



Exploring Environmental Supportiveness for Outdoor Play in Greek Preschools

Thesis submitted for the degree of Doctor of Philosophy

Institute of Education

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Declaration of original authorship

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Dimitra Kalpogianni

Dedication

This thesis is dedicated to my husband Konstantinos and our two sons Alexandros and Markos, the light of my life.

Acknowledgements

I would like to express my deepest gratitude to my supervisor Prof Helen Bilton for her untiring support and invaluable feedback, and for kindly and constructively challenging me towards developing my thinking and reflection upon my topic. I am also deeply grateful to my second supervisor Prof Alan Floyd for his insightful comments, his consistent guidance, and reassuring encouragement. I am also thankful to Prof Jill Porter, my initial second supervisor, for her help and pertinent direction in the planning of this study. I would also like to extend my sincere thanks to the Institute of Education for offering me support throughout my studies.

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Abstract

Outdoor play's multiple benefits for children's health, development, learning, and wellbeing depend upon the environment where it occurs, accentuating the responsibility of preschools, especially in light of restricted outdoor play opportunities. Despite growing interest into these issues in other countries, the topic remains under-researched in Greece and its ecological examination is limited. The purpose of this study, therefore, is to address this knowledge gap and examine the way the interrelationship between the organisational, human, and physical elements of the environment facilitates preschool outdoor play provision in Greece.

A sequential two-phase mixed methods design was used. The first phase combined desk research with a survey of educators from around Greece (n=662), whilst the second employed a mixed methods multiple embedded case study design, examining three institutions, non-profit, private play-based, and public. Data collection methods included interviews with preschool managers (n=3) and educators (n=6), questionnaires (n=36), physical environment and play observations (n=18, n=12), educator diaries (n=6), and document examination.

Following the integrated analysis of findings, the main barriers and enablers for the environmental supportiveness for outdoor play identified were: cultural perceptions; policy; pedagogical framing; staff training; staff engagement in planning, outdoor play, and reflective practice; physical environment's use; presence of loose parts, water, and messy materials; and time.

The Environmental Supportiveness for Outdoor Play in Preschool (ESOPP) model, introduced and further developed within this study, is proposed to offer a novel ecological conceptual framework to help explore preschool outdoor play provision in Greece. It is hoped that the study findings will inform theory, policy, and practice development, educator training, environmental design, and future research.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

This study aims to examine the Environmental Supportiveness for Outdoor Play in Preschool in Greek childcare¹, referring to the degree to which the interrelationship between the organisational, human, and physical elements of the environment facilitates preschool outdoor play provision.

A two-phase sequential mixed methods design was used to explore current practice in Greece, identify the main barriers and enablers, as well as the way environmental factors interrelate to shape provision influencing children's outdoor play opportunities.

This research aims to facilitate the enhancement of children's outdoor play within childcare centres, through widening the knowledge base and offering novel insights on the examination of this complex phenomenon. It is hoped that it will prove relevant and useful for educators, managers, policymakers, as well as other researchers.

In this chapter a general overview of this study will be provided, including establishing the research problem and gap in knowledge, expressing the researcher's personal and professional interest on this subject, presenting the study's research questions, and outlining its methodology. Additionally, the originality and significance of this research will be discussed, and an outline of the thesis' structure will be provided.

1.2 Research problem and gap in knowledge

Outdoor play has been widely acknowledged to benefit children's health; physical, social-emotional, and cognitive development; learning; and overall well-being (Australian Government, 2022; Dodd et al., 2022; Gray et al., 2015; NHS, 2022; Nigg et al., 2021; Pellegrini, 2009; Sando & Sandseter, 2020; Tandon et al., 2015; Tremblay et al., 2015; Wyver, 2017). Nevertheless, in many western countries outdoor play opportunities are in decline in recent years, placing children in a disadvantageous position (Clements, 2004;

¹ Within this study the terms 'childcare' and 'childcare centres' are used to refer to public, private, and non-profit preschool institutions catering for infants, toddlers, and young children up to the age of compulsory education. In Greece, preschool education and care operates under a split system between the kindergartens, included within compulsory education, and the childcare centres, to be further discussed in Chapter 4.

Lee et al., 2021; Preub et al., 2019; Tremblay et al., 2015; Waller et al., 2017; WHO, 2017; Yogman et al., 2018).

This phenomenon accentuates the already pivotal role of preschools for outdoor play provision, as many young children spend most of their waking hours within childcare settings (Howard & MacInnes, 2013; King & Howard, 2012; Nathan et al., 2022) often lacking other regular outdoor opportunities (Tandon et al., 2012). According to the World Health Organisation (WHO, 2016) “Health is created in the settings of everyday life - in the neighbourhoods and communities where people live, love, work, shop and play” (p.1), with educational and care settings identified as potential health promoting institutions (Ward, 2010; WHO, 2009, 2017). Stressing the critical function of preschools, Kemple et al. (2016) proposed: “the responsibility for providing time and space for outdoor play falls to the child-care industry” (p.448).

Within preschool pedagogy, the outdoor play environment held a prominent role in the writings of influential educational reformists such as Froebel and McMillan (Garrick, 2011; Johnson et al., 2005; McMillan, 1919, 1930; Tovey, 2014), however, more recently its structure and quality have been identified to receive less attention than the indoors, possibly because of the more established connection of the indoors with learning (Bilton, 2010; Kantz, 2004; Söderström et al., 2013). In addition, though outdoor play’s central role within early years education and care has been highlighted (Bilton, 2010, 2014a; Haughton & Ellis, 2016; Tovey, 2007, 2014; White, 2011, 2014; Waller et al., 2017; Waters & Maynard, 2014), difficulties regarding its actual integration in practice have been acknowledged (Maynard and Waters, 2007) and the educators’ knowledge and motivation to support it have been questioned (Copeland et al., 2012; McClintic & Petty, 2015). Thereby, preschool outdoor play provision may in many cases not fulfill pedagogical expectations or cover childrens’ needs, which in light of play’s general decline could accentuate children’s lack of outdoor opportunities. However, the way that the environment of childcare institutions facilitates children’s outdoor play has not been adequately studied (Lee et al., 2021; Ulset et al, 2017), nor have the factors enabling and hindering outdoor play provision, which is the research problem this study aims to address.

Rogers (2011) discussed the discrepancy between the volume of literature related to play in early childhood and our ability to define play pedagogy or clarify “how and in what ways do pedagogical practices shape the play experiences of young children” (p.5), highlighting a gap in knowledge. This is especially relevant to Greece, where outdoor play in childcare centres has been sparsely researched. An aspect further accentuating this gap would be

the lack of a consistent definition of play within preschool pedagogy and the tendency to categorise most children's behaviours as 'play' (Pellegrini, 2009), which may result in some of the existing research using the term 'outdoor play' not really examining play at all.

Within this study a holistic, ecological approach to the examination of outdoor play provision is adopted. An ecological view of play supports that children's outdoor play is not only dependent upon their personal attributes but is interlinked with the environment within which it occurs (Bilton, 2002; Bundy, 2003, 2012; Loebach & Cox, 2020; Sando & Sandseter, 2020; Wyver & Sandseter, 2019). This view is supported by the International Play Association (2016) stating "As children's well-being is shaped by where they live, the quality of play is fundamentally shaped by the environments it happens in" (p.2), going on to acknowledge the susceptibility of play's positive outcomes to the quality of the play environment. Most research attention in recent years appears to have focused on the physical environment (Czalczyńska-Podolska, 2014; Dymont & O'Connell, 2013; Gibson et al., 2017; Gull et al., 2020; Larrea et al., 2019; Luchs & Fikus, 2013; Olsen & Smith, 2017; Sando & Sandseter, 2020; Sandseter et al., 2022; Söderström et al., 2013; Woolley & Lowe, 2013) and the perceptions of the educators (Bilton, 2020; Cheng et al., 2022; Copeland et al., 2012; Dietze & Kashin, 2019; Goodling, 2016; McClintic & Petty, 2015; Spencer et al., 2019, 2021). However, additional parameters such as policy and culture have also been identified to influence provision. Policy surrounding play in preschool and outdoor environment regulations has been identified to create confusion or even restrict educator practice (Cheng et al., 2022; Dietze & Kashin, 2019; Rogers, 2010; Wood & Chesworth, 2017). Cultural perceptions of childhood and views on risk have also been associated with limitations to children's outdoor play opportunities (Jerebine et al., 2022; Spencer et al., 2021; Van Rooijen and Newstead, 2017). Nevertheless, limited studies have adopted an ecological approach to the examination of preschool outdoor play provision. Gibson's theory of affordances has been used in studies examining the preschool physical outdoor play environment, especially in Scandinavian countries (Almers et al., 2021; Kyttä, 2006; Larrea et al., 2019; Lerstrup et al., 2017; Sando & Sandseter, 2020; Sandseter et al., 2022). Cheng et al. (2022) used Bronfenbrenner's ecological systems theory to examine educator perceived challenges for promoting unstructured outdoor play. Lee et al. (2021) used the socioecological model framework in their systematic review of outdoor play and time correlates. Ecological factors were also highlighted in the protocol by Ramsden et al. (2022) for an outdoor play intervention study currently taking place in Canada. However, studies examining the way that the

organisational, human, and physical environment interact to influence preschool outdoor play provision appear to be lacking, indicating a gap in knowledge.

Thereby this study addresses a gap in knowledge on three levels. Firstly, in relation to the lack of evidence regarding outdoor play within Greek childcare. Secondly, addressing the need for further research on the ways that preschool institutions support outdoor play. And finally, in relation to adopting an ecological approach to the examination of this topic. The researcher's personal and professional interest on this subject will be discussed next.

1.3 Personal note expressing the researcher's personal and professional interest

I am a paediatric occupational therapist. This has been my profession for twenty-eight years, working with children and families, in close collaboration with teachers and educational institutions, both in the UK, where I worked for the NHS in community paediatrics, as well as in Greece. For almost thirteen years I have specifically worked within mainstream preschools, as a member of staff, rather than an external occupational therapist, with an aim for prevention and early identification of issues that could affect children, in close collaboration with the educators.

Play has been a very important part of my work since the very beginning. Within occupational therapy, play is considered one of the main occupations of childhood, making it one of the major aims for treatment. In addition, play is considered both an important way of assessing children's development, as well as the main vehicle for intervention. Therefore, the subject of play has been a steady interest of mine for many years, but I became even more focused on it since I had my own twin boys in 2009. Viewing play not only through a professional lens, but also as a mother, having the opportunity to witness it in an informal manner, such as in playgrounds, parties, and natural spaces, kindled my interest even more. It was through these observations, in combination with my clinical experience, that I became concerned about the play opportunities that children had in their everyday lives. Especially in relation to outdoor play, it seemed that even though the weather conditions in Greece, and especially Athens, are optimal for most of the year, the children were often kept indoors. I became very interested in learning more about the current state of play in different countries and turned to the literature, where my inkling that play had reduced, was indeed confirmed.

This realisation was very significant to me, as I view play to be vital for children's health, development, learning, and well-being and consider it my professional duty to advocate

for children's right to play. This is in line with the American Occupational Therapy Association (2008) statement: "Occupational therapy practitioners support, enhance, and defend children's right to play as individuals and as members of their families, peer groups and communities by promoting recognition of play's crucial role in children's development, health and well-being; establishing and restoring children's skills needed to engage in play; adapting play materials, objects and environments to facilitate optimal play experiences; and advocating for safe, inclusive play environments that are accessible to all" (p.707).

Seeing that there was no organisation in Greece dedicated to promoting children's play, not as a means for other goals but for play's sake, I co-founded a non-profit organisation called PLAYING in 2013, for the promotion of play in childhood and advocacy for children's right to play. It aims at changing the culture around play, through raising awareness and via education and support for parents, teachers, policy makers, and the community. It was through the focus on this work that the need arose for me to increase my knowledge both on the play subject itself, as well as on how to do research, in a more structured and guided way. The thought of doing a PhD had crossed my mind many times in the past, and my thinking had always been that I would embark on it, only if I found a subject that I was passionate about. It soon became clear that play was indeed this subject. The reason that I chose to abandon my professional comfort zone and do my PhD in Education is that I felt that this way I would expand my knowledge on pedagogical practice, increase my understanding of the educator role, develop a common language for collaboration, and enhance my ability to support the promotion of play within educational institutions. Having reached the end of my studies I am pleased to report that these aspirations were materialised and I have come out of this process richer.

I hope that this personal note is helpful to the reader in relation to who I am and where I am coming from, as a person, professional, and subsequently as a researcher. It is also important for me to publicly acknowledge my personal views and experiences, as they inform my research but may also affect it. Throughout the course of my studies, I intended to be as self-aware as possible in relation to my own subjectivity, aiming to preserve the quality of my research. These issues will be further explored in the Methodology Chapter 3. The study's research questions are presented next.

1.4 Research questions

This study aims to explore current outdoor play provision, as well as offer explanations regarding the barriers and enablers to the environmental supportiveness for outdoor play within Greek childcare centres, referring to the degree to which the interrelationship between the organisational, human, and physical elements of the environment facilitates preschool outdoor play provision. The overarching study's research question is:

'What are the main barriers and enablers to the environmental supportiveness for outdoor play in Greek childcare centres?'

To answer this though, the following subquestions will also be addressed within the case studies:

RSQ1: How does the Organisational Environment influence the environmental supportiveness for outdoor play within this childcare setting?

RSQ2: How does the Human Environment influence the environmental supportiveness for outdoor play within this childcare setting?

RSQ3: How does the Physical Environment influence the environmental supportiveness for outdoor play within this childcare setting?

A brief overview of the study's methodology will be discussed next.

1.5 Methodology overview

This study employed a two-phase sequential mixed methods design. The first exploratory and descriptive phase combined desk research with a survey of educators from around Greece, aiming to sketch a picture of outdoor play provision within Greek childcare centres. Through the desk research various document sources were accessed, including national and international statistics, policy and guidelines, central and local governmental documents, national and European Union reports, and University curricula, with an aim to increase the understanding of conditions governing outdoor play within Greek childcare.

The survey study aimed to collect evidence on the views and practice of staff working within public childcare centres and reached a convenience sample of 662 educators from around Greece. A questionnaire was developed as this study's data collection method, combining closed, scaled, ranked, and open-ended questions. The quantitative data collected was analysed through descriptive statistical methods using the SPSS software,

whereas the qualitative data was analysed using data-driven thematic analysis in accordance with Braun et al.'s (2018) guidelines, supported by the NVivo qualitative data analysis software.

The findings of the first phase of the study and the literature review informed the design of the second phase of the research, which employed a mixed-methods multiple embedded case study design, with an exploratory, descriptive, and explanatory aim. Three preschool institutions in the northern sector of Athens were included as case studies, non-profit, private play-based, and public municipality²-run, with two classes within each as embedded sub-cases. Data collection methods utilised were semi-structured interviews of the preschool managers and two educators per institution, staff questionnaires, physical environment observations, naturalistic outdoor play semi-structured observations, educator diaries, and document examination, with most data collected being qualitative. A researcher diary, including field notes as well as the researcher's thoughts, ideas, and reflections was also kept for the duration of the study. Analysis of the data was initially done separately for each case study, following Braun et al.'s (2018) guide on thematic analysis, including dataset familiarisation, coding, initial theme generation, reviewing and developing the themes, and further refining, defining, and naming themes. The NVivo qualitative data analysis software was used to support data organisation and development of the coding frame.

The findings of the first and second phases were then revisited and re-analysed in a holistic, comparative, integrated manner (Bazeley, 2018; Yin, 2014). Reflexive thematic analysis was used to develop themes based on data from both phases of the study (Braun et al., 2018) to address the study's main research question, with data from each stage and data collection method informing, questioning, and enhancing the findings (Feilzer, 2010). The interpretation of findings was guided by abductive reasoning, involving iterative reflection upon theory and data, enabling the reaching of metainferences (Cresswell, 2022; Hirose & Creswell, 2023) or 'warranted assertions' (Dewey, 1941/2008), identified as the aim of mixed-methods research (Bazeley, 2018). The study's methodology will be discussed in detail in the Methodology Chapter 3. The study's originality and significance will be discussed next.

² Municipality refers to "a political subdivision of a state within which a municipal corporation has been established to provide general local government for a specific population concentration in a defined area". (Britannica, 1998)

1.6 Originality and significance of the research

The study's originality primarily relates to the introduction of the conceptual framework of Environmental Supportiveness for Outdoor Play in Preschool, never before used in the examination of outdoor play provision. This ecological approach incorporating the interrelationship of the organisational, human, and physical environments proposes an original way to the examination of preschool outdoor play provision which could offer new insights to this phenomenon. The study's conceptual framework will be discussed in more detail in the next chapter.

Furthermore, this research is original in relation to the examination of outdoor play provision within Greek childcare, an area sparsely researched and never examined through an ecological approach.

As for the study's significance, this research raises the issue of environmental supportiveness for outdoor play in preschool viewed in the context of human rights and social justice, thereby highlighting the responsibility of policy makers, governing authorities, preschool institutions, and individual educators to support children's outdoor play opportunities. This study could increase our understanding of the complexity surrounding preschool outdoor play provision, enhance the knowledge base on how the environmental supportiveness for outdoor play in preschool is shaped, inform theory, pedagogical practice, and environmental design, facilitate the development of educator training, influence policy development, as well as provoke future research, making it worthwhile. This endeavour is also timely, considering outdoor play's decline, the aftereffects of the COVID lockdowns, as well as a recent introduction of new policy for childcare in Greece. This study's significance though transcends its usefulness for Greek preschool outdoor play practice, as the identification of possible limiting and enabling factors in a country such as Greece, where outdoor play is underdeveloped in early years settings even though weather conditions are optimal, could also be informative for other countries facing similar challenges.

1.7 Thesis Structure

This thesis is organised in the following nine chapters:

In Chapter 1 'Introduction' a general overview of this study is provided, referring to the research topic and gap in knowledge, the researcher's personal and professional interest

on this subject, the study's research questions and methodology, its originality and significance, and an outline of the thesis' structure.

In Chapter 2 'Conceptual Framework and Literature Review' the study's conceptual framework of Environmental Supportiveness for Outdoor Play in Preschool (ESOPP) will be presented and the literature surrounding this topic will be reviewed. Though the ESOPP model was conceptualised during the course of the study, based on the literature review and the first phase findings, a choice was made to be presented early in the thesis with a view to establish how it links with an ecological view of play and to provide the reader with the rationale underpinning the research.

In Chapter 3 'Methodology' the study's research paradigm, methodology, data collection methods and analysis will be discussed. Ethical considerations and the study's limitations will be identified, and the research quality criteria will be considered.

In Chapter 4 'First Phase of the Study' information will be provided on the Greek preschool education and care system as well as outdoor play in childcare centres, and the findings of the first phase of the study will be presented.

In Chapter 5 'First Case Study Findings' the findings of the first case study, carried out in a non-profit preschool will be reported.

In Chapter 6 'Second Case Study Findings' the findings of the second case study, carried out in a private play-based preschool will be reported.

In Chapter 7 'Third Case Study Findings' the findings of the third case study, carried out in a public municipality-run preschool will be reported.

In Chapter 8 'Discussion' the study's overarching research question will be addressed. The main themes identified as barriers and enablers for the environmental supportiveness for outdoor play will be discussed and a theoretical discussion focused on the integrated analysis of the data presented in the previous chapters will be provided.

Finally, Chapter 9 'Conclusion' will present a summary of the research, the main study findings, its original contribution to knowledge, implications for policy and educator training, limitations of the study, as well as suggestions for further research. This chapter will conclude with a personal account of the researcher's journey.

1.8 Summary

This chapter provided a general overview of the study, presenting the research topic and gap in knowledge, the researcher's personal and professional interest on the subject, the

study's research questions and methodology, its originality and significance, as well as an outline of the thesis' structure. The following chapter will introduce the study's conceptual framework and present a review of the literature.

CHAPTER 2: CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to outline the study's conceptual framework and review the related literature. The conceptual model of Environmental Supportiveness for Outdoor Play in Preschool will be introduced, based on an ecological view of play, proposing that the environmental supportiveness for outdoor play emerges through the interrelationship of the preschool's organisational, human, and physical environments. Following the description of the search strategy and the conceptual framework's outline, a review of the literature will be presented. The first section of the literature review (2.3) will start with the subject of play, as an elusive phenomenon, a human right, and a major childhood occupation, followed by a discussion of the outdoor play context, outdoor play's benefits for children, and an examination of outdoor play within past and present preschool pedagogy. The second section (2.4) will analyse the ecological rationale underpinning the study and its main concepts of time, organisational, human, and physical environments. Literature specifically pertaining to Greece will be presented in Chapter 4 'First Phase of the study'. The study's search strategy will now be discussed.

2.1.1 Search strategy

Aiming to acquire a comprehensive understanding of the existing literature and research into outdoor play in preschool, some predetermined strategies were initially utilised, such as reading key authors and papers, identifying books related to this area, as well as performing a systematic literature search using combinations of key words and phrases, like "outdoor*", "outdoor play" or "outdoor environment", together with "play", "preschool", "nursery*", "early years" or "kindergarten", for papers published in English, in peer reviewed journals from 1995 onwards. Following this process, relevant work cited within the publications identified was additionally examined. These strategies were repeated at many points in time within the study, and alerts for new publications fulfilling the search criteria were set up, in the format: ("outdoor play" OR "outdoor environment" AND (preschool OR early years OR kindergarten OR nursery*)), on the following databases: Education Research Complete, MEDLINE, British Education Index, ERIC, Child Development & Adolescent Studies, Education Abstracts, Educational Administration Abstracts.

To acquire additional information regarding Greek policy and practice, legislative documents, guidelines, reports, and publications through governmental, University, or international sources were also tracked to be presented in Chapter 4.

As this study progressed though, the process of reviewing the literature became more organic, branching into many additional fields. This led to the exploration of a multitude of concepts, both in relation to theory as well as practice, expanding into areas such as philosophy, pedagogy, ecological and environmental psychology, sociology, human geography, and organisational culture, among others. The views of prominent authors within the fields of occupational therapy and occupational science were also explored, with the work of Anita Bundy on environmental supportiveness for play providing a source of inspiration for this study. As the research evolved, the work of authors from the past century such as Lewin and Dewey, who first expressed views identified as key to this study was examined, seeking to gain a greater understanding of ecological, social, and transactional concepts. This wider review process greatly influenced this study's rationale and underlies the development of the conceptual model of Environmental Supportiveness for Outdoor Play in Preschool which will be introduced in the next section. The literature review underlying this model will then be presented in a narrative fashion (Bearman et al., 2012).

2.2 The conceptual model of Environmental Supportiveness for Outdoor Play in Preschool

Based on the literature review as well as the findings of the first phase of the study, the construct of "Environmental Supportiveness for Outdoor Play in Preschool" (ESOPP) was proposed, defined as the degree to which the interrelationship between the organisational, human, and physical elements of the environment facilitates preschool outdoor play provision. The organisational environment refers to external and internal aspects of the organisation, relating to culture, policy, and structure. The human environment relates to the characteristics, values, perceptions, planning, and actions of the preschool staff, including educators and managers. The physical environment refers to the space, objects, and sensory characteristics of the preschool's outdoor play area. Sensory characteristics within this study refer to the sensory possibilities that the environment affords children. Even though the organisational, human, and physical environments are going to be discussed in different sections for clarity purposes, it is important to note that upholding an ecological perspective, these elements are proposed to interrelate. The term "supportiveness" implies an active stance and a sense of

responsibility for children's play on the part of the governing bodies, preschool institutions, and practitioners, in line with a view of play as a right for all children. The following diagram depicts an initial visual representation of this model.

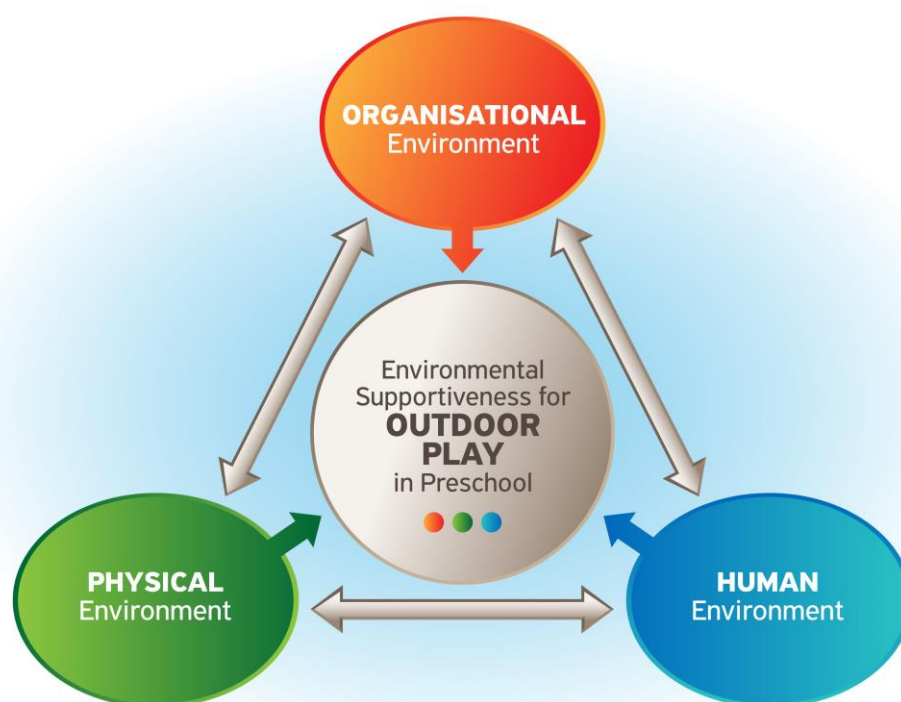


Figure 2.1: Environmental Supportiveness for Outdoor Play in Preschool Model.

The notion of environmental supportiveness for play was introduced by Anita Bundy (1999, 2003), an occupational therapist, academic, researcher and author, as one of five connected play facets including children's: a) play skills, b) playfulness, c) play activities and d) sources of motivation for play (Bundy, 2011). She developed the Test of Environmental Supportiveness for Play (TOES) (Bundy, 1999, 2003; Skard & Bundy, 2008) (Appendix A) within a therapeutic perspective, to examine the fit between environmental elements and an individual child's play, proposing that "An analysis of how the environment supports play answers the following question. 'To what degree do the elements of the environment motivate and encourage play?'" (Bundy, 2011, p.140).

This thesis expands upon Bundy's work, relating environmental supportiveness to outdoor play provision in the preschool context, viewing it not on an individual level but in relation

to groups, and including all children, not only those with special educational needs. The rest of the chapter will demonstrate how this framework relates to the literature.

The fact that children are not included in this model is not indicative of a lack of appreciation for their agency or the value of their participation. Seeing that this model proposes a novel way to examine the environmental supportiveness for outdoor play within preschool it was deemed best to firstly examine the organisational, human, and physical elements surrounding the children, which though to a large extent out of their control nevertheless determine their play environment. It is envisaged that the children will be added in a central way to this model at a later stage of its development.

The multifaceted concept of play, central within this study, will be discussed first, forming the basis for all the other concepts to be presented.

2.3 Play

2.3.1 The elusive Play phenomenon

Scholars over the years have expressed their difficulty in fully defining play (Pellegrini, 2011; Rubin et al., 1983; Sutton-Smith, 1997, 2008). This could partly relate to play's diversity, the various viewpoints of scholars studying it, but also to "the fact that play proves often a subtle, elusive phenomenon that seems to appear without notice and then disappear just as quickly" (Henricks, 2008, p. 160). Sutton-Smith (1997) elaborated on the ambiguous nature of play and viewed it "as an existential, separately motivated reality" for children (p. 98). Else (2014) described play as a 'process', focusing on the essence of the play experience, as "a way of being, a way of performing an activity, rather than the activity itself" (p.35). Similarly, Gray (2013) focused on mental attitude and motivation, rather than overt behaviour, as central play identification parameters. Theorists have described dispositional factors characterising play, such as: intrinsic motivation, attention to means rather than ends, internal locus of control, free choice, non-literality, positive affect, and active engagement (Burghardt, 2011; Gray, 2009; Pellegrini, 2009; Rubin et al., 1983). Additionally, play has been viewed not only within a dichotomy between 'play' and 'non-play', but also as a continuum of more or less playful behaviours (Krasnor & Pepler, 1980; Rubin et al., 1983), thereby widening what can be ascribed as play (Gray, 2013; Pellegrini, 2009). We could infer that what adults recognize as play relates to their theoretical understanding of what it is, which lacking a unified play theory can be very diverse.

Play theorists and researchers have attempted many classifications of play types, focusing on the form of observable behaviour, or on play's perceived function (Burghardt, 2011; Else, 2014; Frost, 1992; Gray, 2013; Hughes, 2002; Piaget, 1962; Rubin, 1989; Smilansky, 1968; Sutton-Smith, 1997). Although using play classifications in research is common, play types have been identified as difficult to differentiate, due to the overlap in observable behaviours and the multitude of play effects (Loebach & Kox, 2020; Luchs & Fikus, 2013). During play, children not only quickly flow between play forms but also engage in behaviours which could fall under more than one categories (Tovey, 2007, Pellegrini, 2009), creating situations where "boundaries between different play types are quite blurry, and perhaps even non-existent in some observations" (Sando & Sandseter, 2020, p.7). The possibility that the inherent structures of classifications as well as utilising mutually exclusive play categories in research may accentuate the identification of certain play behaviours while underplaying or ignoring other significant elements has been highlighted, especially in relation to outdoor play (Lerstrup & Konijnendijk van den Bosch, 2017; Loebach & Kox, 2020; Sandseter et al., 2022). In line with this view, within this study children's behaviours outdoors will not be categorised under preset play classifications, but described in a narrative fashion, as will be further discussed in the Methodology chapter.

Having acknowledged the issues surrounding play's definition and classification, play in the context of human rights will now be discussed.

2.3.2 Play: A right for all children?

Play has been recognised as a right for all children since the 1959 United Nations declaration and explicitly in Article 31 of the 1989 Convention on the Rights of the Child (UN, 2013). However, children's play in many western countries is declining (Ginsburg, 2007; Waller et al., 2017; Tremblay et al., 2015; Yogman et al., 2018). This reduction has especially affected young children's opportunities to play outdoors, attributed to a combination of factors, such as reduced parental time (Cleland et al., 2010; Tandon et al., 2012); limited or unsafe spaces, traffic, and fears for children's safety (Carver et al., 2008; Clements, 2004; Gill, 2007; Kernan & Devine, 2010; Louv, 2008; Sandseter et al., 2019; Wyver et al., 2010; 2012); increased structured adult-led activities, childhood commercialisation, and escalation of screen-based entertainment (Clements, 2004; Kernan & Devine, 2010; Skår & Krogh, 2009); as well as a heightened focus on academic skills and the devaluing of play (Miller & Almon, 2009; Pyle & Danniels, 2017; Waller et al., 2010, 2017; Yogman et al., 2018). Some of the aforementioned factors appear to have an inadvertent effect on children's play, while others actively seem to limit it.

Nevertheless, play's value for children is explicitly supported by the UN Committee (2013) cautioning that it "is often considered non-essential" and reaffirming "that it is a fundamental and vital dimension of the pleasure of childhood", critical for children's health and well-being, "as well as an essential component of physical, social, cognitive, emotional and spiritual development" (p.6). The Committee goes on to propose play as promoting "creativity, imagination, self-confidence, self-efficacy, as well as physical, social, cognitive and emotional strength and skills" and contributing "to all aspects of learning..." (p.4).

Regardless of contributing to other outcomes though, play is acknowledged as important in its own right, a rationale underpinning this study. The UN Committee (2013) stresses play's autotelic and intrinsically motivated character, stating that "play itself is non-compulsory, driven by intrinsic motivation and undertaken for its own sake, rather than as a means to an end" (p.5). Supporting this stance, the European Early Childhood Education Research Association (EECERA) (2017) states that "play is also valuable on its own right as a meaningful socio-cultural activity and not just because of its relation to learning" (p.4). Nevertheless, play appears to be often side-lined, in favor of more controlled, adult-led, outcome-focused activities, or even harnessed to achieve other, more socially valued, measurable goals, especially within education (Rogers, 2010; UN, 2013; Wood & Chesworth, 2017). This marginalisation of play though is often obscure, as many of these activities are referred to and marketed as play, through a social and literary tendency of grouping and labelling most of children's everyday behaviours or interactions under this term (Pellegrini, 2009). The UN Committee (2013) expressed concerns regarding the adult-directed types of provision prioritised for children, stressing the need "to create time and space for children to engage in spontaneous play, recreation and creativity, and to promote societal attitudes that support and encourage such activity" (p.3). This statement highlights not only the practical, but also the cultural and attitudinal elements which can affect children's play, an area explored within this study, while also accentuating the responsibility of societal structures to actively promote a positive stance towards play.

Viewing children's play as a human right raises the issue of moral as well as legislative obligation to support it, highlighting the action or inaction of the adults, institutions, governments, and policy makers, as "in the absence of action, rights are mere words on paper", especially critical for children from disadvantaged backgrounds (Nussbaum, 2011, p. 65). Similarly, discussing the rights of children with disabilities, reduced opportunities for outdoor play have been highlighted, accentuating the societal need to facilitate it (Flynn & Kieff, 2002; Moore et al., 2020, 2022; Taylor et al., 2022). This study upholds a

view of play as a human right requiring active and explicit support, with outdoor play provision identified as influencing social justice. Having discussed play in the context of human rights, play's occupational nature will now be explored.

2.3.3 Play: A major childhood occupation

Within occupational therapy and occupational science, play is considered a major childhood occupation and an aim in its own right (Bundy, 2012, Knox, 2008, Lynch & Moore, 2016; Rodger & Ziviani, 2006). Occupations refer to “all the things we need, want or have to do” (Wilcock, 2005, p.8), defined as “a contextually bound synthesis of meaningful doing, being, belonging and becoming that influence health and wellbeing” (Gallagher et al., 2015, p.1). Occupations’ potential to promote well-being and health forms a pillar within occupational science and therapy (Gallagher et al., 2015; Whiteford & Hocking, 2012; Wilcock, 1998). Hooper and Wood (2014) emphasise the occupational nature of humans, suggesting that regardless of abilities or age we “require occupation to grow and thrive; in pursuing occupation humans express the totality of their being, a mind-body-spirit union” (p.38), particularly evident in children’s play. Nevertheless, divergence in the way that play is perceived, especially within adult-led settings such as educational institutions, has been raised. Brown and Lynch (2022) differentiated between ‘play occupations’ which are “controlled and organized by the child themselves and can assume limitless diverse forms of play, either individually or in groups” (p.2) and ‘play-based work occupations’ “characterized as being extrinsically motivated, other person selected and externally controlled, in addition to being outcome, end-product and goal driven” (p.3). Play-based work occupations, referring to adult interventions taking the form of playful activities and instruction, are very common within educational practice. However, within this study the scope is to examine the way that children’s self-directed play is supported within preschool, not playful adult-led activities.

Additionally, this study examines play occupation at a group level. The group nature of occupations has more recently been recognized, such as within families, communities, or classrooms (Pentland et al., 2018). Dickie et al. (2006) critiqued individualism within occupational science, whereas Pentland et al. (2019) proposed that an individualistic focus could limit the “recognition and understanding of those essential elements of occupation and health that emerge from the interactions between the numerous people involved” (p.4). The American Occupational Therapy Association (2020) linked occupations to groups and populations, considering them as vital to their “health, identity, and sense of competence as well as carrying meaning and value” (p. 7). This rationale would apply to the play occupation of the population of children within the preschool

environment, underpinning this research. Having acknowledged play's occupational nature, the outdoor play context will now be discussed.

2.3.4 The outdoor play context

Rubin et al. (1983) described play context as one of three ways to define play, in addition to disposition and observable behaviour. Knox (2010) discussed context as one of the four elements through which play can be examined, also including form, function and meaning, stating that it "denotes the individual's environments and the personal, physical, and social elements of each environment" (p.540). The construct of 'outdoor play in preschool', which is the focus of this research, is a way to characterise play precisely by its context, which in this case is the outdoor environment where play occurs while children attend preschool. Scaffa et al. (2008) supported that the play occupation and the play context "are enmeshed with one another" (p.5), while Cutchin and Dickie (2012) also proposed that "the context of action (...) is always part of the process of action" (p. 29), which support this study's ecological approach towards outdoor play, to be further discussed in section 2.4. Outdoor play's benefits will be discussed next.

2.3.5 Benefits of outdoor play

Outdoor play has been acknowledged to offer a multitude of benefits, with children's health being one of the most discussed. Health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2020, p.1). In relation to physical health, outdoor play has been identified as enhancing children's opportunities for fresh air and physical activity; increasing the flow of oxygen-rich blood to the brain; supporting lung function; contributing to muscle, bone and joint health; reducing the risk of obesity, as well as strengthening the heart (Bell et al., 2008; Gray et al., 2015; Kemple et al., 2016; Tandon et al., 2015; Truelove et al., 2018). In addition, being outdoors has been found to reduce infection spread, vitamin D deficiency, myopia, and asthma (Lovasi et al., 2008; Rose et al., 2008; Misra et al., 2008; Söderström et al., 2013). Zhang et al. (2021a) reported an increase in children's myopia following the COVID-19 lockdowns, linking it to decreased outdoor time. Dubnov-Raz et al. (2021) reported a post-lockdown significant increase in obesity rates for preschool-aged children, associating it to reduced outdoor play opportunities while preschools were closed. Children's outdoor play experiences have also been identified to have protective properties regarding future health choices, going up to adulthood (Johnson et al., 2005), for example early increased outdoor play opportunities predicted less sedentary behaviours in later childhood (Nigg et al., 2021).

Much of the recent research focus has been on outdoor play's positive link with physical activity (Bjorgen, 2016; Copeland et al., 2015; Gray et al., 2015; Koepp et al., 2022; Nigg et al., 2021; Tandon et al., 2015; Vanderloo et al., 2013). Physical inactivity has been identified as one of the four key risk factors for non-communicable diseases (NCD), like diabetes and cardiovascular problems, with the WHO (2017) expressing concerns that "children exposed to NCD risk factors often suffer severe health consequences in adulthood" (p. 1). Guidelines refer to at least three hours of daily physical activity for preschoolers, achieved mainly through active, unstructured play (NHS, 2022; Australian Government, 2022; US Centres for Disease Control and Prevention, 2022; WHO, 2019). The role of preschools has been identified as significant for physical activity promotion (Messing et al., 2019; Nathan et al., 2022; Yoong et al., 2022) with the Institute of Medicine (2011) suggesting 15 minutes of physical activity for every hour in care. Koepp et al. (2022) reported that through outdoor play in preschool children achieved minimum physical activity recommendations in half the time, compared to indoors. Nevertheless, studies have identified that children's physical activity within preschool tends to be low (Copeland et al., 2012; Hinkley et al., 2016; Tandon et al., 2015; Reilly, 2010), while Ward et al. (2008) characterised certain childcare centres as 'obesogenic environments'.

Answering these concerns, encouraging outdoor play in preschool to increase physical activity could be seen as a positive step in covering children's play needs, but could however endorse a one-dimensional view of outdoor play (Alexander et al., 2015; Wyver, 2017). For instance, quantitatively monitoring children's physical activity e.g. through accelerometry, is considered optimal (Skouteris et al., 2012), but exploring outdoor play through such a measure could constrict its complexity and potential, reminiscing of past approaches to play as surplus energy expenditure such as by Schiller (1759-1805) or Spencer (1820-1903) (Santer et al., 2007; Saracho, 2017), or in the case of anti-obesity campaigns, calorie-expenditure, which by no means expresses what it means to children or what it additionally has to offer. A quantity-focused mechanistic approach might also fail to fully uncover the way that outdoor play enhances active movement, lacking the aspect of meaning. For instance, children's motivation to move has been related to pretend play, not only to motor or arousal elements, with Frampton et al. (2015) suggesting: "children rarely engage in locomotor play just for the enjoyment of the physical activity itself, but instead it might be the emerging story that necessitates it" (p.130-131). This highlights the need for research to supersede physical activity measures, encompassing outdoor play's holistic effects and health promoting capacity (Burdette & Whitaker, 2005).

Addressing mental health, play and nature exposure, have been acknowledged to lower children's stress (Yogman et al., 2018), especially for children from deprived areas (Söderström et al., 2013), reduce symptoms of inattention and hyperactivity (Kuo & Faber, 2004; Ulset et al., 2017) and increase the development of self-regulation in preschool children (Becker et al., 2014). Contrarily, lack of nature exposure in childhood has been associated with worse mental health in adulthood (Preub, et al., 2019), while play deprivation to increased prevalence of attention-deficit/ hyperactivity disorder (Panskepp, 2007; Yogman, et. al, 2018). A UK study examining the effects of play on children's mental health during the first COVID lockdown found less internalising problems, such as anxiety and depression, and a more positive affect in children that engaged in adventurous play (Dodd et al., 2022). Recent studies have also indicated the positive effects of outdoor play in preschool to children's overall well-being (Sando & Sandseter, 2020; Storli & Sandseter, 2019).

Outdoor play has been identified as "essential for healthy child development" (Tremblay et al., 2015, p.6475). According to the American Academy of Pediatrics, "play has been shown to have both direct and indirect effects on brain structure and functioning", at the molecular, cellular, and behavioral levels "that promote learning and adaptive and/or prosocial behavior" (Yogman et al., 2018, p.5). The preliminary findings of a longitudinal study from Brown University's Advanced Baby Imaging Lab indicated significantly reduced verbal, motor and cognitive skills for babies and toddlers following COVID restrictions, mostly affecting boys and children from lower socioeconomic background (Deoni et al., 2021), with reduced play and outdoor opportunities within the factors identified for this developmental drop (Wenner Moyer, 2022).

Even though child development is often divided by theorists into broad domains, such as: physical, social-emotional, and cognitive; it is not truly partitioned, but combined "in an integrated, holistic fashion to yield the living, growing child", with each domain both affecting and being affected by the others (Berk, 2013, p.4). Loebach and Cox (2020) supported a holistic view of outdoor play's developmental effects, cautioning against "associating certain types of play with a single area of development" (p.2). In this text discussing developmental outcomes in separation is done only for practical purposes, but a view that they intertwine is upheld.

