsley, H. E., & Tinsley, D. J. (1987). Uses of factor analysis in counseling psychology research. *Journal of Counseling Psychology, 34*, 414-424. https://doi.org/10.1037/0022-0167.34.4.414

Tzivinikou, S. (2015). The impact of an in-service training program on the self-efficacy of special and general education teachers. *Problems of Education in the 21st Century, 64*, 95. https://doi.org/10.33225/pec/15.64.95

Velyentienko, M. (2012). Types and forms of professional development of a preschool teacher in in-service training. *Academia.edu*. https://www.academia.edu/68656646/Types_and_Forms_of_Professional_Development_of_a_Preschool_Teacher_in_In_Service_Training

Yilmaz, H. (2016). Okul öncesi öğretmenlerinin öz-düzenleme düzeyleri ile kullandıkları öğretim uygulamaları düzeyleri arasındaki ilişkinin incelenmesi [Yayımlanmamış yüksek lisans tezi]. Marmara Üniversitesi, İstanbul.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.

Zusho, A., Pintrich, P. R., & Coppola, B. (2003). Skill and will: The role of motivation and cognition in the learning of college chemistry. *International Journal of Science Education, 25*(9), 1081-1094. https://doi.org/10.1080/0950069032000052207

GENİŞLETİLMİŞ ÖZ

Giriş

Öğretmenlerin eğitim performanslarını en üst düzeye çıkarmak ve çocukların öğrenmelerini kolaylaştırmak için çeşitli stratejiler kullanmaları ve kendi öz düzenleme becerilerini geliştirmeleri gerekmektedir. Hedef belirleme, içsel ilgi, dışsal hedef, içsel hedef, öz yönlendirme, duygusal kontrol, öz değerlendirme, öz tepki, yardım alma sayesinde mesleki gelişimlerine katkıda bulunmakta ve eğitim öğretim sürecindeki verimliliklerini artırmaktadırlar. Okul öncesi eğitimi öğretmenlerinin öz-düzenleme becerilerinin ölçülmesi, değerlendirilmesi ve bu becerileri etkileyen faktörlerin belirlenmesinin etkili erken müdahale programlarının tasarlanmasına ve uygulanmasına olanak sağlayacağı düşünülmektedir. Ayrıca, mevcut araştırmanın sonuçlarının çocukların kaliteli bir eğitim sürecine dâhil edilmesine yönelik çabalara katkı sağlayacağı düşünülmektedir. Bu görüşler göz önünde bulundurularak, bu çalışmada okul öncesi eğitimi öğretmenlerinin öz-düzenleme becerilerinin öğretmene ilişkin faktörler (yaş, hizmet içi eğitim sayısı, mesleki deneyim) ve görev yaptıkları okullara ilişkin faktörler (okul bölgesinin sosyoekonomik özellikleri, okulların konumu, okul türü, sınıf mevcutları) açısından incelenmesi amaçlanmıştır.1. Araştırmaya katılan okul öncesi eğitimi öğretmenlerinin öz-düzenleme becerilerinde öğretmene ilişkin faktörler (öğretmen yaşı, mesleki deneyim, alınan hizmet içi eğitim sayısı) açısından anlamlı bir farklılık var mıdır? 2- Araştırmaya katılan okul öncesi eğitimi öğretmenlerinin öz-düzenleme becerilerinde çalıştıkları okullara ilişkin faktörler (okul bölgesinin sosyoekonomik özellikleri, okul türü, sınıf mevcutları ve okulların konumu) açısından anlamlı bir farklılık var mıdır?

Yöntem

Bu çalışmada ilişkisel tarama modeli kullanılmıştır. Araştırmanın örneklemini Türkiye'nin Güneydoğu Anadolu Bölgesi'nde yer alan Batman ili ve bu ile bağlı ilçelerdeki okul öncesi eğitim kurumlarında görev yapan 239 öğretmen oluşturmaktadır. Veriler, Kişisel Bilgi Formu ve Öğretmen Öz Düzenleme Ölçeği ile toplanmıştır. Kişisel bilgi formu, öğretmenlere ilişkin faktörler (yaş, hizmet içi eğitim sayısı, mesleki deneyim) ve çalıştıkları okullara ilişkin faktörler (konumu, okul türü ve sınıf mevcutları) ile ilgili sorulardan oluşmaktadır. Öğretmen Öz Düzenleme Ölçeği; Çapa Aydın, Sungur ve Uzuntiryaki (2009) tarafından öğretmenlerin öz düzenleme becerilerini değerlendirmek amacıyla geliştirilmiştir. Ölçek 40 maddeden oluşmakta ve dokuz alt boyutu (hedef belirleme, içsel ilgi, dışsal hedef, içsel hedef, öz yönlendirme, duygusal kontrol, öz değerlendirme, öz tepki, yardım alma) içermektedir. "Tamamen katılıyorum" ve "Tamamen katılmıyorum" ifadeleri arasında puanlanan 6'lı Likert tipindedir. Verileri analiz etmek için doğrulayıcı faktör analizi gerçekleştirilmiş, Cronbach Alpha iç tutarlılık katsayısı hesaplanmış ve non- parametrik testler yapılmıştır.

