

**AN INVESTIGATION INTO PRIMARY SCHOOL PRE-SERVICE TEACHERS'  
PERCEPTIONS AND INTENTIONS RELATED TO OUTDOOR EDUCATION**

**SINIF ÖĞRETMENİ ADAYLARININ SINIF DIŞINDA EĞİTİM ÜZERİNE  
ALGILARININ VE NİYETLERİNİN ARAŞTIRILMASI**

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**Abstract:** This study investigated primary school pre-service teachers' perceptions related to outdoor education and their intentions to teach outside the classroom. 52 pre-service teachers enrolled in an environmental education course at a public university in Turkey were the participants of this study. Pre-service teachers were required to read the book named *Last Child in the Woods* during the course. After reading the book, they were asked to write an essay about their childhood outdoor experiences and their opinions on outdoor education. Moreover, semi-structured interviews were conducted with 11 of the 52 pre-service teachers after essay writing. Qualitative data were collected through essay writing and interviews. Data analysis indicated that the pre-service teachers described significant outdoor experiences from their childhood and had positive perceptions and intentions to teach lessons outside. During the interviews, pre-service teachers also described several barriers to implement outdoor education, which are family concerns, the attitude of school administration, and weather conditions. It is recommended that pre-service teachers should be given more opportunities to implement outdoor activities and develop their outdoor experiences in their university education.

**Keywords:** *primary school pre-service teachers, outdoor education, perceptions and intentions of pre-service teachers*

**Özet:** Bu çalışmada sınıf öğretmenliği bölümünde okuyan öğretmen adaylarının sınıf dışında eğitim ile ilgili algıları ve gelecekte derslerini sınıf dışında öğretme üzerine niyetleri incelenmiştir. Bu çalışmaya Türkiye'de bir devlet üniversitesinde çevre eğitimi dersi alan 52 sınıf öğretmen adayı katılmıştır. Ders süresince öğretmen adayları *Doğadaki Son Çocuk* kitabını okumuşlardır. Kitabı okuduktan sonra kendi çocukluk deneyimleri ve sınıf dışında eğitim üzerine görüşlerini anlattıkları yazılı bir metin hazırlamışlardır. Ayrıca 52 öğretmen adayının arasından 11 öğretmen adayı seçilerek yarı-yapılandırılmış görüşmeler gerçekleştirilmiştir. Çalışmanın nitel verileri raporlar ve görüşmeler yoluyla toplanmıştır. Veri analizi sonuçlarına göre öğretmen adayları çocukken dışarıda daha çok zaman geçirdiklerinden ve sınıf dışında eğitim ile ilgili olumlu bir algıya ve niyete sahip olduklarından bahsetmişlerdir. Ayrıca görüşmeler sırasında bazı öğretmen adayları sınıf dışı eğitimin uygulanması sırasında ortaya çıkabilecek engellerden bahsetmişlerdir. Bu engeller daha çok ailelerin kaygıları, okul yönetiminin tutumu ve hava şartları ile ilgilidir. Öğretmen adaylarına üniversite eğitimleri sırasında sınıf dışı etkinlikleri uygulayabilecekleri fırsatlar sunulmalı ve sınıf dışında eğitim üzerine deneyimleri artırılmalıdır.

**Anahtar Sözcükler:** *sınıf öğretmeni adayları, sınıf dışında eğitim, öğretmen adaylarının algıları ve niyetleri*

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## Introduction

The theory and practice of outdoor education has gained more importance in the literature in recent years. Outdoor education is a complicated concept, which has various definitions based on the context, purposes and locations (Dyment, Chick, Walker & Macqueen, 2018). In general, outdoor education refers to taking students outside and conducting learning activities outside the classroom (Beames, Higgins & Nicol, 2012; Okur-Berberoğlu & Uygun, 2013). Outdoor education has two main purposes: to acquire skills related to adventure activities and to educate individuals about the environment and help them find ways for building a sustainable future (Beames et al., 2012; Hill, 2012). Outdoor education provides direct experience with nature and develops human relationship with the planet (Beames, et al., 2012).

Learning outside the classroom has three main benefits. First, it helps students understand the environment and issues related to sustainability. Second, outdoor experiences develop physical activity and thirdly, spending time in green spaces contributes to students' health development and well-being (Beames et al., 2012). Outdoor education improves students' understanding about the environment and increases their local environmental knowledge (Jose, Patrick & Moseley, 2017). Moreover, outdoor activities develop social interaction, emotional well being and increase academic performance (Merewether, 2015). Outdoor environment gives opportunities to students to explore their environment more freely and develop experiences in nature (Maynard & Waters, 2007). Especially the impact of childhood experiences in nature continues to adulthood and fosters adults' commitment to nature (Bento & Dias, 2017; Chawla & Cushing, 2007; Collado, Staats & Corraliza, 2013) and these experiences lay the foundation of environmental literacy, skills and motivation to find solutions to environmental problems (Torquati, Cutler, Gilkerson & Salver, 2013). However, Louv (2008) pointed out that today's young people are growing up in a digital age and spend more time on the internet, television and video games. Therefore, they are less exposed to natural environment around them (Louv, 2008). Children who spend less time outdoors grow up being unaware of natural environment in their surrounding (White, 2004), which promotes children's lack of connection with nature that might lead to social, physical and psychological disorders (Louv, 2008).