Outdoor play has been identified as effectively supporting children's physical development, in relation to gross and fine motor coordination, strength, stamina, balance and agility (Dankiw et al., 2020; Fjørtoft, 2001; Johnson et al., 2005; Kemple et al., 2016; Little & Wyver, 2008; Maynard et al., 2013; Pellegrini, 2009, 2011; Woolley & Lowe, 2013).

Szeszulski et al. (2022) associated the quality of the outdoor preschool play environment with better locomotor skills. In addition, rich outdoor opportunities have been proposed to support children's sensory processing and sensory integration, functions interlinked with motor development (Ayres, 2005; Mailloux & Burke, 2008; Schaaf & Smith Roley, 2006; Roley et al., 2009; Wang et al., 2021; Yogman et al., 2018). These views are consistent with an ecological rather than maturational outlook of sensory-motor development, viewing it as a dynamic process involving the environment, not only children's individual genetic and structural characteristics (Haywood & Getchell, 2020; Newell, 1986).

Playing outdoors has also been identified to support children's emotional development (Kemple et al., 2016; McClintic & Petty, 2015). According to Ginsburg (2007) "play allows children to create and explore a world they can master, conquering their fears" (p.183), going on to link play to future benefits related to confidence and resilience. When outdoors children also have more chances to engage in play with an element of risk (Sandseter et al., 2021), which apart from being beneficial for children's health and development (Brussoni et al., 2015), is identified as having an antiphobic effect (Sandseter & Kennair, 2011) and puts children in a position where they gradually learn to manage risk and "navigate uncertainty and coping, leading to decreased anxiety over time" (Spencer et al., 2021, p.214). Outdoor play has also been suggested to support children's spiritual development, offering "numerous, high-quality opportunities for children to create and negotiate meaning" (Aasen et al., 2009, p.5), with most adults describing outdoor play spaces as their favorite when children (Kemple et al., 2016). However, the spiritual effects of outdoor play have received more limited attention, possibly due to the increased difficulty in examining this phenomenon.

Outdoor play additionally encourages social interactions, better communication, more complex language, and the development of friendships between the children (Canning, 2010; Frost, 2004; Kantz, 2004), while reducing inappropriate in-class behaviours (Ridgway et al., 2003). The outdoors facilitates group play in self-chosen activities, offering opportunities for negotiating, making joint decisions, and modifying the rules of play, thus building children's socio-emotional capabilities "critical to successful social relations during childhood and later in life, such as cooperation, flexibility, empathy" (Loebach & Kox, 2020, p.21). Though these benefits are widely supported in the literature, they are often backed by opinion-pieces or small-scale studies, which would warrant further research in this crucial area, especially in light of children's limited social outdoor play opportunities in many western countries. Better early peer play ability has been identified as a protective factor for mental health issues in later childhood (Zhao & Gibson, 2022), whereas social play deprivation may negatively affect children's affect and

behaviour, with Sama et al. (2021) reporting increased irritation, anger, and quarreling between children, as well as parental concerns regarding children's social development in a nationwide post-lockdown study in India.

The more informal and egalitarian outdoor play environment has also been proposed as an optimal setting for children to learn democratic values (Aasen et al., 2009; Waite et al., 2013). This is in line with Dewey's and Lewin's views on democracy needing to be mastered by each new generation, with Lewin (1948) proposing: "Autocracy is imposed upon the individual. Democracy he has to learn" (p. 82). The outdoor environment is perceived "to disrupt the usual cultural expectations of adults and children" regarding children's behaviour (Waite et al., 2013, p.258), supporting increased opportunities for children's participation, choice, and influence on their environment, pushing boundaries, and experiencing self-determination (Aasen et al., 2009; Alme & Reime, 2021; Bilton, 2010). Nevertheless, recent studies supporting its' effects on children's participation and democratic enculturation could be seen to produce context-bound findings, with this area requiring further research. In addition, exposure to play environments with more natural features can help children develop their eco-psychological self, referring to identification with nature and caring for the environment (Kemple et al., 2016; Sobel, 2004; St. John & MacDonald, 2007).

Moving on to cognitive development, its link to play has been central to both the work of Piaget (1962) and Vygotsky (1967). Play in outdoor environments has been proposed to support children's cognitive development, curiosity, exploration, imagination, creativity, and executive skills (Dankiw et al., 2020; Loebach & Cox, 2020; Wyver, 2017). Ulset et al. (2017) suggested that "high exposure to outdoor environments might be a cheap, accessible and environmentally friendly way of supporting and enhancing children's self-regulatory capacities and cognitive development" (p. 78). Two recent studies focusing on physical activity proposed outdoor play as a strategy for supporting children's executive functions development in preschool, with Rosiek et al. (2022) identifying increased inhibitory control and Koepp et al. (2022) greater attention during circle time. However, interpreting outdoor play outcomes only through the lens of physical activity, as in these studies, though easier to measure, may limit research conclusions or disregard the effect of other coinciding parameters, such as self-direction, sensory experiences, or social interaction on cognitive functions.

In relation to learning, outdoor play is acknowledged to kindle children's curiosity regarding the world around them, and support exploration, observation, labeling, description, comparison, classification, experimentation, problem solving and behavioral

flexibility, reinforcing learning how to learn rather than just information acquisition (Adolph, 2019; Kemple, 2016). Nevertheless, “adults’ orchestration of the majority of activity in schools creates a tendency for children to be observers rather than participants (or initiators) in learning” (Waite et al., 2013, p.258). The outdoor context as previously discussed, endorses a shift in this balance, supporting children’s active engagement, which within a rich environment can lead to concrete and meaningful learning experiences (Johnson et al., 2005; Laevers, 1997; Laevers & Heylen, 2003; Storli et al., 2020). However, more larger scale studies would be required to establish outdoor play’s effects on children’s learning, to create a robust evidence-base. An element warranting special attention would be the examination of outdoor play’s long-term benefits on children’s learning as well as their stance towards education, requiring longitudinal studies with methodologies able to support the complexity of this phenomenon.

Though outdoor play has been acknowledged to offer a multitude of benefits for children’s health, development, social participation, learning and well-being, more research is required to collect firmer evidence regarding outdoor play’s short and long-term benefits, as well as on how these are facilitated within the preschool environment (Ulset et al., 2017). An additional consideration relates to research methodology decisions, such as research design, sampling, and choice of tools, as these could affect both the detection of play benefits, as well as the understanding regarding why these transpire (Gibson et al., 2017; Sando & Sandseter, 2020). Outdoor play within preschool pedagogy will be discussed next.

2.3.6 Outdoor Play and Preschool Pedagogy – Past and present

Garrick (2011) distinguishes two influential traditions to outdoor play within education, with the first expressed as the ‘Victorian England school yard’, encompassing short bursts of activity between structured lessons with the adults assuming a supervisory role, and affording “few opportunities for children to manipulate, create, control or modify aspects of their environment” (p.57). The second refers to the concept of the ‘Garden’, which has roots in the writings of authors such as Rousseau, Pestalozzi, Froebel, and McMillan, focusing on the affordance of rich opportunities and active children’s engagement, conceptualising the outdoors as a critical environment for play, health, and learning (Johnson et al, 2005; McMillan, 1919, 1930; Tovey, 2014).

When examining contemporary outdoor play pedagogy, one of the approaches often discussed refers to Forest Schools, defined as “an inspirational process, that offers all learners regular opportunities to achieve and develop confidence and self-esteem through hands-on learning experiences in a woodland or natural environment with trees” (Forest

Schools Association, 2002). Forest schools are not novel, introduced in Denmark in the 1950s, supporting play-based, child-initiated, and child-led learning (Knight, 2009). This approach was largely influenced by the Scandinavian philosophy of 'Friluftsliv', translated as 'free air life'. This philosophy is however both complex and culturally rooted, making its implementation in countries with very different cultural and pedagogical backgrounds challenging (Leather, 2018). Furthermore, the physical environment variations between different geographical areas can make a forest-based approach inaccessible, with adaptations developed, such as the 'Bush School' in Australia. Nevertheless, even though this approach has spread to many countries and a handful of Forest Schools exist in Greece, it is by no means representative of the preschool provision available to most children, with preschool grounds, not nature, remaining the basic environment where they regularly play outside, which this study explores.

Focusing on the significance of the nursery garden, one century ago in the UK, Margaret McMillan (1919) stressed the experiential learning opportunities it offered, its health promoting properties, and positive effects on children's physical and emotional well-being (Bilton, 2010; Garrick, 2009; Liebovich, 2019; Tovey, 2007). Nevertheless, recent years saw a decline in the nursery garden's centrality and a shift in pedagogy. This is evident if one merely considers the following two sentences by McMillan (1930) "The garden is the essential matter. Not the lessons, or the pictures, or the talk" (p. 2). In current preschool education 'the lessons', 'the pictures' and certainly 'the talk' appear to be in the spotlight, suppressing not only the garden concept, but often children's self-direction and play. Moss (2017) postulated that the dominant preschool education discourse refers to "the story of quality and high returns", stemming from influential English-speaking countries such as the US, but gaining worldwide legitimacy (p.14). He described it as a neo-liberal, neo-positivistic approach that "values (and assumes the possibility of) certainty, replication, mastery, objectivity, and universality" with its primary purpose "being children's performance of predetermined outcomes determined by a select cadre of adults; of technical practice as first practice" with "ECE reduced to the achievement of a rate of return on investment" (p.15). Play, unpredictable by nature, seems difficult to fit within such a pedagogical practice that "knows everything beforehand" leaving no room for uncertainty (Malaguzzi, 2016, p.421). However, play's vulnerable position within preschool pedagogy appears obscured by the dominance of what Smith (2010) calls the 'play ethos', defining it as "a strong and unqualified assertion of the functional importance of play, namely that it is essential to adequate (human) development" (Smith, 2010, p. 28). This shared belief, may have made the word 'play' essential, if not compulsory, when

discussing preschool education, but has not done it any favors in relation to solving the “conceptual confusion” regarding its use in practice (Haughton & Ellis, 2016, p.131).

An expanding culture of performativity seems to cage play within a social realism viewpoint, focusing on its outcomes, rather than on its transformative process (Rogers, 2010). Wood and Chesworth (2017) supported that play “has become a methodology, based on an onto-epistemological foregrounding of its educational and teleological purposes” (p. 55) with ‘educational play’ globally forming the main theme in practice and research, “based on the concept of mixed or integrated pedagogical approaches that incorporate adult-led and children’s freely chosen activities and play” (p. 49). Papatheodorou and Potts (2016) similarly postulated a shift in the discourse of play “from play to playful learning, from child-initiated play to balanced child-led and adult-led play” (p. 124). Singer et al. (2006) visually represented play’s positive relation to learning as ‘Play = Learning’, in the title of their popular book. However, if this relationship is viewed backwards, as the bidirectional ‘=’ sign would allow, it might be seen to imply that encouraging learning would also lead to enhanced play, which would be an unfounded conclusion creating confusion. For instance, advocating for the ‘guided play’ pedagogical approach Zosh et al. (2018) proposed redefining play as a spectrum, to “capture the true essence of play and explain its relationship to learning” (p.1). Nevertheless, one could question if this ‘play spectrum’ would be better described as a ‘teaching spectrum’ utilising more or less playful strategies, seeing that its two ends are ‘free play’ and ‘direct instruction’ (p.4). Sutton-Smith and Kelly-Byrne (1984) proposed that play by its very nature might be perceived as threatening and thereby “it might be helpful from an upright and respectable point of view to confuse the functions of play with those of normative learning” (p. 319). Within this study the supportiveness of the preschool environment towards children’s play, not playful learning, will be explored.

In accordance with a teleological approach to play, outdoor play within educational settings is often studied not as a unified, complex process, but as a means for achieving isolated results, such as in play promotion interventions focusing mainly on physical activity outcomes (Nathan et al., 2022; Razak et al., 2018). Such restricted examinations of outdoor play could affect the way it is perceived as well as lead to suggestions for pedagogical practices not encompassing its complexity. For instance, children have been identified to be more active in the first few minutes outdoors (Bruijns et al., 2021). Thereby, research suggestions of more and shorter playtimes appear valid for increasing physical activity (Bruijns et al., 2021; Razak et al., 2018), however may not necessarily support rich and complex play, which may need more time to develop (Bilton, 2013). On a similar note, Wyver (2017) cautioned that overfocusing play research on cognitive outcomes

could “lead to impoverished experiences for young children” if outdoor play is viewed “as having value in the service of cognition rather than value in its own right” (p.92). Considering the societal and educational inclination to isolate and give increased status to play elements related to cognition and learning, the role of preschool pedagogy is crucial to avoid the decontextualization and repackaging of outdoor play’s elements into activity programmes, as “to do so would miss the point of outdoor play” (Wyver, 2017, p. 93). This could also relate to notions that certain play types are more beneficial than others, making some forms of play less acceptable, such as rough and tumble (Casey, 2007). An overfocusing on academic outcomes “make it easy to view play as dispensable” allowing “a very easy shift from outdoor play and learning environments to indoor structured approaches” (Waller et al., 2010, p.440). These concerns highlight the important role of preschool pedagogy explored within this study.

Despite its formal inclusion within educational frameworks, play appears not clearly defined or fully integrated within preschool pedagogy (Bilton, 2010;2014b; Department of Education, 2017; Ploof, 2014; Rogers, 2011; Tovey, 2007; Wood & Chesworth, 2017) with play in practice often “offered as a reward or a time filler when ‘work is done’” (Broadhead, 2007, p.89). Rogers (2010, 2011) proposed three reasons for the uneasy coupling of play and pedagogy: a) the ongoing opposition between play and work b) viewing play as work and c) the pedagogisation of play, using it as a tool for learning future skills. Policy has also been highlighted to sustain this lack of integration with Wood and Chesworth (2017) stating: “Policy frameworks reinforce these paradoxes: practitioners struggle to reconcile their beliefs and aspirations about play, with systems of accountability” (p.55). Rogers (2010) viewed play as a supervised, curricularised, institutionalized and politicised activity within preschool, proposing that “what we are left with is the myth of a play-based curriculum grounded in an illusion of choice” (p. 154). She highlighted that regulatory practices “may suppress the physical, social and affective qualities of play, and minimize the aesthetic and creative dispositions of play, in order to substitute in their place a highly prescribed, externally evaluated, purposeful play regime” (p. 155). Ailwood (2003) referred to usual preschool practices such as timetables, floor plans and checklists, as ways to manage play, arguing: “the more an activity is divided, the more it is regulated, monitored and governed” going on to propose “within this heavily regulated space, play has been a key concept through which adults have tried to produce, understand, monitor, regulate and govern childhood” (p.295-296). It is thereby important to note that play discourse within preschool pedagogy is not only a theoretical matter but one that affects everyday practice.

Within preschool practice, the outdoors appears to often be viewed in contrast to the indoor environment, presented to afford increased freedom for children's self-expression and autonomy, allowing them be louder, messier and act in a more boisterous manner without being reprimanded (Bilton, 2010; Copeland et al. 2012; Frost et al., 2012; Legget & Newman, 2017; Maynard & Waters, 2007; Maynard et al., 2013). However, this perception of freedom inherent to the outdoors could in fact be a factor restraining preschool outdoor play provision, as it could potentially challenge the power equilibrium established within the classroom, accentuating the educators' sense of discomfort to allow children control and choice, even though theoretically believing it would be good for their learning and development (McClintic & Petty, 2015; McInnes et al., 2011; Wood & Chesworth, 2017).

Furthermore, outdoor play practice relies upon and incorporates wider societal perceptions of childhood. For instance, McMillan's (1930) views on the outdoors were embedded within an outlook of preschool education "where children can really be seen and known at last as children" not "forcibly obliged to accept conditions that restrict them merely because to us they seem easy and necessary" (p. 34), echoing democratic education notions as expressed by Dewey (1916/2018). It is interesting to note the commonalities between democratic and play-based pedagogical approaches, regarding both the role of the adult, as well as the view of children as competent and socially worthy. Voices from around the world, supporting the importance of play and the outdoors, also uphold children's rights and participation (Alden & Pyle, 2019; Bilton, 2014a; Brussoni et al., 2015; Hamilton & Wood, 2020; Sandseter & Seland, 2016; Tremblay et al., 2015; Welsh Assembly Government, 2002; Waller et al., 2017). For example, Scotland has adopted a national policy supporting outdoor play, strengthened by voluntary groups and lobbying organizations such as Play Scotland advocating for children's rights (Howe et al., 2021; Scottish Government, 2021; Wright et al., 2019). Nordic countries, apart from supporting outdoor play practice appear to encompass more participatory forms of pedagogy (Wagner & Einarsdottir, 2006), endorsing a perception of children as respected, active social agents rather than "adults-in-waiting" (Waite et al., 2013, p. 258). Similarly, Moss (2019) contrasted the 'dominant early years discourse' to the Reggio Emilia approach from Italy, encompassing democracy, experimentation, and potentiality. In New Zealand, the Te Whāriki early childhood curriculum (2017) values play and playfulness, also supporting the empowerment of children, as competent members of society. Waite et al. (2013) propose that such a notion of childhood shifts the aims, expectations, and practice of preschool education, especially supported by the outdoor context. Haughton and Ellis (2016) postulated that to achieve the goal of supporting children "to assess their

own capabilities and regulate their own behaviours” would require an “underlying view of the child as competent rather than one of the child as vulnerable and in need of adult protection” (p. 141). Nevertheless, in their review Wood and Chesworth (2017) concluded that outdoor play practice and children’s potential for increased play autonomy outdoors is “limited by structural, organisational and attitudinal factors” (p.54), highlighting the need for more research incorporating these factors, as in this study.

Having established the intricacy surrounding outdoor play in preschool pedagogy, the ecological background supporting the proposed model of Environmental Supportiveness for Outdoor Play in Preschool will now be discussed.

2.4 Environmental Supportiveness for Outdoor Play in Preschool: An ecological approach

An ecological approach proposes the interrelationship between person and environment, supporting the premise that human behaviour and development is interlinked with the environment where the person exists (Barker, 1968; Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998, 2006; Darvill, 1982; Dunn et al., 1994; Gibson, 1979; Law et al., 1996; Lewin, 1935, 1936).

One of the main authors informing this study is Kurt Lewin (1890-1947) a German-born, American social psychologist, whose work influenced prominent ecological theorists such as Bronfenbrenner (1979) and Gibson (1979), many years after his death. Lewin (1935) supported: “It is a fundamental fact of childhood that the child’s environment is not subject to his own control” (p. 97) envisaging it as powerful in steering children’s development and behavior, postulating that “all aspects of the child’s behavior” including play “are codetermined by the existing environment” (p. 66). He stressed the coherence between environment and personal characteristics, proposing that it is impossible “simply to single out one part to be attributed to the environment and another to be ascribed to the individual” (Lewin, 1935, p. 72). In the same era, Dewey (1938), another main theorist informing this study, also supported the dynamic individual-environment interconnectedness proposing: “An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment” (p. 43), defining it as “whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had” (p.44).

Lewin (1931,1935) expressed the relationship between behaviour, the person, and the environment in quasi-mathematical terms, as $B=f(PE)$, with behaviour, represented by B ,

the person represented by P and the environment by E . Darvill (1982) went on to apply Lewin's 'general law' to play behaviour (Bp), dependent on the playing child (Pc) and the play environment (Ep), modifying the equation into $Bp=f(PcEp)$. Such an ecological view of play is supported by many authors, identifying physical, psychical, familial, social, organisational, political, and cultural environmental factors affecting children's play (Bundy, 2003, 2012; Else, 2014; Knox, 2010; Ramsden et al., 2022; Sando & Sandseter, 2020; Tudge et al., 2011), with environmental structure and quality identified as crucial for outdoor play (Bilton, 2002; Wyver & Sandseter, 2019). Bundy (2011) postulated that an environment that promotes play, at a time when the children's basic needs have been addressed "yields the best chance that what follows actually is play" (p.135). She nevertheless acknowledged that play cannot be dictated and "children can be told to 'go and play' but adults can never be certain that children actually will engage in play" (p.135), supported by Storli and Sandseter (2019) reporting that a third of children's 'free play' time outdoors is spent on non-play activities. Thereby, merely taking the children outside does not guarantee play, less so rich play, shedding doubt on whether they indeed automatically gain the benefits that it may afford, and supporting the scope of this study.

Children's playfulness, their disposition to play, has been implicated as a determinant of play engagement, viewed by some authors as a characteristic of the individual (Barnet, 1991; Lieberman, 1977). Nevertheless, Bronson and Bundy (2001) emphasised the interconnectedness of playfulness with the environment, stating: "even the most playful child may behave in a less playful way in a very unsupportive environment. Similarly, a child's actions may become more playful in a very supportive environment" (p. 244). Likewise, Rentzou (2013b) proposed that "... the physical setting, the play materials and equipment available, the environmental arrangements, and the social elements of the environment may encourage or limit playfulness and affect children's play and how children play with each other" (p. 1741). Examining the relationship between environmental supportiveness for play and the playfulness of children with and without disabilities Bronson and Bundy (2001) found a significant positive correlation between them, with a greater magnitude for typically developing children, proposing play to result "from a reciprocal interaction between the individual and the environment" (p.241). Bundy (2003) also recognized the effects of wider sociocultural factors, such as accepted norms, rules, and expectations, as influencing "the freedom and confidence with which an individual interacts with elements of the environment" (p.4). Darvill (1982) stressed: "it is imperative that the environment be well defined before you can determine causes for similarities or differences in children's play that are due to independent variables such as age, sex, or different preschool programmes" (p.145), also emphasising the need to include

parameters beyond the immediate setting. Similarly, based on Bronfenbrenner's (1994) theory, Cheng et al. (2022) supported the necessity of an ecological approach to the promotion of outdoor play in preschool, considering the interaction of various ecological structures, a stance adopted within this study.

Bronfenbrenner (1979) brought the environment in the spotlight, introducing concepts such as the micro, meso-, exo- and macro-systems. Bronfenbrenner's bioecological theory evolved over time into the Process-Person-Context-Time model (PPCT) (Bronfenbrenner & Morris, 2006). This evolution shifted the focus towards the importance of proximal processes, including play, for fueling children's development. Proximal processes are defined as progressively more complex, enduring reciprocal interactions "between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment" (p.797). Even though Bronfenbrenner's work has informed the rationale of this study, this research does not follow the structure of his Bioecological or PPCT models, as a less pre-determined approach was viewed to best accommodate its exploratory and explanatory aims.

Another prominent ecological theory considered within this study is Gibson's (1979) Theory of Affordances, with affordances defined as what the environment "offers the animal, what it provides or furnishes, either for good or ill" derived by Lewin's (1935) concept of 'valence' (p. 127). Gibson's initial starting point related to the ecology of visual perception however the concept of affordances has over time been developed regarding their functionality or meaning for the individual (Heft, 2010; Lerstrup and van den Bosch, 2017). Heft (2010) defined them as objectively real, psychologically consequential, and functionally significant "perceptible properties of the environment" (p. 18). Gibson's theory as it has evolved, is widely used within current outdoor play research, especially in Nordic countries, and has helped widen our appreciation of the ways the environment influences children's play. Play affordances have been acknowledged to relate not only to physical, but also social and cultural factors (Kernan, 2010) with Kyttä (2002) differentiating between potential, perceived, utilised, and shaped affordances. Reed (1996) introduced the concepts of the 'field of free action' and the 'field of promoted action' (p.130) relating the adult-role on emphasizing or underplaying affordances, to which Kyttä (2002) added the 'field of constrained action'. Nevertheless, the ambiguity of the 'affordance' concept poses some limitations in its use, as there are significant variations in the way it is conceived, defined, and observed, with this term used within preschool education to refer to activities, possibilities offered by the preschool setting, as well as individual perceptions of those possibilities, which could create some confusion (Lerstrup & van den Bosch, 2017). Even though this theory expresses an interactional, ecological perspective, the

concept of affordances was not used as the centre of this study, both due to the aforementioned limitations, but also as it aims to explore the interaction of parameters beyond the characteristics of the actual outdoor play environment.

This study adopts an ecological view of outdoor play, seen to develop both in and through the preschool environment, with the individual and the environment inseparable in an “organism-environment situation” (Dewey & Bentley, 1949, p. 131; Dickie et al., 2006). The ecological concept of time will now be explored.

2.4.1 Time for outdoor play

Time is discussed separately within this review, firstly because it represents a prominent ecological aspect acknowledged to affect child development (Bronfenbrenner & Morris, 2006), but also because its influence on outdoor play was recognised as crucial within this study.

Bronfenbrenner and Morris (2006) introduced the concept of the Chronosystem, with ‘chronos’ meaning time in Greek, divided into three levels. Microtime addresses the continuity within proximal processes’ episodes, mesotime their periodical nature across wider time intervals e.g. days or weeks, and macrotime the changes occurring during the life course and across generations. They postulated that for proximal processes to be effective they need to occur “on a fairly regular basis, over an extended period of time”, considering factors such as frequency, duration, and interruptions (p.820). Play has been recognised as a proximal process, with Rose and Rogers (2012) postulating that regular interruptions discourage children’s engagement in more complex play and Bilton (2002) supporting that sparse or irregular access to outdoor experiences may affect skill acquisition.

However, on a micro and meso level, outdoor play time in preschool is often regulated via timetables, restricting children’s access to specific sessions (Ailwood, 2003), which could be associated to the disciplinary nature of educational institutions (Giddens, 1984). Birkeland & Sørensen (2021) in a study comparing outdoor play time scheduling in Norwegian and Chinese preschools concluded that it “is not just an organisational issue, but is also influenced by societal values and institutional expectations and demands on what to emphasise in everyday life in kindergarten” (p.123). Offering combined indoor-outdoor opportunities has been proposed as an alternative to timetabling (Bilton, 2002; Herrington & Lesmeister, 2006; Lasenby, 1990) with Yoong et al. (2022) proposing its promotion as a strategy to increase outdoor play time and Jones et al. (2020) supporting ‘continuous free play schedules’ or ‘free-flow routines’ to increase children’s outdoor play

access. Yet limited recent research can be found on how this is implemented and is a practice not common in many countries, such as Greece.

On a meso level, outdoor play time has been found to be affected by seasonality (Egler et al., 2013; Lee et al., 2021) with drastic limitations reported during the winter months in many countries including Greece, often linked to fears of children getting ill (Bento & Dias, 2017; Bitou & Waller, 2017; Predy et al., 2020).

On a macro level, societal, cultural, and pedagogical changes have been acknowledged to affect outdoor time in recent years, as discussed earlier in this chapter.

Acknowledging time as an important research factor could influence interpretations and suggestions for practice. For instance, Söderström et al. (2013) found that “It was the long outdoor stay in high-quality outdoor environment that was related to the change in bodyshape, not physical activity as could be expected” (p.89) postulating that this finding “could open up for new approaches to meet the overweight epidemic in preschoolers” (p.89) focusing on all-year-round outdoor play provision rather than fitness interventions. Nevertheless, time is not consistently examined in preschool outdoor play research, with very limited evidence available at an institutional level, especially in large-scale studies (Lee et al., 2021; Ulset et al., 2017). In their systematic review Lee et al. (2021) stressed the need for more research in this area, exploring time’s interactions within multiple variables to better uncover ways to optimise outdoor play provision. Acknowledging this need, time was examined within this study. The role of the organisational environment will now be further discussed.

2.4.2 Organisational environment

An organisation can be defined as “a group of people who work together in an organised way for a shared purpose” (Cambridge University Press, n.d.). The term organisational environment within this study refers both to external aspects surrounding the organisation, such as political, social, economic, legal, cultural, and ecological, as well as internal, relating to its structure and culture (Allen, 2001). Thus, certain wider socio-cultural aspects viewed in other models as separate, are in this study incorporated within the concept of the organisational environment.

Organisational structure pertains to issues such as the way the organisation is set up in departments or units, authority levels and formal reporting relationships, allocation of tasks and responsibilities, communication systems, and procedures regarding monitoring and evaluation (Child, 1988). Giddens (1984) identified three levels of structure: a) signification, referring to the way meaning is expressed through language, b) legitimation,

referring to social norms and values and c) domination, relating to application of power and the controlling of resources (Gibbs, 2017).

Policy factors, such as governmental guidelines, legislation, and codes of standards, can directly affect preschool institutions' organisational structure in areas such as adult-child ratios, group sizes, budgeting and availability of resources, size and configuration of the outdoor play space, educator training and continuing professional development (CPD), affordance of non-contact time for planning and documentation, as well as pedagogy (Eurofound, 2015; ILO, 2014; Melhuish & Gardiner, 2018). Focusing on outdoor practice, Cheng et al. (2022) reported educator difficulties in interpreting regulations, Dietze and Kashin (2019) that conforming to government regulations and safety licensing requirements resulted in more sterile and limited outdoor play environments, and Van Rooijen and Newstead (2017) proposed governmental regulations as inhibiting internal policy development regarding risk in play. Similarly, Spiegel et al. (2014) supported that play equipment and surfacing standards influence play provision and "have invaded areas of decision making beyond their legitimate territory" (p. 1).

Organisational structure is thereby interconnected with organisational culture. Schein and Schein (2017) proposed culture as dynamic, complex, and pervasive, postulating that it "covers mission, strategy, structure, and basic operational processes" (p. 11). Alvesson (2002) highlighted the importance of culture as a crucial way to comprehend "behaviour, social events, institutions and processes" providing these phenomena with meaning (p.4). Rogers (2010) supported this interrelationship stating: "Clearly, early childhood classrooms are embedded contexts, which in turn operate within institutions that are culturally, historically and politically defined" (p.155).

Examining the manifestation of organisational culture Schein and Schein (2017) distinguished three levels of analysis: artifacts, espoused beliefs and values, and underlying assumptions. Artifacts refer to observable phenomena, for instance relating to the physical environment, language, routines, practice descriptions, and published documents regarding institutional values. Nevertheless, they went on to acknowledge that although it is relatively easy to observe such phenomena it is very difficult to decode culture, cautioning against relying on artifacts and overt behaviour alone when inferring deeper cultural assumptions. They proposed espoused beliefs and values as providing justification for practice and helping the group navigate through difficult situations. Rose and Rogers (2012) referred to the notion of professional enculturation, with educators "entering a cultural heritage of early years provision that contains prototypes of how to work with young children – the traditions, habits, and precedents of early years practice"

(p.20). Schein and Schein (2017) supported that this homogeneity in thoughts and emotions within an organisation intensifies over time, with shared values and practices imparted for new group members to adopt as “the correct way to perceive, think, feel, and behave in relation to those problems” (p.6) and “the price of admission to the group” (p.8).

Nevertheless, a group’s abstract values are not necessarily reflected in its operation, resulting in a discrepancy between observed and desired behaviour (Argyris & Schön, 1978, 1996; Schein & Schein, 2017). Argyris and Schon (1978) distinguished between espoused theory, what people say they do and theory in action, what they really do. Schein and Schein (2017) supported that discrepancies between observed behaviour and reported beliefs and values uncover the basic assumptions of the group, which are often unconscious and generally “non-debatable and hence are extremely difficult to change” (p.22). Such discrepancies between educators’ outdoor play values and practice have been identified, leading to a philosophy-reality conflict (Hatch & Freeman, 1988; Kernan, 2007; McClintic & Petty, 2015; McInnes et al., 2011). Within this study it is proposed that rather than only examining this issue on an individual level, it could also be seen as an organisational one. This view is supported by Alvesson (2002) stating: “What appears to be expressions of variation and individuality may sometimes be seen as clearly grounded in a common set of ideals, and thus contingent upon cultural constraints and social conformism” (p. 126).

However, though organisational culture is often discussed as stable, it is also dynamic and evolving, with subcultures within groups developing through time, creating conflict (Schein & Schein, 2017). Lewin (1948) wrote widely on organisational change, stressing the effects of social perception changes on individuals’ social action, supporting the interrelationship between the organisational and human environment, which will now be further discussed.

2.4.3 Human environment

Within this study, the human environment refers to the preschool staff, both educators and managers. A century ago, McMillan (1919) stressed the significance of the educator role stating that “they can give or withhold success” (p. 81). Nevertheless, educator outdoor play practice is not only reliant on personal characteristics, dispositions, values and perceptions, but is acknowledged as affected by various factors, such as the built environment, cultural, societal and parental values, unsupportive colleague attitudes, policy and regulations, workload, pedagogy, and training (Bilton, 2020; Broström et al., 2015; Copeland et al., 2012; Kantz, 2004; Logue & Harvey, 2009; Maynard & Waters, 2007; McInnes et al., 2011; Predy et al., 2020; Ramsden et al., 2022; Sandseter et al.,

2012; Sandseter, 2013). Based on Bronfenbrenner's ecological model, Cheng et al. (2022) supported that educators "faced direct barriers at each system level" regarding outdoor play provision (p.9). Organisational culture and structure is thereby proposed to influence educator practice, however within this study this is not viewed to negate educators' agency and ability to create change. Giddens' (1984) structuration theory acknowledges the dynamic relationship between human agency and structure, viewing structure as "both constraining and enabling" to the individual (p.25). This viewpoint would be supported by reported inconsistencies between educator outdoor practice within the same institutional context (Dietze & Kashin, 2019).

Educator practice is also acknowledged to be affected by values and beliefs. Bilton (2020) defined value as "that which we consider as important" supporting that if something is valued "it follows that we will promote it" (p.2). The interesting point though is that although preschool educators express that outdoor play has value, they do not necessarily support it in practice (Hatch & Freeman, 1988; McClintic & Petty, 2015; Renick, 2009) which could mean that educator statements may not always reflect their underlying beliefs. Ploof (2014) differentiated between two belief categories, informal ones relating to personal experiences, and professional, stemming from training and professional development.

Educators' own positive outdoor experiences have been identified to facilitate practice (Bilton, 2020; Cheng, et al., 2022). However, these may not suffice to support outdoor play provision, with McClintic and Petty (2015) maintaining that despite reporting positive childhood experiences, educators showed limited outdoor play knowledge and no apparent motivation to promote it. Maynard and Waters (2007) proposed that references to outdoor play memories could serve to justify its inclusion in practice, in the absence of a full understanding of its potential benefits, as well as a dissociation of outdoor play from "what teachers saw as their primary role: that of 'teaching' curriculum content" (p. 263).

Educators' professional beliefs and conduct have been linked to training, both on an undergraduate level as well as through CPD (Eurofound, 2015; ILO, 2014; Melhuish & Gardiner, 2018; Ploof, 2014, Predy et al., 2020; Sylva et al., 2004). Higher staff qualification has been highlighted as conducive for preschool provision quality through large scale studies, such as the Effective Provision of Pre-School Education (EPPE) project (Sylva et al., 2004) and the SEED study of Quality of Early Years Provision (Melhuish & Gardiner, 2018). Similarly, Predy's et al. (2020) large scale study in Canada, identified higher education certification as a correlate to outdoor play provision. The effects of CPD have also been highlighted as important for quality provision (Eurofound, 2015; Melhuish & Gardiner, 2018) as well as outdoor play practice (Bilton, 2020; Gehris

et al., 2015; Johnson et al. 2005; Kantz, 2004; McInnes et al., 2011; Pyle & Daniels, 2017; Predy et al., 2020; Vu et al., 2011). Additionally, CPD strategies grounded in coherent pedagogy, integrated within preschool practice, focused on reflection, actively engaging practitioners, and employing peer exchanges, have been proposed to enhance provision (Eurofound, 2015; Lazzari et al., 2013; Thoonen et al., 2011). However, CPD effectiveness could also relate to issues such as whether it is free and guaranteed, as well as on adequacy of educator non-contact time for training and mentoring activities (Eurofound, 2015; ILO, 2014), areas that have received limited attention, but are explored within this study. Additionally to the educators, management's training in early childhood development has been highlighted as beneficial for quality provision (Sylva et al, 2004; Weiland et al., 2018).

Leadership has also been identified as an important parameter affecting practice, defined as an intentional influence "leading to the achievement of desired purposes" (Bush & Glover, 2003, p.5). Though leadership has been connected to personal and professional values (Bush & Clover, 2014), the influence of governmentally imposed and centralised expectations on leaders has been acknowledged (Bush, 2008; Hoyle & Wallace, 2005), which in light of the aforementioned issues regarding play's position within policy and preschool pedagogy (Moss, 2014; Rogers, 2010, 2011; Wood & Chesworth, 2017) may be assumed to place them in a difficult position.

Similarly, the educator role outdoors is not well defined within preschool pedagogy (Maynard & Waters, 2007; McClintic & Petty, 2015; Kendrick et al., 2012). With an aim to support child-centred and socially just practices, Rose and Rogers (2012) introduced the concept of the plural practitioner including: Critical reflector, Carer, Communicator, Facilitator, Observer, Assessor and Creator. Kernan (2007) identified "play architect, designer, manager, orchestrator, organiser, resourcer, observer, assessor, facilitator, mediator, co-player, scaffolder, trainer and advocate" as roles supporting play (p. 12). Johnson et al. (2005) differentiated between facilitative roles during play, such as onlooker, stage manager, coplayer and play leader, and precarious ones, such as uninvolved, director and redirector. Specifically regarding educator roles in the playground, they proposed that at least the following four roles are assumed: supervision; observation; indirect strategies, such as setting up the environment or scaffolding; and direct strategies, such as games or reinforcing safety rules. It is important to note that this multitude of suggestions highlights the complexity of the adult role, and may be confusing for practitioners, as they include roles and actions ranging from quite abstract to very specific. Kernan (2007) concluded that "The task of the early years practitioner is to make judgements about the most suitable strategies to use based on the knowledge of the

individual children, the particular context, whilst also taking account of broader moral, ethical and equity considerations” (p.12). Considering the lack of clarity regarding outdoor play’s position within preschool pedagogy as well as the societal variations of views of childhood and the aim of preschool education, the responsibility of making judgements regarding the best outdoor play supportive strategies could prove quite challenging for individual educators. Additionally though, best practice decisions would require a high level of reflection, involving self-conscious choice rather than semi-automated actions based on ‘habit’, as highlighted by Dewey (1922).

Within the proposed educator actions, planning for play has a prominent role. McMillan (1930) highlighted its significance, stating: “What is important is not the giving of instruction, but the preparation of a suitable provocative environment, an environment where new chances are made possible” (p. 78). Similarly, Haughton and Ellis (2016) noted that “even apparently ‘free’ play requires careful planning” (p. 142) and Maynard and Waters (2007) stressed: “the use and management of the outdoor space by adults is as important as access itself” (p. 257). Bilton (2014a) suggested that planning for indoors and outdoors is easier done in an integral fashion, viewing the two environments as complementing each other. Nevertheless, planning does not seem to be as pronounced outdoors (McClintick & Petty, 2015). This could reflect lack of knowledge but could also relate to the notion of planning and organisation viewed in contrast to children’s self-direction. Returning to 1938 Dewey commented on teacher’s opposition to organisation due to its links with more authoritarian educational approaches, stating “in revolting against that we are led to shrink from the very idea of any organization” (p.31). Such an outlook could be especially relevant to outdoor play practice, where the optimal level of adult involvement appears to remain a debated topic (Legget & Newman, 2017) with Kernan (2007) placing it on a continuum between “indirect planning for play to direct involvement in the play” (p.12).

However, educators viewing outdoor time as a break for them as well as the children has also been acknowledged, with Johnson et al. (2005) discussing “static socializing” (p. 384) and Copeland et al. (2012) referring to educators disengaging in the playground. Even though educator disengagement outdoors has been identified as an issue affecting practice, its relation to their working conditions, for instance having time for breaks, has attracted minimal research (Eurofound, 2015), and is a topic explored within this study. A disengaged stance is often coupled with the notion that while outside the children ‘let of steam’ or ‘recharge their batteries’ (Copeland et al., 2012; Johnson et al., 2005), in line with Schiller’s and Spencer’s ‘surplus-energy’ views (Evans & Pellegrini, 1997).

Consistently with a rationale of outdoor play as energy discharge and a more detached educator stance (Legget & Newman, 2017), focusing on supervision for ensuring children's safety has been highlighted as a central self-reported educator role (Chakravarthi, 2009; Copeland et al., 2012; Ihmeideh & Al-Qaryouti, 2016; Legget & Newman, 2017; McClintic & Petty, 2015; Rennick, 2009). Nevertheless, the tendency to inspect children has also been linked to 'protectionism', a cultural view of children as helpless, exacerbated by a rising fear for parental complaints or litigation, regarding issues such as children getting hurt, ill, or even dirty outdoors (Maynard & Waters, 2007; Dietze & Kashin, 2019; Jerebine, et al., 2022).

Despite the growing literature on the function and benefits of risk in play, the reluctance of adults to allow it, thereby limiting children's freedom and risk-assessment opportunities has been acknowledged, starting to be voiced even by practitioners in countries viewed as traditionally more risk-permissive (Brussoni et al., 2012, 2015; Copeland et al., 2012; Gill, 2007; Gull et al., 2020; Hill & Bundy, 2014; Sandseter, 2016; Sandseter & Sando, 2016; Tovey, 2010; Van Rooijen & Newstead, 2017; Wyver et al., 2010). Apart from personal perceptions though, social factors have also been implicated in the way that risk in play is approached within preschool institutions. Van Rooijen and Newstead's (2017) proposed that educators may be called to navigate conflicting narratives of keeping children safe versus promoting their development, and that considering hidden factors such as organisational policies, regulations, pedagogy, perceptions of good practice, parental beliefs, cultural norms, and societal expectations would support increased understanding. Similarly, Obee et al. (2020) identified childhood assumptions and pedagogical practices as influencing children's opportunities for risky play in ECEC and Jerebine et al. (2022) highlighted cultural and policy barriers. Brussoni et al. (2022) proposed that "addressing the many barriers and challenges to outdoor play in ELCC environments would require complex intervention at multiple organizational levels" (p. 11), and Spencer et al. (2021) proposed that "educators' perceptions of risk are connected to institutions and systems" (p.213) as well as "broad discourses around responsibility and safety" (p.218). This view, which informs this study, shifts the focus from personal educator risk assumptions towards the way outdoor play and risk are perceived on an institutional and societal level, with Van Rooijen & Newstead (2017) proposing that "practitioners may not be suffering from personal risk-aversion as much as professional risk confusion" (p.954).

