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No muddy shoes, no dirty clothes! examining the views of teachers and parents regarding children's outdoor play and learning

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ABSTRACT
The aim of this study was twofold: (a) to carry out an in-depth investigation of teachers and parental views regarding outdoor play and learning, and (b) to examine the extent to which the objectives and goals related to outdoor play and learning were documented within the school curriculum. The data were collected qualitatively from 12 teachers and 35 parents whose children were enrolled in one school. Data collection occurred through observations, semi-structured interviews, and document analysis . It was shownthat parental concerns relative to the weather, children's hygiene, and safety of play, influenced the outdoor practices of teachers as well as the children's access to the outdoors. Teachers' monthly plans also differed based on seasonal weather changes and differences in age groups. The findings shed light on the need for mutual communication and collaboration between teachers and parents regarding the benefits outdoor play and learning provided to children.

KEYWORDS
Outdoor learning; early childhood; teachers; parents; qualitative

Introduction

The early years of life are considered one of the critical periods where the overall development and learning of young children is shaped by their interaction with diverse environments (Ancheita, 2005; Bredekamp & Copple, 1997; Davies, 2004; Fernández -Santin & Feliu-Torruella, 2017; Guo et al., 2021; Justice, Jiang, & Strasser, 2018; Richardson & Mishra, 2018; UNICEF, 2012). Particularly, outdoor environments offer children a variety of opportunities to connect with nature, understand the natural world they live in, and recognize the natural order of everyday life (Auer, 2008; Bento & Dias, 2017; Fjørtoft, 2004; Louv, 2005; Moore & Cooper, 2014; Tonge et al., 2019). Having such awareness can cause children to become sensitive to the environment, while also respecting and appreciating the beauty they find in nature (Bullock, 1994). For instance, a simple gardening activity may not only help children take on the responsibilities of planting seeds and watering plants but also help them to better understand the nature of living things by observing the plants sprout and grow. In this way, the learning needs of children can be addressed in an experiential manner where in effect the learning becomes more relevant, meaningful, active, playful, and engaging (Berry & Hodgson, 2011).

Taking education beyond the classroom walls and organizing learning activities that take place in the outdoors is not new. The pioneers of early childhood education from Rousseau and Froebel to Pestalozzi and Montessori acknowledged this idea in their educational philosophies by pointing out

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the necessity of integrating nature into the educational processes for young children (De Souza, 2012; Morrison, 2015; Sobel, 2016). A number of recent studies have found concrete evidence that since interaction with nature activates children's senses in different ways, use of the outdoors for learning can benefit them intellectually, physically, socially, and emotionally (Becker, Lauterbach, Spengler, Dettweiler, & Mess, 2017; Bikomeye, Balza, & Beyer, 2021; Brown & Heaton, 2015; Dankiw et al., 2020; De Souza, 2012; Humberstone, 2015; Kuo, Barnes, & Jordan, 2019; Morrison, 2015; Sobel, 2016). For instance, in recent studies it is found that there is a positive relation between the time spent outdoors in preschool and children's working memory as well as social emotional development (Scott, Kilmer, Wang, Cook, & Haber, 2018; Ulset, Vitaro, Brendgen, Bekkhus, & Borge, 2017).

When aiming to support the development and learning of children in outdoor environments, it is critical to understand the social and cultural context children live in. This is explained in ecological theory within the context of the systems of relationships that form the child's environment (Johnson, 2008). While parents, teachers, and school environments comprise the child's microsystem; educational philosophies, curriculum, society, policy makers, media, and technology are much bigger and broader systems which comprise the child's ecosystem and macrosystem (Bronfenbrenner, 1986). For example, the child's ability to interact with nature and access the outdoors can be influenced by the interactions of these systems, which can play either a supporting or constraining role (Hunter, Syversen, Graves, & Bodensteiner, 2020; Kernan & Devine, 2010; Tarman & Tarman, 2011). Therefore, to be able to understand the roles and responsibilities of teachers, schools, and parents; it is essential to look at how outdoor play and learning is perceived and implemented in early childhood settings, which are in effect, shaped and moulded by the sociocultural values and views of various systems within children's lives (Hayes, O'Toole, & Halpenny, 2017).

Over the years, considerable research attention has been directed towards the outdoor play and learning of children in their early years of development. It is shown in a majority of those findings that teachers consider outdoor play and learning important because it enables children to appreciate and respect nature, be healthy and active, take risks, cooperate with others, and learn authentically (Canning, 2010; Davies, 1997; Dyment & Bell, 2008; Stephenson, 2003; Sumpter & Hedefalk, 2015; Tovey, 2011; Waters & Maynard, 2010; White, 2008; Wilson, 2012). While it is critical to understand teacher's views and practices, researchers have also been curious about the perceptions of parents as they are considered to be one of the major determinants of children's interests and curiosities toward nature and the outdoors (Barrable & Booth, 2020; Ernst, 2018; Murray & Williams, 2020). Although it is indicated in past research that parents have positive insights in terms of views and attitudes toward outdoor play and learning, gaining support and/or encouragement from parents is challenging due to their safety concerns, a culture of fear, other academic pressures, a greater number of after-school activities, a growing interest in technology, and rapid urbanization (Clements, 2004; Ernst, 2018; Hunter et al., 2020; Little, 2015; Mackett & Paskins, 2004; Sandseter et al., 2020; Tandon et al., 2012; Vandermaas-Peeler, Dean, Biehl, & Mellman, 2019). Particularly, parental barriers to the effective use of outdoor environments are indicated in recent studies where parents report having fears and concerns regarding their child's safety while playing outdoors (Parsons & Traunter, 2020; Robinson, 2020; Sandseter, Cordovil, Hagen, & Lopes, 2019).

Considering the perspectives of parents, whose decisions may influence their children's outdoor experiences, is necessary when making inferences and drawing conclusions regarding teacher's practices related to nature and the outdoors. For example, it is indicated in a number of studies that parents are one of the critical decision makers of their children's play and learning outdoors (Jayasuriya, Williams, Edwards, & Tandon, 2016; Larson, Green, & Cordell, 2011; Tandon, Saelens, & Copeland, 2017). However, there remains relatively little understanding about how teachers and school administrators address parental concerns and complaints while continuing to nurture children's need for the outdoors. Therefore, the aim of this current study was twofold: (a) to carry out an in-depth investigation of teachers and parental views regarding outdoor play and learning, and (b) to examine the extent to which the objectives and goals related to outdoor play and learning were documented and implemented within the school curriculum.