As far as teachers are concerned, it can be said that most of the teachers are not willing to take children outside since they do not feel comfortable with this idea (Torquati & Ernst, 2013). Some barriers for teachers to use outdoor settings such as lack of knowledge and skill about teaching outside the classroom, parental concerns, weather conditions, student management issues and lack of administrative support are listed in the literature (e.g., Blatt & Patrick, 2014; Chakravarti, 2009; Dietze & Kashin, 2019; Ernst & Tornabene, 2012; Gerrish, 2014; McClintic & Petty, 2015; Jose et al., 2017; Shume & Blatt, 2019). These barriers are crucial in that they prevent teachers from using outdoor settings effectively. Teachers play an important role to support students' experiences in nature and to facilitate their sense of wonder and connection to nature (Blanchet-Cohen & Elliot, 2011; Davis, 2009). Therefore, teachers need to know how to plan and manage outdoor activities well (McClintic & Petty, 2015). Although there are many studies emphasizing the influence of outdoor education on young people (e.g., Jose et al., 2017; Malone & Tranter, 2003; Otto & Pensini, 2017), not many studies especially in Turkey have yet explored future primary school teachers' youth outdoor experiences, their perceptions and intentions related to outdoor education. Therefore, this study aims to fill the gap in the literature by exploring primary school pre-service teachers' perceptions and future intentions to teach outside the classroom.

### **Literature Review**

The scope of outdoor education determined by Higgins and Loynes (1997) includes the themes of outdoor activities, environmental education, personal and social development. The authors described that natural environment is the working place of outdoor education. Adopting an experiential approach, participants discover the natural world and learn to respect nature (Higgins & Loynes, 1997). Not only environmental subjects but also mathematics, science and art subjects can be taught through outdoor education (Plevyak & Mayfield, 2010). There are many studies in the literature emphasizing the benefits of outdoor education (e.g., Bento & Dias, 2017; Carr & Luken, 2014; Cheng & Monroe, 2012; Miller, 2007; Otto & Pensini, 2017). In these studies, the authors emphasized that outdoor education develops a sense of connectedness towards nature, emotional health, positive attitudes and pro-environmental behaviours. In the literature, there are also studies investigating the impacts of spending less time outdoor on children (e.g., Burdette & Whitetake, 2012; Louv, 2008; Witten, Kearns, Carroll, Asiasiga & Tava, 2013).

Blatt and Patrick (2014) pointed out that it is not clear how current pre-service teachers' past outdoor experiences influence their beliefs and intentions to teach outside the classroom. Therefore, the authors conducted a study with pre-service elementary teachers about their perceptions and intentions regarding outdoor education. They revealed that most of the pre-service teachers had significant outdoor experiences in their youth and they expressed their desire to take their students out. Recently, Shume and Blatt (2019) conducted an extended version of Blatt and Patrick (2014)'s study and they found that pre-service teachers described their past outdoor experiences and most of them emphasized the importance of teachers in terms of developing children's experiences in nature and stated their positive intentions to teach outside. The authors also found that pre-service teachers attracted attention to logistical issues and their concerns related to mandated curriculum as barriers to implementing outdoor education.

Several authors have argued that teachers' perceptions, attitudes and beliefs regarding learning outdoors influence their commitment and practices related to outdoor education (e.g., Blatt & Patrick, 2014; Chakravarti, 2009; Ernst & Tornabene, 2012; Gerrish, 2014). Simons (1993) emphasized that it is necessary to understand teachers' perceptions related to outdoor settings to better guide them and develop their knowledge, skills and experiences related to outdoor education. However, most of the curriculum frameworks do not support the use of outdoor settings. Generally, teachers encounter challenges when they adopt outdoor education because of their insufficient knowledge and skills, and lack of experience and self-confidence (Holden, Groulx, Bloom & Weinburgh, 2011). Furthermore, financial problems in schools, heavily loaded curriculum, management issues and time constraints decrease teachers' motivation and attitudes to implement outdoor education (Bloom, Holden, Sawey, & Weinburgh, 2010; Özü, 2010; Ürey, Göksu & Karaçöp, 2017). According to literature, pre-service teachers have limited outdoor education experiences as they rarely take outdoor-based science courses during their university education (eg., Blatt & Patrick, 2014; Elliot, 2008; Marcum-Dietrich, Marquez, Gill, & Medved, 2011). In Turkey, there are lack of studies investigating the effects of outdoor education, and teachers' perceptions and motivation to implement outdoor education (Okur-Berberoğlu & Uygun, 2013). Turkish teacher also don't take enough courses related to outdoor education during the undergraduate teacher education. Recently, an elective course related to teaching outside the classroom was included in the new primary teacher education curriculum (Higher Education Council, 2018a). It is important to integrate outdoor education practices into

environmental education, science teaching methods and practicum courses. In this way, pre-service teachers can find opportunities to improve their knowledge and skills related to outdoor education.