Another aspect identified to affect outdoor practice relates to educator comfort perceptions, such as accessibility of indoor facilities, water, sitting places and shade (Johnson et al., 2005); as well as weather conditions (Boyle et al., 2022; Copeland et al.,

2012; Maynard & Waters, 2007). Maynard and Waters (2007) comparing Welsh to Scandinavian educator views, proposed that even though lack of play in all weathers was linked to limited resources, such as clothing and drying rooms, “it may also have reflected a cultural resistance to the perceived discomforts of the outdoor environment and a concern to protect children, and themselves, from these discomforts” (p.263). Kernan (2007) presented similar findings from research in Ireland. Cheng et al. (2022) identified variations regarding what the educators considered bad weather conditions in Canada, while Copeland et al. (2012) in the USA reported that educator weather perceptions, rather than actual weather conditions determined children’s access and time outdoors, linking this to individual preferences, sense of discomfort, and concerns of dampness causing sickness. Studies from countries in the south of Europe, with arguably mild weather conditions, indicate views of cold and wet weather as uncomfortable and a risk to children’s health, to be quite pronounced (Bento & Dias, 2017; Bitou & Waller, 2017; Sandseter et al., 2019).

An associated practical issue relates to preparing children for playing outdoors, such as changing clothes, viewed by educators as laborious (Copeland et al, 2012). The way practical routines are incorporated within educator practice could relate to organisational differences. For example, in Scandinavian countries where being outside is considered part of the preschool’s role, the routines supporting the transition to and from the outdoors appear clearer and more integrated in the children’s schedule, often also reflected in the physical environment of the preschool e.g. through ergonomically designed furniture for supporting adults’ posture when helping young children dress (Röthle & Flugelsnes, 2018). Such organisational variations may also affect the educators’ sense of comfort, role perceptions and attitude towards the outdoors.

On top of educators’ attitudes, parental views and fears have been identified to affect outdoor play practice (Bento & Dias, 2017; Dietze & Kashin, 2019; Freeman & Tranter, 2011; Maynard & Waters, 2007). Strategies for reframing parental perceptions have been proposed to support outdoor play provision within preschool institutions (Bundy et al., 2017; Ramsden et al., 2022). However, the professional-parent relationship (Van Rooijen & Newstead, 2017) and the overarching parental trust towards the preschool would also need to be considered when examining parental outdoor stance, with Hummel et al., (2022) identifying parent-preschool communication and educator-parent interactions to promote trust and proposing educator training to enhance it. Increased parental involvement within the preschool’s programme has also been proposed to be supported by staff’s confidence and CPD (Eurofound, 2015), identified as positive for children’s development and educational outcomes (Cosso et al., 2022; Sylva et al., 2004).

Apart from issues related to educators' perceptions, roles, and actions though, it is important to note that studies in different countries have identified educator concerns regarding the space, equipment, and materials available for outdoor play proposed to affect practice (Chakravarthi, 2009; Ihmeideh & Al-Qaryouti, 2016; McClintic & Petty, 2015; Maynard & Waters, 2007; Renick, 2009). McClintic & Petty (2015) reported that educators in their study "perceived that the physical space of the outdoor environment posed many limitations to their planning, preparation, and implementation" (p. 36). Copeland et al. (2012) identified that the educators controlled "what equipment and parts of the playground would be accessible or off-limits" (p.97), but one could assume that the actual set-up and safety of the environment may also affect the educators' permissiveness for children's access. McMillan (1930) argued "It is important to settle the question of environment first - to have it take precedence of method (of which much is said and written); for until this matter of environment is settled no method can save us" (p. 2). The physical environment will thereby now be discussed.

2.4.4 Physical environment

Within this study the physical environment refers to the outdoor play area of the preschool, including the space, objects, and sensory characteristics. The preschool outdoor play environment is often presented in the literature as special, offering freedom, opportunities for increased physical activity, movement challenges and exploration, enhanced sensory experiences, social interaction in larger groups, creativity, and connection to the natural elements (Bilton, 2014a; Garrick, 2009; McClintic & Petty, 2015; Holmes & Kohm, 2017; Tovey, 2007; Waite, 2011; Wood & Chesworth, 2017). Nevertheless, preschool outdoor play environments are diverse, often falling short of their idealised depiction, especially in urban areas where land can be both scarce and costly (UNICEF, 2018). For instance, public childcare centres in the Municipality of Athens showed an average ratio of 3.26 square meters per child, compared to 47.1 square meters in Norwegian institutions, indicating major differences in outdoor play conditions (Moser & Martinsen, 2010; National Technical University of Athens, 2013; Sandseter et al., 2022). Darvill (1982) had identified a lack of focus on the physical environment characteristics within play research, which he claimed could potentially support an assumption that "all preschools must be the same" with similar layouts and equipment (p.144), whilst in a recent study Gibson et al. (2017) similarly highlighted the need for increased rigor in the evaluation of contextual differences. In addition, a tendency to generalise conclusions that are contextually related could be problematic in relation both to developing a rationale on outdoor play as well as planning for provision or interventions.

As discussed before, the preschool's outdoor play environment is often viewed in relation to physical activity and obesity control. Such a perception of the outdoors is not new, evident in the 1800's German tradition of outdoor gymnasiums and affecting the way outdoor play environments have been developed over the years (Johnson et al., 2005), with McMillan (1930) stating: "It is said by some people that young children, being not only very active but keen to experiment in movement, should have a garden that is a kind of gymnasium. But no mere gymnasium, however well planned, can be a garden, or supply what a garden offers" (p. 23). This view is in line with Froebel's stance on the role of outdoor play for children's overall physical, intellectual, and moral development, not only as physical exercise (Garrick, 2011; Johnson et al., 2005; Tovey, 2014). Contemporary authors have also supported that in addition to offering increased opportunities for more somatic play, other play types, such as symbolic, construction, creative, reflective, and social, not only also take place in the outdoor environment, but may well become richer because of the additional elements it can provide (Bilton, 2010; Loebach & Kox, 2020; Miranda et al., 2017; Thomas & Harding, 2011; Wyver, 2017).

Another way the preschool outdoor space is often discussed is as a natural environment. Nevertheless, it is an artificial one, with Reed (1996) affirming that "Our children do not merely find themselves in a natural environment replete with possible affordances. Instead, we put them in a modified environment in which specific possibilities are emphasised and others are downplayed" (p.124), a view that has greatly influenced this study. Thereby, the physical environment could disclose a rationale towards its intended outdoor play use, with Rose and Rogers (2012) referring to the "hidden curriculum" of preschool institutions reflected through "implicit messages" in environmental structure (p.123). However, the possible effects of the preschool outdoor environment's design on children are often not contemplated, viewed "as an afterthought or considered immaterial to children's development" by the planning authorities (Bilton, 2010, p. 75; Kantz, 2004).

The issue of what constitutes a quality outdoor play environment has been the center of debate, viewed within this study not only as indicative of the overall effectiveness of preschool programmes, but also as an important influencing parameter (Rentzou, 2014). One way to come to agreement about this could be through devising a system of measurement, with several devised by researchers to assess the outdoor play environment (De Bord et al., 2005; Else, 2014; Harms et al., 2005, 2015; Mårtensson, 2013; Herrington & Lesmeister, 2006; Hu et al., 2014; Loebach & Kox, 2020; Moore & Sugiyama, 2007; Woolley & Lowe, 2013). A brief description of tools reviewed is attached in Appendix B. Some include structural and process elements, such as the Preschool Outdoor Environment Measurement Scale (POEMS) (De Bord et al., 2005) while others

only focus on the physical environment, such as Mårtensson's (2013) Outdoor Play Environment Categories (OPEC). Different measures target specific aspects, such as physical activity, learning outcomes, or safety, depending on the author's viewpoint and the need they intend to cover. According to Bundy (1993) however, the way that we choose to examine play and its environment, both indicates and affects the way that we perceive it. Thereby any evaluation tool also acts as a lens, with the potential to overly emphasise certain areas, whereas leaving others almost invisible. Furthermore, assessment tools are inevitably influenced by the conditions under which they are developed and may not always be contextually appropriate. For instance, in countries with wetter climate, grassed open spaces may be considered a sign of good quality environments that is easily achieved, but this may not apply to drier geographical areas, where such a feature would not only be costly and difficult to maintain, but also ecologically dubious. In addition, most measures are quantitative, providing a score in relation to the preschool environment quality, which may be convenient for statistical analysis, but may not offer the in-depth understanding required in studies with an explanatory purpose, such as this one. Söderström et al. (2013) supported the need for more research in this area, stating: "Whereas the quality of the indoor environment is frequently studied, less is known about the influence of the outdoor environment on children's health and well-being" (p.83).

Factors relating to the size, access, design, configuration, and elements of the play area have been found to affect children's play choices, activity, and behaviour (Armitage, 2005; Bilton, 2002; Czalczynska-Podolska, 2014; Dymont & O'Connel, 2013; Freeman & Tranter, 2011; Kuh et al., 2013; Sumiya & Nonaka, 2021). Larger spaces have been identified to support exploration, increased opportunities for more vigorous movement, and group play (Mårtensson, 2013; Martin et al., 2022). Trost et al., (2010) proposed less crowded playgrounds and moveable play materials as supporting physical activity. Herrington and Lesmeister (2006) linked child-space density to levels of aggression, mood, types of play, and gross motor activity. The space's configuration such as pathways and space dividers have been identified to influence children's play behaviour and the space's soundscape has been connected to stress levels (Herrington & Leismeister, 2006). A positive relationship between landscape diversity and play affordances has been identified (Fjørtoft, 2001), with natural elements such as water and sand supporting longer episodes of more complex and focused play (Kuh et al., 2013; Herrington & Leismeister, 2006; Nedovic & Morrissey, 2013; Morissey et al., 2017) and seasonal variations reported to capture children's interest (Herrington & Lesmeister, 2006; Sando & Sandseter, 2020). Sandseter et al. (2021) concluded that nature, fixed structures, and wheeled toys

positively associate with children's risky play. Freeman and Tranter (2011) supported that novelty, complexity, and challenge within a playground, positively affect the duration and creativity of children's play. On the contrary, lack of affordances outdoors has been found to negatively impact children's social play (Larrea et al., 2019).

In an attempt to operationalise these wide variations, various playground categories are found in the literature, including traditional, naturalised, contemporary and adventure (Mergen, 2003; Morrissey et al., 2017). Herrington and Lesmeister (2006) differentiated preschool playgrounds in accordance to their character, referring to overall feel and design, as: modern, organic, modular, and re-use. Woolley and Lowe (2013) described a continuum ranging between what they named "Kit, fence, carpet" playgrounds, "consisting of a kit of fixed play equipment, with a fence surrounding it and a carpet of rubber surface" (p.56); and "natural" playgrounds referring to those affording vegetation, water, variations in landform, and moveable materials. Playground design has been linked to a variety of factors such as history, cultural views of childhood, pedagogy, parental fears, maintenance needs, as well as levels of supervision required (Johnson et al., 2005; Woolley and Lowe, 2013). Herrington and Lesmeister (2006) supported that the play-space design should not only involve professional designers, but also educators, parents, and children, warning against the uniformity created by using pre-fabricated equipment for preschool outdoor play spaces, as it is less likely for educators and children to take ownership of such standardised play spaces.

The importance of children's participation to the decision-making on how the play space is shaped has been especially highlighted in recent years (Bilton, 2014a; Casey, 2007; Clark & Moss, 2006; Muela, et al., 2019; Sandseter & Seland, 2016). Children's formal participation in decision-making (Hart, 1997, 2008; Shier, 2001) has been criticised to often rely on more verbal expressions of children's views and a higher level of maturity (Horgan et al., 2017; Hultgren & Johansson, 2019). With a view to support the participation of all children, including the very young, participation has also been approached as an informal, ongoing, social process emphasising "the interdependency between children's participation and their socio-cultural environments and lived realities" (Horgan et al., 2017, p.276), shifting the focus towards its relational elements and the way it is expressed through actions (Hultgren & Johansson, 2019). Hultgren & Johansson's (2019) model views children's participation "in terms of embodiment, spatiality and materiality (...) closely intertwined with the affordances of a place or situation" (p.380), "happening in the meeting between people, places and things" (p.385), and related to the ways children are included, involved, inspired, and challenged. In accordance with this

rationale, children's actions within the physical environment and their interactions with the educators during outdoor play will be observed within this study.

Within the field of children's geography, a differentiation has been made between 'childhood spaces', as in those assigned to children by society and 'children's spaces' referring to those that they create for themselves (Bollig & Millei, 2018; Moss & Petrie, 2002). It is therefore important to note that play environments are not only identified by their physical characteristics, but also through their function in relation to children's access, actions, choices, as well as meaning. Massey (2005) supported that space is "constituted through interactions", incorporating plurality and in perpetual construction (p.31). Play spaces may thereby be perceived, interpreted, and experienced differently by the people within them. Tovey (2007) referred to the need to create both a 'space' and a 'place' outside, with the concept of 'place' incorporating children's feelings and a sense of meaning.

Suggestions on what the outdoor play environment should include have been provided by a multitude of authors, based on their theoretical underpinnings, review of the literature, opinion, personal experience, or empirical evidence, with some being more prescriptive on how the space should look or what materials would be needed, while others focusing on the functions that the environment should support (Bilton, 2002, 2014, 2014a; Casey, 2007; Dattner, 1969; Garrick, 2009; Johnson et al., 2005; Tovey, 2007; Sando & Sandseter, 2020). Dattner (1969) identified affording experience, choice and control, gradual challenges, being away from adults, fantasy, and expressive play as important for children's play spaces. Tovey (2007) proposed "designated and connected spaces; elevated spaces; wild spaces; spaces for exploring and investigating; spaces for mystery and enchantment; natural spaces; space for the imagination; spaces for movement and stillness; social spaces; and fluid spaces" (p.59). Kyttä (2004) supported that the child-friendliness of an environment relates to diversity of resources and children's access to play and exploration. Sando and Sandseter (2020) proposed providing children with opportunities for sharing experiences with others, giving access to diverse places and a multitude of objects, while ensuring play's self-initiation. Johnson et al. (2005) suggested designing environments that promote a variety of play considering the developmental age of the children. Casey (2007) identified environmental flexibility, accessibility, centres of interest, natural features, atmosphere, shelter, sensory elements, risk and challenge, and continuity between indoors and outdoors as conducive to play. Woolley & Lowe (2013) highlighted the following facilitative play environment characteristics: "enticing; stimulating; challenging; educational, and inclusive" (p.62). Taylor et al. (2022) proposed the notion of inclusivity over that of accessibility, referring

to “creating environments where all children have equal access to opportunities for engaging in the physical and social aspects of play” (p.2), whilst Moore et al. (2020, 2022) proposed a play-centred approach to create playgrounds that support inclusive play. Casey (2007) differentiated between an ‘activity-driven’ design of the play environment e.g., focusing on action potentials such as jumping or riding a bike, and a ‘play-driven’ rationale, focusing on how it supports children’s spontaneity, innovation, flexibility, and reflection, highlighting the environment’s potential for change in accordance with children’s play.

Similarly, Herrington & Lesmeister (2006) stressed the importance of the mutability of the play environment as a parameter affecting children’s play, stating that “children want to play with responsive materials that can be carried, collected, damned, dug, floated, filled, scooped, sifted, spilled, sprinkled, and thrown” (p. 6). Materials largely connected with such an approach of creating play possibilities are loose parts. Nicholson introduced the term ‘loose parts’ in his influential 1971 paper, where he proposed: “In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it” (p.30). Yet, the value of open-ended materials had been identified much earlier, with Froebel already highlighting their importance for children’s symbolic expression (Tovey, 2014). Loose parts are open-ended, moveable materials, with no specific play function, allowing children to use them in ways dictated by their own imagination. They are low cost or even no-cost materials, often recyclable, making them affordable. They can be natural materials, such as logs, sticks, stones, pinecones; or manufactured ones, such as tyres, cardboard boxes, fabrics or ropes (Casey, 2019; Gull et al., 2019). Loose parts have been identified to facilitate children’s engagement, participation, physical activity, and creativity in play, as well as enhance physical, cognitive, and social development outcomes (Bundy et al, 2017; Engelen et al., 2018; Gibson et al., 2017; Gull et al., 2019; Houser et al., 2016; Spencer et al., 2019; Storli et al., 2020). They have also been found to support educator involvement (Chakravarthi, 2009) as well as an evolution of their risk perceptions (Spencer et al., 2021). In recent years there appears to be increased interest in the effectiveness of loose parts play interventions within educational institutions (Bundy et al., 2017; Engelen et al., 2018; Gibson et al., 2017; Houser, et al., 2019, Storli et al., 2020). However, other terms are also used by researchers and practitioners to describe this type of materials such as: open-ended, unstructured, physical manipulatives, moveable. or portable play equipment, which could create some confusion (Byrne et al., 2022; Houser et al., 2016; Hu et al, 2015; Neill, 2013; Trost et al., 2010).

Even though loose parts are increasingly discussed as beneficial for children's learning and development, there appear to be variations in their outdoor use within preschools and a limited understanding of the perspectives of staff regarding the benefits and challenges of incorporating them in practice (Gull et al., 2019; Spencer et al., 2019; Houser et al., 2016). Johnson et al. (2005) highlighted that such materials tend to create more mess, which could act as a deterrent for some institutions, and require regular updating and checking for wear and tear which may be considered laborious (Casey, 2019; Ragen, 2015). The existence of storage facilities outdoors has been identified as crucial for the use of loose parts, yet is often overlooked (Goodling, 2016; Olsen & Smith, 2017; Spencer et al., 2019; Storli et al., 2019).

Apart from loose parts though, elements found in preschool outdoor play spaces have been categorised in various ways, in accordance to their perceived play function, movability, open-endedness, origin, or duration. This study utilises Casey's (2007) categorisation, into longer term, semi-permanent and temporary features. Longer term features include structural components of the environment and fixed play structures, which can remain within a preschool playground for many years. Semi-permanent features refer to elements often introduced to modify the space, expected to last a few months up to a few years, such as rope swings, or mud kitchens. Temporary features relate to elements expected to last up to a few weeks, often presented in response to children's play, such as cardboard boxes, tubing, straw. Such a classification in relation to duration could be clearer when describing the existing materials within a preschool, rather than dichotomous distinctions such as between loose parts versus stable structures, as these often rely on personal views regarding the play use of the objects and equipment and may also not incorporate all the materials found in preschool play areas.

One aspect proposed to be facilitated through the elements present in the preschool's outdoor play environment is children's sensory experiences (Bilton et al., 2017; Garrick, 2009; Johnson et al., 2005; Kemple et al., 2016; Tovey, 2007). Nevertheless, the role of the senses has not been documented in a comprehensive or cohesive way within play literature and existing play typologies. This could relate to the complex way senses connect to play, viewed both as a motivating factor for play engagement as well as an outcome (Zuckerman, 2007). For instance, in the recently developed Tool for Observing Play Outdoors (TOPO) (Loebach & Kox, 2020) vestibular play appears under the wider category of 'physical play' whereas tactile play falls under the 'sensory exploratory play' category. Bundy (1999, 2003) incorporated the sensory characteristics of the environment as a parameter of environmental supportiveness for play. Her work was influenced by

Sensory Integration theory, introduced by Jean Ayres (1972), a prominent frame of reference within paediatric occupational therapy (Case-Smith & O'Brien, 2010). According to Ayres (1979) sensory integration refers to the "organisation of sensation for use" (p.5) considered crucial for children's behavior and learning (Bundy et al., 2002; Parham & Mailloux, 2010). Within Sensory Integration theory seven sensory systems are examined, viewed as interconnected: visual, auditory, tactile, olfactory, taste, proprioceptive³ and vestibular⁴, especially highlighting the developmental importance of the proximal senses of touch, vestibular and proprioception (Ayres, 1972, 1979, 2005). In this study it is not children's play that will be differentiated under sensory categories, as this would rely on adult assumptions regarding children's motivation and play outcomes, but rather the sensory possibilities that the environment affords children.

Within play literature, sensory opportunities outdoors are often discussed as stimulation for the children (Else, 2014; Thomas & Harding, 2011), focusing on their arousal excitation capacity. Nevertheless, Sensory Integration theory supports that merely providing sensory stimulation is not the scope, emphasising that: "To have an optimal effect on development, learning and behaviour, the sensory input must be actively organised and used by the child to act on and respond to the environment" in activities that have meaning for them (Parham & Mailloux, 2010, p.326). Rich outdoor play in preschool would fulfill the criteria of a challenging and adaptive process, with active engagement and meaning, through which children could naturally develop their sensory integration (Mailloux and Burke, 2008; Roley et al., 2009; Wang et al., 2021).

In conclusion, the physical environment is crucial for children's outdoor play, yet is not a unidimensional construct. It is proposed that its design, use, and assessment are largely influenced by parameters also related to organisational and human factors, while concurrently it can also influence practice. The examination of this interconnectedness is the aim of this study.

³ Proprioception relates to "sensations derived from movement and joint position" (Bundy et al., 2002 p.479).

⁴ Vestibular relates to sensation derived from stimulation to the vestibular mechanism in the inner ear that occurs through movement and position of the head" contributing to postural and visual functions (Bundy et al., 2002, p. 480).

2.5 Research questions

Based on the review of the literature and the study's conceptual framework, the need to further explore the way that the organisational, human, and physical environments influence the environmental supportiveness for outdoor play in preschool has been identified. Thereby, within the case studies the following sub-questions will be addressed:

RSQ1: How does the Organisational Environment influence the environmental supportiveness for outdoor play within this childcare setting?

RSQ2: How does the Human Environment influence the environmental supportiveness for outdoor play within this childcare setting?

RSQ3: How does the Physical Environment influence the environmental supportiveness for outdoor play within this childcare setting?

This study however aims not only to describe current outdoor play provision, but also offer explanations regarding the factors facilitating and hindering environmental supportiveness for outdoor play within Greek childcare centres, hoping to prove relevant and useful for educators, managers, policymakers, and other researchers, as well as facilitate richer outdoor play opportunities for children in Greece. Thereby the study's overarching question would be:

'What are the main barriers and enablers to the environmental supportiveness for outdoor play in Greek childcare centres?'

This question will be addressed in the Discussion chapter, following the integrated analysis of findings from both phases of the study.

2.6 Summary

This chapter started with the study's search strategy, followed by the introduction of the conceptual model of Environmental Supportiveness for Outdoor Play in Preschool, proposed to emerge through the interrelationship between the organisational, human, and physical environments.

The literature surrounding the area of study and underpinning the conceptual model was then reviewed. The first section focused on play, as an elusive phenomenon, a human right, and a major childhood occupation. The outdoor play context and outdoor play's benefits for children's health, development, learning, social participation, and overall well-being were then discussed, followed by an examination of outdoor play within past and

present preschool pedagogy. The second section analysed the ecological rationale underpinning the study, examining the work of ecological theorists, as well as the concepts of time and organisational, human, and physical environments. In the final section the study's research questions were presented. The study's methodology will be discussed in the next chapter.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This study employed a two-phase sequential mixed-methods design. The first exploratory phase of the study combined desk research with a survey of educators from around Greece, aiming to outline a picture of outdoor play provision within Greek childcare centres. This informed the design of the study's second phase employing a mixed-methods multiple embedded case study design, with an exploratory and explanatory aim, to unravel the complex interplay between the various environmental aspects shaping the environmental supportiveness for outdoor play in preschool. The final stage of the research consisted of the integrated analysis of the study's overall findings.

This chapter will discuss the study's research paradigm, design, methodology, data collection, analysis, ethical considerations, and limitations identified, and research quality criteria considered.

3.2 Research Paradigm

This research is informed by a pragmatic paradigm. In this section I will briefly discuss my views regarding the significance of research paradigms, as well as the philosophical, ethical, and methodological aspects of pragmatism underpinning my study.

The term research paradigm was introduced by Kuhn (1970) referring to the generalisations, beliefs, and values shared within a community of specialists, addressing the nature of knowledge and reality (Shannon-Baker, 2016). According to Denzin and Lincoln (2018) a paradigm encompasses four elements: epistemology, regarding knowledge acquisition and the relationship between the inquirer and the known; ontology, referring to the nature of reality; axiology, relating to ethics; and methodology, focusing on the optimal ways to gain knowledge. Morgan (2007) identified four possible, but not mutually exclusive, paradigm rhetorics: as a way to view and experience the world, an epistemological stance, as model examples demonstrating research conduct, and finally as shared beliefs within a community of scholars regarding the questions posed and the way to approach them (Teddle & Tashakkori, 2011).

Paradigms thereby are not only chosen reflections of the individual researcher's worldview but can be seen as "systems of beliefs and practices that influence how

researchers select both the questions they study and methods that they use to study them” (Morgan, 2007, p. 49), guiding, or even dictating, their thinking and actions (Kaushik & Walsh, 2019). A paradigm has been compared to a lens through which the researcher perceives the world, also shaping the way they act, investigate, and interpret (Guba & Lincoln, 1994; Kivunja & Kuyini, 2017).

This approach to paradigms is in accordance with pragmatism, where the focus is shifted from “traditional issues of epistemology”, to an emphasis “on the interactions between humans and their environment” (Greene & Hall, 2010, p. 131). For pragmatism, the metaphysical abstraction of determining what can be known based on the nature of reality is replaced by “an emphasis on experience as the continual interaction of beliefs and action” within its historical, cultural, and political context (Morgan, 2014, p.5). William James (1909), one of the main pragmatist philosophers, questioned the dualist nature of the subject-object relation and the division between the knower and the known, challenging “the traditional notion of ‘truth’” (Russell, 1961/1995, p.767). Dewey went on to stress the temporal and process elements of reality, acknowledging the evolving, transitory, provisional, and utilitarian nature of knowledge (Lorino, 2018; Russell, 1961/1995, Teddlie & Tashakkori, 2009). According to Russell (1961/1995) “Dewey does not aim at judgements that shall be absolutely ‘true’ or condemn their contradictories as absolutely ‘false’” (p. 777). Dewey (1931, 1938, 1941/2008) referred to ‘theory of inquiry’ rather than epistemology (Kaushik & Walsh, 2019) and proposed ‘warranted assertions’ as inquiry outcomes (Morgan, 2014), recognising “that knowledge is provisional, to be judged by consequent experience” (Bazeley, 2018, p.278). Morgan (2014) supports that the central question addressed through Dewey’s pragmatism relates to the nature of human experience, where “ontological arguments about either the nature of the outside world or the world of our conceptions are just discussions about two sides of the same coin” (p.4).

Thereby, rather than building upon the opposing positivist and constructivist viewpoints on reality and truth, pragmatists suggested an approach rooted in life as “inherently contextual, emotional, and social”, proposing inquiry as “the defining process” (Morgan, 2014, p.3). Dewey (1938) defines inquiry as “the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole” (p.108). The emphasis put by Dewey on the ‘situation’ rather than on the separate elements, as well as the aim for a ‘unified whole’ resonates very well with my own views on an ecological approach to research.

Apart from only discussing the process of inquiry though, pragmatist philosophers also addressed its ethical aspects, proposing that it should aim to improve the human condition (Dewey, 1954; Kaushik & Walsh, 2019). Even though such a view might be restrictive for other research fields, it does appear particularly pertinent to social research, where “inquiry will always be a moral, political and value-laden enterprise” (Denzin, 2010, p. 424-425). The work of more recent pragmatists strengthened its bond with human rights and social justice, an aspect very relevant to the topic I researched, viewing play as a children’s right and outdoor provision as a parameter affecting social justice (Seigfried, 2002; Morgan, 2014; Whipps, 2010). Issues of axiology, referring to how values, attitudes, and biases can affect research decisions, regarding the questions asked or not, the type of methods, data, and analysis, as well as our research interpretations (Hesse-Biber, 2012, p.878), are inherent to pragmatism “naturally assigning a central role of politics and ethics in every aspect of human experience” (Morgan, 2014, p.7).

Coming to methods of inquiry, pragmatism has been associated with an emphasis on finding the best way to study a phenomenon, not focusing on the quantitative or qualitative nature of the data collected, often making it a paradigm of choice within mixed-methods research (Creswell, 2014; Kivunja & Kuyini, 2017; Tashakkori & Teddlie, 2010). However, Feilzer (2010) cautions against mistaking pragmatism’s openness to the use of both quantitative and qualitative methods for “an excuse for sloppy research” (p.14), but rather understand it in connection with its view of the world as a multiply layered “existential reality” (Dewey, 1925, p.40) with a mixture of “objective” and “subjective” elements best measured or observed through a combination of quantitative and qualitative methods (p. 8). Pragmatism focuses on the creation of meaning, proposing that “qualitative and quantitative approaches can be combined in order to “compliment” the advantages and disadvantages present within each” (Shannon-Baker, 2016, p.323), with abductive reasoning proposed to connect data and theory, referring to an iterative moving “back and forth between induction and deduction” (Morgan, 2007, p. 71) used for this study’s integrated analysis (Bazeley, 2018).

In relation to the researcher’s stance, pragmatists denied the adoption of “a supposedly neutral and opinion-free position” (Lorino, 2018, p. 5), acknowledging the emotional and social nature of inquiry as affecting research choices and interpretations, and making no claims for complete objectivity or subjectivity, but rather adaptability (Morgan, 2007, 2014; Patton, 2015; Shannon-Baker, 2016). This view is consistent with my own ideas of the way that the researcher comes into the research situation, with prior knowledge and experience and my belief that such a preexisting stance may inform but also influence the

researcher's understanding and should therefore be acknowledged and constantly reflected upon.

In conclusion I believe that the pragmatic paradigm underpinning my research, especially as expressed by Dewey, not only reflects my personal worldview, but is also a choice compatible with my methodological decisions, supporting my integrity as a researcher. The study's research will be discussed next.

3.3 Research Design

A mixed-methods sequential design was applied in this study. Cresswell (2022) defines mixed-methods as "A methodology and method to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates or combines the two, and then draws inferences (called "metainferences") from the integration that provide insight beyond what can be learned from the quantitative or qualitative data" (p.2). Metainferences refer "to the inferences drawn from the quantitative analysis, the qualitative analysis, and finally, the inferences that transcend both databases" (Hirose & Creswell, 2023,p.24). The choice of mixed methods allows for different types of data to converge, complement, or extend each other, allowing for a complete "breadth and depth of understanding and corroboration" in the examination of a research topic (Johnson et al., 2007, p.123), especially when it relates to complex real-world phenomena (Bazeley, 2018; Bryman, 2006; Fetters et al., 2013; Fielding, 2012).

A sequential mixed-methods design was chosen, aiming at a richer understanding of outdoor play provision with Greek childcare centers, with insights from the first exploratory phase informing the design of the second in-depth exploratory and explanatory phase of the research (Bazeley, 2018; Cresswell, 2015; Shannon-Baker, 2016). The design could also be seen as a "social justice design" (Cresswell, 2015, p.44) seeing that it is informed by a conceptual framework viewing play as a human right and raising issues of social justice in relation to outdoor play provision. Methodological decisions within this study are also in line with ecological theorists such as Bronfenbrenner, stressing the need for methodology that facilitates the holistic rather than isolated examination of complex phenomena (Tudge et al., 2016).

The first phase of the study included a combination of desk research and empirical study using a survey design, while the second phase employed a mixed-methods multiple embedded case-study design. This was followed by the integrated analysis and

interpretation of the findings from the two stages and drawing of metainferences. Though the integrated analysis of the findings is discussed separately in section 3.6 for clarity purposes, it is important to note that integration was inherent throughout the course of this research. Figure 3.1 provides a simple diagram of this study's procedures:

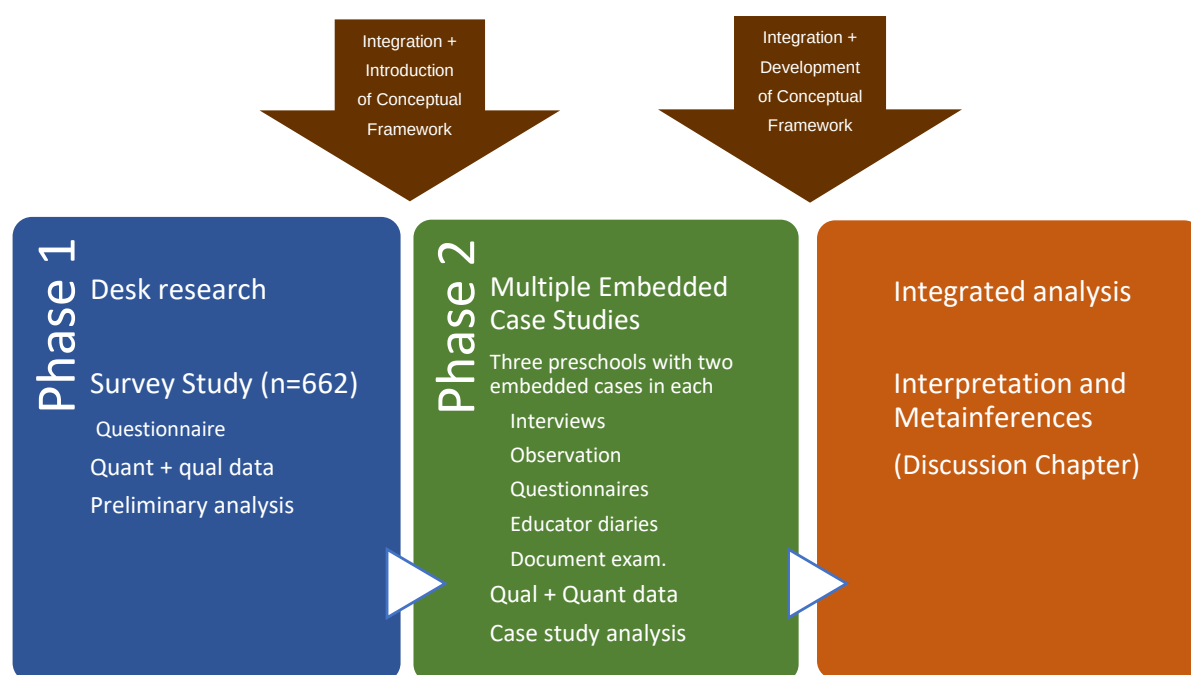


Figure 3.1: Diagram of the study's basic procedures.

The methodology for the study's two phases will now be discussed.

3.4 First Phase of the study

The first phase of the research combined desk research with empirical study using a survey design.

3.4.1 Desk research

Desk research refers to the collection of secondary data, such as statistics or material published in reports and similar documents (Cohen et al., 2018; Oxford Reference, n.d.). Within this study the aim of the desk research was descriptive, intending to gather information on the context of Greek childcare and increase the understanding of conditions governing outdoor play's position within it. Including desk research was deemed appropriate to ensure access to additional material that would not be traced

through the literature review, such as legislative documents. Various sources of secondary data were accessed, including statistics produced on a national and international level, policy and guidelines, central and local governmental documents, national and European Union reports, and University curricula.

The strategy utilised to access the materials started with defining the purpose of the desk research, which was to gain more information on Greek childcare provision and outdoor play's position within it. The second stage referred to the mapping of possible online sources of information, such as official websites and internet search engines (Moore, 2006). Websites accessed related to the European Union, the government, the national statistics authority, Universities with preschool education departments, and relevant NGOs. Online searches were performed in Greek and English using combinations of key words, such as 'childcare', 'day care' and 'preschool', together with 'Greece', 'Hellenic', or 'Greek', to access documents fulfilling the following criteria: national and European reports, legislation, and guidelines produced after the year 2000. Care was given to questioning the authority of the sources accessed. Additionally, more sources of evidence were identified through the references of the examined materials fulfilling the inclusion criteria.

Findings were stored in a computer file both in their original format where appropriate e.g. complete reports in pdf format, as well as in a word document where relevant sections were copied and highlighted. The aim of the study related to documenting and describing the findings, starting with familiarisation with the data, followed by carefully reading and re-reading the information and comparing data from different sources (Moore, 2006). The findings were then summarised, and a written report was produced, as presented in Chapter 4: First Phase of the Study. The data collected through desk research was included in the integrated analysis at the final stage of the study, using a reflexive thematic analysis rationale (Braun et al., 2018), to be presented in section 3.6 later in this chapter.

3.4.2 Survey study

The empirical study carried out was exploratory and descriptive in nature, using a survey design to examine the views and practice of educators working in Greek public childcare centres regarding outdoor play provision. Surveys involve "the collection of information from a sample of individuals through their responses to questions" and have been identified as versatile and efficient (Check & Schutt, 2012, p.2). Though using surveys has been criticised as not offering an understanding of the reasons and processes underlying values and behaviours, yet incorporating them within a mixed method approach has been identified to support the development of "an understanding of agents'

perspectives, social process and context” (May, 2011, p.126). This design was chosen to reach educators working around Greece in an exploration of outdoor play provision, an under-researched area in Greece for which very little data was available. To ensure access to a large number of educators across the country, the survey was conducted in connection with the presentations of a raising awareness programme entitled ‘The Power of Play’⁵, organised for the preschool educators by PLAYING non-profit play-promotion organisation in coordination with the municipalities responsible for the operation of the childcare centres. The researcher was not acquainted with the participants at the time of the study, and neither herself nor the non-profit organisation held any position of power or influence over the participants.

3.4.3 Sampling

The population targeted was staff working in Greek municipality-run childcare centres. Within this study the term ‘educators’ is used to refer to all staff carrying an educator role, both educators and educator assistants, seeing that there is no differentiation within the policy guidelines regarding their roles and responsibilities in relation to supporting children’s outdoor play.

This study employed a non-probability sampling strategy carried out on two levels (Cohen et al., 2018). Firstly, in relation to the municipalities, a purposive sampling approach was used to maximise access to the population and achieve representation from many different geographical areas of Greece. The municipalities approached were chosen according to their population, their geographical position, and their administrative importance, with 18 municipalities taking part in total. Eight of the thirteen regions of Greece were represented, including the three most populated, as well as the three most inhabited municipalities of the densest in population Attika region, which contains the majority of childcare centres (Hellenic Statistical Authority, 2015, Skolarikos et al., 2014). Secondly, in relation to the individual educators, the sample gathered was a convenience sample, as it relied on their presence at the presentations (Cohen et al., 2018; Field, 2013; Ruane, 2015).

3.4.4 Data collection method

A questionnaire was chosen as the data collection method for this study. Questionnaires have been identified as a potentially “cheap, reliable, valid, quick and easy to complete” (Cohen et al., 2018, p.471), structured way to collect the views of a larger number of

⁵ More information on this programme can be found in www.paizontas.gr

respondents (Basit, 2010). It was developed for the purpose of this survey, based on the literature and previous research both on play in preschool as well as on questionnaire development, in order to be both effective in gathering the targeted information and culturally relevant (Basit, 2010; Cohen et al., 2011; Saris & Gallhofer, 2014).

The survey questionnaire contained 14 questions, including basic demographic information, and focusing on educator views and practice around outdoor play (Appendix D). The questionnaires were anonymous. In addition to closed-ended, scaled, and ranked questions, two open-ended questions were also included offering qualitative data, to best capture the educators' opinion on specific issues (Basit, 2010; Ruane, 2016). According to Thomas (2016) "You can think of open questions in a questionnaire in the same way that you think about unstructured interviews, diaries, and accounts. They are bounded by the same considerations, in that you are aiming to get at the central concerns of an issue as your respondents see them" (p.196). The questionnaire took about 15 minutes to complete.

3.4.5 Piloting

The questionnaire was initially piloted with 25 educators working in childcare centres in Athens, aiming to check for clarity and consistency regarding the respondents' interpretation of the questions, as well as test the overall ease and time of questionnaire completion, as piloting has been proposed to address these issues and assist in the further refinement of the instrument (Cohen et al., 2018; Oliver, 2003). The following changes were performed: question deletion, clarifications for completion, and minor adjustments in the phrasing. Specifically, two demographic questions were removed (Questions 3 and 4) with an aim to reduce the length of the questionnaire and make it easier for the educators to complete. Clarifications on marking the answers with an 'x' and that only one answer should be circled were added. Finally, minor adjustments in the syntax of the instructions given for ranking were made in Questions 12 and 15. The questionnaire used in the piloting stage can be found in Appendix C, while the finalised one used in the study is presented in Appendix D.

3.4.6 Data collection

The questionnaires were handed out in person to the educators at the local events, as this administration method has been proposed to increase the response rate (Basit, 2010). The questionnaires were given as the educators arrived, to be completed before the presentation began, so as not to confound their views. The researcher was present in the room during questionnaire completion, proposed to be facilitatory as clarifications can be provided (Basit, 2010), however to ensure that no pressure was placed on the

respondents by the researcher's presence, the researcher was discreet, only offering clarifications when requested. The questionnaires were then returned to the researcher by the respondents, placed upside-down in a pile on a table.

3.4.7 Organising the data for analysis

Following questionnaire collection, the data was prepared for analysis (Bazeley, 2018). The returned questionnaires were checked by the researcher for completion, with the blank ones removed. The completed questionnaires were assigned identification numbers in ascending order. The researcher defined and coded the data variables in the SPSS statistical package, corresponding to the questions. The data was then entered manually, transformed into the appropriate numeric or nominal format in accordance with the question type.

The text responses to the open-ended questions were copied exactly as written and kept both within the SPSS statistical package, as well as in word format. Data was collected in Greek, as many educators did not speak English and to ensure accurate and free expression of their views. The choice was made to analyse the textual data in Greek, as translating it into English would contain a level of interpretation, which could influence analysis. The excerpts later chosen to be presented in the findings were translated into English by the researcher. The accuracy of the researcher's translations was confirmed by two other persons with excellent knowledge of both Greek and English, to ensure minimum risk of misinterpretation and semantic distortion.

Following data entry, the entire dataset was then checked for errors, and any found were corrected. All data was securely stored, in accordance with data protection guidelines to ensure confidentiality, with papers kept in a locked filing cabinet and digital files being password protected. The data analysis will now be discussed.

3.4.8 Data analysis

The quantitative analysis of the questionnaires was performed using the SPSS statistical package. As this descriptive and exploratory study utilised a convenience sample, the analysis focused on descriptive analysis methods, such as frequency and percentages, as well as cross-tabulation (Field, 2013; Ruane, 2015).