Method

The study was conducted qualitatively to (1) determine outdoor activities through observations, (2) understand the views of parents and teachers through semi-structured interviews, and (3) examine monthly curriculum plans regarding outdoor activities through document analysis. Since there might be differences between views and practices, triangulating the data from multiple sources enabled the researchers to gain a more in-depth understanding, and as a result, better illustrate teachers' and parents' views, practices, and support for outdoor play and learning.

To better understand the underlying causes and needs regarding outdoor play and learning, the researchers collected data from one early childhood centre where the first author of this study was a classroom teacher and thus acted as both a practitioner and researcher. Such an approach is known as reflective practice or practitioner research, where teachers research their own pedagogic practice to '*focus on issues arising through the questioning, evidence gathering and analyzing of their actions alongside their students' learning*' (Mills & Earl Rinehart, 2019, p. 1). As an insider, the first author had a chance to observe and understand the relational factors causing problems and challenges in implementing outdoor play and learning within the whole school context. As pointed out by Mills and Earl Rinehart (2019), although there might be ethical challenges in the multiple roles of teacher as researcher, collecting data from different sources enables the teacher/researcher to examine the situation from a broader perspective without solely relying on one data source and/or one group of participants.

Before collecting data, all the necessary ethical permissions were obtained from the Ethical Review Board and the Ministry of Education (MoNE). Next, the researcher informed the teachers and parents about the research process by distributing consent forms to be reviewed and signed. Thus, all the participants were ensured that their identities would remain confidential through the use of pseudonyms, and in particular, parental consents were obtained regarding the observation and photographing of their children for the purpose of this research. Furthermore, the researcher obtained verbal consent from the children before taking any pictures related to their play activities. Additionally, since the first author was one of the teachers at the school, the students in her classroom as well as their parents were not included within the current study. Lastly, for privacy and confidentiality purposes, the children's faces were blurred out and not shown in the photographs documented in this study, and instead only the materials used in their activities were shown.

Participants

In this study, there were 12 conveniently selected teachers whose ages ranged from 24 to 35-years-old (mean age = 28.08). There were seven classrooms in the school and each classroom had two teachers working as partners. The researchers informed all the teachers about the study protocol and distributed the content forms if they were interested voluntarily participating in the study. All the teachers gave their consent to participate. Most of the teachers (n = 9) had a bachelor's degree in the field of early childhood education, while three of them had earned an associate degree. The teachers' years of experience also varied from 2–5 years (n = 9) to 5–10 years (n = 2) and 16 years (n = 1). Regarding their outdoor play and learning backgrounds, while seven teachers took outdoor education courses during their undergraduate and associate degree programs, two teachers participated a seminar on the subject. The remaining three teachers had not participated in any course or seminar.

Also included in the study were 35 parents who volunteered to participate. Before beginning the study, the researchers informed all the parents (N = 96) about the research in which voluntary participation was needed. After parents had indicated their interest in participating, they received further comprehensive information including a consent letter both for themselves and their children

Table 1. Ages and Numbers of Children in Each Classroom.

Age Groups	Number of Age Groups	Number of Children
24-month-olds	1	10
24 to 36-month-olds	1	7
36 to 48-month-olds	2	15
		9*
48–60-month-olds	2	9
		12
60–72-month-olds	1	7

Note. *Did not included in the study.

as well as details regarding the ethical considerations. The parents volunteered to participate across several age groups: three parents for 24-month-olds, five parents for 24 to 36-month-olds, seven parents for 36 to 48-month-olds, 14 parents (seven parents from each class) for 48 to 60-month-olds, and six parents for 60 to 72-month-olds. The parents' ages ranged from 30 to 47-years-old (mean age = 35.77). While most of the participating parents were mothers (n = 31), the remaining four were fathers. Each participating parent had one child attending the school and they specifically commented on the child's experience attending the school where the research took place. Additionally, the majority of them were working parents (n = 28) and only seven were stay-home moms.

The school included classrooms across several age groups: one classroom for 24-month-olds, one classroom for 24 to 36-month-olds, two classrooms for 36 to 48-month-olds, two classrooms for 48 to 60-month-olds, and one classroom for 60 to 72-month-olds. The number of children in each classroom varied from seven to fifteen children with two teachers in each classroom. Importantly, one classroom which included 36 to 48-month-olds was excluded from this study due to it being the first author's classroom (see Table 1).

The outdoor setting

The study was conducted in the Ankara province of Turkey where the summers are warm and clear, the winters are cold, cloudy and partly rainy. In Ankara, the average annual temperature typically varies from 23°F to 87°F. The setting for the observations was a private school with a 280-square-meter outdoor area which included three different activity areas. For example, the front area included swings, a slide, and seating bench surrounded by trees and flowers (see Figure 1). The back area included a sandbox in which there were buckets, shovels, scoops, a variety of containers, and measuring cups/spoons which were the only materials provided to children (see Figure 2). Additionally, there was a wooden bench primarily used by the teachers for book reading activities. There was another area which was a botanical garden where planting and observing flowers and vegetables was encouraged (see Figure 3). However, children were not allowed to use the garden tools due to the sizes of the tools being too heavy and large for them.

The time allocated for outdoor activities was a minimum of 45 minutes (twice a week) for each classroom regardless of the students' age group. Moreover, the teachers were free to use the outdoor areas if their schedule allowed as well as if the outdoor area was available at that time. Due to insufficient space for all the children to be outside at the same time, each classroom was scheduled to use the outdoor environment at different times of the day.

Data collection

During the data collection process, multiple data sources were used. For example, data were collected through observations, interviews, and document analysis, which enabled researchers in this study to examine the topic from diverse perspectives.

Figure 1. The front area.

Figure 2. The back area.

Observations

To observe participants in their natural settings, the researchers preferred to use the technique of nonparticipant observation in which the first author conducted all the observation sessions without directly interacting or being involved in the activities of the teachers and/or children. Since each classroom had two teachers working as partners, the first author was able to conduct the observations without causing any interruptions of her classroom's routine. Before interviewing the teachers, a total of 15 observation sessions were conducted over a span of five months (from February to June) with each session lasting approximately 20 to 45 minutes. Observations were conducted according to the outdoor play time of each classroom stated in their weekly schedules. The observations sessions for each classroom were: one observation session of 24-month-olds, three observation sessions of 24 to 36-month-olds, three observation sessions of 36 to 48-month-olds, six observation sessions (three sessions for each classroom) of 48 to 60-month-olds, and two observation sessions of 60 to 72-month-olds (see Figure 4). The researchers aimed to observe at least three sessions for each classroom. However, cancellations of the outdoor sessions in some classrooms due to weather conditions, field trips, and longer indoor classroom activities created different numbers of observation sessions among the classrooms.