Teachers play a critical role in increasing young people' environmental awareness and developing their sustainable behaviours (Blatt & Patrick, 2014). What teachers know influences their students' attitudes and learning (Hill, 2012). If teachers have positive attitudes and perspectives related to outdoor learning, they might be more willing to implement outdoor activities. Investigating pre-service teachers' beliefs and intentions is critically important to design and integrate outdoor education strategies in teacher education programs (Shume & Blatt, 2019). Clark and Peterson's (1986) framework on teachers' thoughts and actions suggests that there is a link between teachers' thoughts and practices as teachers' knowledge, beliefs and perceptions influence their planning and teaching practices. It is believed that if pre-service teachers take part in or implement outdoor education practices during their undergraduate years, their beliefs, perceptions and intentions about implementing outdoor education in their future classes improve. We, as teacher educators, need to explore primary school pre-service teachers' perceptions and their future intentions to adopt outdoor education. The findings of this research study could guide teacher educators and policy makers to create outdoor education programs for primary school education. Thus, the first step should be to investigate primary school pre-service teachers' perceptions and intentions to teach outside the classroom. The study addresses the following research questions:

- What are Turkish primary school pre-service teachers' perceptions related to outdoor education?
- How do Turkish primary school pre-service teachers describe their childhood experiences outdoor?
- How do Turkish primary school pre-service teachers describe their future intentions to implement outdoor education in their schools?

## Method

### Research Design

Current study was a basic qualitative research focused on the participants' interpretations related to their outdoor experiences, their perceptions and intentions to teach outside. Basic qualitative research is used to explore how individuals interpret their experiences, what meaning they attribute to these experiences and how they describe a phenomenon (Merriam, 2009). The aim of this study is to investigate how pre-service teachers describe outdoor education and what they think about teaching outside the classroom in the future, basic qualitative research was preferred. The perceptions and future intentions of primary school pre-service teachers regarding outdoor education were investigated after they read Richard Louv's book titled *Last Child in the Woods* [Doğadaki Son Çocuk]. The study was conducted in an environmental education course in the Faculty of Education at a public university in Turkey during the 2017-2018 spring semester.

This book was chosen because Louv (2008) addressed the connection between child and nature, the benefits of nature for both children and adults, and the alienation of children from the natural world in this digital age. The author also discussed how to save children from *nature deficit disorder* and promote teachers to use outdoor settings as a classroom and thus, providing opportunities for children about learning from nature. In order to understand the relationship between child and nature and to design outdoor education programs, all teachers should read this book in their university education. Even while writing this article, Turkish Ministry of National Education advised all teachers to read Richard Louv's book within the scope of in-service education programme. Therefore, it is important to recommend primary school pre-service teachers to read and have a discussion about the book.

### Participants

52 sophomore primary school pre-service teachers who were enrolled in the environmental education course (29 female, 23 male) participated in the study. This course was a compulsory course in the primary school teacher education program. 52 participants wrote an essay after reading Richard Louv's book and 11 of them (8 female, 3 male) were selected for the follow-up

interviews. The participants were selected using the convenient sampling method considering their availability and willingness to allocate time to have an interview.

### **Data Collection**

Qualitative data were collected through essay writing and semi-structured interviews. A design similar to Blatt and Patrick's (2014) study was used to examine primary school pre-service teachers' perceptions and intentions to teach outside. First, the participants were given guided questions to write an essay after reading Richard Louv's book. They read the book and wrote their responses for the following questions:

- Before reading this book (*Last Child in the Woods*) what were your opinions related to outdoor learning?
- How did your opinions related to outdoor learning change after reading Richard Louv's book?
- How do you compare your childhood experiences in nature with children's experiences today?
- Which chapter of the book mostly affected you? Could you give an example?
- What kind of a teacher do you plan to be in the future? How do you plan to implement outdoor education in your class?

Following the essay writing, 11 participants were interviewed to reach in-depth information. Nine interview questions were prepared. Some of these questions were adapted from the study of Blatt and Patrick (2014) after receiving permission to use the interview questions. Blatt and Patrick (2014) prepared 12 interview questions based on their study context. In the present study, the questions related to pre-service teachers' future plans to be a teacher, their outdoor experiences in childhood and possible barriers to teach outside were adapted from Blatt and Patrick's (2014) study. Furthermore, the author of this study prepared essay writing questions and several interview questions related to pre-service teachers' intentions to implement outdoor education. Essay writing included questions related to the pre-service teachers' views about Richard Louv's book. Interview questions were used to validate their answers in the essay responses and to gain a better insight into their perceptions and intentions to use outdoor education.

Sample interview questions are presented below:

- Where did you spend your childhood?
- What were your childhood outdoor experiences? Please explain.
- Did you have outdoor classes in your school when you were a child? Please explain.
- Do you have future plans to take your students out to teach curriculum subjects? Please explain.
- How do you think you will implement outdoor learning in your class in the future? What kind of outdoor activities do you intent to implement?
- When you become a primary school teacher, what kind of barriers do you think you can encounter while implementing outdoor activities at school?

### **Data Analysis**

While analysing qualitative data, themes and categories were created inductively and deductively. First, pre-determined themes and categories were determined and then, throughout the course of the analysis, emerging categories were added. While identifying themes and categories, the coding structure generated by Blatt and Patrick (2014) were used and new categories were added through the data analysis. The data were read several times and interview excerpts were selected to support the codes and categories (Creswell, 2007). Moreover, content analysis was used to analyse essay writings as the content analysis technique focuses on the written content of communication (Frankel & Wallen, 2003). In addition to essay writing analysis, several new themes and categories emerged from the analysis of the interviews as displayed in Table-1. In order to ensure the reliability of the qualitative data analysis, transcripts were checked several times and the data were compared with the codes and categories to make sure that there is no mistake. Furthermore, an expert in science education coded the randomly selected data to provide inter-rater reliability. 90% agreement was established between the coders after discussions.