The qualitative data collected through the two open ended questions of the questionnaire, was analysed by the researcher using qualitative thematic content analysis. The structuring and generating of the coding frame were carried out in a data-driven way, covering the requirements of unidimensionality, mutual exclusiveness and exhaustiveness (Schreier, 2013). To assert coding consistency, the analysis was

performed by the researcher in two points in time. Themes were drawn in accordance with Braun et al.'s (2018) thematic analysis guidelines to be discussed in detail in the integrated analysis section. The analysis also provided quantitative information, in that percentages for each coding category were provided. The interpretation of the findings was approached in an 'empathic' stance, through engaging with the available data and trying to gain a better understanding of its meaning, without presupposing external theoretical concepts on the material (Willig, 2013).

The findings from the quantitative and qualitative analysis were then interpreted in an integrated fashion, through a reflexive stance. Integration refers to the "mutual illumination" which occurs when combining quantitative and qualitative data, leading to a "negotiated account" (Bryman, 2007, p. 8, p.21), with the findings of the survey study reported in Chapter 4. A visual depiction of the data organisation and analysis for the first phase of the study is presented in Fig.3.2. The findings of this first stage of the study informed the development of the second phase to be discussed next.



Figure 3.2: Process of organising and analysing the data for the First Phase of the study.

3.5 Second Phase of the study

A mixed-methods multiple embedded case study design was employed for the second phase of the study. The case studies were three preschool institutions, with two classes within each as 'nested units' or 'embedded subcases' (Yin, 2012, p.7). This study is exploratory, descriptive, but also explanatory, aiming to comprehend the perspectives of the people involved and acquire a better understanding of the situation (Merriam, 1988; Thomas, 2016).

Yin (2009) defines case study in relation to its scope, stating: "Case study is an empirical method that investigates a contemporary phenomenon (the case) in depth and within its

real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (p.18). This definition is particularly pertinent to my choice of using case study as my research design, since I wished to examine the environmental supportiveness for outdoor play within real-life preschool contexts, acknowledging that the play phenomenon is interlinked with the context in which it occurs. Case studies utilise different methods of data collection and have been acknowledged to generate “understanding to contribute to cumulative public knowledge of the topic” (Simons, 2009, p. 18). They have been identified as appropriate for approaching a complex context from many different angles and getting a picture that is rich, from which analytical insights can be developed (Thomas, 2016; Yin, 2014) going “beyond the study of isolated variables.” (Yin, 2012, p. 4). A case study approach was thereby chosen for this second in-depth exploratory and interpretative phase of the study, deemed consistent with a comprehensive approach to the naturalistic study of a complex phenomenon. The cases were planned to be examined consecutively so that the researcher could immerse herself in one case at a time and allow for more time and focus during the data collection and analysis process.

3.5.1 Participants

Three preschools were examined as cases within this study, with two classes from each institution as embedded units, with this number predicted to provide adequate opportunities for the researcher to explore the phenomenon of environmental supportiveness for outdoor play in preschool, both as it occurred within each institution, but also in a comparative manner (Thomas, 2016). The cases were not selected using a ‘sampling’ approach, as this would be inappropriate for a case study design which has no expectation that the cases represent a sample of a wider population (Thomas, 2016; Yin, 2014). According to Thomas (2016) “The point of a case study is not to find a portion that shows the quality of the whole. (...) So it is not a sample; it’s a choice, a selection” (p.63). Therefore, instead of approaching the participants as a sample, the chosen cases were viewed “as the opportunity to shed empirical light about some theoretical concepts or principles” (Yin, 2014, p. 40).

Since this is a multiple case study, the cases were not chosen using the same criteria as in a single case study design focusing on “extreme” or “revelatory” cases (Yin, 2014). In this study, the three chosen institutions were expected to offer some variation in relation to their environmental supportiveness for outdoor play, deemed important as there is not enough understanding of the construct of environmental supportiveness for outdoor play

to support theoretical replication, with information from different settings proposed as facilitative to acquire a clearer picture of the phenomenon (Yin, 2018).

Certain commonalities existed within the three chosen institutions. Firstly, that they were situated in the northern sector of Athens. Secondly, that the municipalities within which they operated could be characterised as middle socioeconomic class areas. This was decided to avoid extreme issues related to socio-economic conditions, such as inner-city poverty, which could confound the examination of outdoor play provision. Finally, they all had outdoor play spaces adhering to or exceeding governmental guidelines, to ensure that spatial limitations did not confound the examination of outdoor play provision. Additionally, when approached by the researcher, initially the management and later the educators within the three institutions agreed to take part in the study. On a practical note, the chosen cases were situated in a geographical location easily accessible by the researcher to support the feasibility of the study.

However, there were also differences between the institutions, relating to their legal and operating status, their expressed outdoor play pedagogy, and their outdoor play environment. Specifically, the first institution was a non-profit preschool with a particularly large outdoor play area for Athenian standards. It had no expressed outdoor play pedagogical framework, following governmental regulations. The second was a play-based private preschool. The 'play-based' nature of the institution was determined by its expressed philosophy and the way that pedagogical practice in relation to play was proclaimed. The third institution was a public municipality-run preschool with a spacious outdoor play area, following the basic governmental regulations and with no expressed pedagogical framework in relation to outdoor play practice.

In addition to the three main cases, the embedded cases within each preschool offered the researcher opportunities to examine the ways that the elements of the environment varied within the same institution, offering a better understanding of the nuances and interactions within each case. Two classes of children aged 2-5 were chosen as 'embedded cases' within each preschool. All educators working in classes in this age-range were invited to participate in the study and the embedded cases were chosen according to the educators' expression of interest to participate. When more than two educators within each preschool expressed interest, those working with different age-groups were chosen for the first and second embedded case to offer more opportunities for exploring outdoor practice with children of different ages. When more than one educators from each group expressed interest, educators working within the specific preschool for a longer time were favoured, as it was hypothesised that their practice would

be more indicative of the institution's. The combination of these case studies offered the researcher rich opportunities for examining the phenomenon of environmental supportiveness for outdoor play within each preschool, but also within different classes, attempting to unravel the dynamic factors that may underlie variations in practice.

3.5.2 Data Collection methods

The data collection utilised semi-structured interviews, questionnaires, direct observation, educator diaries, and document examination, with most data collected being qualitative. Tools were developed specifically for this study based on the literature, to ensure they addressed the study's questions and were culturally appropriate. Additionally, a researcher diary was kept for the duration of the study. The choice of using multiple evidence sources was made to acquire an in-depth and holistic understanding of the study's topic and support triangulation (Flick, 2018b) and "the development of converging lines of enquiry (...) based on several different sources of information" (Yin, 2014, p.120). The data collection methods used and their aims will now be discussed, with details on implementation during the data collection phase provided in section 3.5.4:

a) Interviews.

Interviews were carried out with i) the preschool managers of the childcare centres and ii) two educators from each institution, one from each embedded case study class. The aim of the interviews was to collect in-depth information on the staff's perceptions and practice regarding outdoor play, as well as on the preschool's regulations and outdoor play provision. Interviews have been acknowledged as "a flexible tool for data collection, enabling multi-sensory channels to be used: verbal, non-verbal, seen, spoken, heard" (Cohen et al., 2018, p. 506), based on human interaction, through which the participants can share information, interpretations, and personal views, allowing for a deeper understanding of the phenomenon investigated.

A semi-structured approach was chosen, ensuring that certain topics would be discussed but also enabling a more spontaneous communication to be established between the researcher and the interviewees, as well as allowing for additional issues not predicted by the researcher to emerge. Two preliminary interview schedules were devised, for the preschool managers and for the educators, based on the literature (Appendix D), providing a list of issues that should be covered, as well as possible questions and probes, to encourage the interviewees to discuss the phenomenon in more depth (Thomas, 2016). The interview schedules nevertheless were only used as indicative, with questions not necessarily phrased in this particular fashion or following a specific order.

b) Questionnaire.

A questionnaire on outdoor play perceptions and practice was used, aiming at collecting information from all staff and supporting a clearer picture of the institution. The questionnaire (Appendix D) was anonymous and developed specifically for this study, based on the literature on outdoor play and questionnaire development (Basit, 2010; Cohen et al., 2018; Saris & Gallhofer, 2014). It consisted of 22 questions, with five of them open, to also collect qualitative data and best capture the educators' views (Ruane, 2016; Thomas, 2016).

c) Direct observation.

Observation has been acknowledged as a powerful data collection method, offering the researcher the opportunity to collect rich, first-hand data regarding the physical, human, interactional, and programme characteristics of social settings, including verbal, non-verbal, and physical aspects (Clark et al., 2009; Cohen et al., 2018). It can identify discrepancies between self-reports and practice, as well as bring to light everyday routines and behaviours (Cohen et al., 2018; Cooper & Schindler, 2001; Robson, 2002).

Two types of direct observation were used within the study: i) observation and recording of the space and materials and ii) outdoor play observation, during the normally occurring outdoor play times, focusing on the interaction between children, educators, and the physical environment.

i. Observation and recording of the physical environment's space, objects, and sensory characteristics. This involved: a) a top view depiction of the outdoor play area made to scale, b) using The Outdoor Play Environment Categories (OPEC) tool to outline the space configuration (Mårtensson, 2013), c) documenting surfacing types, d) multiple recordings of the play material available and creating an inventory, e) multiple documenting of the sensory characteristics of the play environment, and f) taking photographs.

The OPEC is a researched tool (Mårtensson, 2013) documenting the size, proportion of shrubs, trees and hilly terrain and the integration between open spaces, vegetation and play structures, used in this study in a descriptive manner. Information was collected on surfacing types, as they have been identified to influence the play value of the environment (Woolley & Lowe, 2013). The play materials available were recorded on six occasions for each preschool, creating an inventory, categorised according to their life span, as longer term, semi-permanent and temporary, in line with the work of Casey (2007), aiming to inventory materials with minimal judgement regarding their play use by

the children or the preschool's rationale for offering them. The play area's sensory characteristics were recorded in accordance to Ayres' (2005) Sensory Integration approach, under seven sensory systems: visual, auditory, tactile, olfactory, taste, vestibular, and proprioceptive. Repeating the observations of the play materials and sensory characteristics at six points during the study was decided to capture changes in the environmental affordances through time. Photographs of the space and materials, with no children present, were taken to complement the written documentation and offer a clearer picture of the preschool's physical environment.

ii. Direct observation during outdoor play times. The observations aimed to examine the interaction between children, educators, and the physical environment during outdoor play. This observation could be characterised as naturalistic, as it took place in the space and time outdoor play normally occurred within the preschools. Naturalistic observation was deemed appropriate in relation to the study's research questions, aiming to make meaning of the observed processes in context (Cohen et al., 2018; Papatheodorou et al., 2013).

A semi-structured approach to observation was chosen, deemed compatible with the exploratory and explanatory aim of the research, allowing the researcher to be immersed within the outdoor play situation and for issues to emerge from the observation, in addition to documenting elements identified as relevant to the study beforehand (Thomas, 2016). The Environmental Supportiveness for Outdoor Play in Preschool Observation Tool (ESOPPOT) (Appendix D) was the semi-structured tool developed for this study, based on elements identified in the Test of Environmental Supportiveness for Play (TOES), relating to caregivers, playthings, playspace, and the sensory environment (Bundy, 2003; Skard & Bundy, 2008) (Appendix A). However, as discussed in the previous chapter, the TOES is a clinical instrument, focusing on the environment of individual children with additional needs not groups, and not specifically targeting the preschool setting. Thereby, adaptations and additions were made by the researcher based on reviewing the literature, for the development of the ESOPPOT tool. The opinion of two experts in the field of preschool education was also sought in relation to the clarity and relevance of the categories and indicators included in the tool developed. This new observation instrument contained three categories for examination: a) the adult human environment regarding how the educators promoted and supported children's play activities, as well as their adherence to clear, reasonable, and consistent rules, b) the physical environment, referring to the space, objects, and sensory characteristics, and c) children's behaviours and interactions within the physical environment.

This tool was used to collect qualitative information in a descriptive, narrative form. Indicators were included for the first and second category, offering possible manifestations of identified relevant educator behaviours and environmental elements. As for children's behaviours, it was decided not to group them using a preset play typology, but rather record their observed actions in a descriptive narrative fashion, for example "Boy goes into the climbing frame alone and hangs from the bars", actively trying to abstain from making judgements regarding the type of play they were engaged in, or their play motivations. Classifying children's play behaviours in research has been acknowledged as difficult, with children not only quickly flowing between play forms but also engaging in behaviours potentially fitting more than one play categories simultaneously (Loebach & Kox, 2020; Luchs & Fikus, 2013; Tovey, 2007, Pellegrini, 2009; Sando & Sandseter, 2020). Using mutually exclusive play categories depends upon the viewpoint of the observer and has been raised as a methodological decision which could accentuate the identification of certain play behaviours, while underplaying or ignoring other significant elements, especially in relation to outdoor play (Lerstrup & Konijnendijk van den Bosch, 2017; Loebach & Kox, 2020; Sandseter et al., 2022).

d) Educator diary.

A structured daily diary was devised for the educators to use during the study, based on the literature (Appendix D). It included information on the time spent outdoors, the play activities the children engaged in, the organisation and adaptations of the physical environment by the educator, documentation, and any thoughts for future planning. This tool was used to provide the researcher with additional information about the educators' planning and actions, give an account on how certain practices occur on a daily basis, and provide the educators with an opportunity to offer information not discussed in the interviews (Hyers, 2018). According to Thomas (2016) "Some people will be more fulsome in accounts in a private disclosure of the kind given in a diary than they would be in a face-to-face interview" (p.191).

The two interviewed educators from each institution completed the diaries for one week at a time, for a total of two weeks. The duration of one week was proposed to give a sense of continuity but was also considered manageable and not too obtrusive for the educators. The educators were asked to use the diary as a retrospective tool, completing it daily either after the outdoor play sessions, or at the end of the working day.

e) Document examination.

Examining documentation is suggested as one of the six sources of evidence within case study data collection (Yin, 2014). Examination of relevant documents guiding outdoor play practice, produced by the preschool institution, the local authority, or governmental agencies, aimed to offer the researcher more information and increased understanding on the organisational context within which the institutions operated and collect data on existing policy influencing outdoor play practice.

f) Researcher diary.

Recording ones' own "ideas, reflections, thoughts, emotions, actions, reactions, conversations" (Thomas, 2016, p.191) has been proposed as a vital part of case study and mixed-methods research by various authors (Cohen et al., 2018; Curtis et al, 2014; Lincoln & Guba,1985; Yin, 2014). Yin (2014) referred to the notes made by the researcher resulting from interviews, observations, or document analysis, as "field notes", proposing that "jottings during actual fieldwork should be converted into more formal field notes on a daily or nightly basis" (p. 125). Thomas (2016) also referred to field notes as "an assortment of opinions, views, interpretations, remembered conversations and so on" (p.191). Within this study the term 'researcher diary' was used, as this tool was used to both record field notes, as well as document the researcher's thoughts, emotions, and ideas during the whole research process, supporting a reflective stance.

3.5.3 Piloting

Data collection methods were piloted in a preschool institution in the north sector of Athens, different to the ones taking part in the study, aiming for further refinement of the instruments (Cohen et al., 2018; Oliver, 2003). The piloted data collection tools can be found in Appendix C while the finalised ones used in the study can be found in Appendix D.

The semi-structured interview schedules were piloted with the preschool manager and two educators, with the aim of checking the clarity and relevance of the questions and probes in the preliminary interview schedule, as well as average duration. Following piloting, five clarifying and probing questions were added for the preschool managers, referring to educator breaks, non-contact time for documentation, risk in play, and rules for outdoor play. For the educators three clarifying and probing questions regarding rules for outdoor play and risk were added. The adapted interview schedules were then used in the case studies.

The questionnaire was piloted with 10 educators to check for ease of completion, question clarity and consistency regarding the respondents' interpretation, as well as test the time of questionnaire completion. Following piloting, small adaptations were made, namely adding a completion clarification in question 12 and changing the wording in question 17, with the adapted questionnaire used in the case studies.

The Environmental Supportiveness for Outdoor Play in Preschool Observation Tool was trialed by the researcher on two outdoor play observations, aiming to check for ease and clarity of observation documentation. After piloting, the following changes were made to the instrument: a) phrasing changes, such as 'elements' changed to 'opportunities' in section B.3.b; b) merging of subsections, as in sections A.c, A.d and A.e referring to educator adherence to rules merged into one, as well as the merging of sections B.1.b and B.1.c, referring to space configuration and accessibility; and c) the addition of indicators for clarity purposes, as in sections B.1.c and B.2.a. Additionally, some changes to the format of the observation tool were made to make it easier for the researcher to use for documenting, such as leaving wider margins to allow for longer descriptions.

The educator diary was piloted by two educators for one week to check for ease and average time of completion, as well as question clarity. After piloting, the following changes were made: the first question was split into two sub-questions and the format was altered to fit one page.

3.5.4 Data collection

The study's data collection process will now be discussed:

a) Interviews

All interviews were conducted individually in a quiet room of the preschools with no one else present and the door closed, at a time convenient for the interviewees. Interviews were recorded on two digital sound devices, to make sure that data was not lost and ensure sound clarity.

- i. Three semi-structured preschool manager interviews, lasting 68, 60 and 85 minutes respectively (M=71 min).

- ii. Six semi-structured educator interviews. One educator from each of the embedded case study classes within the three preschools was interviewed within this study. The interviews of the six educators lasted between 25 and 60 minutes (M=45 min).

b) Questionnaire.

The questionnaires were given to all the educators working within the three preschools at the beginning of each case study, were completed at a time convenient for them, and then returned to the researcher when she re-visited the preschool after one week. All 36 educators working in the preschools completed the questionnaires.

c) Direct Observations

i. Observation and recording of the physical environment's space, objects, and sensory characteristics.

In the beginning of each case study the researcher made a top view depiction of the outdoor play area made to scale. The Outdoor Play Environment Categories (OPEC) was used to describe the space configuration (Mårtensson, 2013) of the three preschools and surfacing types were documented. The researcher recorded the play materials available on six occasions for each preschool, creating an inventory in line with the work of Casey (2007). A written description of each play area's sensory characteristics was made at six points in time for each case study, in accordance with Ayres' (2005) sensory categories. Photographs of the space and materials were taken in all three institutions, when no children were present.

ii. Direct observation during outdoor play times.

During the study, the researcher documented a total of 12 observations, by observing whole outdoor play sessions for each class, using a new ESOPPOT form for every observation. Duration ranged between 30 and 85 minutes, with a mean of 47.5 minutes. Each class was observed twice, so four play observations took place for each institution. Observations for each class were organised two weeks apart to allow enough time for the researcher to copy and organise the handwritten notes into word files, to minimize the influence of one observation on the next, and to keep the researcher's presence discreet. In the first and third case study, where seasonal differences in outdoor play time or complete omission due to weather conditions, were reported in the interviews and questionnaires, observations were organised in May 2019 and June 2020 respectively, which were periods proposed as optimal. Observations in the play-based preschool took place at the end of February and beginning of March 2020, as playing outside in all weathers had been reported, but additionally due to fears for forthcoming lack of access later in the Spring due to imminent COVID restrictions.

During the observations the researcher adapted a non-participatory observer stance, aiming at minimal disruption of the outdoor play situation. The researcher moved around

the space in a discreet fashion, to offset any feelings of being watched by the children and educators, keeping her distance so as not to disturb children's play, while also able to hear what the children were saying (Bitou & Waller, 2017). The researcher was introduced to the children prior to the observations on one occasion and was open to answering any questions they had. Additionally, the researcher's presence within the preschool on times prior to the direct play observation e.g., during the three days where the interviews took place or while making observations of the play space and materials, helped accustom the children and educators to her presence during actual data collection.

d) Educator diary.

The two interviewed educators from each institution whose classes took part in the study were asked to keep a structured diary for a total of two weeks. At two points during the study, they were given a folder containing five forms to be completed over the course of the week. The folders were then returned to the researcher in person when she visited the week after. All educators completed the diaries for the full two-week duration.

e) Document examination.

The researcher examined relevant documents used by the preschools to guide outdoor play practice, produced by the preschool institution, the local authority, or governmental agencies.

f) Researcher diary.

A researcher diary was kept during the whole course of the study, to include both field notes, as well as documentation of the researcher's thoughts, emotions, ideas, and reflections. Field notes were kept immediately after any field session to ensure a more accurate record.

A summary of the data collection methods used in the study, their implementation, and aims can be found in Figure 3.3.

Data collection method	Implementation	Aims
Interviews	3 Preschool Managers 6 Educators Semi-structured tool devised for this study.	Collect in-depth information on staff's outdoor play perceptions and practice, preschool's regulations and outdoor play provision.
Questionnaires	36 Educators Questionnaire devised for this study.	Collect information from all staff, regarding outdoor play perceptions and practice.
Observations of the physical environment	Scaled top view depiction of the outdoor play areas OPEC (Mårtensson, 2013) 18 physical environment observations – 6 for each institution	Collect information on the physical environment's space, objects, and sensory characteristics.
Semi-structured observations during outdoor play	12 in total – 4 for each institution (Range: 30-85 min, M= 47.5 min) Semi-structured tool devised for this study.	Examine the interaction between children, educators, and the physical environment during outdoor play.
Educator diaries	2 educators from each case study (6 in total) – for two weeks each. Used tool devised for this study.	Collect additional information about the educators' planning, actions, and daily practices.
Document examination	Documents from the three institutions	Gain a better understanding of the organisational environment.
Researcher diary	During the course of the study	Record additional field notes and facilitate the researcher's self-reflective process.

Figure 3.3: Summary of data collection methods, implementation, and aims.

The way that the data of the study's second phase was prepared for analysis will now be discussed.

3.5.5 Organising the data for analysis

Following data collection, evidence from the different sources were organised to prepare for analysis:

a) The interview recordings were transcribed accurately, including pauses and non-verbal sound responses, to best capture the meaning the participants wished to convey. Each interview was turned into a separate word file, organised per institution.

b) The questionnaire-data was accurately copied into excel files and organised per institution.

c) The play material and sensory characteristics documentation, as well as relevant photographs were organised into word files per institution.

The play observation data, collected through hand-written notes on the observation schedules, was accurately copied into word files and organised per observation, class, and institution.

d) The educator-diary data was accurately copied into word files and organised in chronological order per educator and institution.

e) Document examination data was also organised into word files per institution.

f) The researcher diary was kept in a word file, colour coded for each case study.

The choice was made to analyse qualitative data from the interviews, questionnaires, observations, diaries, and documents in Greek, as translating it into English would contain a level of interpretation, which could confound the analytical process. The excerpts later chosen to be included within the Findings chapters were translated into English by the researcher. To ensure minimum risk of misinterpretation and semantic distortion, the accuracy of the researcher's translations was confirmed by two other persons with excellent knowledge of both Greek and English.

Following data entry, the whole dataset was checked for errors. Data files were then imported into the NVivo qualitative analysis software, organised per institution. All data was securely stored, in accordance with data protection guidelines to ensure confidentiality, with papers kept in a locked filing cabinet and digital files being password protected. The data analysis process will now be described.

3.5.6 Data Analysis

The analysis took place in two stages. Firstly, data was analysed separately per case-study, immediately following its data collection completion. The NVivo qualitative data analysis software was used to support data organisation and analysis. The second stage of analysis related to the integration of the overall findings, described in the next section.

The importance of framing case study analysis holistically has been emphasised, even though different elements may be analysed using various methods (Thomas, 2016). Yin (2014) links the need of holistic analysis to the concept of data triangulation, which doesn't occur if data from different sources is handled separately. In this study the limited quantitative data collected was analysed in a descriptive manner, using frequencies and

percentages, yet the main focus remained in the association of the quantitative data to the rich qualitative evidence collected. The qualitative analysis was done in a data driven way, using an inductive approach, through the method of interpretative inquiry and the elicitation of themes. Thomas (2016) proposes this method as befitting to case study analysis, involving categorising, sorting, finding coherence in the data, simplifying and synthesising. From within the methods proposed as helpful to achieve a good interpretative analysis, I focused on the constant comparative method, a process of rigorously going through the evidence and continually comparing data from various sources (Thomas, 2016), involving the simultaneous coding and analysis of the data for concept development and refinement, identifying their properties, exploring their relationships, and integrating them “into a coherent explanatory model” (Taylor & Bogdan, 1984, p. 126).

The dataset for each case study was coded through multiple revisiting of the data, adopting an empathic stance. Axial coding was used in that the data was sorted under the three environments identified within the conceptual framework, but open coding was used for further categorization (Basit, 2010). Coding was done phrase by phrase, with excerpts sometimes coded under more than one code. Coding was initially done in a semantic level “capturing explicit meaning, close to participant language” whereas as the analysis progressed codes were additionally generated at a latent level, aiming to capture “a deeper, more implicit or conceptual level of meaning, sometimes quite abstracted from the explicit content of the data” (Braun et al., 2018, p. 853). An example of a coded interview excerpt from the third case study’s preschool manager can be found in Figure 3.4 and an example of coding of an educator diary from the first case study in Figure 3.5, including coding at the semantic and latent level.

Me: You were telling me that at the end of July you held a 'pool-party', where you filled small inflatable pools with water outdoors.

Preschool manager: Yes, the children wait for it and they want it!

Me: I noticed that you also have water-taps outdoors, are they used for children to play with water?

Preschool manager: To use the water-taps for play? No, they don't.

Me: Is there another way they play with water?

Preschool manager: With water... hm... I can't think of another way now, except for the plastic pools, that we use for them to play.

Me: So, would you say that water only appears during the end-of-the-year pool party?

Preschool manager: Yes, during the pool party. Unless we want to wash something, maybe wash a toy, then we use the water-taps.

Me: Is that something the adult would do?

Preschool manager: Ah yes, it's the teacher that will do it, not the children. Because the children... well OK, they have the tendency of course to turn on the tap...

Me: Is it OK for them to turn it on or do you tell them not to?

Preschool manager: Well now, we tell them not to, because they get drenched, right? Which is the same that happens with our water-taps indoors in the school. That is, we do the same thing. They like playing with water, but they do it as play. For example, they wash their hands for a long time...

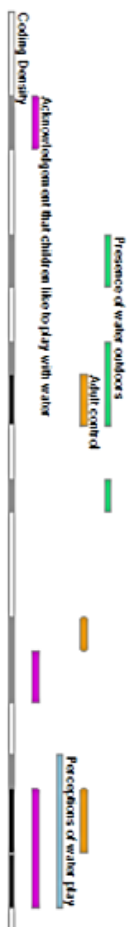


Figure 3.4: Interview coding example.

c) Did you organise the outdoor physical environment in some way before you went outside today with the children? No d) Did you adapt the physical environment during outdoor play? No e) Did you record any written observations of children's outdoor play today? Yes f) Have you got any thoughts on planning for outdoor play based on today's experience? The sanitp materials need renewing. Though the children are spending a lot of time in this part of the garden, their interest often fades as the materials remain the same.	Coding Density Despite acknowledging limitations to the materials no adaptation Setting up and adapting the environment for play Despite acknowledging material limitations no organisation of the environment Organising the outdoor play environment Documentation Factors inhibiting outdoor play Reflection upon ways to support Materials lack novelty

Nodes ... Code At Factors inhibiting outdoor play (Nodes\Human environment)

Figure 3.5: Educator diary coding example.

The NVivo software was used for coding the data, as well as gaining a picture of how codes were organised. The following NVivo screenshots show two stages in the analysis progression related to the research question on how the organisational environment supported children's outdoor play within the third case study setting (Fig.3.6):

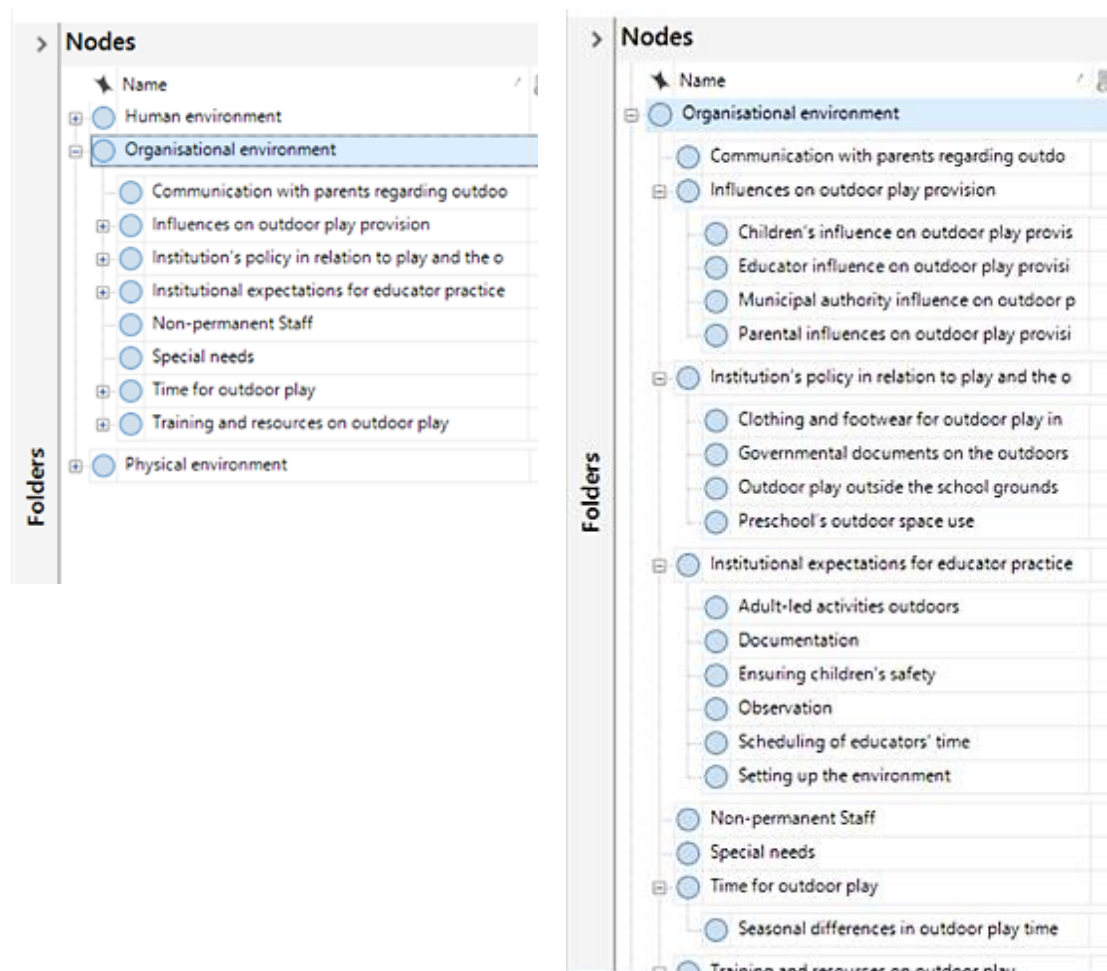


Figure 3.6: Example of analysis progression

In the next section the analytical process aiming at the synthesis and interpretation of the findings from the two phases of the study will be discussed.

3.6 Integrated analysis of the study's both phases

The last stage of the research refers to the integrated analysis of the study's findings, after the data from the first and second phases were analysed in separation. Bazeley (2018) refers to integration of data sources and analyses as central to mixed method analysis, coherently "pulling together elements of theory, information gained, and insight"

(p.2). She supported that an integrated approach to analysis allows for different types of data to complement or extend each other, thereby offering the researcher the opportunity to develop “a richer, more analytically dense, more complete, and confidently argued response to their research question(s)” (Bazeley, 2018, p.12). Bazeley’s operationalisation of integrated analysis model is presented in Fig. 3.7.

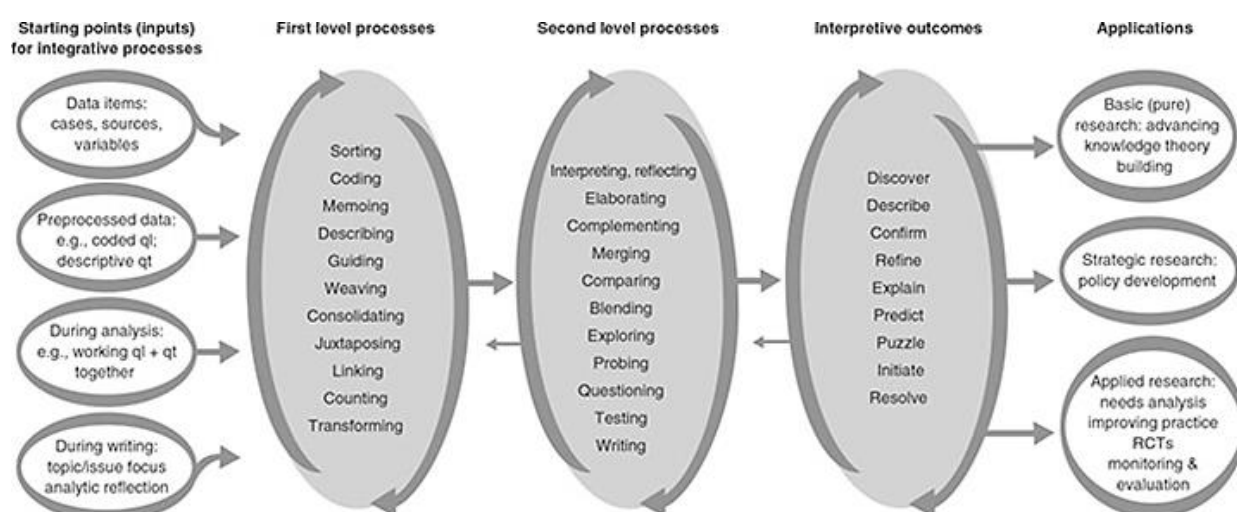


Figure 3.7: Operationalising mixed methods integration (Bazeley, 2018, p. 66)

In this study, the first and second phase findings were firstly analysed in separation using ‘First level processes’ described in the first column, as reported in the previous sections. The integrated analysis discussed within this section initiated with ‘Second level processes’ described in the second column of Fig. 3.7 and was characterised by reflexive thinking, reviewing, and reconsidering prior or accumulated assumptions, assisted by keeping a reflective diary, as well as mindmaps (Fig. 3.8) and diagrams (Fig. 3.9) to explore the interrelationship between factors, as in the following examples.

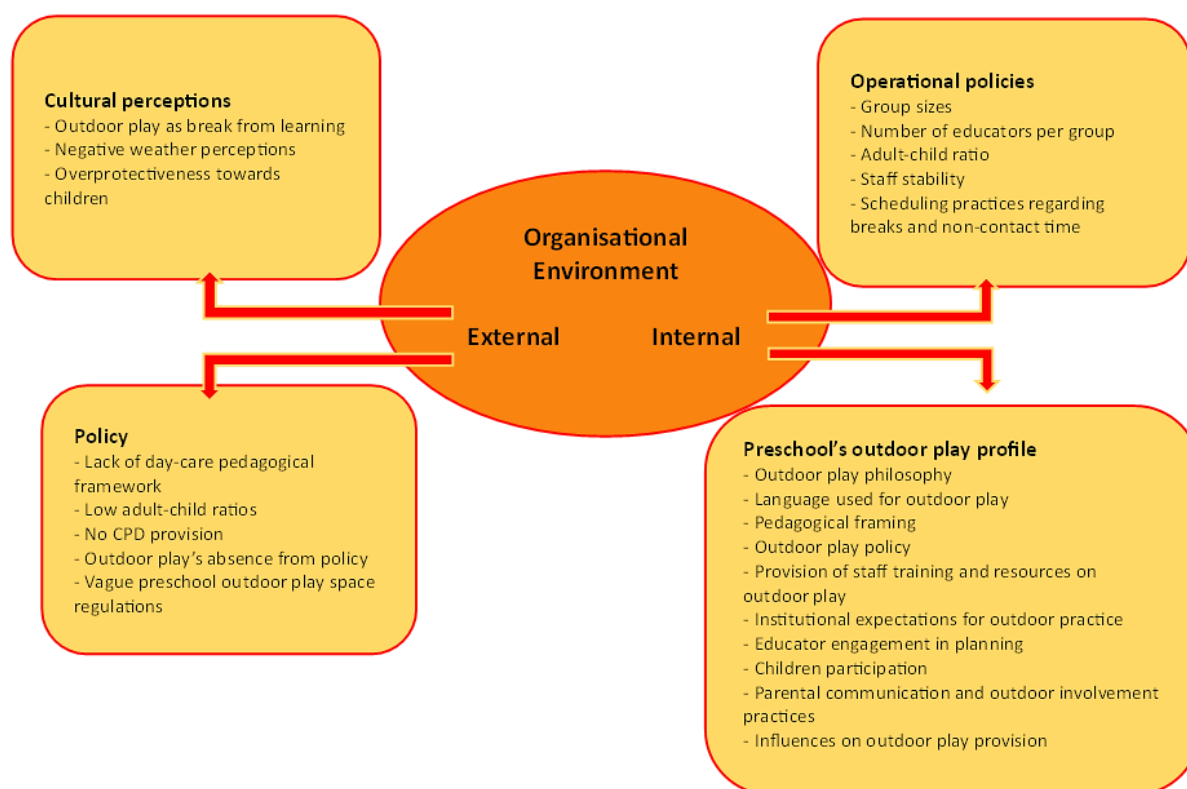


Figure 3.9: Diagram exploring the interrelationship between organisational factors.

The final stage of analysis referred to the integrated interpretation of the findings as described in the 'Interpretive outcomes' column of Fig. 3.7, guided by abductive reasoning. Morgan (2007) referred to abduction as involving reflection upon theory and data. An abductive approach enabled multidimensional interpretation, with data from each stage and data collection method informing, questioning, and enhancing the findings (Feilzer, 2010). This enabled the reaching of metainferences, and what Dewey named 'warranted assertions'. Bazeley (2018) identifies 'warranted assertions' to be the goal of mixed-methods research, defining them as inferences "convincingly argued and supported by research evidence (...) built from the integrative analyses undertaken during the course of the project (...) most often developed iteratively and abductively from an accumulated body of data and analyses rather than from particular bits of evidence" (p.278-279). The warranted assertions of this study are presented in the Discussion chapter, where interpretations are made regarding the study's overarching research question on the main barriers and enablers for the environmental supportiveness for outdoor play in preschool.

On a practical level, during the integrated analysis, data from both study phases was revisited and re-analysed, through a reflexive thematic analysis rationale, following the six-phases described by Braun et al. (2018): familiarisation, code generation, development of candidate themes, reviewing of themes, further definition and naming of themes, and producing a written report. The analysis was done in a data driven way, using an inductive approach. Reflexive thematic analysis aims “to provide a coherent and compelling interpretation of the data, grounded in the data” (Braun et al., 2018, p. 848). The steps of thematic analysis followed will now be discussed:

a) Familiarisation. Familiarisation with the data started while the data was generated and organised, and continued through the researcher’s constant immersion in it, by listening to audio data, reading, and rereading the texts, looking at photographs, making notes of interesting features, and memoing (Braun et al., 2018).

b) Code generation. The coding done in the first stage of analysis was revisited and further refined at this stage.

c) Theme generation. Braun et al. (2018) propose that themes “are built, molded, and given meaning at the intersection of data, researcher experience and subjectivity, and research question(s)” (p. 854). At this stage candidate themes were developed through the researcher’s reflection upon the data, coding, and research questions.

d) Review of themes. The candidate themes were reviewed and the relationship between them was explored, through reflection, rigorous and systematic examination, and deep engagement (Terry et al., 2017). During this process, themes were pruned, added, or merged, while the rationale surrounding some of them also changed.

e) Further definition and naming of themes. The themes identified were further defined and re-named to best reflect data interpretation, with Braun et al. (2018) proposing that “good themes are those that tell a coherent, insightful story about the data in relation to the research question” (p.854). Figure 3.10 displays the evolution of this study’s theme development, through the processes of theme generation, review, and further definition and renaming.

Candidate themes generation	Review of themes	Further definition and naming of themes
• External organisational environment showing lack of supportiveness for outdoor play in preschool day-care centres. • Interrelationship between outdoor play policy, philosophy and pedagogy. • Limited time for outdoor play. • Staff working conditions affecting educator role during outdoor play. • Limited children's participation in decision making for outdoor play. • Need for inclusion of educators in the planning for outdoor play provision. • Communication with parents affecting parental influences on outdoor play provision. • Lack of educator training affecting children's outdoor play opportunities. • Limited opportunities for risk in play related to interlinking organisational, human and physical environment factors. • Lack of access affecting children's play opportunities. • Loose parts presence affecting children's outdoor play opportunities. • The presence of water and messy materials affecting children's play opportunities. • Sensory characteristics of the environment linked to children's sensory processing opportunities. • Outdoor play environment viewed as positive for the participation of children with additional needs.	• Lack of external organisational environment supportiveness. • Outdoor play's absence from policy and pedagogical guidelines, mirrored in preschool policy. • Outdoor play time influenced by organisational, human and physical environment factors. • Physical environment play value dependent upon outdoor play practice. • Limited outdoor play training provision affecting staff perceptions and practice. • Staff working conditions affecting educator outdoor play practice. • Absence of policy and regulations limiting children's participation in decision-making. • Educator reflective engagement in planning for outdoor play not only up to individual educators. • Organisational, human and physical environment factors affecting opportunities for risk in play. • Presence of loose parts, water and messy materials influenced by interlinking organisational and human factors. • Children's sensory processing opportunities linked to environmental characteristics, policy, and practice. • Preschool outdoor play provision recognised as a complex phenomenon.	• Cultural perceptions • Policy • Pedagogical framing • Staff training • Staff engagement • Use of the physical environment • Presence of loose parts, water and messy materials • Time

Figure 3.10: Theme development process.

It is important to note though that this was an ongoing process not only referring to three discrete points in time, with intermediate changes taking place, continuing through the production of the written report, which will be discussed next.

f) Producing a written report. The written report for the final stage of integrated analysis for this study is presented in the Discussion chapter. Braun et al. (2018) stress this stage is not “purely a writing-up exercise” but could also serve as “a final test of how well the themes work individually in relation to the dataset, and overall” (p.857), viewing this as the final phase of analysis. Indeed, changes were made to the themes during the writing stage.

Though the stages of thematic analysis were presented in separation, it is important to note that in practice this process was not linear, but rather “iterative and recursive” with the researcher often moving “back and forth between the different phases” (Terry et al., 2017, p. 23) and constantly re-immersing in the data.

The ethical considerations for this study will be discussed in the next section.