Sonuç, Tartışma ve Öneriler

Araştırmaya katılan öğretmenlerin öz düzenleme becerileri toplam puanının ($\bar{x}$ =196,94) yüksek düzeyde olduğu görülmektedir. Ayrıca öz düzenleme becerileri alt boyutlarının puan ortalamalarının hedef belirleme, içsel ilgi, içsel hedef, öz yönlendirme, duygusal kontrol, öz değerlendirme, öz tepki, yardım alma alt boyutların tümünde yüksek düzeyde olduğu görülürken dışsal hedef alt boyutunda orta düzeyde olduğu görülmektedir. Araştırma sonucunda tüm değişkenlerin öz-düzenleme becerilerini etkilediği belirlenmiştir. Katılımcı öğretmenlerin yaşlarına göre duygusal kontrol ve öz değerlendirme alt ölçeklerinden aldıkları puanlarda anlamlı bir farklılık olduğu bulunmuştur. Öğretmenlerin katıldıkları hizmet içi eğitim sayısına göre hedef belirleme ve öz değerlendirme alt ölçek puanlarında anlamlı bir fark bulunmuştur. Katılımcı öğretmenlerin mesleki deneyimlerine göre duygusal kontrol puanlarında anlamlı bir farklılık bulunmuştur. Öğretmenlerin duygusal kontrol puanları ile çalıştıkları okul türü arasında anlamlı bir fark bulunmuştur. Öğretmenlerin hedef belirleme ve öz tepki puanları ile sınıf mevcutları arasında anlamlı bir fark bulunmuştur. Mevcut araştırma sonuçları ışığında, araştırmacılar ve eğitimciler için çeşitli öneriler sunulabilir. Öğretmenlerin öz düzenleme becerilerini desteklemeye

yönelik kurs, seminer ve hizmet içi eğitim faaliyetlerine katılmalarının teşvik edilmesi önerilebilir. Öğretmenlik mesleğine yeni başlayan öğretmenlerin, daha deneyimli öğretmenlerin mesleki deneyim ve bilgilerinden yararlanabilecekleri öğrenme ortamlarının tasarlanması önerilebilir. Sistematik hizmet içi eğitimlerle öğretmenlerin birbirleriyle deneyimlerini paylaşabilecekleri işbirlikçi öğrenme ortamları sağlanmalıdır. İlçe merkezinde görev yapan öğretmenler ile köyde görev yapan öğretmenler arasında iletişim ve etkileşimi artırabilecek anlamlı uygulamalarla, öz düzenleme becerilerine ilişkin deneyimlerini paylaşma fırsatı bulabilirler. Ayrıca köylerde görev yapan öğretmenlerin öz düzenleme becerilerini desteklemek amacıyla uzaktan/yüz yüze eğitim seminerleri düzenlenebilir.

İlkokullarda görev yapan öğretmenlerin öz düzenleme becerilerini geliştirmeye yönelik nitelikli mesleki gelişim programlarına katılmaları okul yönetimi veya il-ilçe milli eğitim müdürlükleri tarafından teşvik edilebilir. Ortaokullarda görev yapan okul öncesi eğitimi öğretmenlerinin duygusal kontrol becerilerini etkileyen okul ortamı unsurları üzerine derinlemesine araştırmalar yapılabilir. Sınıf mevcudunun ortalama 20 olmasının öğretmenlerin öz düzenleme becerileri üzerinde olumlu etkileri olduğu düşünülmektedir. Çünkü uygun sınıf mevcudu, etkili sınıf iletişimi ve dinamiğinde önemli bir rol oynamaktadır. Bu nedenle sınıf mevcudu az olan öğretmenlerin mümkün olduğunca tüm çocukları etkinlik sürecine dahil ederek, eğitim etkinliklerinde kullandıkları materyal çeşitliliğini artırarak ya da görsel-işitsel uyaranları öğrenme ve öğretme süreçlerinde daha fazla kullanarak sınıfı dinamik ve aktif tutmaları önerilebilir. Sınıf içi etkinliklere katılımın artması nedeniyle aktif ve dinamik süreçler öğretmen-çocuk iletişiminin kalitesini artırabilir. Sınıftaki bu süreçlerle uyumlu olarak öğretmen, karşılaştığı farklı durumlar için hedefleri yeniden tasarlayarak ya da öz-değerlendirme ve öz-tepki becerilerini geliştirerek öğrenme ve gelişim hedeflerini uygun şekilde yerine getirmek üzere içeriği çeşitlendirebilir. Bu bağlamda, bu etkileşimli süreçler öğretmenlerin öz düzenleme becerilerinin geliştirilmesinde önemli ölçüde olumlu bir rol oynayabilir.