Figure 3. The botanical garden.

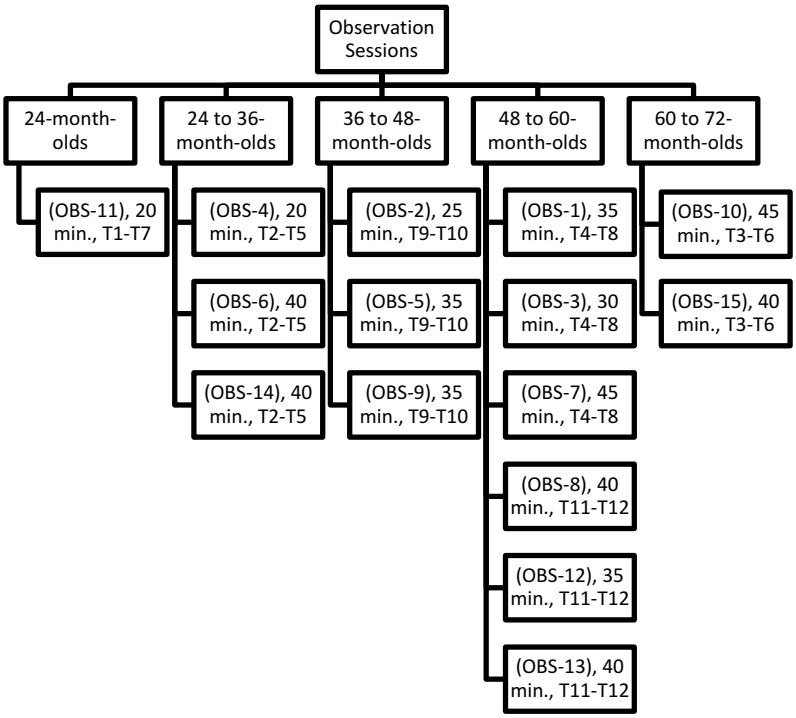

Figure 4. Observation schedule for each classroom.

An observation protocol was utilised for recording teacher behaviours as well as taking notes related to the outdoor activities, setting, weather, children's interactions, and the number of children (see Table 2). The teachers were informed about all the observation sessions including taking photos of them and the children while they were examining plants, participating in activities, playing with natural materials as well as experimenting and observing the natural world around them. The photos taken during the observations were used not only to strengthen the data analysis but also capture the behaviours of the teachers and children which might be unnoticed during the observations.

Table 2. An Example for an Observation Form.

Observed classroom: 60 to 72-month-olds	Season: Spring
Observed teachers: T3-T6	Weather: Partly cloudy
The number of children: 8	Time: 35 minutes
Outdoor Area(s): Front area & botanic garden	Outdoor activity: Book reading, plant examination, math (comparison)
Materials: Story book, leaves, sticks	

Preparation Before Outdoor Time: Through direction of T3, children went to the toilet and after returning they put on their outdoor shoes. The teacher said, 'you don't need to take your coat because it is not too cold today'. T6 selected a book and asked children to line up. While the children were preparing, T6 showed the book's cover, which is about plants, to the children and said, 'we will first read this book outside'.

Interaction and communication: They sat at a bench and settled down. T6 started reading the book by showing the pictures to the children. During reading, she asked questions about the book. T3 warned two children who were talking. After the book reading, T6 said, 'let's collect some branches in the garden, everyone needs to find one'. While collecting the branches, one of the children came to T3 and said that he found more than one and showed the branches in his hand. Another boy said, 'there is a spider here' and pointed out the spider in the soil. T3 said, 'don't be afraid! it won't do any harm to you'. One of the children said, 'yes, it is too little, it can't do anything to us'. After the children found branches, T6 wanted the children to line up the branches next to the sandbox. Then, she said, 'line them up from big to small'. As the children arranged the branches according to their sizes, T3 and T6 followed them. Then, T6 asked the children which branch is the longest and which is the shortest. After that, T6 showed a dry leaf to the children and asked, 'what happened to this leaf?'

Interviews

Two different interview protocols were prepared, including one for the teachers (n = 12) and one for the parents (n = 35). Additionally, each interview session regardless of who was interviewed took approximately 30 to 45 minutes. The interview questions prepared for the teachers included a demographic section as well as questions related to (1) benefits of outdoor play and learning, (2) purpose and frequency of using the outdoors, (3) concerns and conditions before and during time outside, (4) teacher's responsibilities and roles during outdoor time, and (5) suggestions for an ideal outdoor environment.

The interview questions for the parents also included a demographic section and questions related to (1) benefits of outdoor play and learning, (2) information they have regarding the content and duration of outdoor activities at school, (3) concerns and considerations regarding going outside, and (4) suggestions for an ideal outdoor environment.

Document analysis

Document analysis is described as a systematic procedure utilised for closely reviewing and interpreting written materials (Merriam, 2009). Thus, in this current study, document analysis was carried out to better understand the school's policy regarding outdoor play and learning. Since the school did not have any written documents such as vision statements, letters to parents requesting permission to be outside, or rules and regulations specific to outdoor play and learning; the researchers instead examined the participating teachers' curriculum plans. Through document analysis the researchers' aim was to examine (1) number of the outdoor activities, (2) subjects of outdoor activities (i.e. math, science, language, and/or literacy) across different ages, and (3) themes (i.e. numbers, alphabet, and/or animals) of the outdoor activities.

Data analysis

Analysis of the semi-structured interviews with each individual teacher and parent was conducted through the technique of content analysis (Creswell, 2007). First, the collected data were organized via the transcription of interview sessions. After the transcription process was complete, data identified according to following protocol. For instance, 'INT' was used to signify interview data, 'OBS' signified observation data, 'P' signified parents, and 'T' to signify teachers. Thus, 'T5-INT' designated the interview transcript for the fifth teacher. Second, through thematic content analysis, the researchers first became familiar with the data by reading and re-reading it. Then, the

raw data were systematically transformed into codes by identifying the most frequently used words or phrases. Next, the codes were grouped into categories to create meaningful patterns. The researchers then reviewed all the categories to create themes with broader patterns of meaning. To ensure the authenticity of the coding, the responses to the interview questions were coded independently by the researchers and the resulting themes emerged from their codes.