3.7 Ethical Considerations

Ethical standards for research were adhered to in this study, in line with the British Educational Research Association's (2018) and the University of Reading guidelines. The study went through the University of Reading ethical approval process, with the ethical approval and risk assessment documents found in Appendix E.

Participation in the study was totally voluntary and participants were free to withdraw at any time, without having to specify a reason and with no repercussions. The purpose and methods of the study, as well as the future use of the data collected and the way that it would be stored, were explained to all participants, managers, educators, and parents, to ensure informed consent. The information and consent forms for the study can be found in Appendix F. All data collected was kept confidential and the participants' anonymity was protected. The identities of the institutions, the educators and the children were concealed through use of aliases in the presentation of the findings. All data collected was safely kept in accordance with data protection regulations.

Though the researcher did not work within the institutions that took part in the study, nor held any position of power or influence in relation to any of the study's participants, both "external" and "internal ethical engagement" issues were considered "acknowledging the more nonlinear and 'messy' process which typifies qualitative educational research" (Floyd & Arthur, 2012, p.2). Thereby, the researcher not only clearly outlined strategies to ensure informed consent, confidentiality, and anonymity, but additionally reflected upon ethical issues that could arise while in the field. For instance, potential ongoing relationships with participants, where confidentiality and anonymity would need to be sustained both during and after the completion of the study. Furthermore, during the entire course of the study the researcher engaged in ongoing reflection over her moral obligations towards the research participants who entrusted her, striving to empathise and anticipate possible repercussions, aiming to adhere to what Gibbs & Costley (2006, p.244) referred to as "an ethic of care".

Observations within the study were of a naturalistic nature, with data collected on the way that outdoor play normally occurred within the preschools. The researcher did not intervene in the play process and observations took place in a non-participatory manner aiming at minimal disruption. Prior to data collection, the researcher discussed the research project with all the educators within the preschool settings and responded to their inquiries, such as concerns regarding data collection, confidentiality, or time demands for participation. Parents were provided with detailed information about the study in writing and were offered the opportunity to call the researcher to discuss any

questions or concerns they might have, for instance regarding data collection methods, confidentiality, and the researcher's interaction with the children. Three parents phoned to enquire about the study's data collection process prior to giving consent and the researcher answered their questions. Questionnaires were anonymous. Face-to-face interviews with the educators and the preschool managers took place at convenient times for the participants and in conditions that ensured confidentiality. The educator diaries were kept for a set limited time of two weekly periods, to avoid educator discomfort. The researcher remained available to discuss any concern experienced by any of the participants throughout the study.

Special consideration was made in relation to negotiating children's assent. Assent "conveys a sense of agreement obtained from those who are not able to enter into a legal contract" (Ford et al., 2007, p. 20) and is an additional ethical consideration to parental informed consent. It stems from a recognition of "children's competence and agency, their rights to be informed about research and their capabilities to negotiate participation" (Ericsson & Boyd, 2017, p. 300). Negotiating assent with children includes strategies such as providing information in a way appropriate to the children's needs and employing sensitivity during the study regarding researcher judgements on children's comfort and ongoing agreement to participate (Parsons, 2018; Sherwood & Parsons, 2021).

Taking these into account, in this study the researcher was introduced to the children of the classes acting as embedded case studies on one occasion before the observations where she provided information on the scope of the study and her presence in the preschool, in simple language appropriate to the children's age. She verbally clarified to them that observations were not compulsory and that they could express their wish not to be observed at any time. The children were then given the opportunity to ask any questions that they might have, and during the course of the study the researcher remained open to any queries they might have about her presence. For instance, during an observation a child asked: "What are you writing?" and the researcher explained.

In addition, during the play observations the researcher utilised her sensitivity in case a child showed any signs of discomfort related to her presence, or they displayed any verbal or non-verbal indication that they did not want to be observed (Ericsson & Boyd, 2017), in which case she would move away and stop observing the child.

Quality criteria for this study will be discussed in the next section.

3.8 Quality Criteria

The issue of quality within mixed-methods research is not straightforward (Cresswell, 2015; Fàbregues et al., 2019; Onwuegbuzie & Poth, 2016). Nevertheless, even though divergence exists between theorists on the way that quality should be measured, there is undeniable consensus in the view that quality should exist and be evident. It is with this in mind that I will describe my personal route towards quality in my study. I will briefly discuss different viewpoints related to quality, especially as they apply in relation to case study and mixed methods research.

Stemming from a positivist viewpoint, mostly related to quantitative research, traditional concepts used to measure quality refer to construct validity, internal validity, external validity, and reliability. Yin (2014) describes ways that these constructs can be applied to case study research through use of certain tactics, but my views side with authors who expressed reserve on applying such concepts to case study research (Merriam, 1988; Stake, 1995), as well as qualitative study in general (Denzin, 2008; Tracy, 2010; Yazan, 2015). Thomas (2016) goes as far as suggesting that reliability and validity are “not a principal concern when doing a case study” (p.64) linking quality in case study research to the initial study’s idea, the way the case is chosen, the fastidiousness with which the context is described, the appropriate selection of methods of analysis and the character of the arguments used for reaching conclusions, criteria upheld within this study.

The following ways to support case study quality were also used within this study: developing a case study database, establishing a chain of evidence, employing multiple sources of evidence, and posing pressing how and why questions (Yin, 2014). A database was created, including the whole evidentiary base as seen in Fig.3.11, so that the raw data can be inspected without only relying on the researcher’s report and interpretations. Employing multiple sources of evidence links to the concept of method and data triangulation (Flick, 2018b), which in this study took place through the collection of data at different times, in different settings, as well as through using different methods, enabling evidence convergence (Stake, 1995; Yin, 2014). Considering that data triangulation is not simply reliant on data collection but also relates to the way it is analysed, this study employed a holistic, integrated view on analysis, posing pressing how and why questions, with the researcher showing “reflexivity and care” (Greene et al., 2001, p. 41). Providing a detailed account of the data collection and analysis process, clearly describing the steps followed, created an “auditable chain of evidence” (Baskarada, 2014, p.10), with transparency supporting the trustworthiness and credibility of the research (Twining et al., 2017).

ESOPP First Case Study		ESOPP Second Case Study		ESOPP Third Case Study	
Name	Status	Name	Status	Name	Status
First Case Study Document examination	✓	Second Case Study Document examination	✓	Third Case Study Document examination	✓
First Case Study Educator Diaries	✓	Second Case Study Educator Diaries	✓	Third Case Study Educator Diaries	✓
First Case Study Interviews	✓	Second Case Study Interviews	✓	Third Case Study Interviews	✓
First Case Study Observations	✓	Second Case Study Observations	✓	Third Case Study Observations	✓
First Case Study Questionnaires	✓	Second Case Study Questionnaires	✓	Third Case Study Questionnaires	✓

Figure 3.11: Case study database

Within qualitative research various rationales have been proposed for quality criteria (Flick, 2018a). Tracy (2010) described eight quality markers, to provide a model both expansive and flexible: worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethics, and meaningful coherence. This study has aspired to cover these markers, tackling a real-world, timely and pressing topic; displaying rich rigor in relation to theoretical constructs and empirical processes; showing sincerity through transparency and self-reflexivity; supporting credibility through triangulation and rich, concrete descriptions; aiming to resonate with readers and practitioners who may relate the study's findings to their own situations; making a significant contribution conceptually and in relation to future policy and practice development; considering ethics; and showing meaningful coherence between the literature, research questions, procedures, findings, and interpretations.

Finally, another viewpoint on quality relates to adherence to a mixed-methods rationale. Hirose & Creswell (2023) developed six core quality criteria for mixed-methods: advancing a rationale for mixed methods; writing quantitative, qualitative, and mixed methods questions; reporting of quantitative and qualitative data separately; identifying a mixed method design and presenting a diagram; stating the use of integration in a joint display; and meta-inferences. The way this study adheres to these criteria will briefly be discussed. The rationale for using a mixed-methods approach for this study is justified as it aims to examine a complex, real-world phenomenon, best addressed through using a combination of quantitative and qualitative methods. A mixed-methods approach yielded a greater understanding of outdoor play provision in Greek childcare settings, providing rich descriptive evidence, as well as offering insights into explaining issues affecting practice. During the study, questions to be answered through quantitative and qualitative measures were incorporated, both through the survey as well as the case studies,

primarily focusing on qualitative data. For example, in the case studies qualitative questions were asked regarding the preschools' philosophy, pedagogy and policy, the educators' perceptions and actions, as well as the organisation of the physical environment, addressed through multiple data collection methods, but quantitative questions were also included relating to issues such as the amount of time children spent outdoors or the size of the outdoor play area. The study's overarching mixed methods question related to identifying the main barriers and enablers to the environmental supportiveness for outdoor play, addressed through an integrative analysis and interpretation of qualitative and quantitative findings. Quantitative and qualitative data were reported in appropriate ways within the study, with type of evidence and analytical methods clearly explained. The type of mixed methods design was identified, and the process was presented into a simple diagram (Fig 3.1). Integration was evident in the study's design and analysis of the findings.

An additional parameter that was taken into account to ensure this study's quality was the reflexivity of the researcher, to be further discussed in the next section.

3.9 Researcher reflexivity

In contrast to positivist notions of quality relying on the objectivity of the researcher, reflexivity is identified as an important parameter both within qualitative and mixed-methods research, as well as the pragmatic research paradigm. Self-reflexivity relates to the researcher's "honesty and authenticity with one's self, one's research, and one's audience" (Flick, 2018a, p.842) and refers to an "active, ongoing, critical scrutiny of the process of knowledge generation, construction, and interpretation" (Bazeley, 2018, p.279). Thomas (2016) refers to the concept of critical awareness which is pertinent for any type of social inquiry. Throughout the course of my study, I strove to be reflective and inquisitive, acknowledging and reporting my previous experience, beliefs, and positionality, posing difficult questions to myself, and considering rival explanations to my findings. I was aided in this process through the use of a researcher diary, memoing, as well as consultations with a 'critical friend' during both the data collection and analysis phase of the research, with their input providing useful insights and provoking critical discussions in relation to both the research process, my reasoning and interpretations.

In support of a reflexive researcher stance, my previous extensive working experience with preschool-aged children as an occupational therapist within educational settings needed to be reported and taken into account. This was acknowledged to support using my sensitivity to ensure children's assent during the observations. Additionally, through my clinical work my observation skills had been developed to a very high standard, which

allowed me to be able to use the semi-structured observation tool by immersing myself in the play process, zooming in and out of play episodes, while also managing to keep a detailed narrative record of children's actions. However, even though the observations took place in a finite space allowing visual inspection of most of the play area, it is not proposed that the researcher was all-seeing at all times, and that some of the actions that went on in the play environment would be missed.

The study's further limitations, as identified and acknowledged to ensure quality, will be discussed next.

3.10 Study limitations

This study's limitations primarily relate to the researcher's subjectivity and issues of generalisability.

Through the course of this study I have strived to recognise the subjectivity I bring as a researcher, actively remaining open and sensitive to personal biases and values, while also acknowledging that my personal viewpoint and experience played a role in the understanding and interpretation of the data. As mentioned above, throughout the study I kept a diary documenting my thoughts and feelings and regularly sought the support of a 'critical friend' with whom I would discuss. I found both these measures to be helpful in monitoring and disciplining my subjectivity, for instance identifying feelings of frustration about children's limited play opportunities or illuminating a sense of kinship with some educators, facilitating my reflection, especially during the study's analysis and interpretation.

As for generalisability, this study makes no claims that the findings are generalisable, due to the methodological choices regarding research design. In the first phase of the study, a convenience sample was used to maximise access to the population. The purposive sampling of the municipalities and the co-organising of the events with the local authorities, supported an attempt to reach a wider representation of educators. Rough estimates of the number of educators employed in municipality-run childcare centres at the time of the study would indicate that the aim of maximizing access to the population was achieved, with the unconfirmed data indicating that the sample could be as high as 18 per cent of the population. However, seeing that this is based on rough estimates and that this study used a convenience sample, no claims of sample representativeness or generalisability of the results are made. It could nevertheless be argued that the

exploratory and descriptive aim of this first phase of the study were met, in the sense that it provided an initial outline of outdoor play provision within Greek public childcare centres.

Coming to the second phase of the study, the choice of a multiple embedded case study design aimed to achieve an in-depth understanding of the phenomenon of environmental supportiveness for outdoor play, to add to the knowledge-base on this topic and gain novel analytical insights, while expanding upon existing theory. The use of different data collection methods ensured triangulation but also produced rich data supporting the study's credibility. The case study design allows no claims for scientific generalisation, which Bassey (2001) proposed is a shared problem within social science research, examining human beings and thereby inevitably embracing multiple variables. He went on to introduce the notion of fuzzy generalisability as a legitimate way for social research to inform practice and theory development. Considering the in-depth nature of this study, its rich findings could potentially be transferable, relevant, and helpful for people in other settings, for them to explore further and think about the supportiveness of their unique environment. The study's findings do add to the knowledge base, increasing our understanding of supportive environments towards outdoor play, which could prove useful for practitioners, researchers, as well as policy makers. The study's limitations will be further discussed in the Conclusion chapter.

3.11 Summary

This chapter presented the study's pragmatic research paradigm and mixed-methods sequential research design. The methodology for the first and second phases of the study was described, including participants, data collection methods, piloting, data collection, organising the data, and analysis. The integrated analysis for both phases of the study was then discussed, followed by ethical considerations and limitations identified, as well as the research quality criteria considered.

Having completed the discussion of the study's methodology, the next chapter will present the findings from the first phase of the study.

CHAPTER 4: FIRST PHASE OF THE STUDY

4.1 Introduction

This chapter presents the findings of the study's first phase, which was a combination of desk research and an empirical study using a survey design, aiming at exploring outdoor play practice in Greek public childcare centers. In the beginning of the chapter basic information on Greece will be provided, followed by an exploration of the Greek preschool education and care, focusing on the current system, policy, pedagogy, and educator training. Outdoor play in childcare centres will then be explored. In the next section, the findings of the survey study (n=662) will be presented, examining the views and practice of educators working in public childcare centres. A preliminary discussion of the findings will be provided, influencing the second phase of the study discussed in the next three chapters.

4.2 Greece – A very short overview

Greece, or the Hellenic Republic, is a country in the Balkan peninsula in south-east Europe, best known for its ancient civilisation. It has a surface area of 132,049 square kilometers, with a resident population of 10,816,286, of which more than a third live in the region of Attiki, where Athens, the country's capital, is located (Hellenic Statistical Authority, 2016). Greece is a coastal and mountainous country with over 2000 islands, of which over 170 are inhabited. It has a Mediterranean climate with regional variations.

Greece is a democratic presidential parliamentary republic, with the local government structures further divided into seven decentralized administrations, 13 regions, 74 regional units and 325 municipalities. It is a member of the European Union since 1981 as well as the Euro zone. In 2009 Greece entered an economic and financial crisis which resulted in severe austerity measures with serious social repercussions. UNICEF's (2017) report on the living conditions for children during the financial crisis identified a significant increase in childhood poverty and social exclusion in Greece, exceeding the average for the 27 EU countries. In 2021 Greece's gross domestic product (GDP) per capita, as expressed in purchasing power standards, placed it 26th out of the 27 countries of the European Union (EU). The percentage of people at risk of poverty or social exclusion is 27.4 per cent, placing it first within the countries in the Euro area and only third within the whole of the EU (Hellenic Statistical Authority, 2022; Smith et al., 2022). Having discussed

some basic information on Greece, the preschool education and care system in Greece will now be explored.

4.3 Preschool education and care in Greece

4.3.1 The Greek preschool education and care system

Preschool education and care in Greece operates as a split system, falling under different Ministries, between the kindergartens (nipiagogeion) catering for children four to six years old, forming part of compulsory education and falling under the Ministry of Education and Religious Affairs and the childcare centres (pedikos stathmos) (Gregoriadis et al., 2016; Nikolaidis, 2017; Petrogiannis, 2010; Rentzou, 2018). This study targets outdoor play practice within childcare centres, so the information provided here will focus on their operation and not that of kindergartens.

Childcare institutions in Greece can be public, private, and non-profit, with variations in legislation governing their licencing, operation, and quality control according to their status (Fotiou, 2017; Pavlopoulos, 2017; Skourletis & Fotiou, 2017). Most public childcare centres are run by the local municipalities, falling under the Ministry of Interior. The Ministry of Labour and Social Affairs is responsible for regulating the private and non-profit childcare centres, as well as 26 public preschools operating under the agency of Hellenic Manpower Employment Organization (OAED). However, private and non-profit institutions can offer a combination of childcare and kindergarten services depending on licensing, potentially able to cater for children 2 months to 6 years old, hence may also fall under the additional control of the Ministry of Education. In the past the Ministry of Health was also involved in the operation of the childcare centres. Licensing for the foundation and operation of public and private childcare centers is controlled by the local municipalities (Gregoriadis et al., 2016; Nikolaidis, 2017; Petrogiannis, 2010; UNICEF, 2021). Thereby, the system governing Greek preschool education and care could be characterised as complex and fragmented.

Public childcare centres run by the municipalities are divided into those caring for infants and toddlers from 6 months up to 2 and a half years, those catering for children 2 and a half up to 4 years, until the beginning of compulsory education, and centres that combine the two services. The minimum enrollment age can go down to two months following approval by the local authority board (Skourletis & Fotiou, 2017). The maximum age of enrollment in childcare centres used to go up to five years until a change in the compulsory education age was introduced in 2018. The new policy was initially applied in

184 municipalities and was gradually implemented throughout the country by the academic year 2021-2022 (Pavlopoulos, 2018; Sakellaropoulou, 2020). Enrollment in public childcare centres is not guaranteed, and priority is given to economically or socially disadvantaged families. Fees are dependent on financial criteria with service provision free for very low-income families, varying in accordance with local authority decisions. Private institutions have higher fees. Vouchers subsidising children's enrollment in public and private childcare may be offered to families depending upon financial and social criteria through funding from the European Social Fund (ESPA). (UNICEF, 2021; Hellenic Agency for Local Development and Local Government, 2022).

There is severe lack of data in relation to childcare centres. To start with, the number of childcare centres in Greece remains unclear. The Hellenic Statistical Authority began documenting them in 2014, but no data had been released to date. The Hellenic Agency for Local Development and Local Government (E.E.T.A.A.) (2015) refers to 1139 organisations offering childcare services, nevertheless only including those that received European funding through social programmes. In accordance, there is no current data on the number of educators employed within childcare centres, not even within the public ones. Personal communication with the Hellenic Statistical Authority (8/12/2022) confirmed that no definite data is available regarding the number of educators in municipality-run childcare centres, with unchecked estimates for 2017-2018 referring to roughly 3,500 educators and assistants throughout Greece. It is nevertheless important to stress that this is only an estimate and not confirmed data. Similarly, no clear data is available on the number of children attending childcare in Greece, nor their percentage in relation to the entire population (Nikolaidis, 2017). Recent data for children up to three years of age report that 47.5% of children (154,371) were out of formal childcare in 2020 at national level (UNICEF, 2021). This was supported by Gromada and Richardson's (2021) report identifying Greece as one of the top three countries in the EU in relation to informal child-care. UNICEF's (2021) report acknowledges the perpetuation of lack of data in relation to childcare provision, supporting that "the sufficiency of teacher to infant ratio remains unknown and so are children's unmet needs in terms of access" (p.102). The decentralized nature of childcare services and lack of comprehensive registering through the various Ministries involved, both currently and in the past, have been offered as causes for absence of adequate data (Megalonidou, 2020; Nikolaidis, 2019).

This though seems to be only part of the issue, as the fragmentation of preschool education and care between three Ministries additionally creates confusion and enhances a lack of common direction. In 2021 the Ministry of Labour and Social Affairs introduced the development and operation of a National Board for Preschool Education and

Edification, through a joint ministerial decision with the Ministry of Interior (Sakellariopoulou, 2021). This board with a three-year duration, the first of which was formed in April 2022, has a counselling and advisory role, under the General Secretariat of Social Solidarity and Combating Poverty of the Ministry of Labour and Social Affairs (Mihailidou & Petsas, 2022; Mihailidou et al., 2022). The aims outlined in the ministerial decision include the scientific research and study of issues relating to the operation of childcare centres, as well as the scientific and technical support regarding the introduction and implementation of a new pedagogical framework named 'Beehive', which will be discussed later in the chapter (Sakellariopoulou, 2021). The introduction of this policy appears to acknowledge the need for coordination in relation to preschool education provision and creates an initial bridge between the two ministries responsible for childcare centres, nevertheless, does not resolve the division between them, nor does it address the complete separation between non-compulsory and compulsory preschool education. In addition, even though scientific research and support of pedagogical practice are described as a central aim of this board it is interesting to note that of its 15 seats, 11 are outlined to be allocated to high profile public servants and representatives of the unions and only four to experts in the field of preschool education, creating the impression of a focus on the management of the practical operational aspects of preschool provision rather than on its pedagogical identity. It is important to note that the effects of this new policy are not documented within this study as it took place after data had been collected.

Coming to the operational aspects, public childcare centres run from September 1st to July 31st and from 7.00 am to 16.00 pm. The daily time of operation can be extended up to two additional hours, following the approval of the administrative or municipality council (Skourletis & Fotiou, 2017; Pavlopoulos, 2017). Private childcare centres operate during the same period and may offer more flexible hours.

As for the staffing of childcare centres, current regulations for public municipality-run childcare centres dictate an adult-child ratio of two educators and one assistant for 12 children for 'infant' groups 6 months to two and a half years of age and one educator and one assistant for 25 children for groups of children over two and a half years of age (Skourletis & Fotiou, 2017). However, the guidelines for private and non-profit childcare centres published in the same period are different, dictating a ratio of one educator for eight infants from six months up to two and a half years, with one assistant added if the group reaches 12 infants and one educator for 25 children over two and a half years, with an assistant added if the group exceeds 35 children (Fotiou, 2017). Rentzou and Sakellariou (2011) proposed that the implemented policy is "at the lower thresholds of quality" identifying large group sizes and small adult-child ratios to affect educators'

interactions with the children (Rentzou, 2018). Similarly, the educators in the study by Papadopoulou et al (2014) referred to large group sizes, lack of adherence to adult-child ratios, as well as high staff turnover, as major obstacles to practice. UNICEF reports (2014, 2021) raised concerns regarding adherence to ratios, with lack of centralized data prohibiting a clear picture of childcare conditions. Additionally, high staff turnover was identified as an issue requiring further examination, which could relate to the practice of employing educators on short-term contracts as low as two months to cover staffing needs, through periodical European funding. Childcare pedagogy will now be discussed.

4.3.2 Pedagogy within childcare centres

Unlike kindergartens that follow a national curriculum, the childcare centres have no explicit pedagogical framework, only brief regulations mostly referring to operational issues (Gregoriadis et al., 2016). The governmental regulations on the operation of childcare centres introduced in 2017 (Skourletis & Fotiou, 2017) stated that the educational programme should be child-centred, respecting children's personal, social, and cultural differences, in accordance with the latest scientific data. The role of helping the children develop physically, mentally, emotionally, and socially, was outlined as one of the main aims of childcare centres, nevertheless no explicit guidance on how this would be achieved in practice was offered, in accordance with the previous governmental guidelines in effect since 2002 (Papadimas & Thanos, 2002). An intermediate bill in 2009 included one sentence referring to the childcare centres' pedagogical programme, stating that it should be dictated by the Minister of Interior, following the recommendations of the union of municipalities and the trade unions (Papoulias, 2009). Additionally, an absence of guidelines for children's participation in decision making and incorporation of children's views has been highlighted in all policy documents examined. These policies would indicate not only a lack of a pedagogical philosophy, but also a mechanistic view of preschool pedagogy, focusing on practicalities and technical issues, rather than pedagogy. This absence of a pedagogical framework could relate to a societal undervaluing of care services, viewing childcare centres as welfare institutions, providing care rather than education, highlighted as a parameter affecting policy and funding decisions both internationally (Bunting, 2021; Urban et al., 2012) as well as in Greece (Petrogiannis, 2010; Rentzou & Sakellariou, 2011; Rentzou, 2013).

A recent shift occurred in October 2021, when the Ministry of Labour and Social Affairs introduced a bill outlining the introduction of a novel pedagogical framework for childcare centres catering for children 0-4 years-of-age, called 'Beehive' (Κυψέλη) (Sakellaropoulou, 2021). This pedagogical framework was developed by an

interdisciplinary team, of which I was a member, and was released in July 2022 (Meghir et al., 2022). The 'Beehive' outlines a play-based approach to preschool education and care, based on the following pillars: a) Democracy, equitability, inclusion and respect, b) Relationships, c) Environment, d) Holistic development, e) Play and f) Creativity. Nevertheless, the 'Beehive' framework was introduced after the data collection period of this study and to date has not gone through the piloting, let alone the implementation stage. It is thereby important to note that the effects of the 'Beehive' pedagogical framework will not be discussed within this study as it had not been implemented at the time of the research.

Coming to the topic of quality provision within childcare centres, it has been identified to be "marginally researched" and "an underdeveloped area receiving neither adequate encouragement nor support" (Megalonidou, 2020, p.4). Petrogiannis (2010) commented on the scarcity of the word 'quality' even within legislative texts. Limited research could relate to the absence of official, centralized procedures for provision evaluation, with the few studies available on this subject coming from individual researchers identifying low to medium quality of services (Megalonidou, 2020; Petrogiannis, 2010, 2013; Rentzou, 2015). Grammatikopoulos et al. (2017) highlighted that despite sporadic studies "the provided quality in relation to children's outcomes has actually never been measured, as there are no established procedures of ECEC evaluation in the Greek context" (p.2). Nikolaidis (2017) highlighted that the auditing of the childcare centres, currently under regional control, focuses only on operational aspects such as the space and staffing, without addressing the pedagogical programme or the activities children engage in. UNICEF's (2014) report identified problems in the operation of Greek childcare centres in relation to lack of staff, adult-child ratios, and suitability of buildings and equipment.

An additional area identified as problematic relates to parental involvement within childcare. Regulations propose that educators should communicate with parents monthly, to discuss their children's development and inform them regarding the preschool's activities (Skourletis & Fotiou, 2017). However, Megalonidou (2022) reported inadequate scores on the Provisions for Parents subscale of the Revised Infant/Toddler Environmental Rating Scale (ITERS-R) (ITERS-R), which were consistent with previous findings by Sakellariou and Rentzou (2009) using the Revised Early Childhood Environment Rating Scale (ECERS-R). This issue could be fuelled both by lack of parental involvement strategies on the part of the childcare institutions, as well as parental perceptions regarding the role of childcare. Papadopoulou et al. (2014) quoted educator reports on difficulties cooperating with parents, whereas Rentzou (2013a) identified parents mostly viewing childcare centres as welfare institutions, focusing on aspects such

as nutrition and safety, with less significance assigned to their pedagogical dimension and parent-educator collaboration.

Having discussed the system and pedagogy underlying Greek childcare provision, the training standards for preschool educators in childcare centres will now be examined.

4.3.3 Preschool educator training in Greece

Post-secondary preschool education training in Greece is offered in three ways, the Preschool Education University departments for Kindergarten teachers (four years), the Early Childhood Education and Care schools (four years), and vocational training in public or private institutions (two years). Early Childhood Education and Care schools, formerly known as schools for Nursery Nurses, were part of Higher Technological Educational Institutions, but became University departments in 2018. The requirement of a degree from an ECEC or Kindergarten teacher department is prerequisite to be employed as a childcare educator. Vocational training is required to be employed as an educator assistant.

The undergraduate training of educators in relation to outdoor play was examined within this study and found to be very limited. For example, the 2021-2022 curriculum of the Department of Early Childhood Education and Care of the University of Western Attica in Athens, one of the three University departments in Greece, included only one course specifically dedicated to play entitled 'Child and Play'. No separate course in relation to outdoor play or play in nature was offered, with outdoor play mentioned as part of only two out of the 45 courses offered. Specifically, within the syllabus of the course 'Child and Play', outdoor play is mentioned as one of 13 topics to be covered, nevertheless put together with a variation of other subjects: "Play, its material and space. Play-grid environments. Play & Technology. Contemporary trends in outdoor play". In the course 'Pedagogical and educational movements' it is mentioned as one of 13 syllabus topics to be covered as: 'The outdoor play movement/ Pedagogy of risk'. Only two books on outdoor play were included in the study guide's suggested reading list.

As for the continuing professional development (CPD) of educators working in childcare centres, it is optional and dependent upon the circumstances of the municipality or institution within which they are employed, rather than mandatory and centrally controlled as it is for kindergarten teachers (Megalonidou, 2020). Even though the need for educators to develop their knowledge in accordance with scientific developments is acknowledged within operational guidelines, this is presented as a personal responsibility (Skourletis & Thanou, 2017). Accordingly, Megalonidou (2020) identified an inadequate score on the item Opportunities for professional growth of the ITERS-R scale for

educators working in childcare centres. In line with lack of centralised CPD provision outdoor play training is not included within implemented policy.

Lack of early years educators' CPD provision has been linked to "a lack of public investment in the early childhood sector" (Eurofound, 2015, p. 18) as well as to a perception of childcare centres as institutions offering care rather than education (Petrogiannis, 2010; Rentzou & Sakellariou, 2011; Rentzou, 2013a). The split system could accentuate the division between educators working within the education system and those viewed to offer care services, with the latter receiving less ongoing training and rewards related both to social status, as well as regarding working conditions and salaries (Urban et al., 2012). For instance, though Kindergarten teachers can be employed in childcare centres, ECEC graduates cannot be employed within kindergartens.

Outdoor play within Greek childcare centres will now be discussed.

4.4 Outdoor play in Greek childcare centres

Despite outdoor play's significance within early childhood education and care, this is an area sparsely documented in Greece. A term commonly used to refer to outdoor play within Greek education and care services is 'recess' (*διάλειμμα*) (Giannakou, 2007; Papadimas & Thanos, 2002; Pavlopoulos & Giavroglou, 2017). Another term formally used to refer to outdoor time could be translated as 'yarding' or 'time in the yard' (*προαυλίζομαι/ προαυλισμός*) which, apart from educational institutions, is also commonly used in reference to outdoor time for prison inmates, focusing on ensuring their physical activity (Makri, 2021; Ministry of Justice, 2022).

The childcare centres' regulations that were in effect from 2002 up to 2017, made no direct mention to the outdoor environment (Papadimas & Thanos, 2002). The childcare regulations introduced in 2017 make only one mention to the outdoors in their statement that, among other activities, the time for free outdoor play, 'should be determined based on children's age, as well as their personal and biological needs' (Skourletis & Fotiou, 2017, p.55992), with no further suggestions regarding minimum time outdoors or the set-up of the outdoor space for play. In addition, no suggestions regarding the promotion of physical activity are given, even though Greece figures within the world leaders in childhood obesity for many years (OECD, 2014; OECD, 2019), with Greek two- to four-year-olds reported to be overweight or obese at a rate of 39.6 per cent (UNICEF, 2021). It appears that these guidelines, acknowledge children's need for play, but place the responsibility for assessing and implementing quality provision solely on the educators.

Very limited empirical evidence can be found on outdoor play provision within Greek childcare centres. Examining overall preschool play practice, studies have indicated that not all aspects and types of play are equally accepted and implemented, with active and sensory play identified to be lacking (Giagazoglou et al., 2008; Gregoriadis et al., 2016; Megalonidou, 2020). Giagazoglou et al. (2008) highlighted that children attending public preschools spent most of the time in indoor sedentary activities, such as cutting and drawing. This was supported by Gregoriadis et al. (2016), who found an increased focus on fine motor, blocks, and art-related activities, with the Nature and Science item of the ECERS-R rating below minimum levels. Similarly, Megalonidou (2020) using the ITERS-R scale identified the Active Physical Play item within the Activities subscale rating between 'inadequate' and 'minimal' and much lower than the Fine motor item which rated 'good', while the Nature and Science item rated last, not only within this specific subscale but overall. This was consistent with Rentzou's (2013a) study on parental preferences, where the 'Nature/science' ranked low, specifically eighth from the end. Megalonidou's (2022) study also identified that the Free Play item rated lowest within the Program Structure subscale, and under the 'minimum' indicator. Regarding sensory play, in the study by Gregoriadis et al. (2016) using the Activities and Programme Structure subscales of the ECERS-R, the 'Sand and water' item was given by far the lowest score, rating between inadequate and minimum and "substantially lower than all other items" (p.1147). This finding was consistent with the results on parental preferences by Rentzou (2013a), where the item 'Sand/water play' was rated last by parents on both the Early Childhood Environment Rating Scale Parent Questionnaire (ECERS-PQ) and Infant/Toddler Environment Rating Scale Parent Questionnaire (ITERS-PQ). In the same study the items 'Space for gross motor play' and 'Gross motor equipment' were ranked low, specifically fifteenth and eighteenth respectively by the parents. From the limited existing data, it thereby appears that outdoor active and sensory play are not adequately valued and promoted within preschool.

Another important issue influencing outdoor play though relates to the physical environment of the childcare centres. Petrogiannis (2010) identified "lack of sufficient space, especially for outdoor activities" as a problem steadily recognised by educators and parents (p. 134), consistently with qualitative findings by Papadopoulou et al. (2014) highlighting this issue as an educator concern, stating that "inadequacies in space and lack of resources for the implementation of activities constitute a significant difficulty in everyday practice" (p. 1854). Current regulations dictate childcare centre space-child ratios of 3.5 square meters per infant/toddler up to two and a half years and 4 square meters per each child over that age. Nevertheless, proposed ratios are often not adhered

to with some childcare centres having minimal or no outdoor space (National Technical University of Athens, 2013). This could be related to the vague phrasing dictating the existence of 'outdoor' or 'semi-outdoor space' within policy. Semi-outdoor spaces refer to unheated sheltered areas with at least one side open to the outdoors (Stefanopoulos, 2000), but in the past had been commonly used by developers as a legal loophole to increase the indoor surface of buildings (Delevegos, 2010). Nevertheless, even if these areas are used as semi-outdoor in accordance with regulations, it would still allow for spaces with mostly indoor characteristics, such as surfacing, walls and ceiling, to pass as 'outdoor' areas for licensing purposes. Additionally, no guidelines regarding indoor-outdoor continuity were discovered in the policy and recommendation documents examined.

Very limited data exists in relation to the outdoor play spaces of childcare centres, but the latest available study of public childcare centres within the Municipality of Athens carried out by the National Technical University of Athens (2013) identified issues regarding their existence, size, and configuration. In the same study 9 per cent of centres did not have any outdoor play area and a further 36.36 per cent had limited space of 10 to 100 square meters, more common in inner city, highly populated areas. Only 7.8 per cent of the childcare centres had outdoor play spaces exceeding 500 square meters. Examining the space in relation to the number of children in the childcare centre, the mean for the 77 centres examined in that same study was 3,26 square meters per child, which is below what is suggested in the regulations, with the smallest ratio being 0.43 square meters per child and the largest 15.85 square meters. Outdoor spaces were documented to vary from yards to covered spaces under apartment buildings, or even verandas. The majority displayed hard or not-natural surfaces, such as cement, slabs, tartan®, or plastic and some lacked natural materials and plants. Lack of imagination and natural elements was identified in the set-up of the outdoor spaces (National Technical University of Athens, 2013).

Examining the standing regulations for the operation of childcare centres, no guidelines or suggestions regarding the design and configuration of the outdoor play area are offered, apart from mentioning that it may include static play constructions and plants, without it being mandatory; and that safety standards for structures and surfacing should be adhered to (Pavlopoulos, 2017). Additionally, the examination of standing regulations revealed lack of guidelines for the inclusion of the views of the educators or children in the design of the preschool outdoor area, appearing to solely involve professionals, such as architects or engineers, municipality technical services, as well as the committees

responsible for ensuring playground safety (Fotiou, 2017; Pavlopoulos, 2017; Skourletis & Fotiou, 2017).

Another important aspect affecting outdoor play provision relates to time. However, no data is available on the amount of time that children spend outdoors in childcare in Greece. Current regulations do not give suggestions on time outdoors as mentioned earlier, and the regulations in effect from 2002 to 2017 (Papadimas and Thanos, 2002) only implied time outdoors referring to a daily 'recess' time of approximately 30 minutes without specifying where this should take place (Papadimas & Thanos, 2002). Similarly, within past Ministry of Education guidelines, at the time also pertaining to childcare centres offering kindergarten classes, recess was grouped with breakfast in a daily time not to exceed 45 minutes (Giannakou, 2007). Additionally, seasonal outdoor play time variations are reported in research, especially in relation to limited outdoor time in the winter, with children sometimes not taken outside to play for days or even weeks (Bitou & Waller, 2017, Sandseter et al., 2019). Considering Greece is generally characterised by a mild climate this practice could relate to a general stance of overprotectiveness towards children anecdotally reported (Giosafat, 2010; Kalyvas, 2017). Consistently, in a small-scale study involving parents and preschool educators from five European countries, Greek participants were identified as more risk-averse, with an indicative finding related to the mean proposed average age from which parents allow their children to play outside alone being 11.8 years in Greece, compared to 5.8 years in Norway (Sandseter et al., 2019).

Concluding the review of the literature regarding outdoor play in Greek childcare centres, the main finding seems to be the very limited available data. The scarcity of information on this subject indicates a gap in knowledge and justifies the need for more research in this area. The survey study undertaken as the first empirical phase of this research will now be discussed.

4.5 The survey study

4.5.1 Scope of this study

This study had an exploratory and descriptive aim and used a survey design to examine the views and practice of educators working in Greek public childcare centres regarding their views and practice around outdoor play. The methodology of this study was outlined in Chapter 3. The questionnaire used as the survey's data collection method can be found in Appendix D.

4.5.2 Results

The completed questionnaires collected during this survey were 662. Considering that a rough estimate of the educators and assistants working in municipality-run childcare centres for 2017-2018 was 3,500, this sample could be assumed to include roughly 18% of the population. Nevertheless, seeing that no confirmed data exists regarding the total number of staff, no definite claims could be made about the numeric relationship between this sample and the total staff population. Additionally, seeing that this was a convenience sample no claims for representativeness of the entire population are made. It could however be argued that this sample could provide a preliminary description of educator perceptions and outdoor play provision with public childcare centres.

The return rate of completed questionnaires was high at 95 per cent, which could be explained by the fact that the survey took place in person, during 18 local events, where the educators were gathered for a presentation. In relation to the completion of individual questions within the questionnaire, the mean completion rate for closed-ended questions was 615 and for the open-ended questions 542.

Demographics

The municipalities included in the study and the number of questionnaires collected in each one can be found in Table 4.1. A map of Greece with the locations of the municipalities included can be found in Figure 4.1.

Municipalities included in the survey study	Number of questionnaires collected
In the Attiki region – wider Athens area	
Municipality of Athens	188
Peristeri	41
Galatsi	31
Korydallos	27
N. Herakleio Attika	25
Pireus	16
Pallini	10
Other areas around Greece	
Ioannina	43
Herakleio, Crete	42
Thessaloniki	41
Kavala	38
Trikala	31
Florina	29
Larissa	28
Alexandroupoli	22

Halkida	20
Kastoria	19
Volos	11
	Total: 662

Table 4.1: Municipalities in the survey and number of questionnaires collected.

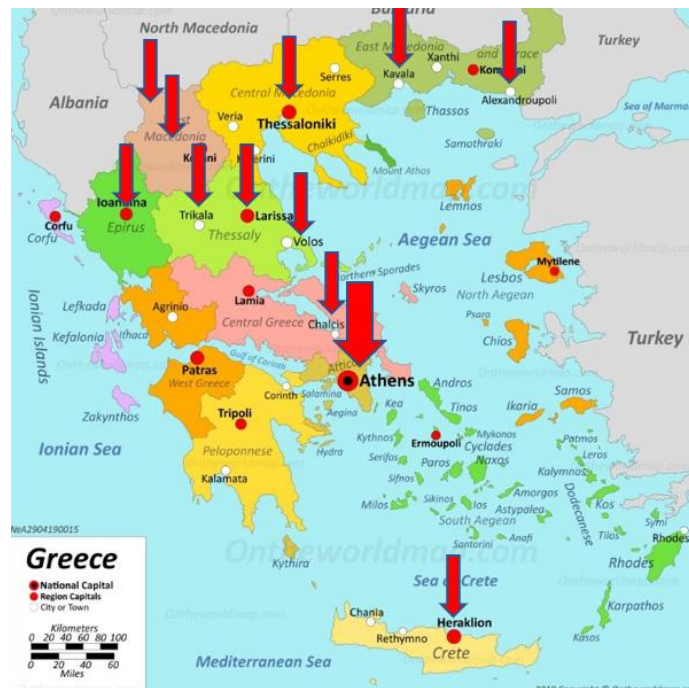


Figure 4.1: Map of Greece with Municipalities included in the survey

The educators' mean age was 40.3 years, with a mean of 15.2 years of working within preschool education, which is consistent with the policy of minimal new recruitments, due to the austerity measures implemented within the Greek public sector since the beginning of the economic crisis in 2009.

Children's age groups and group sizes

The sample included educators working with all age groups catered for within the childcare centres, with the majority (71.4%) working with children over two and a half years old (Table 4.2).

Age groups	Frequency	Percentage
6 – 18 months	75	12.1%
18 months - 2.5 years old	103	16.6%
2.5 – 3.5 years old	242	39.0%
3.5 – 5 years old	201	32.4%
Total	621	100.0%

Table 4.2: Age groups of children the educators worked with

The reported group sizes can be found in Table 4.3. A cross-tabulation of the age groups and group sizes (Table 4.4) showed that 58.2 percent of the groups of 2.5-3.5 years olds exceeded 20 children with 10.3 percent within that exceeding 26. For children over 3.5 years old 65.4 percent of the groups exceeded 20 children, with 18 percent within that exceeding 26.