## Results

Four themes and thirteen categories were determined according to the analysis of the interviews and the essays written by the pre-service teachers (Table-1). With the analysis of the interviews, new themes and categories emerged. These themes and categories explored in the interview analysis are “school experiences outdoor”, “the role of the family” and “barriers to teach outside”.

Table-1

### *Themes and Categories Determined Based on the Essay and Interview Analysis*

Themes	Categories
Childhood outdoor experiences	<ul style="list-style-type: none"> <li>a. Playing on the streets of the neighborhood</li> <li>b. Spending childhood in a village</li> <li>c. School experiences outdoor*</li> <li>d. The role of the family*</li> </ul>
The importance of nature	<ul style="list-style-type: none"> <li>a. The importance of nature for children</li> <li>b. The importance of nature for adults</li> </ul>
The effect of technology	<ul style="list-style-type: none"> <li>a. The effect of technology on children</li> </ul>
Intention to teach outside	<ul style="list-style-type: none"> <li>a. Taking children outside</li> <li>b. Teaching about nature</li> <li>c. Teacher as a role model</li> </ul>
Barriers to teach outside*	<ul style="list-style-type: none"> <li>a. Family concerns</li> <li>b. School management</li> <li>c. Weather conditions</li> </ul>

\*new themes and categories that emerged during the interviews.

Each theme and the relevant category were presented together with participant excerpts. In order to protect participants' identity, their names were represented as numbers.

### **Theme-1: Childhood Outdoor Experiences**

Participants' past outdoor experiences were investigated and the data revealed that all the participants described some significant outdoor experiences in their childhood. Among 52

participants, 38 (73%) of them wrote that they played on the streets and parks in their childhood and 14 (27%) wrote that they spent their childhood in a village, and therefore, they had a chance to play in natural areas. One of the participants wrote that he used to go out and play in his neighbourhood. Most of the participants described similar experiences.

P-9: I spent my childhood playing outside with my friends. We were exploring nature. We were looking up the sky and playing with the shapes of the clouds. We were climbing up the trees.

Some participants described their childhood experiences in a village as follows;

P-15: I spent my childhood in a village. I spent all my time in nature. As we knew and trusted everybody in the village, we could play outside easily. We were more comfortable and free. But this is not the same in the cities today.

P-52: I grew up in a village. We were always playing outside. We were playing with soil. We were getting dirty all the time.

During the interviews, several participants also described their outdoor experiences at school. Five participants said that their teachers were sometimes taking them outside to teach some subjects. However, six participants stated that their teachers never took them outside to teach. For example, P-7 described that they only collected garbage at school.

P-7: I remember that when we went out in primary school, we only collected garbage. Our teachers mostly did not take us outside to teach lessons.

P-15 mentioned that they had some outdoor experiences at school;

P-15: In primary school, our teacher was taking us outside for art working such as drawing plants and trees

Moreover, during the interviews, the role of the family in taking children outside was emphasized. The participants stated that their families were not aware of the benefits of nature on children's development; however, they mostly spent time outside working in the garden or in a farm. They said that their families were not over-protective like today's families.

P-14: It was easy for me to get permission from my family to go out because they always spent time outside in the village.

## **Theme-2: The Importance of Nature**

The pre-service teachers also talked about their perceptions related to outdoor education after reading Richard Louv's book. Most of them discussed the importance of nature for children and some of them described the importance of nature for adults as well. 44 participants (85%) viewed nature as important in terms of developing children's creativity and attention, and contributing to children's social, psychological and physical development. Some quotations from the essays of the participants are presented below:

P-3: Nature is very important to support children's cognitive, psychological and physical development.

P-12: I understood that children need nature. In order to solve the attention deficit problems, we need to allow children to spend time in nature. Nature develops children's creativity and their sense of wonder.

P-17: I learnt how important nature is for children. In recent years, as green spaces have decreased, children have lost their connection with nature. This situation influences children's psychological, social and physical development and also decreases their attention.

Eight participants (15%) highlighted the importance of nature for adults and they stated that nature calms people down and helps them relax.

P-16: I understood that nature has a calming and relaxing effect for individuals.

P-35: If we spend more time in nature, we can feel more relaxed and have more positive thoughts.

## **Theme-3: The Effect of Technology**

44 participants among 52 (88%) described how technology influenced children as it was a major topic in Louv's (2008) book. They stated that technology was not as disturbing in their childhood as it is today. Six participants (12%) did not mention the effect of technology on children. The participants stated that technology alienates children from nature and decreases their connection with nature. P-6 and P-27 shared their opinions as follows:

P-6: When I was a child, I was mostly playing outside and spending time in nature. But today children mostly play with cell phones or tablets and they are afraid of being in nature. For example, they don't know how to grow plants.

P-27: We spent more time in nature compared to today's children. Today, children mostly spend their time in front of a computer or a mobile phone. We do not hear children's voices on the streets. They lose their connection with nature.