The analysis of the observations was conducted based on the (1) outdoor activities children engaged in, (2) materials used during outdoor time, and (3) teachers' interactions with children and their role during outdoor time. After the field notes were organized into a more readable format, the researchers looked for general patterns which appeared when analyzing the notes inductively. Thus, the notes from the descriptive analysis consisted of the outdoor activities, materials used in play and learning, interactions of teachers with children, and the role of the teacher during outdoor time.

The teachers' five-month plans were analysed through content analysis using a three-part procedure. First the plans were examined for the activities related to outdoor play and learning. Second, the outdoor activities were recorded based on the numbers, subjects, and themes. Third, the activities were grouped into each category stated in the second part: (1) number of outdoor activities, (2) subjects of the outdoor activities, and (3) themes of the outdoor activities.

Trustworthiness of the study

To increase the validity of this study, the researchers utilised the technique of triangulation in which the data were cross checked and compared with the observations, interviews, and document analysis. Additionally, member checking to gain informant feedback from the teachers and parents was conducted following the compilation of the interview transcripts. The researchers sent the interview transcripts to all the participants, who then reviewed and double-checked their statements. As a result, only seven parents and two teachers made changes by providing additional comments to their interview transcripts. To ensure the authenticity of the coding in this study, inter coding agreement was reviewed and determined to be 85.5% (Miles & Huberman, 1994). Additionally, one expert from the field of early childhood education reviewed the analysis procedure to ensure the clarity and coherence of the data. Importantly, the prolonged engagement of the first author at the school enabled the researchers to witness the participant's understanding, interactions, and practices regarding outdoor play and learning. Lastly, the utilisation of thick descriptions where the researcher describes and interprets the observed behaviours within its particular context (Ponterotto, 2006) aided the researchers in presenting more detailed information about the school, teachers, parents, and monthly curriculum plans.

Findings

In the following sections, the findings from the observations, interviews, and document analysis are presented to provide a comprehensive picture of teachers and parental views regarding outdoor play and learning along with the extent to which the objectives and goals related to outdoor play and learning were documented and implemented within the school curriculum. Throughout each section, exemplary quotes gleaned from the observations and interviews were provided as 'OBS' for observations and 'INT' for interviews. Moreover, the data from each teacher and parent was presented as 'T' and 'P' to designate either the teacher or parent data. For instance, the use of 'T1' represents teacher 1, and the use of 'P3' represents parent 3.

Observations

The field observations were primarily focused on three areas: the outdoor activities taking place, the materials used during outdoor time, and teacher interactions and their roles.

The outdoor activities

The observed outdoor activities mostly varied from unstructured to structured play. Thus, when the children were free to play independently, they usually engaged in pretend play with natural materials they discovered within their environment. For instance, three children from one of the 48 to 60-month-olds classrooms (OBS13) were observed collecting sticks and making a circle with them (see Figure 5). While one of the children was watering the sticks, another child approached the activity and asked what they were doing. The response was, 'This is a transportation place. We put water and if you want to go to another place, you should put your hand inside of it'. In another free play activity that was observed, one of the children from the same classroom was digging in the soil to plant a stick (see Figure 6). When his teacher asked him what he was doing, he stated, 'I'm planting a strawberry tree here'. Then, the teacher, with a surprised face, asked, 'But, how do strawberries grow in the sticks?', and the child responded, 'these are special strawberries' (48 to 60-month-olds; OBS13).

Figure 5. Pretend Play 'Transportation Circle'.

Figure 6. Pretend Play 'Strawberry Tree'.

Additionally, the teachers were also observed implementing guided nature-based activities for the children. For instance, T3 from one of the 60 to 72-month-olds classrooms (OBS10) asked the children to find sticks and put them inside the sandbox. Afterwards, she then asked the children to, 'Put them in an order from shortest to longest'. While, in another classroom with a younger group (36 to 48-month-olds; OBS5), the teacher implemented a counting activity using walnuts. For instance, after collecting some walnuts from a tree, T10 showed the walnuts to the children and then asked them to count how many walnuts she had collected. During this activity, the teacher and students also discussed the process of planting and growing walnuts. Furthermore, various other activities observed during outdoor time included book reading, singing songs, listening to the sounds of nature, drawing nature, watching ice melt, digging in the soil, and locating where the potatoes were growing in the botanical garden which is also known as the vegetable-growing area (see Figure 7, Figure 8).

Materials

Regarding the observations of the materials that were used during outdoor activities and/or during the children's free time, it was recognised that the children usually selected and played with the natural materials in their outdoor environment such as sticks, leaves, soil, pinecones, walnuts, water, ice, sand, and stones. Moreover, while the sand box play area was popular among all the children, the manufactured fixed play equipment which included swings and slides appeared to be the least popular play items within the entire play area.

Teacher roles and interactions

Through observations it was also determined that the roles teachers took on during the outdoor time was more often that of being director and/or supervisor. For instance, before going outside the children were making plans about playing the game, 'cops and robbers'. However, T8 interrupted them and explained that they would only be playing in the sandbox; where she later joined in and played along with them (48 to 60-month-olds; OBS1). While, in another observation, T7 checked on

Figure 7. Teacher Led Activity 'Finding and examining potatoes'.

Figure 8. Teacher Led Activity 'Watching ice melt'.

the children in the play area and then approached two girls who were playing by making footprints in the snow. Without asking their permission to join in the play, T7 directed the two girls to compare their footprints in the snow with each other (24-month-olds; OBS11).

It was also clearly observed that the teacher-child interactions were profoundly focused on issues related to getting dirty, injured, and/or sick when they were exposed to cold weather. For instance, on one rainy day, T9 looked at the play area and decided that the children could only play in the carpeted area to avoid the children getting their shoes dirty (36 to 48-month-olds; OBS5). Similarly, the teacher for children in the 48 to 60-month-olds classroom (T4) asked them to wear disposable galoshes over their shoes before going outside. However, wearing the plastic galoshes was inconvenient and uncomfortable for most of the children since the disposable galoshes are like small plastic bags which kept falling off their shoes and worried the children about their shoes becoming dirty (OBS3). Additionally, all the teachers were cautious about the children's clothing and every time they went outside, they checked the children's clothes one by one to, 'eliminate the risk of (the children) getting sick' (T7). Furthermore, they repeatedly checked the children's clothes while they were outdoors playing. Similar concern was also observed in relation to the children's safety. All the teachers focused their attention to ensure the children's safety by frequently checking on them as well as giving verbal warnings to the children to stay safe when the teachers' believed it was necessary. For example, one of the children from the 24 to 36-month-olds classroom was trying to climb up the slide but T5 immediately reacted in a panicked way and stated to the child, 'We have outdoor rules, you know them, right? You cannot climb up the slide like this. Your friends cannot slide down if you do this' (OBS6). While in another observation, T1 kept warning the children about not throwing snowballs at each other's faces (24-month-olds; OBS11). Additionally, during one of teacher-led activities, T5 was attempting to locate and dig up potatoes growing in the soil. She did not allow the children to dig in the soil and/or use the shovel, but while digging she did find a worm and showed it to the children (see Figure 9). Ironically, some of the children wanted to touch the worm but the teacher would not allow them to touch due to concerns regarding hygiene (24 to 36-month-olds; OBS14).