Group size	Frequency	Percentage
<15 children	111	17.8%
15-20 children	204	32.8%
21-25 children	239	38.4%
26-30 children	58	9.3%
>30 children	10	1.6%
Total	622	100.0%

Table 4.3: Group sizes

Age groups	Group size					Total
	< 15 children	15-20 children	21-25 children	26-30 children	>30 children	
6 –18 months	37 50.7%	23 31.5%	10 13.7%	2 2.7%	1 1.4%	73 100%
18 months - 2.5 years old	30 29.1%	52 50.5%	16 15.5%	5 4.9%	0 0%	103 100%
2.5 – 3.5 years old	31 12.8%	70 28.9%	116 47.9%	22 9.1%	3 1.2%	242 100%
3.5 – 5 years old	12 6.2%	55 28.4%	92 47.4%	29 14.9%	6 3.1%	194 100%
Total	110 18.0%	200 32.7%	234 38.2%	58 9.5%	10 1.6%	612 100%

Table 4.4: Cross-tabulation of the age groups and group sizes

Does the childcare centre have an outdoor play area?

The majority of the educators indicated that their childcare centre had an outdoor play area, but 7.5 per cent stated that they had none.

Do the educators consider the outdoor play area of the childcare centre appropriate?

The educators' views on the appropriateness of the outdoor play space were indicated on a 4-point scale with results found in Table 4.5. It is important to note that 12.7 per cent deemed it as 'Not at all appropriate' and 23.51% as 'A little appropriate'.

How appropriate is the outdoor play area of the childcare centre?	Frequency	Percentage
Not at all appropriate	79	12.72%
A little appropriate	146	23.51%
Appropriate enough	288	46.37%
Very appropriate	103	16.58%
Don't know/ No opinion	5	0.8%
Total	621	100.0%

Table 4.5: How appropriate is the outdoor play area of the childcare centre?

How much time do children spend outdoors while in childcare?

The educators were asked to state the time during a typical day that the children spend outdoors. The mean reported outdoor time per day was 48.5 minutes, but with a large standard deviation of 30.5 minutes. The findings for daily outdoor time can be found in Table 4.6.

Daily outdoor time while in childcare	Frequency	Percentage
0 minutes	41	6.9%
1-15 minutes	10	1.7%
16-30 minutes	182	30.8%
31-45 minutes	84	14.2%
46-60 minutes	198	33.6%
61-90 minutes	35	6%
91-120 minutes	32	5.4%
over 120 minutes	7	1.3%

Total	589	100.0%

Table 4.6: Children's daily outdoor time while in childcare.

A 6.9 per cent of the educators stated that the children do not go outdoors at all. A cross-tabulation of the educators reporting no time outdoors and the existence of outdoor play space within the childcare centre revealed that 69.6 per cent of the educators reporting no outdoor space also reported no time outdoors with the children. Nevertheless, these were only 41 per cent of the educators that reported no outdoor time, meaning that 59 per cent of the educators not taking the children outside had outdoor space within the childcare centre.

A further 32.5 per cent of the educators reported that they spend up to half an hour per day outdoors. Only 12.7 per cent of the educators stated that they spend more than one hour per day outdoors with the children, with just the 1.3 per cent within that group exceeding outdoor time of two hours per day.

Do the educators believe children should spend more time playing outdoors?

When asked if in their opinion the children should play outdoors more than they do, 86.9 per cent of the educators responded positively, 11.2 per cent negatively, and 1.9 per cent that they did not know.

What do the educators view as most important in relation to children's play?

The educators were asked about what they believed is most important in children's play, by ranking nine offered statements according to importance for them, with the option of adding a statement of their own. The analysis was conducted only using the factor that each educator ranked as most important. The list of statements, as well as the educators' responses can be seen in detail in Table 4.7. The highest factors were: 'Not to get hurt' (34.2%), 'To have fun' (27.5%), 'To play in a group' (10%), followed by 'Not to get dirty' (6.3%).

Educators' top responses on what they view as most important in children's play	Frequency	Percentage
Not to get hurt	195	34.21%
To have fun	157	27.54%
To play in a group	57	10%
Not to get dirty	36	6.31%
To learn	34	5.96%

To follow their own ideas	32	5.61%
To explore	29	5.08%
To follow the rules	21	3.68%
To resolve their conflicts	6	1.05%
Other	3	0.52%
Total	570	100%

Table 4.7: Educators' top responses on what they view as most important in children's play.

Which role did the educators report as the main role they should assume during children's unstructured play?

The educators were asked to choose from eight options including 'other', the main role they believed that the educator should assume during children's unstructured play. The role of 'Facilitator' ranked first (24.4%), followed by the role of 'Observer' (21.1%), and the role 'Prevents accidents' (13.6%), with findings presented in Table 4.8.

Which in your opinion is the main role the educator should assume during children's unstructured play?	Frequency	Percentage
Facilitator	149	24.5%
Observer	129	21.2%
Prevents accidents	83	13.6%
Educational	73	12%
Directing	55	9%
Recreational	47	7.7%
Resolves conflicts	44	7.2%
Other	29	4.8
Total	609	100%

Table 4.8: The main role the educators proposed they should assume during children's unstructured play.

What are the factors that the educators perceive hinder outdoor play within the childcare centres?

The educators were asked to rank nine factors that in their opinion decrease the opportunities for outdoor play in the centres where they work according to importance, with the option of adding a factor of their choosing. The analysis was conducted only using

the factor that each educator ranked as most important. The factor that ranked higher by far, was 'Lack of suitable space' (55%), followed by 'Health and safety' (10.8%), 'Parental views and fears' (6.5%) and 'Staff views and fears' (5.4%). The detailed results for this question can be found in Table 4.9.

Factors that decrease the opportunities for outdoor play	Frequency	Percentage
Lack of suitable space	304	55.07%
Health & Safety	60	10.86%
Parental views & fears	36	6.52%
Staff views & fears	30	5.43%
Inadequate supervision	28	5.07%
Need to take the children outside the childcare centre	26	4.71%
Financial reasons	20	3.62%
Legal responsibility	16	2.89%
Inadequate relevant training	7	1.26%
Other	25	4.52%
Total	552	100.0%

Table 4.9: Factors decreasing the opportunities for outdoor play in their setting.

What are the main issues that arise during play?

The coding for the first open-ended question, which referred to what the educators identified as the main problems that arise in children's play (n= 576), revealed six main themes, with a residual category of 'No problems arising during play' (0.86%). Percentages relating to the frequency of each category within the completed questionnaires are also provided. Specifically:

a) Children's conflicts and negative behaviours (88%), was by far the most prominent category, with the predominant issue being conflicts between the children, mentioned in 98.4 per cent of the questionnaires in this code. The conflicts described were mostly related to: fighting over the same toy, difficulty sharing, and competitive behaviours, as evidenced in the following statement:

Not being able to share the toys, fighting for their turn, not wanting to play together. (Educator, 31 years old, 4 years working experience in preschool education, working in group of 2.5-3.5 year olds)

b) Accidents and risk of injury (12.8%). The educators mentioned minor accidents occurring during play, as in the following statements, sometimes relating them to children's behaviour, physical activity, the play space, or staffing:

Unsuitable space (dangerous spots, fear of injury, children's access to dangerous areas) (Educator, 40 years old, 17 years working experience in preschool education, working in group of 18-30 month olds)

Running and getting hurt. (24 years old, 2 years working experience in preschool education, working in group of 2.5-3.5 year olds)

c) Space (9.7%) referred to both limited space as well as suitability, as in the following statements:

Limited outdoor space for the children (36 years old, 7 years working experience in preschool education, working in group of 3.5-5 year olds)

Unsuitable outdoor space (48 years old, 20 years working experience in preschool education, working in group of 2.5-3.5 year olds)

d) Materials (5.4%) referred to limitations in the quantity, variety and novelty of materials available to children for play, linking them to children's behaviour as in the following statement:

Competition between the children due to limited space and lack of variety of toys. (42 years old, 17 years working experience in preschool education, working in group of 2.5-3.5 year olds)

e) Large number of children (2.6%) was mentioned both in relation to the number of children in the group, staff-child ratio, and space-child ratio outdoors, as in the following statement:

The large number of children in the space. (44 years old, 20 years working experience in preschool education, working in group of 2.5-3.5 year olds)

f) Educator's own management of time and space for play (2%), in relation to setting up appropriate spaces and activity centres, scheduling play during the day and allowing children enough freedom and choice.

What are the factors that the educators perceive as enhancing play within the childcare centres?

The coding for the second open-ended question which referred to the educator's views on the main factor which would facilitate the development of children's play within the childcare setting (n=501), contained nine themes, with two residual categories, 'Nothing' (0.4%), and 'Parental views' (0.2%). Specifically:

a) 'Space' (69%), included issues such as the size, suitability, configuration and organisation of the space, the outdoor space characteristics (e.g. shading, surfacing), as well as safety, as in the following statement.

Spacious and safe space, with suitable infrastructure. (42 years old, 5 years working experience in preschool education, working in group of 3.5-5 year olds)

Most statements within this category (70%) referred to the organisation and configuration of the physical environment.

b) 'Materials' (46%) referred to the quantity, variety, quality, novelty, and suitability of the available toys and materials, as in the following statement:

To have suitable toys in accordance with children's age. (47 years old, 25 years working experience in preschool education, working in group of 2.5-3.5 year olds)

c) 'Educators' (39%), related to the positive effects on play that could be attributed to the educators' values, perceptions, and engagement in play, the communication and cooperation of the educators with the children and between themselves, as well as their willingness, enthusiasm, imagination, inventiveness, and flexibility, as evidenced in the following statements:

Educator flexibility and staff cooperation (29 years old, 4 years working experience in preschool education, working in group of 2.5-3.5-year-olds)

An educator that provides motivation and stimuli helps children's play. (32 years old, 12 years working experience in preschool education, working in group of 3.5-5-year-olds)

d) Educator-child ratio (9.6%). Having less children and more educators per group was suggested as a facilitating factor, as in the following statement, proposed to enhance children's play opportunities and support their safety.

In each class there should be less children and more educators (36 years old, 10 years working experience in preschool education, working in group of 2.5-3.5 year olds)

e) 'Children' (6.7%), referred to the children's behaviour, social skills and relationships within the group, obedience, and adherence to rules, as well as children's trust in adults, as factors that would facilitate play, as in the following statement:

Obeying the teachers, adhering to rules, and mutual respect (22 years old, 1 year working experience in preschool education, working in group of 2.5-3.5 year olds)

f) Affording children's freedom, choice, and participation (4.6%), was proposed as a factor facilitating outdoor play, as in the following statement:

Children need stimuli, freedom of expression and 'space' to develop their imagination. (52 years old, 25 years working experience in preschool education, working in group of 3.5-5-year-olds)

g) Continuing Professional Development (3.8%). Having frequent training opportunities and supportive CPD resources was proposed as a facilitative factor.

h) 'Time' (2.4%). Increasing time for play was mentioned as a supportive factor.

i) Pedagogical framework (0.8%). Adopting a pedagogical framework supportive of outdoor play was proposed as a facilitative factor by only four educators.

Do the educators need to advise parents on issues related to their child's play?

The majority of educators (78.7%) stated that they need to advise parents on issues related to their child's play.

4.5.3 Preliminary discussion

The findings of the first phase of the research will be comprehensively discussed in combination with those from the second phase in the Discussion Chapter. Nevertheless, a preliminary discussion of the main findings of this first phase will be presented here to indicate how it informed the rationale for the second phase of the study.

Outdoor play within Greek childcare centres

The desk research on Greek outdoor play provision within childcare services exposed insufficient data and limited research to date, highlighting a gap in knowledge on this subject and a need for further examination.

Available data revealed that Greek preschool services operate as a split system with no co-ordination between compulsory education and childcare services. Even focusing on the childcare centres though, there is fragmentation between public and private or non-profit services, governed by different ministries and adhering to separate guidelines. This disjunction appears to enhance a lack of documentation regarding the characteristics and quality of services, as well as confusion regarding provision. Low educator-child ratios were acknowledged through desk research, also raised as a factor influencing outdoor play by the educators in the survey. During the time of the study no pedagogical framework was in place for the childcare centres, with the existing governmental guidelines focusing on practical operational issues. Within regulations, references to outdoor play were indirect and very sparse, showing a lack of acknowledgement regarding the role of outdoor play provision. Specifically, no regulations or guidance for outdoor play were in place regarding space configuration, time, or pedagogical practice. Educator undergraduate training in relation to outdoor play was also identified to be limited and CPD for childcare educators non-compulsory and unregulated. In the survey, training was raised by the educators as a factor that could support outdoor play. These findings highlight organisational parameters which would affect outdoor play provision, thereby supporting the need for an ecological approach for the examination of outdoor play within childcare centres encompassing these wider factors. Additionally, the role of the human environment is highlighted within this study, with the educators' perceptions and practice discussed in the next section.

Educators' perceptions and practice

All educators in this study expressed positive views on the value of play, nevertheless it is unclear from this study how this stance influences their outdoor practice.

The role of the educator was identified as a factor supporting play by 39 per cent of the respondents in this study. Many of the open statements focused on personal educator attributes relating to play, such as views, willingness, engagement, imagination, flexibility, and cooperation, but not so much on specific actions that the educator should take, such as organising the environment and the activities, or documentation. Nevertheless, the need for clarity of the adult role, combined with the educator's competence and skills in relation to observation, attentiveness to the play process and outcomes, awareness of

the gravity of timing and space and understanding of children's learning through play, have been linked to positive outcomes for children (Kernan, 2007). The role of 'Facilitator' ranked highest within this study as the main proposed role that the adults should assume during free play, suggested by almost a quarter of the educators, closely followed by the role of 'Observer'. The way that the educators practice these roles though, is not clear from this research, as no data is available on the way that they facilitate, or actively observe play and how they make use of their observations. It is possible that the 'observer' role is for some of the educators synonymous to 'supervisor'. This would highlight the need for further in-depth research on educator views and actions surrounding outdoor play.

Another interesting finding relates to the factor the educators ranked highest in relation to its importance for play, which was for children 'Not to get hurt'. This could indicate that the educators are very focused on children's safety and may perceive outdoor play as an inherently risky situation, further corroborated by the finding that the educator role of 'Prevents accidents' ranked third as the main proposed role during children's play. The way the educators perceive play and risk has been identified to influence practice, possibly restricting children's play to ensure increased safety (Kernan & Devine, 2010; Sandseter & Sando, 2016; Wyver et al., 2010). The educators' focus on limiting risk could however be indicative not only of the way that they manage play, but on their overall perception of children's competence and vulnerability. This study's findings are consistent with Sandseter's et al (2019) study of attitudes in different countries and seem to support the notion that Greek culture is overprotective towards children (Giosafat, 2010; Kalyvas, 2017). Thereby, cultural, policy, and attitudinal elements towards the use of the outdoor environment, possibly exacerbated by an apparent focus on the risks rather than on the developmental opportunities that the outdoors affords children, could also be affecting children's play opportunities in addition to other structural and functional barriers (Ashiabi, 2007; Brussoni et al., 2012, 2015; Copeland et al., 2012; Gill, 2007; Gull et al., 2020; Hill & Bundy, 2014; Sandseter, 2016; Sandseter & Sando, 2016; Tovey, 2010; Van Rooijen & Newstead, 2017; Wyver et al., 2010). However, further examination of educators' risk perceptions and management would be required. Additionally, part of the educators' concerns could be linked not only to their risk perceptions but also to the appropriateness and quality of the physical environment, discussed in the next section.

The outdoor play environment

Desk research highlighted the physical environment of the childcare centres as a concern, confirmed by the findings of the survey study. Firstly, 7.5 per cent of the educators

reported working in centres that had no outdoor space, which is not in keeping with current regulations, however consistent with the findings from the study carried out by the National Technical University of Athens (2013) in the Municipality of Athens. The limited size of outdoor play areas highlighted in that study was also raised by the educators in this survey as a parameter affecting play.

The existence and size of the outdoor space though were not the only issues revealed in this study, as the quality of the physical environment was identified as a major additional concern. If we added the 7.5 per cent of the educators in this study stating that their childcare centre had no outdoor space, with the 12.7 per cent stating that they considered the outdoor space not at all appropriate, we would conclude that approximately 20 per cent of the educators have no suitable outdoor space available for the children to play in within the childcare centres. A further 23.5 per cent of the educators categorised the outdoor space only as a little appropriate. Lack of suitable space was rated highest by the educators as a factor decreasing the opportunities for outdoor play in child-care. This finding is consistent with previous studies highlighting physical environment quality issues affecting children's play opportunities in Greek childcare centres (National Technical University of Athens, 2013; Papadopoulou et al., 2014; Rentzou, 2014). The quantitative data gathered in this study regarding space suitability though does not specify the exact causes for the educators' opinion, allowing for the possibility that different educators consider the outdoor area inappropriate for different reasons. Nevertheless, the educators raised issues around the space extensively within the open-ended questions, with organisation and configuration of the space expressed as main influencing factors, in addition to size, suitability, lack of resources, safety, and space characteristics such as shading. However, desk research revealed that decisions about childcare centres' outdoor play area's design and configuration are taken at the municipality level, revealing no procedures in place for including the views of educators, parents, or children, which would mean that educator concerns as those highlighted in this study may not in fact influence decision-makers.

In the present study, space was also identified by the educators as the main factor that would facilitate play within child-care, followed by appropriate materials, with the organisation of the space highlighted as important for children's play. However, this study does not reveal the educators' views on how the space should be configured, what materials they would consider appropriate and how they actually organise the physical environment for play, indicating a need for further in-depth research. Another parameter highlighted in this study was time for outdoor play, to be discussed in the next section.

Time for outdoor play in childcare

Desk research revealed lack of evidence regarding the amount of time children spend in outdoor play in childcare, an area explored through this survey study. An informative finding related to the limited time children spend outdoors, with 6.9 per cent of the educators reporting no time outdoors and about a third (32.5%) reporting outdoor time of up to 30 minutes. The mean outdoor time identified within this study is consistent with the recent systematic review by Truelove et al. (2018). Most educators (86.8%) proposed that children should play outdoors more, however only 12 educators (2.4%) proposed increasing outdoor time as a facilitative factor of outdoor play within preschool, which may indicate that time is perceived as a regulated parameter. The long-standing previous guidelines referring to a 'recess' time of 30 minutes, which the current ones have not added to, may have played a role in sculpting educator perceptions, supported by the findings of Bilton and Waters (2017) regarding the impact of curricular guidelines on educator outdoor practice. The findings of this study could indicate that the outdoor environment is viewed as a 'recess space' within Greek child-care practice, nevertheless further examination of this topic would be required.

As for the absence of outdoor time reported by 6.9 per cent of the educators could be partially explained by having no outdoor play space. Findings indicate that in most cases (69.6%) where no outdoor space existed within the centre, no alternative arrangements were made so that the children could play outside. Even though absence of outdoor space poses an obvious practical barrier, the lack of alternative strategies for fostering children's play outside of the childcare centre could indicate that outdoor play may also not be viewed as a priority on the part of the educators and management. However, lack of outdoor space did not explain all cases where no time outdoors was reported, which could imply that suitability of the space, institutional practices, or educator views could also relate to lack of outdoor play time, which would warrant further in-depth examination.

Seeing that obesity is a major issue in Greece, the question of whether children's physical activity needs are met through current outdoor play practice would be valid. Guidelines on obesity prevention suggest 15 minutes of physical activity for every hour spend in care (Institute of Medicine, 2011), identified to be easiest achieved through outdoor play (Koepp et al., 2022). Thereby, for children in Greece who may spend up to 8 hours a day in childcare, this would amount to 2 hours of daily outdoor play time. Considering the times reported within this survey it appears that the children's outdoor play needs, even only considering the obesity prevention front, seem not to be met, which is consistent with the findings of previous studies (Copeland et al., 2012; Hinkley et al., 2016; Tandon et al.,

2015; Reilly, 2010; Ward et al., 2008). What one needs to keep in mind though, is that increased physical activity and a healthier weight, is only a part of the many benefits that children acquire through outdoor play (Burdette & Whitaker, 2005). Children's behaviour was raised as an issue in this survey, to be discussed next.

Children's behaviour and conflicts

The main issue arising during play identified by most educators (88%) related to children's behaviour, with the main problem being children's conflicts. Doliopoulou and Rizou (2012) also referred to Greek educators' concerns of the way the children handle conflict. However, Mc Innes et al. (2011) linked early years educators' placing the focus on children's behaviour "rather than analysing their own" (p. 122) to limited engagement with pedagogy, which could relate to this finding especially in the absence of a pedagogical framework.

Nevertheless, the educators' concerns regarding children's behaviour and the issue of the poor quality of the environment, may also be related, as was also highlighted by their answers in the open-ended questions. The features and arrangement of the physical environment as well as the materials on offer, have been acknowledged to affect children's behaviour, social interactions, playfulness, and play (Acer et al., 2016; Armitage, 2005; Bronson & Bundy, 2001; Czalczynska-Podolska, 2014; Rentzou, 2013b). We could therefore hypothesise that the reported limitations of the physical environment may negatively influence children's behaviour, but additional information on the way that the environment is structured, the play opportunities that it allows, the children and educators' interactions, would be required, which were not targeted in the survey study.

Informing the next phase of the study

Taking into account the findings of this first phase of the research it became apparent that outdoor play provision within Greek childcare centres is a complex issue involving parameters on a) the organisational level, including issues in relation to culture, policy, governance, quality, outdoor time provision, staff-child ratios, and CPD provision, b) the human level, in relation to educators and manager's perceptions, knowledge, pedagogy and practice and c) the physical environment level, in relation to its suitability for outdoor play, regarding size, safety, configuration, natural characteristics, as well as the quantity, variety, quality, novelty, and appropriateness of materials. These parameters though appear interconnected, not acting in isolation. Thereby, it would seem that solely gaining data on one aspect, for example only focusing on educator attitudes, would not offer a concise picture of outdoor play provision. An ecological approach was recognised to better frame this phenomenon as well as facilitate its further study, hence the preliminary

ESOPP conceptual model was developed, as outlined in Chapter 2. In addition, the need for in-depth, qualitative study was identified, leading to methodological decisions regarding the next stage of the research employing a mixed-methods multiple embedded case study design. This would facilitate the further exploration of outdoor play provision, as well as offer insights into explaining why certain issues occur. It is envisaged that this study would add to the body of knowledge regarding outdoor play provision in Greece, as well as facilitate our understanding of this phenomenon, aiming to inform policy and practice.

4.6 Summary

The first phase of the study aimed to explore outdoor play provision within Greek childcare centres, through a combination of desk research and empirical study. The first section of this chapter provided basic information on Greece, an exploration of Greek preschool education and care, focusing on its system, policy, pedagogy, and educator training. Outdoor play in childcare centres was also explored. In the next section, the findings of the survey study (n=662) were presented, examining the views and practice of educators working in public childcare centres. The survey study, has the strength of having reached a large number of educators from around Greece, sketching an outline of the play practice in Greek public childcare, an area sparsely documented and a timely endeavour considering outdoor play's decline in recent years.

The survey revealed issues relating to limited daily outdoor time; outdoor space's existence, size, configuration, and suitability; the quantity, variety, quality, novelty, and appropriateness of available materials; educator-child ratios; educator perceptions and practice; and CPD. The findings indicated that a combination of organisational, human, and physical environment factors influence outdoor play provision, highlighting a need for further in-depth research in this area. A preliminary discussion of the findings was provided, as well as a discussion of how this first phase influenced the second phase of the study. The next phase of the study utilising a mixed-methods multiple embedded case study design aims to address the identified gap in knowledge, as described in the Methodology section. The findings of the case studies will now be outlined in the next three chapters.

CHAPTER 5: FIRST CASE STUDY FINDINGS

This is a report of the first case study findings, carried out in a longstanding non-profit preschool, with no expressed pedagogical identity on outdoor play, between April and July 2019. ⁶

5.1 Organisational environment

5.1.1 Operational policies

This preschool was established in 1926 through private donation, as a non-profitable institution, managed by a twelve-member board of directors. Parents pay monthly tuition, with scholarships available for families with financial limitations. It caters for 155 children, two to six years old, in eight groups, divided by age. Children spend a maximum of eight hours in the preschool, from 8.00 to 16.00. Details on the number of children and staff in each group can be found in Table 5.1, with the two groups observed as part of the study marked in bold.

Age groups	2-3-years	2-3-years	3-4-years (Class A)	3-4-years	4-5-years (Class B)	4-5-years	5-6-years	5-6-years
Number of children	18	22	20	21	14	16	22	22
Number of educators	3	3	3	3	2	3	3	3

Table 5.1: Number of children and educators per group

The preschool employs 23 female educators in addition to the preschool manager. Details on each member of staff's formal education, age and working experience can be found in the next section on the Human Environment. The preschool manager will from now on be referred to using the pseudonym Mrs Georgiou, and the interviewed educators as Alexia (Class A) and Daphne (Class B).

⁶ Raw data excerpts included in the three case study findings chapters will be presented using the following formatting, according to data collection method: a) Interview: indented and italicised, b) Questionnaire: indented, italicised, within two vertical lines, c) Observation: indented, italicised, within two horizontal lines, d) Document examination: indented, italicised, in a box.

Group sizes, number of educators and adult-child ratio

Group sizes varied between 14 and 22 children. Mrs Georgiou explained that there are always three educators in the 2-3-year-old group, due to increased care needs, while in the older groups a third educator is added when children exceed 16. The adult-child ratio ranged between one adult to 5.3 children and one to 7.3. During the study Alexia worked in a group of 20 three-four-year-old children, with two more educators and a learning support assistant for a child with special educational needs. Daphne worked in a group of 14 four-five-year-old children, with another educator.

Staff stability

Mrs Georgiou has been directing the preschool for 18 years. Staff were reported to be employed under long-term contracts, no shorter than one school year, with the mean duration of working within this preschool being 10 years.

Staff scheduling practices

Mrs Georgiou revealed that the educators have no scheduled breaks during the day, acknowledging being outdoors as a time they can also “take a breath” from classroom pressure.

Additionally, she reported no scheduling of non-contact time for documentation, or for the educators’ written or telephone communication with parents. Mrs Georgiou explained that these tasks were tackled during other daily activities such as outdoor play time, acknowledging that this would affect the adult-child ratio:

Not one hundred per cent of the school’s educator force is present when the children go outside. (Interview)

Educator absence for part of outdoor play was documented on all play observations, ranging from five to 30 minutes.

5.1.2 Outdoor play philosophy and pedagogical framing

Philosophy regarding play and the outdoors

Play is referred to on the preschool’s website, as “the highest form of learning”, a “joyful and productive activity”, a way for children to “release their energy” and a “means for development”, through which they build skills, such as motor, social, emotional, and cognitive.

Alexia confirmed a positive institutional view of outdoor play:

I think the preschool has a very clear position: that there is nothing more creative than going out in the garden. (Interview)

Nevertheless, Mrs Georgiou implied that this philosophy may not be shared by the institution's board of directors, stating:

I have a feeling that the extensive level of freedom in outdoor play philosophy is not compatible with the directors' position. (...) Maybe they don't consider it as creative. (Interview)

Daphne referred to institutional restrictions posed on educators' outdoor practice:

Our work setting is quite structured, and I think it significantly restricts us in that direction. (Interview)

Language used for outdoor play

When discussing outdoor play with Mrs Georgiou, she referred to it as 'recess' on 12 occasions during the interview. Other expressions used were 'going to the garden' or 'going outside'.

Pedagogical framing of outdoor play

Outdoor play was discussed in the interviews in relation mostly to children's development, rather than pedagogy. Similarly, document examination did not reveal a pedagogical framing of outdoor play.

5.1.3 Policy regarding play and the outdoors

No document or written policy was reported by Mrs Georgiou to exist in the preschool specifically in relation to outdoor play, produced either by the preschool or the governing bodies. She stated guidelines are verbally communicated to the educators.

When asked, through the questionnaire, if the preschool has a clear policy on outdoor play, 16 educators responded negatively, three positively, and four that they didn't know.

Time for outdoor play

Outdoor play for each group was reported to be scheduled for 30 minutes per day in the late morning, also documented in the indicative schedule supplied yearly to the Ministry of Education for the kindergarten classes, with Mrs Georgiou describing:

Recess happens steadily for half an hour a day in a cyclical fashion, so that not all children are out in the garden simultaneously. (Interview)

Short, additional bursts of outdoor time lasting 10-15 minutes, were reported to be allowed at the educators' discretion, as Mrs Georgiou explained:

Instead of having free time or relaxation for 10 minutes inside the classroom they can play a game outdoors. That is used very much by the educators that have children with a lot of energy. (Interview)

The option to have additional time outside was also confirmed by the interviewed educators, with Alexia suggesting that consideration for other classes being outside or children sleeping was needed:

If we want to go out, we will try to move in an area where we're not disturbing. (Interview)

Time outdoors after lunch was described to be more problematic, with Mrs Georgiou explaining:

I have two issues to deal with: the neighbours' complaints of noise in the afternoon and some parents' worry of children getting queasy after eating. (Interview)

Seasonal variations in outdoor play time were reported in all interviews. Outdoor play time across four seasons, as reported by the educators in an open question in the questionnaire, can be found in Table 5.2. The mean daily scheduled outdoor time reported was 34 minutes, however not considering reductions or omissions due to the weather.

Outdoor time reported ⁷	Autumn	Winter	Spring	Summer
30 minutes	22 educators	22 educators	18 educators	13 educators
40 minutes			3 educators	2 educators
45 minutes	1 educator	1 educator		
45-60 minutes			1 educator	1 educator
60 minutes			1 educator	7 educators

Table 5.2: Reported outdoor play time on a typical day across four seasons.

The outdoor times suggested by most educators in the questionnaire were consistent with the play observations taking place in May, having a mean duration of 33.7 minutes and reaching 40 minutes once.

Deprivation of outdoor play time due to weather conditions was reported by all interviewed staff, with children kept indoors due to rain, cold, or strong winds. Additionally, on two instances when it had drizzled earlier in the day staff ambivalence was witnessed regarding going outside, with Mrs Georgiou prompting them to go out “As long as it doesn’t rain” (Researcher diary, 27/5/19).

During the summer, the sun and heat, were discussed by Mrs Georgiou as impediments for being outdoors between 11.30 and 14.00.

Outdoor space use

Even though the preschool has a unified outdoor space with no barriers, a major finding related to it being used for play in a divided manner, confirmed by all interviewed staff, with Mrs Georgiou explaining:

One class on the right side of the garden and the other on the left.

(Interview)

Researcher observations corroborated this practice on all occasions, with children instructed to stay within the allocated space, regardless of whether one or more classes were outside.

Mrs Georgiou reported that the outdoor space is also used for physical education classes twice a week, for an English programme relating to ecological subjects once a week, and for classroom learning projects at the educators’ discretion. Additionally, the garden is

⁷ The times in the table are presented as reported by the educators.

used for adult-led activities during the 'summer camp' period, between 15/6 and 31/7, as well as for the summer end of the year celebration.

Different practices were indicated for having meals outside. In the interview, Alexia reported occasionally having snacks outdoors when the weather is nice, while Daphne stated her group had gone out for snacks only twice in the past seven months.

Clothing and footwear for play in all weathers

No special clothing or footwear for playing outdoors in wet weather was observed to be kept in the preschool, confirmed by all interviewed staff. In the questionnaire 20 out of the 23 educators responded that children in their preschool did not have suitable clothes to play outdoors in wet or cold conditions. When cold, children were reported to wear jackets and in hot weather light clothes and hats.

Opportunities for playing in nature

All interviewed staff reported that the children do not visit natural spaces outside the preschool with the main purpose of playing. Groups over about four years were reported to visit spaces with natural features, for a combination of organized educational activities and play, once or twice a year, with Mrs Georgiou explaining:

It is usually connected with some nature-related activities the children do with their teachers and then there is free play, that is before they leave. (Interview)

Strategies to support the outdoor play of children with additional needs

No specific policy regarding outdoor play for children with additional needs was reported. If a child had a learning support assistant, they were reported to also accompany them outdoors.

Provision of training and resources on outdoor play

Even though the preschool occasionally organises training events, Mrs Georgiou reported none have targeted outdoor play or outdoor education, nor have the staff been offered any external training on this subject, since the preschool's foundation.

No books or other resources on outdoor play were observed in the preschool, nor were referred to by the interviewed staff.

Institutional expectations for educator practice outdoors

Discussing the preschool's expectations for educator practice outdoors, Mrs Georgiou stated:

Not to skip recess, ensuring children's safety, and promoting play as much as possible. (Interview)

Safeguarding children's safety was described as a responsibility of primary importance by Mrs Georgiou, with adequate educator supervision as the appropriate way to ensure it. Each class is supervised by their educators, reported by all interviewed staff, and observed by the researcher.

Mrs Georgiou also proposed the educators' pedagogical involvement during outdoor play as an expectation. However, there is no expectation for the educators to complete documentation for children's outdoor play. Mrs Georgiou supported that such a demand would burden them, seeing that they are expected to document many other aspects of the pedagogical programme:

They can't take any more, they don't have time, they're tired of documenting. (Interview)

Planning for outdoor play provision

No scheduling for non-contact time allocated to planning for outdoor play provision was reported, nor any team-work practices for this purpose.

Alexia supported the need for teamwork practices, stating:

If I want something to be established there should be a relevant conversation and space-organisation. (Interview)

Children's participation in decision-making for outdoor play provision

Children's wishes, informally expressed during everyday communications, such as requesting more time outdoors or enjoying water play, were acknowledged by all interviewed staff, but no mechanism of including their views in outdoor play provision was mentioned or was identified in the preschool's policy documents. Observation of children's play was described to lead to adaptations, for example Alexia mentioned that children's fighting over shovels was resolved when they purchased more.

All interviewed staff showed willingness to incorporate children's views, with Daphne stating:

Personally, I very much listen to children's wishes (Interview)

Parental communication and involvement regarding outdoor play

Mrs Georgiou reported that no written guidelines are given to the parents regarding outdoor play. Informal communication during enrollment, parent-teacher meetings, or other school events, was reported by all interviewed staff, with Alexia however commenting:

Very short and very fragmented. It's not structured, it's about what individual teachers say on each occasion. (Interview).

Both educators highlighted a need for increasing parental understanding of outdoor practice through effective communication, with Alexia supporting:

*If we don't pass the message across, they will never understand.
(Interview)*

Daphne linked educating parents on the connections between outdoor play and learning, to implementing changes in practice:

If as a school we decide to change route, I believe we must inform and educate the parents. (Interview)

The parents are not regularly invited to take part in outdoor play activities, but Mrs Georgiou reported that they attend activities in the garden at least once a year, such as gardening, as well as the outdoor end of the year celebration.

5.1.4 Influences on outdoor play provision

In this section, reported influences on outdoor play provision by the parents and the board of directors will be outlined.

Parental influences on outdoor play provision

Parental stance was described to affect outdoor practice, with Alexia suggesting:

*Because it's a very important issue for the school what the parents say.
(Interview)*

She described that parents express positive feelings about the garden:

They always tell me 'You're so lucky to be here, there's such a nice view, the children have direct access outdoors'. (Interview)

However, Mrs Georgiou proposed contradictions in parental stance:

In theory the parents appreciate that we go out. (...) But in practice it's more contradictory, as they start asking 'when are we going to learn the letters?'. (Interview)

She also expressed concern that untidiness during play might be perceived as poor practice:

A parent may misunderstand (Interview)

Parental academic expectations were reported to impede on time for outdoor play, with Daphne stating:

Parents unfortunately reproduce the model they experienced as children, of being enclosed in a classroom, associating knowledge and learning only with indoor spaces, often equating knowledge with academic skills, not learning through experience or interaction with the natural environment. (Interview)

Alexia confirmed parental prioritisation of academics, especially regarding language and writing skills:

It's their greatest longing. If the children could write from the moment they opened their eyes, they would do it! (Interview)

Parental concerns and anxiety were reported as an outdoor play barrier by five educators in the questionnaire (Table 5.7) and in all interviews, with health concerns described to restrict outdoor play in cold or wet weather. Mrs Georgiou confirmed that accommodations would be made to parental requests:

We've had requests such as: 'it's the season of viral infections, better if you don't take them out', but we do, it's explained to them. Unless they

ask specifically for their child to stay in. In that case I can't act differently, we keep the child in with one educator while the group goes out.
(Interview)

When asked if such parental requests need to be supported by a medical opinion, Mrs Georgiou responded that they do not.

Negative responses by the parents were also described by Mrs Georgiou to deter the preschool from requesting clothing for wet weather:

The parents will chase us! (laughing) (Interview)

Nevertheless, Alexia supported that this stance could also relate to lack of adequate information:

We have not informed the parents. So, it's not only their issue.
(Interview)

Parental views were also reported to limit water play, with Daphne commenting:

In the winter I believe we would have regular protests from parents, regarding children getting dirty or wet. (Interview)

Minor injuries sustained during outdoor play, were reported to sometimes produce parental requests for changes outdoors, with Alexia stating:

Last year a child in my class scratched herself on a bush and the mother asked that all bushes are cut, but that was not accepted. We are obviously not going to change the entire school because a child got a scratch. (Interview)

Even though the bushes were indeed not cut, they were observed by the researcher to be heavily trimmed on the day the parents would attend the end of the year celebration in the garden.

Daphne went on to stress the need for a clear and consistent stance towards parental criticism, to facilitate the development of outdoor play practice:

If we sternly support our views (...) not changing course according to incoming comments, then in due time change may occur. (Interview)

Board of directors' influence on outdoor play provision

The board of directors' expectations regarding the preschool's pedagogical programme, and their views on self-directed and outdoor play, were proposed as parameters influencing provision, with Mrs Georgiou commenting:

We have not come into conflict, but I have the feeling they consider it a bit of a waste of time. (Interview)

Even though it transpired that the current board of directors has expressed willingness to support outdoor play, including budgeting for improving play facilities and educator training, Mrs Georgiou suggested that any change on that front would require adequate time to produce a positive outcome, going on to explain:

Time is needed for everybody to change, the educators, the parents, the board. When we have rushed into things in the past, it did not go well. (Interview)

5.2 Human environment

5.2.1 Staff training and working experience

Details on each member of staff's formal education, age and working experience can be found in Table 5.3. Apart from four educators specialised in teaching English, all staff had training in preschool education. The two educators and preschool manager, interviewed as part of the research are marked in bold in the table.

Staff pseudonyms	Formal Education	Age	Years working in preschool education and care	Years working in this preschool
Mrs Georgiou (Preschool Manager)	Postgraduate Degree	50	18	18
Daphne	-"-	49	23	20
Anna	-"-	35	12	10
Evie	-"-	28	7	0,6

Lena	Postgraduate Degree (Not in Preschool Education)	30	2	1
Alexia	University Degree (working towards Postgraduate Degree during the study)	27	7	4
Irene	University Degree	58	37	16
Maria	-"-	48	24	15
Renata	-"-	33	10	9
Dina	-"-	33	12	12
Zina	-"-	33	11	11
Betty	-"-	33	18	3
Despina	-"-	32	10	10
Vicky	-"-	32	10	10
Vassia	-"-	28	2	2
Hara	-"-	24	2	1
Katia	-"-	22	1	1
Jenny	University degree (Not in Preschool education)	35	2	0,6
Katerina	-"-	31	3	3
Sofia	-"-	24	2	1
Sarah	Vocational Training	58	37	37
Miranda	-"-	42	21	19
Eleni	-"-	41	20	20
Mary	-"-	40	18	18

Table 5.3: Staff education, age and working experience.

Outdoor play training

None of the educators reported having specific training on outdoor play in the questionnaire or the interviews. Mrs Georgiou reported having had outdoor play training as part of being in the Girl Guides Association for many years, as well as having experience in summer-camps and being in nature.

5.2.2 Staff perceptions

Perceived outdoor play value

Interviewed staff and all staff in the questionnaire stated they consider outdoor play important. Mrs Georgiou fondly described some of her own childhood play experiences, being very positive towards outdoor play's significance for children:

It's important, because play is the basic means which develops children. It allows them to interact, self-regulate, think upon their actions. It is the medium. (Interview)

In the questionnaire's add-on open ended question on why they consider it important, more than one justification was provided by all. Educator statements were coded into themes reported in Table 5.4, including frequency and quotes to allow for better understanding of nuances.

Theme	Statements	Frequency
Energy release	"Discharge"	12
Engaging with nature	"Interaction with natural elements" "Observe nature" "Feel close to nature" "Natural environment calmness"	11
Freedom, lack of schedule and instruction	"Express themselves freely" "Free communication" "Play freely" "Move freely" "No specific schedule" "Lack of organised frame" "Without instruction" "Evade classroom routine"	10
Social development	"Social skills development" "Learn to interact" "Social communication" "Sociability development"	9
Movement	"Practice motor skills" "Motor development" "Test motor abilities" "Allows them to be more active"	5
Creativity	"Play creatively" "Create their own games" "Discover novel and creative ways to play"	5
Imagination	"Cultivate imagination" "Use imagination"	4
Learning	"Learning through interaction with nature"	3
Effects on children's mind	"Mind energising" "Children empty their mind"	2
Energises curiosity		1
Experimentation		1
Sensory		1

Table 5.4: Why do you believe that outdoor play is important? (n=23)

The most common theme identified was 'Energy release' as in the following statement:

To discharge, seeing that they all play inside and in front of screens nowadays. (Sofia, 24 years old, University degree, Questionnaire)

The importance of engaging with nature was also reported, as in the statement below:

Children always enjoy moments of interaction with nature. All their senses are operating, their mind and curiosity are energized, they experiment, and they learn! (Anna, 35 years old, Postgraduate degree, Questionnaire)

This was the only reference of the words ‘senses’ or ‘sensory’ throughout all communications with staff. Increased movement and motor development was also a reported outcome, as in the following statement:

Because it helps the children discharge, move freely, interact with others, feel close to nature and practice their motor skills. (Maria, 48 years old, University degree, Questionnaire)

Allowing children freedom, through lack of structure and adult-direction, was also a theme identified. Consistently, while discussing their role outdoors, three educators in the questionnaire stressed the need to safeguard children’s freedom and choice, with Daphne corroborating:

Free outdoor play is in essence the only unstructured time. I consciously choose not to organise the children and let them play. (Interview)

An additional theme emerging in the interviews, related to outdoor play’s value also defined in comparison to indoor activities, with Mrs Georgiou stating:

There is less need for it to be structured. (...) The children can discharge through movement, vastly different from the indoors, but also

build communication bridges, cooperate, learn about themselves, their abilities, think about things, mess up and learn by it. (Interview)

Increased opportunities for social interaction were also mentioned in the questionnaires, as in the statement below:

Through play children cultivate their social skills. (Jenny, 35 years old, University degree in other area, Questionnaire)

Negative effects of the classroom environment for some children and the potential of the outdoors to support learning and freedom was also expressed by Daphne:

The classroom setting acts in a suppressive manner for some children. It may not suit their learning style or profile. Thereby I believe the outdoors is not only useful but necessary. (Interview)

Comparing children's behaviour indoors and outdoors, Alexia affirmed increased self-regulation outdoors:

The children self-regulate so easily there, that you feel you are doing something very wrong inside the classroom! (laughing) (Interview)

Learning was mentioned in all interviews, but only by only three educators in the questionnaire, as in this statement:

Play is the best form of education for this age group. (Betty, 33 years old, University degree, Questionnaire)

Views on outdoor play and children with additional needs

All interviewed staff indicated that outdoor play afforded positive conditions and increased opportunities for the inclusion of children with additional needs, with Mrs Georgiou commenting:

It's never been a problem, on the contrary. We see the children very happy, regarding how well they can play together. (Interview)

Alexia supported that the outdoors functions “exceptionally well” for children with additional needs, suggesting a reduction in arising issues:

Concerns often decrease outdoors. (Interview)

She stressed this effect for children with attention and hyperactivity issues:

Especially for children with ADHD, the garden is everything. (Interview)

Similarly, Daphne reported:

Very often hyperactive children find major outlet outdoors. Their problem is that we shut them inside the classroom. (Interview)

Views on time outdoors and play in all weathers

The educators' views on the adequacy of outdoor play time within the preschool are presented in Table 5.5, with the majority responding negatively. Lack of time was also indicated as a barrier to outdoor play by 18 educators in the questionnaire (Table 5.7). Nevertheless, in the open-ended question regarding factors facilitating the development of outdoor play within the preschool, only four educators indicated increased time (Table 5.10).