### **Theme-3: Intention to Teach Outside**

During the interviews, the participants were asked about their future plans to implement outdoor education and they described various ways to implement it. 36 of the participants (69%) expressed their desire to take students outside and teach some curriculum subjects such as math and science in nature.

P-36: I will take my students outside to teach subjects as you did in our course. For example, you took us outside to teach the food web concept.

P-6: I will organize field trips. I will take my students to natural places (rivers, lakes etc.) and I will take them to the solid waste facility center to increase their awareness about waste management.

25 of the participants (42%) expressed their intention to teach about nature in order to increase students' knowledge and awareness about nature, their love of nature and respect to nature.

P-3: I will teach to my students how to love and protect nature, soil and trees. I will teach them how to plant seeds. I will develop their experiences in nature.

P-36: I will increase my students' environmental awareness and teach them how to protect nature and be respectful to the earth.

Five of the participants (9%) stated that teachers need to be a role model about environmental protection.

P-1: I will try to take my students outside and explain how to protect nature. I will be a role model for them.

P-41: I will be a responsible teacher and have environmental values to protect nature. I will educate my students to love and respect nature.

Table-2 shows the themes and categories that emerged in the analysis of essay responses and their percentages.

Table-2

*Themes, Categories and Total Percentages in the Essay Responses*

Themes	Categories	Total (%) N=52
Childhood outdoor experiences	Playing on the streets of the neighbourhood	38 (73%)
	Spending childhood in a village	14 (27%)
The importance of nature	The importance of nature for children	44 (85%)
	The importance of nature for adults	8 (15%)
The effect of technology	The effect of technology on children	46 (88%)
	Taking children outside	36 (69%)
Intention to teach outside	Teaching about nature	25 (42%)
	Teacher as a role model	5 (9%)

#### **Theme-4: Barriers to Implementing Outdoor Education**

During the interviews, pre-service teachers mentioned several barriers to implement outdoor education in a formal school setting. They mostly talked about family concerns (N=7) as the main barrier to teach outside. One participant stated that the attitude of school administration could be a barrier to apply outdoor activities. Another participant described weather conditions that could be a challenge to teach outside. Two participants stated that they cannot think of any difficulty about teaching outside and they can manage any risks they encounter while implementing outdoor education. Example quotations from the participants' responses are presented below:

P-3: Family concerns can be a major barrier to teach outside. If children get cold, parents can blame me. I will need to raise awareness of parents about the importance of outdoor education for children.

P-8: We need to receive permission from families. If we take the necessary precautions, I do not think that there will be a problem.

P-19: As it is cold in winter, taking children outside can be a problem.

## Discussion and Conclusion

This study investigated primary school pre-service teachers' perceptions regarding outdoor education and their future intentions to implement outdoor activities. Moreover, their past outdoor experiences were examined to explore their connection with nature in their childhood. Most of the participants stated that they had significant outdoor experiences in their childhood. They had outdoor experiences in different kinds of settings like around their neighbourhood or in a village. Blatt and Patrick (2014) explored that pre-service teachers between 20-25 ages had outdoor experiences in a variety of settings such as parks, neighbourhoods, gardens and farms. Similarly, Shume and Blatt (2019) revealed that pre-service teachers had meaningful outdoor experiences in their youth. On the other hand, Louv (2008) reported that individuals that grew up in the late 1980s and in the 1990s had limited outdoor experiences; therefore, they are a part of a *nature deficit disorder generation*. As the participants of this study mostly grew up in rural cities and villages, they had more opportunities to play outside in their childhood. Waite (2007) argued that teachers with positive memories of outdoor experiences will probably have a connection with nature in their adulthood, which may promote positive views regarding outdoor education and cause teachers to value outdoor learning (Blatt & Patrick, 2014; Vadala, Bixler & James, 2007).

In this study, after reading Richard Louv's *Last Child in the Woods* (2008), the pre-service teachers realized the importance of nature for children's learning and development. The majority of them stated that outdoor environments improve children's creativity and attention and contribute to children's social, psychological and physical development. Also, several participants mentioned the relaxing and calming effects of nature on adults. Similarly, Scott, Boyd, Scott and Colquhoun (2015) noted that pre-service teachers agreed on the importance of outdoor learning for children. Blatt and Patrick (2014) stated that most of the pre-service teachers recognized the value of nature for children such as developing creativity and connection with nature, and the calming effect of nature. Similarly, Shume and Patrick (2019) reported that pre-service teachers discussed how important nature is for children as children can be inspired from nature and their creativity can be fostered.

Pre-service teachers in this study also stated that technology did not influence their life when they were young; however, today's children were born into a digital world and they spend more and more time with technological tools and less time outdoor. The same pattern related to the influence of technology on children appeared in Blatt and Patrick's (2014) and Shume and Blatt's (2019) studies. The authors found that technology did not disrupt pre-service teachers during their youth; however, they stated that technology has a more disruptive effect on today's youth, which causes a decrease in their outdoor experiences.

Another important finding in the current study is related to pre-service teachers' positive intentions to teach outside. All of them expressed their willingness to take their future students outdoors by employing various strategies like teaching curriculum subjects in nature, teaching about nature and being a role model to protect nature. Blatt and Patrick (2014) noted that pre-service teachers having positive experiences in nature might have positive intentions to teach outside in the future. In a recent study, Shume and Blatt (2019) reported that pre-service teachers had positive intentions to implement outdoor activities when they become a teacher. In both studies, it is notable that pre-service teachers who are not a part of the *nature deficit disorder generation* hold positive intentions for future outdoor learning. Similar findings were reported in the current study.