Interviews

The value of outdoor play & learning

Through the interview responses from the teachers and parents it was indicated the level of value they placed on outdoor play and learning. For example, a majority of teacher and parents mentioned the benefits of outdoor time on the children's physical development, intellectual growth, and gaining of social skills: (see also Excerpts 2 and 4 in the Supplemental data)

Figure 9. Teacher Led Activity 'Examining a worm'.

> Outdoor activities affect all the developmental areas. Physical development is supported when children run, jump, and climb. They also communicate and interact with their friends while playing so that they can express themselves (T1).

> I believe outdoor experiences are important for physical development. Children can control their bodies and improve their balance skills. However, my son did not have enough outdoor experiences since I was limiting his behaviour on the playground, but he has begun to understand his limitations and try risky situations to test his skills (P30).

Concerns regarding outdoor play

Although both groups stated their affinity towards outdoor time, they also indicated they had some concerns in relation to the children's hygiene, the weather, and other safety issues regarding outdoor play. Particularly, all the teachers stated that when they go outside during cold, snowy, and/or rainy days, they usually get complaints from the parents regarding the children's hygiene and chance of becoming ill. Therefore, they pointed out that on these days, one teacher stays inside and remains in the classroom with children whose parents do not allow let them to go outside: (see also Excerpts 6, 7, 8, 9, and 10 in the Supplemental data)

> We have some parents who don't want their kids go outside when it's cold. So, we need to arrange with my teaching partner who's staying inside the classroom when the other kids go outside (T7).

The parental comments regarding these concerns and considerations were consistent with the statements from the teachers: (see also Excerpts 12 and 13 in the Supplemental data)

> Weather conditions are important. For instance, children can have longer outdoor time during summer if it is not too sunny; but an hour will be long for the winter. Also, it is hard for the teachers to manage the whole class for checking their clothes during the outdoor time in winter (P13).

The duration of outdoor play time

Reactions related to parental concerns seemed to impact not only the frequency but also the duration of the children's outdoor time. For example, the teachers' responses appeared to indicate that they considered shortening or even eliminating outdoor time. Additionally, five teachers stated that they did not go outside with the children during the winter due to the parents' concerns regarding hygiene and sickness. Furthermore, the remaining seven teachers also had similar concerns, yet they stated that they continued to allocate a limited amount of time (10 to 25 minutes twice a week) for outdoor time. Importantly, the teachers who had continued to set aside time for outdoor activities mentioned their belief during the interviews that children need time outdoors to maintain proper physical and mental well-being. Moreover, interestingly the teachers who had taken a course or training regarding play, outdoor learning, and child development were the teachers who continued to include outdoor time in their curriculum regardless of the weather conditions. Also, these teachers highlighted why they believed outdoor time is important for children as well as that an insufficient amount of time outdoors can be detrimental (see Excerpts 14 and 15 in the Supplemental data).

During the summertime, it was indicated that the teachers weekly outdoor time for the children varied from three times a week for a minimum of 30 minutes each session ($n = 6$), two times a week for a minimum of 45 minutes ($n = 4$), two times a week for minimum of 20 minutes ($n = 4$), and every day for a minimum of 20 minutes ($n = 1$).

Outdoor activities & teacher responsibilities

The teachers also listed the types of activities they implemented with the children during outdoor time. It was determined that similar to the information compiled in the observation notes, the teachers mentioned that children engaged in both structured and unstructured activities including free play, games with rules, counting, book reading, drawing, planting and watering seeds as well as observing plants, animals, and flowers.

Importantly, while implementing outdoor activities, the role and responsibilities of teachers are extremely critical. For example, some teachers (n = 10) indicated that their roles were primarily as co-players who played with the children and also as stage managers who set the stage and arranged the environment for the children's play (see Excerpts 16, 17, and 18 in the Supplemental data). Additionally, three teachers indicated that they took on the role of directors who directed and/or redirected the children's activities by inputting their teaching agenda onto the children's play. For instance, the comments from one of the teachers illustrated their role as a director for the children:

> Our role is directing children. During free play time we need to direct and lead them. While playing games, for example, we need to direct them about the rules of the game. We need to shape children with our direction and the teacher's role is so critical (T1).

Whereas two teachers identified their roles as observers who believe it is important to closely watch over the children due to safety concerns (see Excerpts 20 and 21 in the Supplemental data). Independently from their trainings, the teachers seemed to internalize those roles based on their views about teacher roles during outdoor time.

The ideal outdoor environment

The final point discussed with both participant groups was querying them about what they believed was an ideal outdoor environment. Four main topics emerged from the groups' responses and according to the participants, an ideal outdoor environment should include; (1) big and open space, (2) diverse play materials, (3) natural elements, and (4) isolated areas. Thus, in the following are some of the exemplary quotes provided by the teachers: (see also Excerpts 24 and 25 in the Supplemental data)

> The outdoor area should be natural, wide, and safe. It should also encourage children to experiment, explore, and learn by doing. There can also be natural materials such as logs and different sizes of stones (T8).

> We need an open area where there can be animals. There should also be diverse trees within the grassy area. There can be sound pipes in the environment, so we can listen and imitate natural sounds by using this material (T11).

Furthermore, it was indicated by the parents' comments that they had similar ideas regarding an ideal outdoor environment (see also Excerpts 28 and 29 in the Supplemental data)

> I would like to see wider areas where children can run easily. The area could involve climbing walls and isolated play areas to support muscle development (P2).

> The outdoor environment should have a separate area for botanical activities. I want my daughter to learn about the value of growing things (P9).