In your opinion, do children in your preschool spend enough time playing outside?	Frequency
No	18
Yes	4
I don't know	1
Total	23

Table 5.5: Educators' opinions on adequacy of children's play time outdoors (n=23)

All interviewed staff reported that children should play outside for longer, with Alexia commenting:

How long can you stay inside a classroom? (...) It's logical that after a while the children are fed up. They are inside one room. (Interview)

Similarly, Daphne supported:

They're here for many hours for them to only go outside for 30 minutes. Even I can't stand it. (Interview)

However, she also expressed apprehension that expanding outdoor play time might lead to undervaluing of the preschool due to societal views:

The perception that ‘they’re only babysitting there’ may start prevailing.

(...) It’s not good for the school’s reputation. (Interview)

The educators were asked to choose between six options, regarding the most important influence on how much the children are taken outdoors, with responses presented in Table 5.6. Almost half indicated preschool policy and none referred to their own beliefs.

Influences on how much the children are taken outside to play	Frequency
Preschool policy	11
Pedagogical framework	7
Conditions in the preschool	2
Parental expectations	2
Staff training	1
Own beliefs	0
Total	23

Table 5.6: Influences on how much the children are taken outside to play (n=23)

When asked if they believe children should play outside in all weather conditions while in preschool, 11 educators as well as the manager responded negatively, with the main conditions stated as unsuitable being: rain, storms, intense wind, snow, as well as very low or very high temperatures. Ten educators indicated weather conditions as a barrier to outdoor play in the questionnaire (Table 5.7). Though drizzle was not reported as unsuitable for outdoor play, it transpired in the interviews that children are not taken out when it drizzles, also observed by the researcher, with Alexia describing:

We have not taken advantage of the rainy days. We stick to saying: ‘it drizzles, we’re going in’ when the children seem to want it. (Interview)

Mrs Georgiou expressed personal positive views towards playing outside in wet weather, proposing societal beliefs as a barrier:

Ideally, I would like to go out with raincoats and wellies, we have never done it. (Interview)

Asked if they had such clothing, she laughingly responded:

We will be flogged! (Interview)

Similarly, she expressed positive views towards playing outside in cold weather however reporting sometimes needing to confront the educators:

I confront the educators if they may be cold, or bored, or if half the children are ill and they don't want to take them outside. (Interview)

Alexia also referred to individual weather preferences affecting outdoor time:

Some educators may say 'I'm not going out because I'm cold' and the children stay inside. (Interview)

Summer weather conditions were mentioned to have a positive effect on the educator's mood, choice of pedagogical activities, and time outdoors, with Alexia describing:

The weather helps, it calls you to go outside, but I think it's the whole atmosphere... Our pedagogical actions will be 'summerier'. (Interview)

However, the summer heat and the presence of mosquitos were reported as limiting factors, with Daphne explaining:

In June and July things are more difficult. (Interview)

Views on factors inhibiting outdoor play

All interviewed staff reported that outdoor play provision in their preschool should be further developed, with Mrs Georgiou stating:

We have an amazing outdoor space to which we have not given the emphasis we should have. (...) The reasons are multidimensional... (Interview)

In the interviews, societal factors were raised, regarding negative weather perceptions, as well as views of outdoor play as a break from learning, further corroborated by parental and board of director influences, as discussed previously. Mrs Georgiou commented on outdoor play's position within state policy and education goals:

They always regard it as secondary. (Interview)

Mrs Georgiou also referred to educators' perceptions and limited engagement as influencing practice:

Some educators – I tend to think that it is justified- may not be very inclined to engage with the children during recess, beyond supervision which is important for them not to get hurt. It is difficult to be 100 percent present all the time. It consumes all your energy. I understand them, but pedagogically I would like to see them better involved. (Interview)

However, she also referred to educators having to tend to other responsibilities, such as documentation or communication with parents, during outdoor play:

I think there are a lot of influences. The perception of each educator regarding recess, the parallel responsibilities that the educators have and whether they are completely available in the garden. (...) During recess educators also do other things. (Interview)

The educators were asked which factors inhibit outdoor play in their preschool, by marking as many of the possible 13 answers as they saw fit, with results found in Table 5.7.

Which of the following, if any, are in your opinion barriers for children to play outside in your preschool?	Frequency
Lack of time	18
Lack of play materials	13
Weather conditions	10
Poor play facilities	9
Fear of children getting injured	6
Parental concerns/ anxiety	5
Lack of relevant training	2
Not enough adult supervision in the playground	2
Staff concerns/ anxiety	1
Fear of litigation	1
Limited play space	0
Concerns about children getting dirty	0
Other: a) "There are no barriers to children's outdoor play", b) "Parental concerns about children getting ill", c) "Strong winds"	3

Table 5.7: Which of the following, if any, are in your opinion barriers for children to play outside in your preschool? (n=23)

Though no educator indicated 'Concerns about children getting dirty' as a barrier to outdoor play in the questionnaire, this was related to possible negative parental reactions in the interviews. In addition, during an observation Daphne appeared concerned when children were found to have sand in their hair, commenting:

You will go home, and your mothers will say ‘Did these children bathe in dirt? And the teachers, where were they?’ (Observation, 14/5/19)

This comment could indicate anxiety that children getting dirty could be perceived as educator negligence by parents.

Views on factors facilitating children’s outdoor play within this preschool

The educators were asked about the factors facilitating children’s outdoor play within the preschool, in an open-ended question. Their answers were coded into themes presented in Table 5.8, with quotes and frequency. Enrichment of the play facilities and materials was the top factor proposed.

Themes	Statements	Frequency
Play facilities and materials	“More play facilities and materials” “Enrichment with more toys-stimuli” “Infrastructure”	12
Preschool’s pedagogy and policy	“A programme oriented towards encouraging, supporting and implementing outdoor actions” “A different approach to the pedagogical programme, more oriented towards outdoor play” “Scheduling” “Linking play to teaching units”	5
Educators’ stance and creativity	“Creative thinking” “Exchanging ideas”	4
Increased time		4
Educator Training	“Continuous training” “Raising awareness”	3
Planning		2
No need for improvement		1

Table 5.8: In your opinion, which is the main factor which would facilitate the development of children’s outdoor play within your preschool? (n=21)

Mrs Georgiou supported that improving outdoor play is multidimensional, including the materials as well as the roles and actions of the educators.

Perceptions of physical environment elements supporting outdoor play in this preschool

The educators were asked to describe which elements of the preschool’s outdoor physical environment they found conducive to play, in an open-ended question. Their answers were coded into themes, found in Table 5.9, together with quotes and frequency. The sandpit was mentioned by 19 educators, more than any other element.

Themes	Statements	Frequency
Sandpit		19
Fixed play equipment	"Wooden construction" "Swings" "Climbing frame" "Slides"	18
Moveable play equipment	"Tricycles" "Sand tools" "Kitchen tools" "Tyres" "Plastic toys: house, chair, table" "Psychomotor equipment"	18
Natural elements	"Trees " "Bushes" "Soil" "Sticks" "Pebbles"	9
Space	"Openness" "Pathways through bushes"	3
Climate	"Good climate all year round"	1

Table 5.9: Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool? (n=23)

Mrs Georgiou referred to the combination of having tartan®-covered and tiled areas, conducive for more "athletic types of activities" such as running and using wheeled toys, as well as more natural areas supporting imagination:

... with the hiding places and the 'treasures' (Interview)

Alexia also referred to the more natural area of the playground, describing:

It is their forest, their hideout, the 'wolf's den', it's everything to them.

It's their most creative spot. (Interview)

The educators were asked which elements of the outdoor physical environment they believe should be improved and in what way, in an open-ended question. Their answers were coded into themes, presented in Table 5.10, with quotes and frequency.

Themes	Statements	Frequency
Increased quantity and variety of toys	"More toys to increase variety in children's choices"	11
Materials facilitating experimentation, improvisation and pretending	"Abstract toys" "Materials supporting experimentation"	8
More fixed play equipment	"More swings" "Seesaw" "A tent to hide between the trees"	7
More wheeled toys		6

Construction material	"Blocks" "Wood" "Cardboard boxes" "Ropes"	5
Functional play equipment	"Psychomotor material" "Balance beams" "Balls"	3
Water	"Experimentation with water" "Water activities in the summer"	2
Infrastructure	"Appropriate infrastructure"	2
Space use	"Better utilisation of the space for all ages" "Stimuli in all areas of the playground"	2
Protective flooring	"Under the swings and climbing"	1
Maintenance	"Replacement of frayed ropes"	1
Aesthetics	"More wooden toys instead of plastic"	1

Table 5.10: Which elements of the outdoor physical environment do you believe should be improved and in what way? (n=23)

Overall, if the themes for moveable play materials and fixed equipment were combined, 20 out of the 23 educators suggested improvements relating to the quantity, variety, novelty, versatility, safety and quality of materials and structures.

Mrs Georgiou proposed that it would be nice for the children to have access to climbing and the need to renew the climbing structure.

Daphne commented on the need for materials to challenge children of different ages, explaining:

Level of difficulty needs to be considered as children grow (...) so that it intrigues them. (Interview)

Alexia referred to including children's own ideas and constructions in the garden, stating:

What the children themselves would like to put in the garden. (Interview)

Daphne commented on the aesthetics of play materials:

I don't like the plastic equipment we have (...) they don't fit my aesthetic. (Interview)

The need for more and various open-ended materials was raised in all staff interviews, however the term 'loose parts' was not used in any communications. Open-ended materials were proposed to facilitate children's physical activity, exploration, creativity, imagination, and social interaction, with Alexia commenting:

I generally miss these materials in the garden. Such as large cardboard boxes they could utilise any way they wanted. (Interview)

Alexia described that the children really enjoy using moveable materials, such as the tyres in combination with the plastic houses, to create play spaces:

They like these a lot because they can be moved, they can transport it to build constructions. (Interview)

She went on to support that this enhances playing in larger groups:

In some way they all play together, because in the end they build something in common. (Interview)

Reminiscing of her own childhood summer holidays, Mrs Georgiou referred to play with natural materials and found objects, however focusing on the importance of being with other children:

Company is more important than materials. (Interview)

Mrs Georgiou reported that in the past play elements had been introduced, such as a 'water wall' and 'tree cookies', but though she found them useful they were not renewed when worn. She went on to link this to lack of educator reinforcement and limited understanding of outdoor play's value from the board of directors.

Educator stance towards the use of water and messy materials

Water was reported to be introduced only on certain occasions in the summer on all staff interviews, despite acknowledging children's joy during water play. Water was not present in the playground during any researcher observations taking place in May, including the 'mud kitchen' and sandpit, where soil and sand were used dry. When asked if water is available in the garden Alexia replied negatively:

No, nor mud... It's my yearning! (Interview)

She went on to express that her positive views on the use of water and messy play were not shared by some colleagues. She associated lack of water and messy materials to the stance of some educators finding it laborious:

I think they are settled in their ways. They may say 'Aren't you bored?', 'Who's going to clean up?', 'It's a mess'. I think a lot of it relates to children getting wet and having to change clothes. (Interview)

Daphne related lack of water and messy play to parental concerns about children catching colds, as well as about them getting dirty.

Risk and safety perceptions

In the questionnaires safety concerns relating to climbing and surfacing were raised and six educators indicated fear of children getting injured as a barrier to outdoor play (Table 5.7).

In the interview, Mrs Georgiou referred to a need to “tidy up” the planted areas and “beautify” the bushes for safety purposes:

The tree roots have surfaced and children could trip more easily, or get injured by branches (Interview)

She additionally referred to playing with rocks or sticks as potentially risky and in need of supervision. This practice was corroborated in the interviews. Accordingly, no sticks were observed in the garden during the researcher's visits and an educator was witnessed to throw away sticks fallen from the trees (Researcher diary, 28/5/2019).

Alexia referred to her personal stance towards playing with sticks, proposing that the educator's knowledge and risk management ability affects what is considered safe and thereby allowed:

I have not yet learned how to deal with use of sticks. I always feel restless that – through clumsiness not on purpose- they might hurt their eyes. (...) It's my worry, I have not learned to manage it correctly. (Interview)

Nevertheless, the importance of allowing children to take some risk in their play was supported by both educators, with Daphne describing:

I will allow them to climb, to go up the slide despite the rule, to hang from the rope coming down, while taking care of their physical safety.

(Interview)

5.2.3 Staff engagement

Setting-up and adapting the outdoor play environment

The educators were asked if they organise the outdoor area before taking the children out to play, with 17 stating they do. The results of the follow-up question on frequency can be found in Table 5.11.

How often do you organise the outdoor area before taking the children outside to play?	Frequency
Everyday	6
Once a week	2
Once a month	2
At the beginning of the year	7
Never	6
Total	23

Table 5.11: How often do you organise the outdoor area before taking the children outside to play? (n=23)

The educators were not witnessed to organise the environment before they went outside with the children on the days of the outdoor play observations. During questionnaire completion and staff interviews, some confusion became apparent regarding the meaning of ‘organising’ the space for play, with some educators on the one hand relating it to tidying up and on the other to organising adult-led activities. In the interview Mrs Georgiou also appeared to associate it with direction, contrasting the notion of organising the physical environment to allowing children freedom:

It is our habit when we go for recess not to set up, to let the children be free and act freely. (Interview)

As the conversation evolved, descriptions of organising the space regarded adult-led activities or classroom projects, indeed not child-directed play. This was also evident in the educator’s diaries, as on the two occasions Daphne documented organising the environment it was in relation to adult-directed games. However, during the interview she referred to setting-up materials for play:

Sometimes we may take out hoops, balance beams, tunnels, (...) cooking utensils, paper, and markers, (...) fabrics. (Interview)

Only one of the educators suggested outdoor space organisation as a factor facilitating children's outdoor play in the questionnaire, stating:

Taking advantage of more outdoor spaces within the preschool and their organisation. (Dina, 33 years old, University degree, Questionnaire)

Alexia reported a long-established and generally stable fashion that the outdoor environment is organised, for as long as she has worked in the preschool:

We know where to find the relevant toys, so it's not necessarily our concern. (Interview)

Referring to open-ended materials she would like to take outside, she explained that this would not create lasting changes to the environment if it was not discussed between the staff:

I could take them outside. But even so, I would put them out and then remove them. (Interview)

When asked about environmental adaptations to support play, both educators indicated some confusion with the term. Alexia in the interview could not think of adaptations needed during play, nevertheless in the educator diary she documented adaptations on six out of the ten days, for example, helping the children move equipment. Daphne initially discussed adaptations to game rules rather than the environment, but then gave an example of responding to a child's request by bringing an object from indoors.

Educator roles during outdoor play

The educator responses to the open-ended question on how they would describe what they do when they are out with the children were grouped into themes reported in Table 5.12, including quotes and frequency. Most educators referred to a combination of actions, rather than one discreet role.

Themes	Statements	Frequency
Supervision	"Ensure safety" "Reminding rules"	14
Joining in play	"Join in play without interfering" "Playing games e.g., chase" "Engage briefly when asked"	12
Facilitation	"Offer ideas" "Encourage children to join in" "Support"	10
Observation	"Observe children's play"	6
Conflict resolution	"Conflict resolution" "Mediate" "Fair toy sharing"	5
Directing play	"Organising games e.g., treasure hunt or activities connected to monthly project"	2

Table 5.12: How would you describe what you do when you are outdoors with the children? (n=22)

i. Supervision

Supervising children and ensuring their safety was the primary role suggested, as described in the following statement:

'Lifeguard'. I supervise their safety, physically and emotionally e.g., verbal disagreements, interacting only when needed. (Betty, 33 years old, University degree, Questionnaire)

During the outdoor play observations both educators were witnessed to maintain visual contact with the children and be available for help when needed. A difference observed related to their positioning and mobility. Alexia appeared consistently positioned within the area where play occurred and moved around in accordance with children's actions. Daphne tended to stand on the outskirts with the other classroom educator, with whom she would converse at times, displaying limited movement unless a safety or conflict issue arose, with her actions appearing consistent with a primarily supervisory role.

Consistently, when asked to describe what she does when outside with the children, Daphne indicated:

I usually supervise and engage sporadically when the children request it. (Interview)

She indeed positively engaged with children when they addressed her, as in the following example:

Daphne cheerfully responds to a child showing her an insect: “Oh you found a ladybird!” (Observation, 28/5/19)

ii. Joining in play

Taking part in children’s play was suggested by 12 educators, with three stating that they join in games and another three specifying joining in for a limited time, or if the children asked them. The following statement linked educator participation to children’s age and ability to play on their own:

At the age of four or five the children ‘know’ how to play and don’t need me to participate as much. Nevertheless, when I had younger children, I played with them. (Evie, 28 years old, Postgraduate degree, Questionnaire)

During the play observations differences were observed in the educators’ demeanour and joining in with children’s play. During these specific play sessions, Daphne displayed what could be characterised as a serious expression while monitoring children’s play and was not observed to join in the play, nor was invited to do so. Alexia adopted what could be described as a playful stance: smiling, laughing, moving in accordance to play, and going into role-play. She accepted children’s invitations to join in with various types of play, such as physical and pretend, as in the following example:

A group of children lead Alexia inside the climbing frame to “lock her in the dungeon”. Alexia stays there and playfully says to a child passing: “Save me they have imprisoned me!” (Observation, 27/5/19)

Consistently, when asked to describe what she does when outdoors with the children, she described that she indicates her availability for play and stated:

I often play with the children. (Interview)

iii. Facilitation

Facilitating play was proposed by 10 educators, with suggested actions including encouraging children to join in, offering ideas, as well as emotional support.

During the outdoor play observations both educators displayed respectful behaviour towards the children and offered tacit permission to the children to choose objects, activities, types of play, and play locations, however only within the allocated area. Alexia was observed to indicate possibilities in the playground which the children might find of interest on a few occasions, as in the following excerpt:

Alexia points to an ant's nest and says with some excitement

"Children have you seen the ants? There are so many." (Observation, 13/5/19)

Consistently in the interview, Alexia referred to sustaining children's play through indicating possibilities and offering ideas:

When play starts to deflate (...) If you join in and show them that you can do more things (with an object) they will approach it differently.
(Interview)

Alexia was observed to facilitate interactions between small groups of children, as well as acknowledge and support children's feelings, as in the following excerpt:

A boy shows interest in observing a bug with other children but appears frightened. Alexia approaches him and says: "If you are afraid of the bug you can move that way", showing him a wider space near enough to see. (Observation, 13/5/19)

iv. Observation

Observation was proposed by six educators in the questionnaire. Both educators referred to observing children's play in the interviews, with Alexia stressing:

It's important. Because we see the social part of children (...) expressed even more during free time. (Interview)

During the outdoor play observations both educators were witnessed to continuously visually monitor the children, but as mentioned earlier differences were identified in relation to their mobility within the play space, with Alexia moving around and in closer proximity to the children, which would allow her to also listen. Neither educator was witnessed using a camera during the play observations.

v. Conflict resolution

Conflict resolution was mentioned by five educators in the questionnaires and in all interviews, as in the following statement:

Supervise and intervene when necessary (conflicts). (Lena, 30 years old, Postgraduate degree, Questionnaire).

Alexia reported that conflicts may occur due to children being possessive of their friends, or fighting over the same toy, specifically shovels, wheeled toys and swings. She discussed the educator's role in conflict resolution focusing on advancing children's interaction:

Not by splitting the children and ending the argument. If you show them the way (...) you pass a subtle message, that eventually there is a solution: to get along with each other. (Interview)

Consistently, during the play observations Alexia was observed to calmly discuss with two girls arguing on who would go on the swing first, trying to calm them down, mediating between them and offering alternatives:

After the girl stopped crying Alexia proposed "You can push her on the swing if you want" (Observation, 27/5/19)

vi. Directing play

Organising games for the children to play, either traditional or linked to a classroom project, was suggested by two educators in the questionnaire and was also discussed in the interviews with Mrs Georgiou and Daphne.

During the play observations both educators maintained an unobtrusive stance and were not witnessed to direct children's play.

Setting rules and boundaries

Daphne reported that rules focus on children's safety and respect for the environment and materials, such as not destroying them, tidying up, and keeping the garden clean, however stating:

We don't have many rules, we try to be quite free. (Interview)

During the play observations interruptions to children's play were witnessed when their behaviour was deemed inappropriate or precarious, as in the following excerpt:

A boy pushes a girl on a tricycle, and they inadvertently collide with another tricycle. Daphne approaches and tells them: "I'm sorry but you must not do this again. Each should do it on their own." (Observation, 28/5/19)

In the interview Alexia however stressed the need to set boundaries without limiting children's creative play choices:

In that moment the child (...) is 'thinking outside the box'. And I will restrict it? I do not see why. If they did something that harmed another child, or destroyed something, I would say yes, we must set boundaries. (Interview)

Apart from rules to ensure children's safety and avoid destruction of materials that were reported, boundaries were also observed to relate to the divided use of the play area and the scheduling for time outdoors. Children were asked to remain inside the allocated area and were otherwise reprimanded. They were allowed to move some materials from the other area, such as the tyres, but not all, such as the wheeled toys. Some flexibility was observed regarding space-use, for example, on a day when it had previously rained and

the tiled area was deemed slippery, the children were instead allowed to use the tartan® track for running and riding the tricycles. Both educators were observed to adhere to common rules for outdoor play. The rules were verbally explained to the children in an age-appropriate way. No visual cues were observed in the playground.

Interruption of children's play was witnessed when the allocated outdoor time had finished, with a few minutes' flexibility at the educators' discretion. The end of playtime was observed to be communicated through the educators giving notice to the children a few minutes before. However, when the children appeared to want to continue playing outside, the educators clarified the boundary, such as in the following excerpt:

A group of children continued playing after being told to gather to go inside. Daphne addressed them saying: "Tidy up, no more"
(Observation, 14/5/19).

This stance appeared to relate more to scheduling practices, rather than lack of acknowledgment of children's play actions or wishes on the part of the educators, as evidenced in the next excerpt:

At the end of playtime Alexia addressed the children that seemed unwilling to go inside with a sympathetic tone: "Children lets go inside. We may be able to come back out again after lunch" (Observation, 27/5/19).

Documentation and critical reflection practices

Even though outdoor play documentation was not an institutional expectation, Alexia supported the importance of documenting outdoor play observations for monitoring children's behaviour and overall progress, linking observation to reflection:

It's a good time to observe (...) and take the distance to understand what is really going on. (Interview)

In her educator diary she reported documenting children's outdoor play on nine out of ten days, in contrast to no documentation reported by Daphne, indicating variations in practice between members of staff.

Daphne referred to documenting unusual behaviours, indicative of children's developmental progress:

If I have not seen a child climbing all year and suddenly, I see them climbing, I may note it in my journal and put in my assessment form.

(Interview)

All staff showed critical reflection upon their outdoor play practice during the interviews. Though no formal teamwork practices were described specifically supporting reflection for outdoor play practice, Alexia described that educators in her group discuss and reflect upon their observations of children's behaviour outdoors informally, on their own or with Mrs Georgiou:

There is a fertile dialogue. (Interview)

The way the physical environment supports outdoor play within this preschool setting will be discussed next.

5.3 Physical environment

5.3.1 Space characteristics

Size and space-child ratio

The preschool has an outdoor play area of 1300 square meters outlined in the following top-view depiction made to scale (Figure 5.1). If divided by the number of children attending the preschool, it allows 8.38 square meters per child, exceeding the national licensing guidelines.

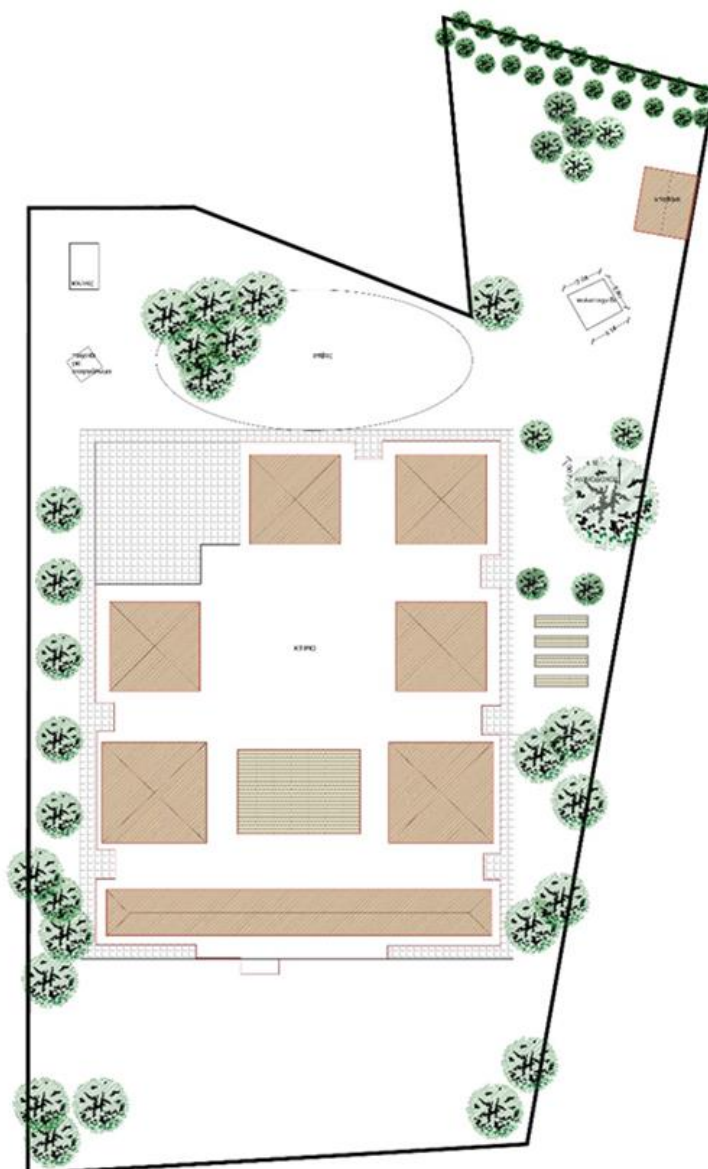


Figure 5.1: Playground view from above made to scale.

Access

The preschool is housed in a two-story purpose-built building, constructed in 1999. Six out of the eight classrooms are on the ground-floor, with five having direct access to the garden.

Configuration and space use

The playground consists of a unified, flat, fully accessible space. Nevertheless, as discussed before, it is used in two parts during play, the left and the right. A description

of the playground in accordance with the Outdoor Play Environment Categories (OPEC) (Mårtensson, 2013) can be found in Table 5.13.

Total size of the outdoor area	1300 square meters
Proportion of area with shrubs and trees	40%
Proportion of area with hilly terrain	Flat terrain only (0%)
Integration between vegetation, open areas and play areas	Trees and shrubbery adjacent to play areas and open spaces located in between

Table 5.13: Play area's description.

When stepping out of the building onto the garden from the three doors on the lower end, it firstly spreads in a wide, open space of approximately 300 square meters with the running track area in the middle, with limited peripheral tree coverage and more direct sunlight (Figure 5.2).



Figure 5.2: Middle open part of the playground, with tartan® track.

The playground's left side includes the climbing frame, swings, part of the running track, the tiled area adjacent to the building and a corridor with low trees on the side, extending to approximately 400 square meters. Five tall eucalyptus trees create a shaded area, where benches and tables are placed, but in the rest of the space shading is dependent on the time of day and can be limited. The pergola over the tiled area was reported to be covered by wicker in the summer months. (Figures 5.3, 5.4, 5.5).



Figure 5.3: Left side of the playground, with swings and climbing frame.



Figure 5.4:



Figure 5.5: Corridor with lower trees on the left side of the building.

The playground's right side extends to approximately 500 square meters and covers a mostly shaded area with lower and thicker trees, plants of various sizes acting as natural visual divides and forming enclosures, giving the feeling of being more sheltered. It includes the sandpit, the elevated wooden house-like construction and three gardening plots. (Figures 5.6, 5.7, 5.8)



Figure 5.6: Right side of the playground, with elevated construction.



Figure 5.7: Right side of the playground, with sandpit and bushes.



Figure 5.8: Stepping-stones between the bushes leading to gardening plots.

More information on the play facilities and materials will be further discussed and can be found in Table 5.14.

Natural features

The play area is surrounded by tall hedges on three sides. There are some tall eucalyptus and pine trees and many smaller ones, with only three on the left side of the building being climbable (Figure 5.5). A double row of hedges and three bushes on the right side of the garden created enclosures, but the bushes were heavily trimmed on the last observation, no longer affording these natural den-like spaces (Figure 5.9).



Figure 5.9: Bushes after being heavily trimmed.

Scented plants are grown in the gardening plots: basil, thyme, lavender, and rosemary. Mrs Georgiou reported that vegetables are also sometimes grown.

The garden is covered in soil of various consistencies, apart from the tiled-covered area adjacent to the building and the central tartan® rubber-covered area, shaped like an oval running track. The tartan® was installed a few years previously, as the grass initially planted was very expensive to maintain and the intermediate use of pebbles resulted in children sustaining abrasions, as Mrs Georgiou reported. Tiles of protective surfacing are positioned under the climbing frame and swings.

There was no water for children to use on any of the observations, although many taps are available.

Insects of different types were observed in the garden, e.g., ants, snails, ladybirds, dragonflies, and butterflies. There were birds in the trees, such as sparrows and pigeons, and a neighbour's poultry can be seen through the fence on the upper side. (Figure 5.10)

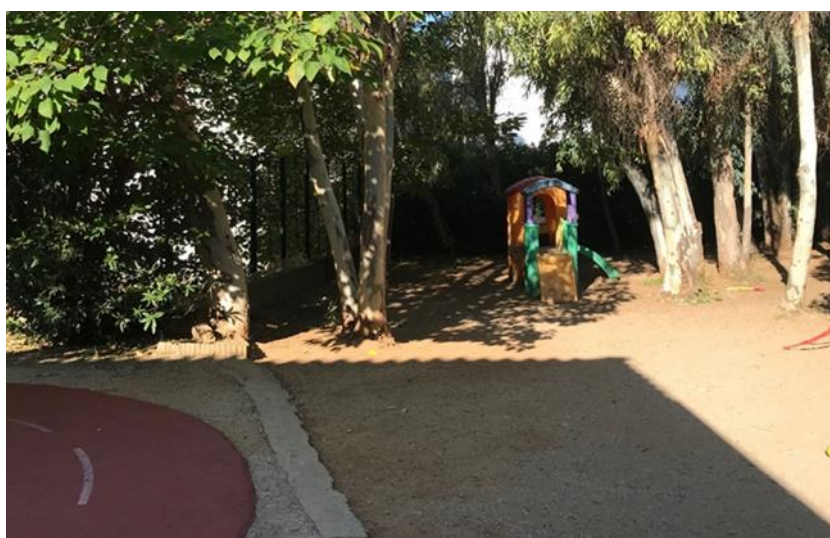


Figure 5.10: Black fence overlooking the neighbour's coop and row of hedges at the back.

Storage

There is no storage for play materials in the playground, apart from one small plastic box to collect the sandpit toys (Figure 5.13).

5.3.2 Play facilities and materials

The play facilities and materials were recorded by the researcher on six occasions and are reported in Table 5.14, organised according to their life span (Casey, 2007). The condition of the features, children's access to them and the number of occasions observed in the playground is also reported.

Life span of play features	Play features observed	Condition	Children's access	Number of occasions observed
Longer term	Running track	Good	Educators' discretion	6/6
	Tiled area	-"-	When on left side Discouraged to use when wet	6/6
	Climbing frame	Needs replacing	When on left side	6/6
	Swing set	Needs new protective flooring	When on left side	6/6
	Wooden elevated construction with slide	Ropes require maintenance. No protective flooring.	When on right side Access only to the slide	6/6
	Sandpit	Good. Sand sufficiency inconsistent.	When on right side	6/6
	Stepping-stones	Good	When on right side Discouraged to use when wet	6/6
Semi-permanent	Plastic houses (4)	Worn	Depending on positioning	6/6
	Rocking equipment (3)	-"-	-"-	6/6
	Wheeled toys (3)	-"-	When on left side	6/6
	Outdoor furniture (3 tables, 2 benches)	Good	-"-	6/6
	'Mud kitchen'	-"-	When on right side No water allowed	6/6
Temporary	Miscellaneous plastic sandpit toys kept in small plastic box: buckets (3), cups (4) plates (3) shovels and rakes (6), sheeves (3), watering cans (3)	Worn	When on right side	6/6
	Tyres (7)	Good	Free	6/6
	Pulley with bucket (1)	-"-	Introduced for end of the year celebration	1/6

Table 5.14: Outdoor play features and materials.

The play materials observed in the playground remained unchanged in the space of three months, apart from the day of the summer celebration, when some equipment planned to

be used that evening for adult-guided activities was introduced, to be removed after the event. Among this, the only one used in self-directed play was a pulley with a bucket, on a rope between two trees.

Longer term features

There are three fixed play constructions, installed when the preschool was established, all in need of maintenance. The swings require new protective flooring. The climbing frame, still in use, was assessed to have problematic foundation and is planned to be removed (Figure 5.11).



Figure 5.11: Swings and climbing frame.

The 'house' construction is elevated at 1m high, with a slide, a sliding pole, a two-step climb and diagonally positioned ropes which were frayed and consequently cut, deemed unsafe. Of the four openings, only the slide was accessible by the children, with the others covered with plastic chicken wire mesh (Figure 5.12). This was explained by Mrs Georgiou as a precaution for children's safety, as there is no protective flooring underneath.



Figure 5.12: Covered sides of elevated construction.

The sand pit measures 200x410cm and has a mesh cover to protect it against cat soiling (Figure 5.13). On two observations it contained very little sand, reported by the educators present to be due to children scattering the sand around.



Figure 5.13: Sandpit with cover and box of miscellaneous sandpit toys underneath.

Six unmovable stepping-stones made of painted cylindrical wood were installed about two months before the study started, between the bushes near the sandpit (Figure 5.9).

Semi-permanent features

There are four small plastic house-type toys, donated to the institution, which look worn and faded (Figure 5.14). Moveable materials include two tricycles, a very small toddler-sized plastic bicycle, two single plastic rocking animals and one plastic toddler-sized triple seesaw. A small wooden kitchen was introduced about two months before the study started, described as a mud-kitchen, but with no water available (Figure 5.15). Two

wooden tables made of pallets, four benches and a small plastic table were observed to be used as seating, but also as play materials by the children (Figure 5.16).



Figure 5.14: Plastic toys and tricycle.



Figure 5.15: Wooden kitchen.



Figure 5.16: Tables and benches.

Temporary features

The only temporary features observed were seven tyres, the pulley, and a limited number of plastic sand-toys, e.g., small buckets, watering cans and shovels, kept in a small plastic box (48x39x20cm) (Figure 5.13).

5.3.3 Sensory characteristics

The sensory characteristics of the play environment, relating to potential sensory opportunities afforded, are presented under the following seven sensory categories: visual, auditory, olfactory, taste, tactile, vestibular, and proprioceptive.

Visual opportunities related to natural features, and light-shade variations. No equipment targeting visual exploration, such as magnifying glasses, or binoculars, where available.

The playground is quiet, situated at the back of the preschool, away from the main road. The play area is wide, with sounds dispersed. No constructions producing sound or musical instruments were present in the playground. Children in Class A were observed to experiment with their voices, inside a stack of tyres (Observation, 27/5/2019).

Olfactory opportunities are provided through scented plants in the gardening plots, as well as the eucalyptus and pine trees.

No taste opportunities outdoors were observed by the researcher. In the interview, Mrs Georgiou referred to children tasting vegetables grown in the garden at times.

Tactile opportunities were observed in relation to children playing with sand, leaves, and soil. No water-play or 'messy play' was observed by the researcher, or described by the educators as a common occurrence, only organised at specific times in the summer.

Potential vestibular stimulation could come through running, climbing, rocking, riding on the tricycles, and the two swings, offering mostly linear movement. No equipment offering rotatory movement was observed.

Potential proprioceptive stimulation could come through climbing on the fixed equipment, hanging from the climbing frame, digging, and pulling or pushing the moveable features.

5.3.4 Children's behaviours and interactions with the physical environment during outdoor play

The way the children of the two targeted classes behaved and interacted with the physical environment during outdoor play time was observed on four occasions, two for each class, during complete outdoor play sessions at the time when children would normally go

outside. Each group was observed on both the left and the right side of the garden. Detailed data on the circumstances for each observation can be found in Table 5.15.

	Group A – 13/5/19	Group A – 27/5/19	Group B – 14/5/19	Group B – 28/5/19
Weather	Cloudy 21°C	Some clouds 22°C	Cloudy 21°C	Some clouds 22°C
Location in the playground	Right	Left	Right	Left
Time outdoors	30 minutes (11.00-11.30)	30 minutes (11.10-11.40)	40 minutes (11.40-12.20)	35 minutes (11.35-12.10)
Number of children in observed group	19	18	14	10
Number of educators supporting observed group	3 + 1 learning support assistant (2+1 for the first ten minutes)	2 + 1 learning support assistant	2 (1 for the first five minutes)	2 (1 for the first 10 minutes)
Groups outside at the time	1 (for first 20 minutes) then 2	1	2 (for first 15 minutes) then 3	2
Maximum number of children outside	36	18	42	28

Table 5.15: Circumstances of outdoor play observations.

Group play was observed to mostly take place in small groups of two to five children on all occasions, but solitary play was also observed. The children appeared to engage in various play behaviours which often seemed to overlap e.g., climbing and pretending happening simultaneously. They were also observed in apparent non-play instances, e.g., sitting and talking.

The researcher's observations in relation to children's behaviours and interactions with the physical environment were analysed and coded into six themes: a) Handling sand and soil, b) Pretending, c) Engaging with nature, d) Moving and being physically active, e) Using objects and changing the environment, f) Sedentary activities.

a) Handling sand and soil

Handling sand and soil was the behaviour mostly observed when children played on the playground's right side, in ways such as digging, piling, throwing, sieving, spreading, dropping, and sweeping, using their hands and sand-toys. Apart from inside the sandpit it was also observed in other spaces e.g., under the bushes. As no water was available, the children could not mould the sand. Children appeared to simultaneously engage in pretence on many instances, as in the following example:

A child playing with the sand says to another “We’re making pie, let’s also put some water” and pretends to pour water on the sand.

(Observation, 13/5/19)

Handling soil was not observed when children were on the left side of the playground, apart from momentarily spreading it on a plastic table or tricycle seat, on two instances. No sandpit or sand-toys were available on that side of the playground.

b) Pretending

The children were observed pretending both while sedentary e.g., inside the plastic houses, but also while moving, often in conjunction with other play behaviours, such as making constructions. Various scenarios were observed, such as cooking, fishing, playing house, characters from TV shows, and fighting off dangerous creatures, as in the following examples:

Two children run and one shouts “I am Spiderwoman. Anna was taken to the volcano!” (Observation, 14/5/19)

A child digging at different spots behind the bushes exclaims “I’m building traps to destroy the bad wolf” (Observation, 13/5/19)

c) Engaging with nature

Children explored the space behind the hedges or under the bushes and showed interest towards plants, insects, and birds, as in the following example:

A girl finds a ladybird and shows it to the educator and other children.
A boy asks her “I also want a ladybird, where did you find it?” They search in the bushes together. (Observation, 28/5/19)

d) Moving and being physically active

Differences in afforded opportunities and in children’s movement patterns were observed between the two sides of the playground. Increased physical activity when first going

outside was observed on the more open left side, anecdotally observed to last no more than 10 minutes, after which children moved less intensely.

Children were observed to walk, run, balance, push, pull and lift on both sides of the playground. Movement behaviours relying on the existence of equipment only observed on the left side were: riding on the wheeled toys, swinging, climbing, and hanging on the frame, rocking on the plastic toys and playing with a ball. In the beginning of playtime some discussions between the children and minor conflicts were observed, regarding who would go on equipment such as the swings and tricycles first, with the educators at times intervening.

Children were observed to request adult help to get on and off the swings, also asking other children or the educators to push them, appearing to sometimes lack independence in fulfilling their movement ideas, as in the following example:

A girl suggests to another that they sit back-to-back on the baby swing. They ask the educator for help to get on. They sit for a few minutes until an educator offers to push them. (Observation, 27/5/19)

The younger children moved on the wheeled toys, mostly by pushing on the ground, while the older mostly by pedalling. The children also appeared to enjoy using the tricycles two at a time, with one child riding and one pushing. Nevertheless, this seemed to be discouraged by the adults due to safety concerns, as it resulted in minor crashes and falls.