Ernst and Tornabene (2012) maintained that the intention to use outdoor learning is related to individuals' level of nature relatedness, their views related to the benefits of nature for children's development, and also the perceived barriers to implement outdoor education. It can be inferred that pre-service teachers' intention to teach outside can be influenced by potential barriers. In this study, pre-service teachers described several barriers to implement outdoor activities which are family concerns, the attitude of school administration, and weather conditions. Correspondingly, some researchers described several barriers that prevent teachers from implementing outdoor activities (e.g., Blatt & Patrick, 2014; Chakravarti, 2009; Ernst, 2014; Gerrish, 2014). Particularly, parental concern and weather conditions are described as the main barriers to implement outdoor education (e.g., Alat & Cavali, 2012; Little, Wyver & Gibson, 2011; Maynard & Waters, 2007; McClintic & Petty, 2015). Scott et al. (2015) noted that parental support is a prerequisite for successful outdoor education. One of the participants in this study stated that she first needs to educate parents about the importance of outdoor education. The

attitude of school administration and family concerns were described by the pre-service teachers as the crucial barriers to teach outside the classroom. Shume and Blatt (2019) revealed that resistance from parents and lack of administrative support could be barriers to take students outside. The authors stated that mandated curricula are another obstacle to implement outdoor education because lack of time and the emphasis on test preparation might prevent teachers from implementing outdoor education. In this study, none of the pre-service teachers mentioned the effect of the curriculum on taking students outside. Teacher education programs need to equip pre-service teachers with the necessary knowledge and skills to reduce potential barriers to implement outdoor education. It is necessary to collaborate with parents and school administration while implementing outdoor education.

In conclusion, the results of this study revealed that primary school pre-service teachers who have positive memories related to outdoor experiences have positive perceptions and intentions to implement outdoor education in their future classes. This finding coincides with Blatt and Patrick's (2014) and Shume and Patrick's (2019) findings. Rogoff (1990) stated that past experiences shape individuals' current beliefs and views. Individuals' earlier outdoor experiences contribute to developing their beliefs about the importance of taking children outdoor (Shume & Patrick, 2019). This is an important finding because teachers who have positive views regarding outdoor education influence their students' attitudes toward outdoor learning (Marcum-Dietrich, Marquez, & Medved, 2011; Sandoval, 2005). If teachers have a fear related to implementing outdoor education, they avoid it. At this point, students will probably be influenced by teachers' behaviours and avoid outdoor play (Sandoval, 2005). Moreover, in this study, the pre-service teachers listed several barriers to implementing outdoor education in the future. It is important to increase pre-service teachers' experiences of outdoor education. Teacher educators should be aware of the countless opportunities for outdoor education and encourage pre-service teachers to use these opportunities in the Teaching Methods and Teaching Practice courses. Education faculties are responsible for determining the needs of pre-service teachers and prepare them to use outdoor education in their schools (Marcum-Dietrich et al., 2011). In Turkey, there is not a certain educational policy for outdoor education. Okur-Berberoğlu (2015) suggests that Turkey needs institutionalization in order to develop outdoor education. This means that outdoor education centres and departments should be opened within universities (Okur-Berberoğlu, 2015).

Teacher education programs can integrate outdoor learning into science teaching and environmental education courses. Several teacher education programs which have recently been revised in Turkey consist of outdoor education courses. “Out of School Learning Environments” course has been included in the science teacher education and primary school teacher education programs (Higher Education Council, 2018a; 2018b). This is an important progress to develop pre-service teachers’ knowledge and skills related to outdoor education. In these courses, pre-service teachers can learn how to teach curriculum subjects through outdoor education and how to prevent potential risk and barriers related to outdoor education. Primary school pre-service teachers in this study had significant outdoor experiences in their childhood and they hold positive views to implement outdoor activities in their future class. Outdoor education programs can be built upon these feelings and the perceptions pre-service teachers already have. Additionally, teacher education programs can prepare pre-service teachers to cooperate with their colleagues, parents and head teachers while preparing outdoor learning resources.

The limitation of this study is related to working with primary school pre-service teachers studying in one university located in a small city of Turkey. The pre-service teachers in this study stated that they mostly grew up in villages or rural cities. These participants may not be representative of other districts because their prior experiences, cultural and social backgrounds are different. The perspectives of pre-service teachers from different regions can be explored. Future studies may investigate both pre-service and in-service teachers’ perceptions regarding outdoor education. Also, outdoor education courses can be designed to develop pre-service teachers’ outdoor learning experiences in primary school settings and the effectiveness of these outdoor education courses on pre-service teachers’ knowledge, perceptions and skills can be investigated.