Document analysis

In the document analysis portion of this study, the teachers' five-month plans were analysed based on (1) number of outdoor activities, (2) subjects of outdoor activities, and (3) themes of outdoor activities.

The number of outdoor activities

The number of outdoor activities for each age group were different, and the distribution of these activities by age group are illustrated in Figure 10.

Clearly, by reviewing Figure 10 it is understood that the 24 to 36-month-olds classrooms had the highest number of activities in April (n = 7) and May (n = 6). Similarly, the highest number of outdoor activities for the other classrooms were also during the month of April. Additionally, consistent with the information compiled in both the observations and interviews, the number of outdoor activities were either low or non-existent during the colder months. Interestingly, the 48 to 60-month-olds

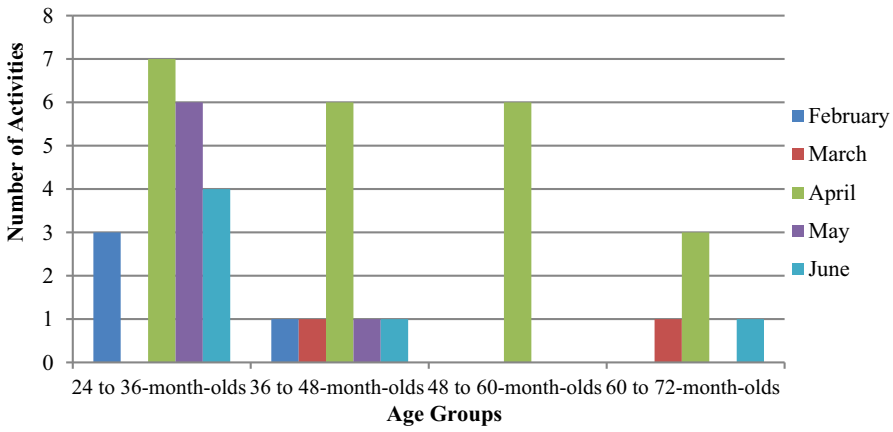

Figure 10. Number of Outdoor Activities for Each Classroom.

classrooms only had outdoor activities planned for the month of April. Thus, during interviews with the teachers of 48 to 60-month-olds, it was indicated that their busy indoor schedules with this age group limited their opportunities to plan outdoor activities.

The subjects of outdoor activities

Regarding the types of outdoor activities, five subjects emerged from the analysis of the teachers' monthly plans; science, language and literacy, movement, art, and mathematics. Additionally, it was also indicated through the observations of outdoor practices that each teacher's background impacted the themes which were planned and carried out for the children during outdoor time. For example, teachers who had previously taken a course and/or training regarding outdoor play and learning for children appeared to conduct more diverse activities as well as tended to integrate nature into the themes. For instance, activities with the children such as counting the walnuts they had found, writing numbers in the snow, or comparing leaves they had collected according to their colour were each observed among the teachers who had this prior training. In the following, the distribution of each subject taught according to age groups is provided in Figure 11.

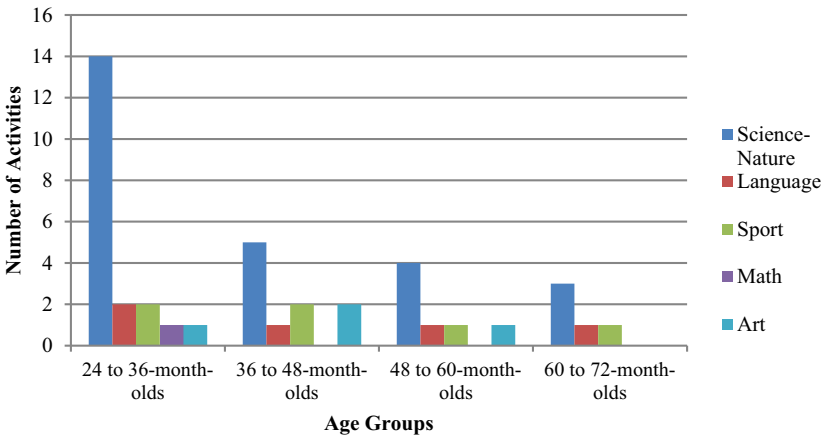

Figure 11. Subjects Taught Outdoors for Each Classroom.

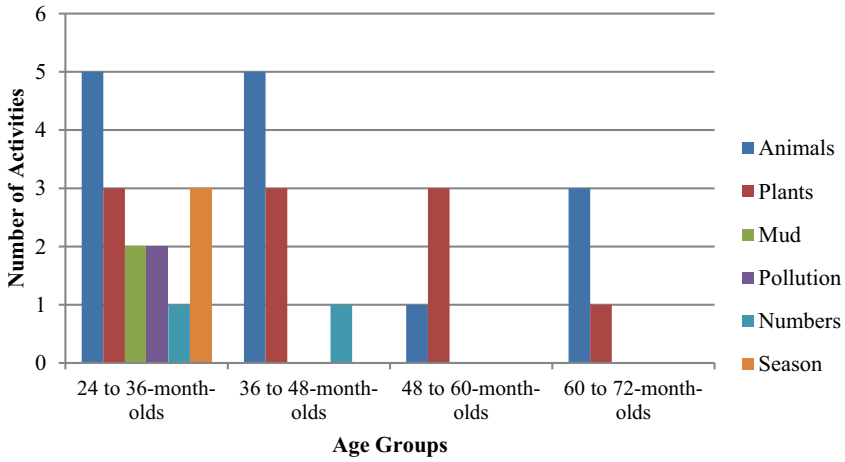

Figure 12. Themes Taught Outdoor for Each Classroom.

The themes of outdoor activities

Thus, it was recognised that while diverse subjects were covered in the plans of teachers, the themes examined from each classroom tended to be focused on science-related topics. Animals, plants, mud, pollution, numbers, and seasons were all topics stated within the teachers' plans. The observation data were consistent with some of the stated themes which were seen to be covered by the teachers. For instance, the teachers and children were observed during their outdoor time looking at and talking about plants, counting pinecones and walnuts, observing worms, and discussing the seasons. Generally, it was seen that themes related to plants and animals were stated in the teachers' plans for all age groups (see Figure 12). Although, the way teachers taught these subjects did vary according to age groups. For example, structured and teacher-guided activities were implemented more with the older groups compared to the younger ones who instead engaged in more unstructured activities.