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## Geniş Özet

### Giriş

Sınıf dışında eğitim, planlı ve programlı bir şekilde eğitim-öğretimin sınıf dışında gerçekleştirilmesidir (Okur-Berberoğlu & Uygun, 2013). Sınıf dışında eğitimin iki temel amacı vardır. Bunlardan biri, doğada gerçekleştirilen doğa sporları ile ilgili becerilerin kazandırılması, bir diğeri ise bireylerin sürdürülebilir bir gelecek için çevre ve doğa hakkında eğitilmesidir (Beames vd., 2012). Sınıf dışında eğitim bireylerin doğayla olan bağlarının güçlendirilmesinde önemli rol oynar (Beames ve diğ., 2012). Yapılan pek çok çalışma sınıf dışında eğitimin çocuklarda çevreye yönelik olumlu tutum ve davranışlar geliştirdiğini, onların bilişsel, fiziksel ve duyuşsal becerilerini arttırdığı ortaya koymaktadır (Jose, Patrick & Moseley, 2017; Merewether, 2015). Ancak Louv (2008), *Doğadaki Son Çocuk* kitabında dijital çağda büyüyen çocukların daha fazla teknolojik araçlara maruz kaldığını ve doğal çevreyle bağlarının zayıfladığını ifade etmektedir. Doğayla bağları zayıflayan çocuklarda sosyal, fiziksel ve psikolojik problemler ortaya çıkmaktadır (Louv, 2008). Sınıf dışında gerçekleştirilen eğitim-öğretim etkinlikleri, çocukların doğaya olan yakınlıklarının güçlendirilmesinde, çevreye yönelik olumlu tutum ve davranışlar kazanmalarında önemli rol oynar. Bu nedenle, öğretmenler öğrencilerin doğadaki deneyimlerinin geliştirilmesinde ve doğaya olan bağlılıklarının güçlendirilmesinde etkili olabilirler (Blanchet-Cohen & Elliot, 2011). Ancak öğretmenler lisans eğitimleri sırasında sınıf dışında eğitim ile ilgili yeteri kadar ders alamamakta ve kendilerini bu alanda geliştirme fırsatı bulamamaktadırlar (Blatt & Patrick, 2014; Elliot, 2008). Türkiye’de Eğitim Fakültelerinde de benzer bir durum söz konusudur. En son yenilenen Sınıf Öğretmenliği lisans programında “Okul Dışı Öğrenme Ortamları” dersi seçmeli ders olarak önerilmiştir. Sınıf dışı eğitim ile ilgili

uygulamalar fen öğretimi, çevre eğitimi ve aynı zamanda öğretmenlik uygulaması derslerine entegre edilebilir. Böylece öğretmen adayları sınıf dışı eğitimle ilgili bilgi ve becerilerini geliştirmek için daha fazla fırsat bulabilirler.

Öğretmenlerin sınıf dışı eğitimle ilgili algıları, görüşleri ve tutumları da önemlidir. Eğer öğretmenler sınıf dışı eğitime yönelik olumlu bir tutuma sahiplerse, sınıf dışı öğrenme etkinliklerini derslerinde kullanma konusunda daha istekli olacaklardır. Bu nedenle, öğretmen adaylarının sınıf dışı eğitimle ilgili algılarının ve niyetlerinin incelenmesi, öğretmen eğitiminde sınıf dışı eğitimle ilgili yaklaşımlar ve stratejiler belirlenirken önemli bir adım olabilir (Shume & Blatt, 2019).

### **Çalışmanın Amacı**

Bu çalışmada, Sınıf Öğretmenliği programında okuyan öğretmen adaylarının sınıf dışında eğitim üzerine algılarının ve gelecekte sınıf dışında eğitimi gerçekleştirmelerine yönelik niyetlerinin incelenmesi amaçlanmıştır. Çalışmanın araştırma soruları şöyledir:

- Türkiye’deki sınıf öğretmeni adaylarının sınıf dışında eğitim ile ilgili algıları nelerdir?
- Türkiye’deki sınıf öğretmeni adayları geçmişteki sınıf dışı deneyimlerinden nasıl bahsetmektedirler?
- Türkiye’deki sınıf öğretmeni adayları gelecekte sınıf dışı eğitimi okullarında uygulamaya yönelik niyetlerinden nasıl bahsetmektedirler?

### **Yöntem**

Çalışmada temel nitel araştırma deseni kullanılarak öğretmen adaylarının algıları ve niyetleri incelenmiştir. Çalışmaya 2017-2018 bahar döneminde ikinci sınıfta okuyan ve çevre eğitimi dersi alan 52 sınıf öğretmeni adayı katılmıştır. Öğretmen adayları ders kapsamında Richard Louv’un “Doğadaki Son Çocuk” adlı kitabını okumuş ve kitabı bitirdikten sonra kendilerine yöneltilen sorular rehberliğinde yazılı bir metin hazırlamışlardır. Aynı zamanda 52 öğretmen adayı arasından seçilen 11 öğretmen adayı ile detaylı görüşmeler gerçekleştirilmiştir. Çalışmanın verileri yazılı metinler ve görüşmeler aracılığı ile toplanmıştır. Nitel verilerin analizi önceden belirlenmiş tema ve kategoriler ve analiz sırasında ortaya çıkan yeni kategorilere göre

gerçekleştirilmiştir. Blatt ve Patrick'in (2014) kullandığı kodlama tablosu incelenerek bu çalışma için uyarlanmıştır. Yazılı metinlerin analizinde ise içerik analizi yapılmıştır. Veriler birkaç kez okunarak tema ve kategorilere göre kodlanmıştır. Fen eğitimi alanında uzman bir araştırmacı rastgele seçilmiş verileri kodlamış ve analizlerin güvenilirliği test edilmiştir. Uzman ve araştırmacı arasında gerçekleştirilen görüşmelerden sonra puanlayıcılar arası güvenilirlik katsayısı .90 olarak belirlenmiştir.