Although the monthly plans were prepared around specific areas, the practices of teachers during the researchers' observations seemed to vary according to the weather conditions, children's interest, and materials available at that time. For instance, in one of the observations, one child from the 48 to 60-month-olds classroom found some tiny white rocks and told the teacher that he found some teeth. Then, the teacher also found one of these small stones and kept talking about the teeth they were finding (OBS7). As a result, this was one of the types of spontaneous interactions and learning opportunities that were frequently observed to occur among the teachers and children.

Discussion

Time spent in the outdoors is essential during the early years of children's development as a way of introducing them to nature, teaching them about the natural world they live in, and establishing positive value judgements which promotes their ideas regarding a sustainable lifestyle (Tuuling, Õun, & Ugaste, 2019). Therefore, it is necessary to more fully understand the views of teachers and parents who are in effect the primary role models regarding children's play and learning in outdoor environments. Although, as indicated in this current study, the value placed on outdoor time for children by both teachers and parents was concerning in relation to the amount of time and direction allocated towards play and learning.

Importantly, exploration and experimentation in the outdoors is central to a child's development and it is necessary that parents and teachers share a common goal and understanding regarding the support of children's interest in the outdoors (Parsons & Traunter, 2020). Thus, it was indicated in the findings of this current study, that there is a need for parents to focus in particular on the developmental benefits of outdoor play and learning for their children, rather than on issues related to the outdoors such as their children's hygiene, safety, and becoming ill. Additionally, the data from interviews with the teachers matched the researchers' field observations, which revealed the pressures placed on teachers from the parents regarding the issues of outdoor time and their children's hygiene, safety, and sickness. A possible interpretation of this finding might be related to overprotective parenting styles which can significantly affect the way children play and interact with each other (Frost, Wortham, & Reifel, 2012; Jambunathan, Burts, & Pierce, 2000; Jung Yeh, Pal Singh, & Singh, 2010; Van Campen & Russell, 2010).

Particularly, several studies show a negative impact of overprotective parenting on children's outdoor play (Allin, West, & Curry, 2014; Brussoni, Olsen, Pike, & Sleet, 2012; Cevher-Kalburan & Ivrendi, 2016; Clements, 2004; Erbay & Saltali, 2012; Little, 2010; Sandseter & Kennair, 2011). Thus, the excessive guarding behaviours of parents who want to protect their children from harm might indirectly affect the way teachers interact with children outdoors. For instance, children in the current study were not allowed to use garden tools due to them being too heavy. The rules about children not climbing up the slides seemed to be related with safety concerns as well. Such restrictions and concerns prevent teachers from paying attention to children's learning while outdoors by not responding appropriately to their explorations or questions. According to Locke, Campbell, and Kavanagh (2012), excessive controlling with the intention of protecting children from the consequences of their actions is associated with lack of resilience, inadequate developmental of life skills, low self-efficacy, and child anxiety. Besides, the concerns of parents and teachers in this current study were more related to inappropriate provision of suitable garden tools for the children that would allow them to be involved in gardening activities. Similarly, the rules about climbing up the slide might be more related to the negative perceptions about risky play rather than the child's capacity to climb up the slide. Therefore, it is necessary to implement developmentally appropriate practices outside the classroom, collaborate with parents to help them understand the benefits of risky play, and inform them about what constitutes a safety hazard (Ball, Gill, & Spiegal, 2012; Sandseter, 2012; Tovey, 2010).

Additionally, negative perceptions with becoming dirty from outdoor activities might influence parents' concerns regarding their children's muddy shoes and clothes. For Mycock (2019), instead of perceiving the dirt as a sign of connecting to nature, some parents see being clean as a sign of higher social status. In this current study, the teachers also indicated their efforts to keep the children's clothes and shoes clean by limiting the use of muddy areas as well as asking children to wear disposable galoshes over their shoes, which ultimately did not entirely solve this problem.

Children's opportunities to learn in the outdoors and the time they spent outdoors were also affected by the weather. For example, on cold and rainy days the teachers noted the poor weather conditions as a reason for staying inside. These results were consistent with previous studies which show that weather conditions can restrict access to outdoor environments for children's play and learning (Ata Dogan & Boz, 2019; Bento & Dias, 2017; Copeland, Kendeigh, Saelens, Kalkwarf, & Sherman, 2012; Ernst, 2014; Jayasuriya et al., 2016; Parsons & Traunter, 2020; Tuuling et al., 2019; Yalcın & Tantekin-Erden, 2021). Thus, it can be recognised from the findings of this current as well as from previous studies that there is a need for greater communication and collaboration between parents and teachers regarding any negative reactions related to their fears about children becoming sick, dirty, and/or injured when being outdoors (Bento & Dias, 2017). Also, there is a need for better understanding regarding the common misconception that playing outside during cold weather makes children sick. Schools should inform parents about dressing their children appropriately in all types of weather, particularly during cold or wet seasons. Most importantly, it is essential to understand that being cold or wet does not make children sick, rather boosts their immune systems.

Additionally, as Parsons and Traunter (2020) emphasise, 'A lack of cooperation and communication between the school leadership team and parents could lead to decreased opportunities for free access to the outdoors within the school day and a lack of appropriate clothing and resources provided by parents in order to enable this' (p. 705). In relation to these authors' points, the teachers in this current study stated that they had to leave some children inside the classroom with a partner teacher when the children's parents would not allow them to go outside on cold days. Also, some teachers stated having to completely cancel outdoor plans when the weather was either cold or rainy. Therefore, through written information sent home, displays at school, and/or conversations directly with parents, it is extremely important for teachers to clearly inform the parents about the physical, intellectual, and emotional benefits of outdoor time as well as the proper clothing needed by the children in different weather conditions (Parsons & Traunter, 2020). In the current study, the school did not have any written policies, protocols, and/or statements regarding outdoor play and learning. As a result, by making such resources available to parents it can be an effective way of getting parents better informed, involved, motivated, and satisfied in regard to the outdoor practices within the school (Bento & Dias, 2017).

As children play and learn during outdoor time, it is also extremely critical to better understand how teachers engage with children as well as how they create an environment that ignites the children's curiosity of the natural world. Although a majority of the teachers in this current study indicated their roles as coplayers, the teachers were primarily observed acting as the directors and/or onlookers of the children's play as a way of ensuring the children's safety and hygiene, which seemed relatable to the concerns voiced by parents during the interviews. Consequently, children had little ownership of their play and learning, and limited autonomy in choosing what they wanted to do as well as how they wanted to play during their outdoor time. For Canning (2010), since teachers have a strong influence on how children utilise and interact with their environment, it is essential that teachers work on 'their own beliefs and values about how much structure and direction to provide children' (p. 564). Therefore, teachers' professional development is a key component in helping expand teachers' understanding of their own role during children's outdoor play and learning (Bento & Dias, 2017; Davies, 1997; Ernst, 2014; McClintic & Petty, 2015; Waite, 2011). For instance, Dowda et al. (2009) find that teachers who have the requisite background knowledge and training are not only supportive of children's outdoor play but also motivated to prepare an environment for children that encourages physical activities and adventurous play. Thus, in this current study, the teachers who had background knowledge regarding outdoor education were observed preparing more nature-related activities which were integrated into a variety of themes. Nevertheless, they still did not seem to feel comfortable and/or motivated to encourage active and adventurous play among the children due to their perceived role as protectors to monitor and redirect the children's play when it was considered unsafe.

Additionally, the knowledge gained through professional development training should highlight to teachers the fundamental aspect of seeing the outdoors as in effect an extension of the indoors. Regardless, it was indicated through the document analysis of the teachers' monthly plans that a limited number of activities were allocated to outdoor time in comparison to the indoors. Importantly, in this current study, the classrooms made up of older students had less outdoor time due to their indoor schedules which included a greater number of 'academic subjects'. This finding was consistent with the results from previous studies where it is shown that teachers are of the opinion that, 'outdoor learning was not necessary because children learn indoors' (Tuuling et al., 2019, p. 364). However, rather than only seeing outdoor time as a break from indoor learning, teachers also need to consider the outdoors as a locus of learning where children can learn about math, science, art, and literacy while observing nature, interacting with natural elements, and developing an appreciation of the natural world. Therefore, continuous professional development in outdoor play and learning within schools is essential for teachers to take children outside as part of the everyday curriculum regardless of the challenges, concerns, and constraints.

Conclusion

The benefits children gain from the outdoors were reported by both groups of participants; the classroom teachers and children's parents. However, it was also acknowledged that there were barriers and concerns to children's outdoor time relative to the weather, hygiene, and safety related to outdoor activities. Collaboration between teachers and parents is important for developing a shared understanding regarding the guidelines for children's outdoor time to help ensure more opportunities, better appreciation, and overall motivations for providing chances for outdoor play and learning to take place.

Furthermore, through such collaborations it can also be ensured that schools are places where children can fulfil their physical, intellectual, and social-emotional needs via the outdoors. This is more and more of paramount importance in children's lives due to rapid urbanisation, a culture of fear, a greater number of academic pressures, and an increased number of after-school activities which keep children indoors and away from valuable outdoor play and learning. Finally, it was indicated in the results that seasonal changes seemed to affect teachers' outdoor plans negatively. However, it is critical for teachers and parents to appreciate the learning benefits of the outdoors at any time and in any season, so that children can learn not only about the weather and seasonal changes, but they also internalize the idea that learning occurs everywhere and at any time. In that way, the environmental awareness of children can be cultivated by developing responsible attitudes among students toward their peers as well as the environment.

Limitations of the study

Importantly, the findings from this current study should be interpreted with the following limitations in mind. First and foremost, the data were retrieved from only one school setting where 12 teachers and 35 parents volunteered to participate in this study, and as a result, the data should be interpreted cautiously since the results cannot be generalised. However, transferability can be applied while making connections between the current research situation and similar research situations and methods (Korstjens & Moser, 2018).

Second, the school where the data were collected was a private school, thus being accountable to the parents might have been a sensitive issue regarding the implementation of outdoor activities. Future research might be focused on a public school setting so that the results can be compared based on various outdoor environmental characteristics as well as the outdoor activities planned and carried out by teachers.

Third, the study did not cover the whole academic year, particularly the warmest seasons. The data were collected during the winter and spring seasons which might have impacted the outdoor practices of teachers as well as the play and learning children engaged in due to the poor weather conditions. Moreover, the children as the primary users of the outdoor environments, could also add their own unique perspectives to this topic. Lastly, school administrators play a critical role in deciding and preparing school policies in relation to outdoor time, thus by only obtaining data from the parents and teachers regarding this research topic, the findings of this current study may be limited in relation to gaining a broader perspective.

Implications

It appears from the results of this study that it is critical for schools to provide parents with adequate information regarding the appropriate clothing needed for their children to participate in outdoor activities during the different seasons. Also, it is important to invite parents to join some outdoor activities with their children such as gardening time, so that the parents can be better informed about how outdoor play and learning occur. Additionally, parents should be informed about the benefits of active play for their children's physical and psychological development as well as provide

documentation to them about some of the outdoor activities along with the accompanying academic outcomes of these activities. This can make the children's play and learning outdoors more transparent to parents, and as a result, encourage parents to be more supportive of their children's in-school access to the outdoors as well as after school and during weekends.

Furthermore, teachers need to reflect more deeply on how their roles during outdoor time affect how children play, explore, engage, and learn in the outdoors. Thus, equipping teachers with knowledge and opportunities for practice at the same time through in-service trainings, teachers can be empowered to make changes within their own outdoor activity preparations and practices. These trainings are important because as indicated in the findings of this current study as well as in previous studies, teachers having background knowledge regarding the benefits of children's outdoor play and learning is invaluable.

Higher education institutions are responsible for equipping pre-service teachers with the necessary theoretical and practical knowledge regarding the value of outdoor play and learning for children by offering elective and/or requisite courses in outdoor education. Thus, as stated at the beginning of this study, the ecological system children live in can either support or constrain the way they physically and psychologically grow and develop. That is, the multiple interconnected systems in which children's interactions take place influence how children grow and develop. For instance, various factors within each system including physical characteristics of the outdoor play area, teacher self-efficacy, parent support, neighbourhood characteristics, weather conditions, or even societal or cultural attitudes might influence teachers' decisions to go outside and use outdoors as one of the learning spaces.

Additionally, school administrators play an extremely critical role in supporting and motivating teachers by providing them the necessary resources and training as well as granting them the power to implement outdoor play and learning activities for children free from parental concerns and/or complaints. Moreover, communities and neighbourhoods are also responsible for providing outdoor play experiences by creating play areas that are easily accessible for children and their families.

Lastly, it is critical to look at the impact of liability concerns, laws, and governmental regulations on schools' outdoor practices. Legal liability concerns often create fear among teachers who may ultimately choose to remove outdoor play time or excessively control the children's activities by acting as safety monitors instead of educators.

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