### **Sonuç ve Tartışma**

Araştırmanın sonuçlarına göre öğretmen adaylarının hepsi dışarıda geçirdikleri çocukluk deneyimlerinden bahsederken özellikle parkta ya da sokakta oyunlar oynadıklarını ifade etmişlerdir. Louv (2008) 1990'lı yıllarda büyüyen çocukların doğadaki deneyimlerinin azaldığından bahsetse de bu çalışmaya katılan öğretmen adayları çoğu köyde ya da küçük şehirlerde büyüdükleri için doğadaki çocukluk deneyimlerinin daha fazla olduğu dikkat çekmektedir. Fakat görüşmeler sırasında öğretmen adayları çocukken okullarında sınıf dışında eğitimin az olduğunu ya da hiç yapılmadığını belirtmişlerdir. Öğretmen adayları *Doğadaki Son Çocuk* kitabını okuduktan sonra doğanın çocuklar üzerindeki etkisini daha iyi kavramışlardır. Katılımcılar doğanın hem çocuklar hem de yetişkinler üzerindeki olumlu etkilerinden bahsetmişlerdir. Öğretmen adayları kendi çocuklukları ile günümüz çocuklarını kıyasladıklarında kendilerinin teknolojiye çok fazla maruz kalmadığını, ancak şu anda teknolojinin çocuklar üzerinde ciddi dikkat dağıtıcı etkileri olduğunu ifade etmişlerdir. Blatt ve Patrick (2014) ile Shume ve Blatt (2019), öğretmen adayları ile yaptıkları çalışmalarda benzer sonuçlara ulaşmışlardır. Son olarak, öğretmen adayları derslerini sınıf dışında gerçekleştirme konusunda olumlu görüş ve niyetlere sahip olduklarını, gelecekte öğretmen olduklarında derslerinin bazılarını sınıf dışında yapabileceklerini belirtmişlerdir. Özellikle fen, matematik gibi bazı derslerin dışarıda işlenmesi, çocukların doğaya yönelik farkındalıklarının geliştirilmesi ve kendilerinin öğretmen olarak onlara rol model olmaları gerektiğini vurgulamışlardır. Görüşmeler sırasında öğretmen adayları sınıf dışında eğitimin uygulanması sırasında bazı engellerle karşılaşabileceklerini söylemişlerdir. Bu engeller özellikle ailelerin endişeleri, okul yönetiminin tutumu ve hava şartları ile ilgilidir. Alan yazında sınıf dışı eğitimin uygulanmasında benzer engellerden bahsedilmiştir (örn., Alat ve Cavali, 2012; Little, Wvyer & Gibson, 2011).

Sonuç olarak, öğretmen adayları sınıf dışında eğitim üzerine olumlu algı ve niyetlere sahiptir. Ancak öğretmen adaylarının bu alanda bilgi ve becerilerinin geliştirilmesi ve sınıf dışında eğitimin uygulanmasına yönelik engelleri ortadan kaldırmak için neler yapılabileceğinin anlatılması gerekmektedir. Türkiye’de sınıf dışı eğitimle ilgili henüz bir eğitim politikası geliştirilmemiştir. Okur-Berberoğlu (2015) sınıf dışı eğitimle ilgili daha fazla kurumsallaşmaya ihtiyaç olduğunu ve bu nedenle üniversitelerde sınıf dışı eğitim merkezleri ve bu alanla ilgili bölümler kurulabileceğini ifade etmiştir. Eğitim Fakültelerinde fen öğretimi ve çevre eğitimi derslerinde sınıf dışı öğretim ile ilgili uygulamalar yapılabilir. Öğretmen adayları derslerde sınıf dışı etkinlikleri nasıl uygulayacakları, potansiyel riskleri ve engelleri nasıl ortadan kaldıracabilecekleri konusunda bilgilendirilebilirler. Gelecekte hem öğretmen adaylarının hem de öğretmenlerin sınıf dışı eğitimle ilgili algıları incelenebilir. Öğretmen adaylarının sınıf dışı eğitimle ilgili deneyim kazanmalarını sağlamak için sınıf dışında öğretim dersi tasarlanabilir ve bu dersin öğretmen adaylarının sınıf dışında öğretimle ilgili bilgileri, algıları ve becerileri üzerindeki etkileri araştırılabilir.

*ETİK BEYAN: “An Investigation into Primary School Pre-service Teachers’ Perceptions and Intentions Related to Outdoor Education” başlıklı çalışmanın yazım sürecinde bilimsel, etik ve alıntı kurallarına uyulmuş; toplanan veriler üzerinde herhangi bir tahrifat yapılmamış, karşılaşılabilecek tüm etik ihlallerde “Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi Yayın Kurulunun” hiçbir sorumluluğunun olmadığı, tüm sorumluluğun sorumlu yazara ait olduğu ve bu çalışmanın herhangi başka bir akademik yayın ortamına değerlendirme için gönderilmemiş olduğunu taahhüt ederim.”*