Physical play also appeared to happen in conjunction with sensorimotor exploration, as in the following example:

Two children drag two tyres inside the climbing frame and use them in an upright position, balancing on them astride and gently swinging, holding on to the sides of the climbing frame. (Observation, 27/5/19)

e) Using objects and changing the environment

The children were observed to use the objects available in simple ways, mostly in line with their intended use, such as using the sand toys to dig or carry soil. At times they were observed to use the large moveable objects available to change the set-up of the environment, as in the following example:

Two boys position the plastic houses, rocking animals and tricycle close together, near the furniture under the eucalyptus and balance on top of them for a few minutes. After a while they park the other tricycle there, with one saying: 'Nice car park'. (Observation, 27/5/19)

Children were heard expressing additional ideas for using objects and altering the environment, appearing to lack the materials to implement them, as indicated in the following example:

Two boys kick the ball into a tree where it gets stuck. Looking at it, one says "We should use a stick, an enormous one...", with the other agreeing. They search, but no stick is available. (Observation, 28/5/19)

f) Sedentary

While on the left side of the playground, children were observed to be sedentary on occasions, without engaging in obvious sensory, exploratory, pretend, or social play. For example, while in the swing area they were at times observed to be inactive, waiting their turn or for someone to push them, or just sitting on the swing without moving. Children were also observed to use the tricycles or rocking animals as seating, while discussing between themselves.

A summary of the themes of children's behaviours and interactions with the physical environment during the observations can be found in Table 5.16.

	Class A - Right side of the playground	Class A - Left side of the playground	Class B - Right side of the playground	Class B - Left side of the playground
Handling sand and soil	X		X	
Pretending	X	X	X	X
Engaging with nature	X	X	X	X
Moving and being physically active	X	X	X	X

Using objects and changing the environment	X	X	X	X
Sedentary		X		X

Table 5.16: Children's observed behaviours and interactions with the physical environment.

5.4 Summary

This chapter presented the findings of the first case study regarding how the organisational, human, and physical environments supported children's outdoor play.

Within the organisational environment, the preschool's operational policies were examined, in relation to group sizes, number of educators, adult-child ratio, staff stability, and scheduling practices. The preschool's outdoor play profile was also explored, including its outdoor play philosophy and policy, language used for outdoor play and its pedagogical framing, time for outdoor play, outdoor space use, clothing and footwear for play in all weathers, opportunities to play in nature, strategies to support the outdoor play of children with additional needs, provision of outdoor play training and resources, institutional expectations for educator practice, educator engagement and children's participation in planning for outdoor play provision, parental communication and involvement, as well as parental and board of directors' influences on provision.

Within the human environment, the staff's training and working experience was explored, as well as their perceptions regarding outdoor play's value, outdoor play and children with additional needs, time outdoors and play in all weathers, factors inhibiting and facilitating outdoor play in their preschool, physical environment elements supporting outdoor play, stance towards water and messy play, as well as risk and safety. Staff's outdoor practice was also examined regarding setting-up and adapting the outdoor play environment, educator roles outdoors, setting rules and boundaries, documentation, and critical reflection practices.

Within the physical environment, the outdoor play area was examined regarding size and space-child ratio, access, configuration, natural features, play facilities and materials, sensory characteristics, and storage. Additionally, the children's behaviours and interactions with the environment during outdoor play were described.

The second case study findings will be presented in the next chapter.

CHAPTER 6: SECOND CASE STUDY FINDINGS

This is a report of the findings of the second case study, carried out in a private preschool in the north sector of Athens, between November 2019 and June 2020.

6.1 Organisational environment

6.1.1 Operational policies

This preschool started as a playgroup in 2010, established as a licensed early years childcare centre in 2013. It is part of a private educational institution, catering for children up to 11 years old, with its Kindergarten and Primary school housed on a different site in the same area. It has an expressed play-based philosophy, supporting learning outdoors and in nature, as discussed in the following section.

The childcare centre caters for 50 two-to-four-year-old children, in three groups divided by age, as presented in Table 6.1, with the two groups observed as part of the study marked in bold.

Age groups	2-3-years (Class B)	3-4-years (Class A)	3-4-years
Number of children	19	13	18
Number of educators	3	2	2

Table 6.1: Number of children and educators per group

Children spend a maximum of eight hours in the preschool from 8.00 to 16.00. Each group has their own room, but also share common spaces for other activities, such as art.

The preschool employs seven female educators in addition to the preschool manager. Details of each member of staff's formal education, age and working experience can be found in the next section on the Human Environment. The preschool manager will from now on be referred to using the pseudonym Mrs Xenaki, the educator from Class A as Lydia and the educator from Class B as Khloe.

Group sizes, number of educators and adult-child ratio

Group sizes varied between 13 and 19 children. There were two or three educators in each group. The adult-child ratio ranged between one adult to 6.3 children and one to nine.

During the study Lydia worked in a class of three-to-four-year-olds, with 13 children, together with another educator, and Khloe worked in a class of two-to-three-year-olds, with 19 children, with two more educators.

Staff stability

Mrs Xenaki has been directing the preschool since it opened. Staff were reported to be employed under long-term contracts, no shorter than one school year, with the mean duration of working within this preschool being four years.

Staff scheduling practices

Staff work eight hours a day, with a 20-minute break, described to take place at their discretion, following communication between them.

Non-contact time for documentation, parental communication, and staff teamwork, was reported to be available when the children are not in the preschool, either in the beginning or the end of the day. Mrs Xenaki reported that some educators prefer to complete documentation at home, presenting it as voluntary, however it was not clear whether this was because of inadequate allocated time during working hours.

6.1.2 Outdoor play philosophy and pedagogical framing

Philosophy regarding play and the outdoors

Play appears prominent in the institution's philosophy, with the word 'play' included in its name. A sign on the main entrance to the preschool reads: "Play – Pedagogy – Culture" followed by the phrase "Play is the beginning".

On the school's website, reference is made to play in all sections addressing their philosophy. The view of children as 'self-luminous' beings is proposed, suggesting that the adult should be loving and playful, supporting exploration and creating learning experiences through play. Play is proposed as a way for children to discover their limits and a driving force of development, quoting Vygotsky (1978, p. 102):

"As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form and is itself a major source of development." (Preschool's Website)

The "transubstantiation of play" is postulated as the base of the institution's pedagogical philosophy, with play proposed as the natural way for developing children's

communication, creativity, self-expression, and understanding of the world around them, linking it to exploration and problem solving:

Through play children are called to explore and exceed their limits, create in an innovative way, resist conventionality, make mistakes, and invent solutions with safety. (Preschool's website)

Khloe confirmed an emphasis on self-directed outdoor play:

The preschool's philosophy aims to promote self-directed play outdoors. (Interview)

Developing children's autonomy through connecting with nature, is set as a goal for the preschool's programme:

The scope of the programme is to cultivate their autonomy through comprehensive pedagogy and contact with nature. (Preschool's website)

Mrs Xenaki referred to the importance of the outdoors for the preschool's philosophy, discussing both the preschool's garden, as well as natural environments:

We operate using nature as a guide, both while within the preschool grounds, as well as when we take the children to the forest. (Interview)

Language used for outdoor play

At the beginning of the study Mrs Xenaki proposed that choice of words is pertinent on how outdoor play is viewed within the preschool, affirming not using the words 'recess' or 'break':

We do not view it as a break from something. We say: "we'll go out to the garden" (Interview)

Pedagogical framing of outdoor play

Mrs Xenaki conceptually related the institution's philosophy and pedagogy to acknowledged pedagogical frameworks, namely the Danish Forest School model

(Williams-Siegfriedsen, 2017), the Reggio Emilia approach (Hall et al., 2014) and New Zealand's early years curriculum Te Whāriki (2017). She summarized the institution's pedagogical philosophy as having four main pillars, with play outdoors and in nature being the first:

For me it is the pinnacle of pedagogy. (Interview)

The second, related to incorporating art and following children's flow, through project-based learning, and the third concerned supporting children's resilience and self-regulation. Mrs Xenaki linked risk in play to children's emotional resilience:

So that one can fail. To risk, to fail and to regain your balance. That is emotional resilience. Risk exists so that you can try, fail, love your mistakes and thereby yourself. (Interview)

Mrs Xenaki related the fourth pillar to being part of a wider community and empowering children to be active agents:

It is about the 'woven fabric' of relationships and actions (...) the encouragement you give children to be active parts of their life and their reality. (Interview)

In all interviews, outdoor play was discussed as a process incorporating all the above elements, with Khloe proposing:

I think the school's philosophy is for children to recognize the value of the outdoor environment, familiarize with it, get to know themselves and others, test out their autonomy, increase their confidence, create relationships and experiment with different objects. (Interview)

6.1.3 Policy regarding play and the outdoors

All educators reported that there is a clear policy on outdoor play within this preschool in the questionnaire, also confirmed during all interviews. Khloe commented on how the institution's outdoor policy played a role in her choice to work for this preschool:

It's one of the reasons I'm here, because I believe the preschool recognises the importance of outdoor play. (Interview)

Time for outdoor play

Mrs Xenaki reported that children's time outdoors within the preschool is scheduled for 45 minutes to an hour each day, however differentiating between the age groups:

Minimum 45 minutes, maximum one hour. That's as much as can fit within all the other processes. In the younger group they may go to the 'nature atelier' for another hour. (Interview)

The daily outdoor play times per season, as reported by each educator in minutes in an open question in the questionnaire can be found in Table 6.3, with a mean of 58 minutes, ranging between 30-120 minutes. This refers to outdoor play time within the preschool's play area, while additionally, all interviewed staff reported consistently having outdoor play in natural spaces for one morning per week.

	Autumn	Winter	Spring	Summer
Khloe	60	60	90	90
Evangeline	60	60	60	60
Athina	40-45	40-45	50-60	50-60 (maybe more)
Lydia	30-50	30-50 (20-40 when it's really cold)	40-50	30-40
Rena	30	30	60	60
Maya	60	60	90	90
Anastasia	60	60	90-120	90-120

Table 6.2: Reported outdoor play time in minutes in the preschool's grounds on a typical day across four seasons.

Differences were identified between groups, with outdoor time of 30-60 minutes reported for the groups of 3-4-year-olds, while longer times of 60-120 minutes for the younger group of 2-3-year-olds. Lydia indicated less typical minimum daily outdoor time than reported by Mrs Xenaki in the interview, ranging between 30-50 minutes. The researcher's play observations, which took place in Winter, had a mean duration of 56 minutes, confirming reported times and ranging between 30 and 85 minutes.

Overall, longer times outdoors were reported for Spring and Summer. All interviewed staff affirmed that children would not miss outdoor play regardless of weather conditions. This was confirmed by the researcher's observations in February and early March, including two occasions with moderate to heavy rain, where all groups were observed to play outdoors. However, lack of waterproof trousers appeared to limit children's outdoor time

in wet weather, as some children got wet, progressively getting cold, thereby going inside sooner to change.

Additional time outdoors was described in all interviews to be at the educators' discretion as confirmed by Khloe:

We have set a minimum limit of being outdoors for one hour each day.

Today we were out for almost two hours, because it was a nice day.

(Interview)

Flexibility to increase outdoor time was confirmed through the educator diaries. After the first COVID lockdown, Khloe reported Class B being outdoors for five hours a day, explaining:

Due to the COVID 19 situation, we decided now schools reopened, to spend as much time as possible outside. (Educator diary)

In the same period Lydia reported a mean time outdoors of 81 minutes per day for Class A in the educator diary, exceeding what she had indicated in the questionnaire, yet confirming differences in outdoor time between the two groups.

Outdoor space use

Mrs Xenaki described that the preschool's outdoor space is used for play once a day for each group, with two usually out concurrently. All interviewed staff described the outdoor space, including the garden and the verandas, as very utilised, also used for art activities, project-based learning, celebrations, as well as everyday activities, such as snack or lunch, with Lydia commenting:

It's such a big part of our everyday life. (Interview)

Clothing and footwear for play in all weathers

Mrs Xenaki explained that in the beginning of each year, parents are requested to send in wellies and raincoats for outdoor play in wet and cold weather. In the questionnaire six educators stated that children had appropriate clothing for playing outdoors in wet and cold weather, with one educator working in the preschool for three months responding that she does not know.

Researcher observations confirmed that all children had raincoats and footwear for wet weather, kept within the preschool, but no waterproof trousers (Figure 6.1). As for warm and sunny weather, the parents are requested to send in hats and sunscreen.



Figure 6.1: Clothing and footwear for outdoor play in wet weather

Appropriate clothing for wet and cold weather for the educators was also kept within the preschool, as observed by the researcher, and confirmed by Lydia:

We also have our wellies and raincoats here. (Interview)

Opportunities for playing in nature

All interviewed staff reported that the children are taken to play in natural spaces for one morning each week, with Mrs Xenaki commenting:

We believe it's something spectacular. (Interview)

For children in the two-to-three-year-old group, outings commence in the Spring, whereas for the older children they begin at the start of the academic year. Mrs Xenaki explained that the preschool's bus is used for transport and the children are accompanied by their classroom teachers as well as additional staff, with a ratio of one adult per four or five children.

Strategies to support the outdoor play of children with additional needs

No specific policy regarding outdoor play for children with additional needs was reported. If a child has a shadow teacher, they also accompany them outdoors. The institution employs a psychologist and a speech and language therapist supporting the whole school.

Provision of training and resources on outdoor play

Mrs Xenaki reported that training on outdoor play was very intense when the preschool was first established, but is still offered to all educators with the additional support of the head of primary school who is a licensed outdoor educator instructor⁸:

With time, as most educators have been trained, training time has reduced, but the six hours a year are standard. (Interview)

In addition to training, Mrs Xenaki reported that continuous support through mentoring is offered to the educators to advance their outdoor practice:

Preschool educators are offered mentoring for observing children's play and reflecting upon it. (Interview)

Mrs Xenaki reported having a lot of outdoor play literature and resources within the school, which was confirmed by both educators, with Khloe describing:

There is a rich enough library, which is renewed and enriched, to which we have free access (Interview)

Khloe linked the management's personal interests as well as the school's philosophy, to the existence of literature and resources available to staff:

Because it's part of the preschool's philosophy (...) they have a personal and institutional interest on this subject. (Interview)

⁸ A licensed outdoor education instructor has received appropriate training and accreditation by an outdoor education organisation, to train other educators to lead, supervise and teach individuals and groups outdoors. The head of this primary was accredited by an organisation specialising on Danish Forest and Nature School training (<http://www.insideoutnature.com>).

Institutional expectations for educator practice outdoors

Mrs Xenaki set children's safety as a priority, describing that they are attended to by all the educators present outdoors, in a way that sanctions play:

Everybody looks at every child. We divide the space between the adults, with safety being the main priority. We can see where all children play, while still allowing them to be hidden. (Interview)

The educators' ability to predict pitfalls and position themselves within the playground to support children's safety was discussed, while acknowledging children's own role:

It's about children having the freedom to do what they like and be conscious of what they do. You're placing more trust in children, thereby needing to constantly predict. (Interview)

This stance of including children's alertness and abilities in the process of keeping themselves safe was further elaborated upon by Mrs Xenaki, discussing instructing them on the safe use of natural materials, such as sticks, or rocks:

We show them how they should hold sticks while walking, so that if they trip, it won't go near their eye and hurt them. (Interview)

When the researcher asked if supervision is one of the expected educator roles outdoors, Mrs Xenaki disagreed:

It's not supervision. They are playing, or they are observing, they don't supervise. (Interview)

Mrs Xenaki proposed active outdoor play observation as one of the main expected pedagogical practices, reporting regularly applying it herself, going on to describe how it may appear:

Because our practice is very focused on observing play, you may see an educator look towards her right and listen towards her left. In a photo, it wouldn't always seem like the educators are very engaged, because sometimes they observe or try to listen without disturbing. (Interview)

Mrs Xenaki supported that there is an expectation for consistent pedagogical practice indoors and outdoors, explaining:

We play indoors and we play outdoors (...) We want to have educators with an understanding that the garden is a continuation of the room, that we also practice pedagogy in the garden. (Interview)

She went on to describe that staff were expected to be actively engaged outdoors:

It's a very functional time for us. It's not like "the children have recess, so I can also have a break", it's the opposite. (Interview)

Mrs Xenaki stated regular outdoor play documentation is expected:

There is almost daily outdoor play documentation. (Interview)

Documentation was proposed as the next step to play observation, expected to take about 15-20 minutes per day, with Mrs Xenaki describing the use of shared online documents for recording.

Educators engaging in planning for play through teamwork and setting up the outdoor play environment accordingly was also described as an institutional expectation, to be further discussed in the next section.

Planning for outdoor play provision

When discussing the development of the preschool's garden Mrs Xenaki described intense personal involvement in the design and construction of play features to suit pedagogical practice, whilst acknowledging structural limitations as the site is rented:

We put in a lot of personal work (...) We developed the garden in a way that suited us. (Interview)

Mrs Xenaki contrasted this practice to governmental guidelines, commenting that they focus only on the size of the space not on how it should be configured and used:

Certain square meters per child are required. But there is nothing in the guidelines on how this outdoor space should be set up. (Interview)

Setting-up the garden's configuration and materials for play was discussed by Mrs Xenaki as a process undertaken in collaboration with the educators, informed by the preschool's philosophy and pedagogy, as well as through observations of children's play. She described the evolution of the garden as an ongoing process, with discussions undertaken during scheduled pedagogical meetings and adaptations planned according to identified needs, especially when the preschool first started operating:

We shared where children play more, (...) if we needed to add or remove materials. (...) If we identified needing something, the following month we would construct it together with the educators or supply it as a school, with various features put in over time. (Interview)

Children's participation in decision-making for outdoor play provision

No processes were described for children's formal participation in decision-making for outdoor play provision. However, collecting children's views and preferences, through active play observation, documentation and listening to children's ideas and requests, was reported in the interviews. Khloe described that through outdoor play documentation they record children's interests:

As a way to quantify children's preferences. (Interview)

Educators were then reported to feed back to management through regular meetings.

Incorporating children's views was also mentioned in the preschool's website:

In a place where the children are heard even when they do not talk (...)
(Preschool's website)

The willingness to facilitate children's influence on outdoor play provision was expressed in all interviews, with Lydia commenting:

When the children ask for something it will come. (Interview)

Similarly, Khloe proposed that there is a positive stance towards children's requests, saying:

I believe that Mrs Xenaki has the intention to materialize children's requests. (Interview)

Parental communication and involvement regarding outdoor play

The importance of establishing clear and continuous communication with parents regarding outdoor play was expressed by all interviewed staff, with Mrs Xenaki stating:

We communicate with the parents a lot. (Interview)

In addition to being verbally informed about the preschool's outdoor play practice, Mrs Xenaki reported parents are also sent an email and an information leaflet before enrollment. They are informed about the demands regarding clothes and footwear for outdoor play, at the beginning and during the year, as needed. A photo description of the preschool's everyday routines is also given to the parents in the form of a poster, including going to the garden and the forest, as seen in Figure 6.2.



Figure 6.2: Photo description of the preschool's everyday routines provided to parents (original size 70x50cm)

Continuous communication with parents on outdoor play, was reported in all interviews, through parent-teacher conferences and informal meetings, with Khloe describing:

In parent meetings we provide very detailed briefings about play outdoors. (Interview)

Written communication with parents was also reported by all interviewed staff, with Mrs Xenaki explaining that emails are sent fortnightly, containing photographs and comments:

We send emails explaining what happens outdoors, for instance displaying a discovery. (Interview)

In addition, the parents of each group were sent printed ‘newspapers’ reporting children’s endeavors, including outdoor play and play in nature, as seen in the excerpt entitled “What I liked in the Forest” (Figure 6.3). The following captions were added to the children’s pictures: “We explored”, “We saw and observed flowers”, “We played ‘the monkeys’”, “We ran”, “We climbed on rocks”, “We played with friends”, “We climbed on trees”, “We played chase”, “We cooked with natural materials”, “We saw turtles”, “We laid on the grass”.



Figure 6.3: Preschool newspaper excerpt entitled “What I liked in the forest” (original size 30x45cm)

The described parental communication practices were confirmed by both educators, with Lydia commenting:

Parents are very well informed about our practice, thankfully for us. (Interview)

Involving parents in outdoor activities in the garden was also discussed by all interviewed staff, through the practice of 'parent in action', where they can spend a few hours with the children in outdoor activities of their choice, e.g., gardening, games, picnic.

Additionally, Mrs Xenaki reported that the school involves the parents in outdoor events in natural areas, where they have a chance to not only discuss but also experience nature play:

So that they understand what their children experience when they go to the forest. (Interview)

Khloe confirmed this practice describing that before taking children to the forest for the first time, they go with parents only:

As a way of acquainting the parents with what we do in the forest and what they could do with their children when they take them there. (Interview)

Mrs Xenaki discussed these actions with parents as a way to inform and educate them, affecting perceptions:

The parents in our school are educated through this process, in listening to their children and understanding the value of play in the garden and in nature, of outdoor play in general. (Interview)

The view that these actions positively influence parental perceptions and facilitate outdoor play practice was supported by all interviewed staff. All interviewed staff displayed confidence in discussing outdoor play practice and reported ability to defend it in conversation with parents.

6.1.4 Influences on outdoor play provision

In this section, reported influences on outdoor play provision by the parents and higher-level management will be outlined.

Parental influences on outdoor play provision

In the questionnaire, one educator reported parental fears as a deterrent factor for outdoor play. No negative parental influences on outdoor play provision were reported by the interviewed staff. Parents were described to endorse outdoor play practice with very rare

exceptions. Parental objections or anxiety e.g., about getting dirty, or going out in wet weather, was described to be dealt with through appropriate communication, without affecting practice.

Lydia linked the ample information provided to the parents, even before enrolment, to their positive stance towards outdoor play, stating:

This is why they are so accepting afterwards, because they have made an 'agreement', they know. (Interview)

Management influence on outdoor play provision

The owners and managers of the institution were described by interviewed staff to have a firm belief in the value of outdoor and nature play, actively supporting outdoor practice with a positive influence on provision. Khloe described how their views were formally shared with new staff:

Once recruited, they gave us a presentation (...) like sharing the preschool's identity and transmitting the philosophy on outdoor play practice and the reasons behind it. (Interview)

The human environment will be discussed in the next section.

6.2 Human environment

6.2.1 Staff training and working experience

Details on each member of staff's formal education, age and working experience can be found in Table 6.2. All staff have training in preschool education. The two educators and preschool manager, interviewed as part of the research are marked in bold in the table.

Staff pseudonyms	Formal Education	Age	Years working in preschool education and care	Years working in this preschool
Mrs Xenaki (Preschool Manager)	Postgraduate Degree	40	20	10
Lydia	-"-	45	15	4
Evangeline	-"-	33	7	5
Rena	-"-	26	4	1
Khloe	University Degree	28	6	2

Anastasia	-"-	34	6	2
Athina	Diploma of Higher Education	39	15	0.3
Maya	Vocational Training	37	8	8

Table 6.3: Staff education, age and working experience

Mrs Xenaki is one of the owners of the school, directing this preschool for 10 years. Prior to that she worked as a preschool teacher in another private institution. She holds two University degrees, one in Early Childhood Studies, the other in Economics, and a postgraduate degree in Special Education. Lydia held a postgraduate degree, while Khloe was working towards one during the study.

Outdoor play training

Mrs Xenaki reported having had outdoor play training focusing on the Danish Forest School model, as well as taking part in outdoor play workshops as an instructor. She also mentioned having nature-related training through being in the Girl Guides Association for many years, including a two-day workshop entitled 'Nature Education', as well as having many years of experience in summer-camps and being in nature.

Both interviewed educators confirmed attending outdoor play training workshops ran by this institution. Lydia mentioned having additional outdoor play training through an Erasmus + project and the Girl Guides. Khloe referred to additional outdoor play training in a nature-based preschool she previously worked in, as well as completing a five-day Forest school course in collaboration with Linköping University, Sweden.

In the questionnaire, four educators reported having outdoor play training, two that they did not know, one of them working in the preschool for three months and the other for a year, while another, in her second year of working for this preschool, responded negatively.

6.2.2 Staff perceptions

Perceived outdoor play value

In the questionnaire all educators stated that they consider outdoor play important and provided multiple reasons for this in the add-on open ended question. Educator statements were coded into themes, reported in Table 6.4, including direct quotes to allow for better understanding of the nuances in the educators' views, as well as frequency.

Theme	Statements	Frequency
Physical health	"Fresh air rich in oxygen" "Stronger immune system"	5
Motor development	"Motor skills development"	5
Social development	"Social skills development" "Increased socialisation opportunities" "Relationships, solidarity, trying out different roles in the group"	3
Emotional development	"Emotional resilience" "Testing of limits"	3
Holistic development		3
Provision of multitude of stimuli		3
Depressurising emotionally and physically	"Physical and emotional release"	3
Mental health	"Stress reduction"	2
Self-regulation		2
Creativity		2
Imagination		2
Exploration		2
Experimentation		2
Connection with nature		2
Cognitive development		2
Learning		1
Symbolic and pretend play		1
Sensory development		1
Self-initiated action		1

Table 6.4: Why do you believe that outdoor play is important? (n=7)

Most educators touched upon many areas when discussing the value of outdoor play, as in the following excerpt:

Invigoration of their physical and mental health. Enhancement of their holistic development. Increased opportunities for socialization, problem solving, experimentation, discoveries, expression, and creativity. Blowing off tension and stress reduction. Observation and connection to nature, appreciation of its value and development of ecological conscience. (Athina, 39 years old, Higher Education Diploma, Questionnaire)

The effects of the outdoor environment's characteristics on children's development were discussed by Maya:

The children are in an environment rich in oxygen and large in size, so they develop their gross motor skills. They experience many natural stimuli, which help their overall skill development. They get accustomed to the weather conditions and self-regulate! (Maya, 37 years old, Vocational training, Questionnaire)

The various positive outcomes raised in the educator questionnaires were also mirrored in all interviews. Mrs Xenaki referred to children's freedom to plan, create and learn independently:

Outdoors the children do what they want. (...) They create. What they are interested in learning, they learn. (Interview)

Although not raised in the questionnaires, the benefits of outdoor play on children's autonomy and independence in everyday tasks, supporting a view of them as capable, were highlighted in all interviews. A stance towards children as capable was also observed, as in the following excerpt:

Lydia asks two children trying to carry a long wooden plank: "Do you need help?". They respond: "We don't need help we can do it". She does not intervene further. (Observation, 24/2/20)

Mrs Xenaki linked affording children control to supporting their autonomy, as in the following excerpt on water play:

Free access and free flow, when the child can autonomously turn on and off the tap and control the flow. Meaning that the child can command their play. (Interview)

Outdoor play routines were proposed by the educators to support the development of children's independence in everyday tasks, also observed by the researcher.

Independence in dressing was one area of self-help referred to by both educators, with Khloe describing:

When putting on wellies and raincoats we wait for the children to get ready by themselves. (Interview)

During the play observations both educators were seen to engage the children in tidying up the garden at the end of playtime, e.g., covering the sandbox, collecting the toys back in their boxes, repositioning bulky materials, indicating what they need to do and where to put the toys, as in the following example:

The educators start singing: "We tidy up, we tidy up what we're holding, we tidy up, we tidy up in the boxes". Lydia prompts the children to take part and help each other and comments: "Well done this is very nice tidying up". (Observation, 24/2/20)

Lydia referred to skill improvement through perseverance and practice, also relating it to the motivation and enjoyment outdoor play brings:

Because we go out when it rains (...) now they change their socks and trousers in an unbelievably short time, as they've learnt it. They love jumping in the puddles so much, that the effort of changing their clothes afterwards is minimal compared to the joy they experienced. (Interview)

Views on outdoor play and children with additional needs

All interviewed staff indicated that outdoor play afforded positive conditions and increased opportunities for the inclusion of children with additional needs. Lydia highlighted the role of the adults:

We approach them with much encouragement and support in the garden, showing permissiveness on the time needed to do things. (Interview)

Mrs Xenaki stressed the positive effect of the outdoor play environment, calling it 'magical'. She presented it as particularly beneficial for some children with attention and coordination issues:

You almost end up cancelling diagnoses outdoors. (Interview)

She highlighted the role of self-directedness, and having more space and time as supportive to this process, stating:

Because they have the space and the time to practice on their own, without an end goal. (...) They construct their own planning, their motor and mental maps. (Interview)

During the observations staff displayed a supportive stance towards the participation of children with additional needs.

Views on time outdoors and play in all weathers

In the questionnaire six educators stated they believe children in their preschool spend adequate time playing outdoors, with one educator working in the preschool for three months responding she does not know.

The educators were asked to choose between six options, regarding the most important influence on how much the children are taken outdoors, found in Table 6.5.

Influences on how much the children are taken outside to play	Frequency
Pedagogical framework	3
Preschool policy	2
Own beliefs	2
Conditions in the preschool	0
Parental expectations	0
Staff training	0
Total	7

Table 6.5: Influences on how much the children are taken outside to play (n=7)

When asked if she considered children's outdoor play time adequate Mrs Xenaki responded negatively, proposing:

If it was legally allowed in our country we would be outside in nature. (...) Personally, I enjoy the balance of indoors and outdoors, but I would like to be in a forest or on a beach. (Interview)

When asked if they believe children should play outside in all weather conditions while in preschool, all staff responded positively in the questionnaire. Mrs Xenaki supported that only very extreme weather conditions, formally identified by the authorities as hazardous, would be reason for the children not to go outdoors. This practice of going out in all weathers was confirmed by the researcher's observations, as all groups were witnessed playing outdoors during heavy rainfall and cold weather, with the educators displaying a positive attitude to being outdoors, as in the following excerpt:

Before going out Lydia tells the children "It's raining a lot, you can enjoy the puddles". After a while she sings happily "It's raining".
(Observation, 9/3/20)

A finding that transpired through the researcher's observations on rainy days, was that the educators adopted certain practical routines with the children. The documented routines were common between the two groups and related both to children getting dressed in wellies and raincoats before going out, but also to coming inside after playing in the garden, as in the following excerpt:

Two basins filled with water are positioned at the building's entrance.
The children step in consecutively to clean their wellies. They step onto a towel and take them off before going indoors. After going in, the educators organise them into small groups to change out of wet clothes, helping when necessary. (Observation, 9/3/2020)

The educators seemed very familiar with this routine and the process of returning indoors appeared organized and stress-free.

Views on factors inhibiting outdoor play

The educators were asked in the questionnaire which factors inhibit outdoor play in their preschool, by marking as many of the possible 13 answers as they saw fit. Only one educator proposed parental concerns and anxiety as a deterring factor, with six educators indicating no barriers to outdoor play in their preschool and Khloe commenting i:

There are no barriers to outdoor play. I think that this specific school promotes it as a priority, so even if some of the above factors arise the aim is to surpass them, not to be inhibited by them. (Questionnaire)

Consistently, no barriers for outdoor play within the preschool were discussed by the educators in the interviews. Mrs Xenaki referred to policy restricting outdoor play in nature opportunities, as limited outings per year are allowed.

Views on factors facilitating children's outdoor play within this preschool

The educators were asked about the main factor which would facilitate the development of children's outdoor play within the preschool, in an open-ended question. Their answers were coded into themes presented in Table 6.8, together with quotes and frequency.

Themes	Statements	Frequency
Educators' perceptions and actions	"Staff motivation/training/beliefs" "Supporting children's conscious involvement" "Educating children in relation to outdoor play interactions, which already happens"	4
None		3

Table 6.6: In your opinion, which is the main factor which would facilitate the development of children's outdoor play within your preschool?

The only factor proposed related to the educators' own perceptions and actions, suggested by four educators, as expressed by Athina:

Communication between us, sharing ideas, collaboration, and devoting more time to developing the outdoor environment. (Athina, 39 years old, Higher Education Diploma, Questionnaire)

Three educators proposed no factors facilitating development, consistently with two educators suggesting that no improvements are required in relation to the outdoor play environment.

Perceptions of physical environment elements supporting outdoor play in this preschool

The educators were asked to describe which elements of the preschool's outdoor physical environment they found conducive to play, in an open-ended question. Their answers were coded into themes, found in Table 6.6, together with quotes and frequency. All educators referred to the existence of natural elements in the garden as conducive for outdoor play.

Themes	Statements	Frequency
Natural elements	"Soil, trees, flowers, bushes, insects, puddles in the rainy days" "Vegetable garden" "Water" "Mud"	7
Sandpit		6
Moveable play equipment	"Logs, seesaw/ balance construction" "Shovels, buckets, basins, balls, wheelbarrows" "Cooking utensils"	5
Garden configuration	"Large space with variety of stimuli" "Garden atelier" "Secret garden" "Real soil and uneven surfaces"	5
Mud kitchen		5
Fixed play equipment	"Wooden house" "Climbing" "House with slide"	4
Music wall		1

Table 6.7: Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool? (n=7)

The importance of the environmental elements' sensory qualities was discussed by Mrs Xenaki supporting the use of:

Many sensory materials, such as sand, water, stones, herbs, etc.

(Interview)

The educators were also asked which elements of the outdoor physical environment they believe should be improved and in what way, in an open-ended question. Their answers were coded into themes, presented in Table 6.7, together with quotes and frequency.

Themes	Statements	Frequency
No improvements needed		2
Enrichment of play spaces	"Maybe some play spaces could be enriched."	2

	"Taller slide"	
Gardening plots enhancement		2
Shading		1

Table 6.8: Which elements of the outdoor physical environment do you believe should be improved and in what way? (n=7)

In the interviews, suggestions for improvements related to enhancements of existing elements, but no complaints were expressed in relation to the outdoor play infrastructure of the preschool. Lydia referred to the aesthetic issue of having plastic toys and the feasibility of these being replaced with ones made from natural materials. Khloe referred to enhancements in the gardening plots. She also raised a suggestion relating to safety:

(...) having the cement corners of the flower beds slightly rounded.

(Interview)

Educator stance towards the use of water and messy materials

Playing with water, sand, and messy materials was discussed in all interviews as beneficial and supported within the preschool, with Mrs Xenaki stating:

The practicalities of play with sand and water may be hard, but they're the two things I believe should always exist. (Interview)

Water was available during all play observations, with the educators appearing positive towards children engaging in play with water and mud, as displayed by their verbal and non-verbal expressions, as in the following example:

Going out Khloe smiling tells the children: "Look there's lovely mud here!" (Observation, 10/3/20)

The educators were also observed by the researcher to join in with sand and mud play getting their hands dirty, without showing discomfort during all play observations. Consistently, in the questionnaires, five educators referred to the mud kitchen as an element conducive to outdoor play.

Risk and safety perceptions

Ensuring children's safety during outdoor play was discussed in all interviews. However, Mrs Xenaki acknowledged risk during play as an integral part of preschool education, proposing the need for children to be exposed to 'safe risk':

We provide the most stimuli possible with the smaller likelihood of something bad happening, such as a child getting hurt. (Interview)

When discussing the function of risk in play, both educators expressed a positive stance towards it, supporting that it helps children develop their self-esteem and resilience, in line with the views articulated by Mrs Xenaki. Khloe referred to an incident when a child hurt himself falling on a cement corner, explaining her comment on having them slightly rounded. When asked if she has concerns regarding children's safety outdoors, she responded:

Not enough to preclude me from enjoying the day. I remain composed in that anything that may happen is manageable. (...) But I think it largely relates to each educator, what scares them, if they believe they can handle it or not. (Interview)

Lydia referred to the educators' role of supporting children develop their risk-management abilities, linking it to the adult's perceptions:

The point is how dangerous or how manageable the risk is considered by the adult. (Interview)

6.2.3 Staff engagement

Setting-up and adapting the outdoor play environment

The educators were asked in the questionnaire whether they organise the space before taking the children out to play. Four stated that they don't and three that they do, with two of them indicating once a month and the third in the beginning of the year. Setting up and adapting the play space was proposed as an action they perform during outdoor play by two of the educators in the questionnaire (Table 6.9).

Nevertheless, during the interviews, setting up materials, either through educator planning or after children's demands was described. In addition, the educators described instances of taking away some materials, or urging the children to 'leave the toys for today', to support their involvement in play with natural elements. Cleaning the garden and checking the space for cat droppings each morning was a routine mentioned in the interviews and observed by the researcher.

During the outdoor play observations, the educators were not documented to organise the space immediately before going out to play, but they were witnessed setting up materials for water play during other visits as part of the study (Researcher diary, 16/6 and 22/6/20).

In the educator diaries, both Lydia and Khloe referred to organising the outdoor space on two occasions each, as in the following example:

We organized the outdoor area using water basins, for exploration of buoyancy, fun, sensory processing and to stay cool. (Khloe, Educator diary, 16/6/20)

Nevertheless, both educators on one entry each, referred to explaining the rules of an activity when asked if they organised the physical environment, which could indicate some confusion between the two, as in the following excerpt:

It was the first time for the 'Climbing-tree' and we agreed together upon how many could climb at the same time. (Lydia, Educator diary, 16/6/20)

Both educators reported instances where they would adapt the environment in response to children's play in the interviews. Adapting the environment for play was also recorded in the educator diary, once for each educator, referring to helping the children move play equipment. Both were observed adapting the physical environment in response to children's actions, such as helping them move large equipment.

Educator roles during outdoor play

All educators completed the open-ended question on how they would describe what they do when they are out with the children. Their statements were grouped into themes reported in Table 6.9, together with quotes and frequency.

Themes	Subcategories	Frequency
Facilitate play	"Support" "Inspire" "Scaffold" "Introduce idea"	6
Observe play	"Actively observe" "Observe where, how and with whom they play"	5

Engage with the children and join in play	“Join in play, if invited” “Engage with them in play”	3
Ensure children’s safety		3
Care for children’s needs		2
Supervise		2
Setting up and adapting the play space		2

Table 6.9: How would you describe what you do when you are outdoors with the children? (n=7)

All educators referred to a combination of actions, rather than adopting one discreet role, as in the following excerpt by Athina:

Observation, interaction, facilitation, reminding of agreements, covering their needs, caring for everybody’s safety, encouragement, and support. I also want to start setting up some play spaces. (Athina, 39 years old, Higher Education Diploma, Questionnaire)

i. Facilitation

Facilitation of children’s play was reported by six educators, as in the following statement by Rena:

Becoming a ‘scaffold’ for children’s play. (Rena, 26 year old, Postgraduate Degree, Questionnaire)

Maya referred to facilitating children’s play interactions:

We encourage play with other children if needed (Maya, 37 years old, Vocational training, Questionnaire)

During the play observations the educators were also witnessed to model positive social interaction between themselves, using each other’s names when addressing each other, saying please, and thank you.

Facilitation was also widely discussed in the interviews, with Khloe describing:

Sometimes I prompt, I inspire, or I introduce an idea. (Interview)

Consistently during the observations, she was witnessed to facilitate children's play through affording them access to possibilities as in the following example:

Khloe points to a drain and happily says: "Children you can fill your buckets at the waterfall as well!" (Observation, 10/3/20)

Lydia also referred to facilitating play:

Encouraging and reassuring the children. (Interview)

During the observation she was witnessed supporting children's play activities, as in the following excerpt:

A boy stacks objects on the 'seesaw' plank observing it balance.

Lydia asks: "Is your target for it to stay down?". When he goes to fetch more objects and another child approaches, she informs her that "George is doing something here" so that she doesn't take away the 'weight'. (Observation, 24/2/20)

Both educators were observed to be respectful towards the children and acted in a way indicating that play and players' motivations are important. They offered tacit and explicit permission to the children to use the whole space, choose from all available objects and engage in various types of play. They listened to children's ideas and responded in a serious manner, enabling reflection by asking open ended questions, such as "why do you think ...?". They noticed children's discoveries, referring to them as 'treasures' and would sometimes keep objects for further examination and discussion, as in the following example:

Khloe listens attentively to children's views on some unusual tree pods they found and says: "We can keep one so that we can all think about what it might be together. We'll put it in the treasure box."

(Observation, 25/2/20)

ii. Observation

Observation was suggested by five educators in the questionnaire. In the interview, Lydia discussed the content of observation:

We observe different things: what they play with, where, how, and who with. (Interview)

She went on to propose using a camera, which was indeed documented by the researcher on three play observations:

I have a camera and it helps me, because I either record videos or I take many pictures. (Interview)

Both educators were witnessed to observe play in an active way, moving around the space in accordance with children's play, noticing their actions, and taking photos.

iii. Engaging with the children and joining in play

Engaging with the children and joining in play was reported by three educators in the questionnaire, such as in the following quote:

We move through space so that children can address us, and we can engage with them in play. (Maya, 37 years old, Vocational training, Questionnaire)

Joining in play was also reported in all interviews, with Lydia stating:

I run and play chase and sit in the sandpit filling buckets with them. (Interview)

Consistently, during the play observations both educators displayed what could be described as a playful stance sanctioning play, smiling, laughing, singing, responding to children's cues, and going into role-play, as in the following excerpt:

A child holds a bucket towards Khloe and says: "The chicken soup is ready!". She responds playfully "Will you please give me some soup in a bowl?" and pretends she is eating. (Observation, 25/2/20)

iv. Ensuring children's safety

Ensuring children's safety was reported by three educators in the questionnaire and in all interviews. Four ways were described to support safety: observing, predicting, making 'agreements' with the children on safe behaviours, and engaging the children in safe practices, with Mrs Xenaki describing how they instruct children to hold sticks:

You take a stick and show them how to hold it pointing downwards.
(Interview)

Lydia also referred to reminding children:

I remind of agreements if I predict that their safety is 'threatened'⁹.
(Interview)

During the play observations both educators were indeed observed to remind children of what appeared to be safety 'agreements', such as "sticks point downwards".

During the observations the educators were witnessed to involve children in safe practices, as in the following excerpt:

Khloe prompts the children to handle the steps independently, while standing next to them, watching, and offering guidance "It's very slippery, hold on tightly. I hold on and I climb" (Observation, 10/3/20)

v. Care for children's needs

Caring for children's needs was reported by two educators in the questionnaires and in all interviews. During the play observations both educators were available to help children

⁹ Quotation marks indicated by interviewee.

when needed, however also encouraging their self-reliance, such as in the following excerpt:

A child playing in the sandbox gets sand in their mouth and goes to Khloe to take it out. Khloe says in a matter-of-fact way, while smiling "If the sand gets in our mouth, we spit it out". (Observation, 25/2/20)

vi. Supervision

Though not indicated as an expectation for outdoor practice, supervision was referred to by two educators in the questionnaire, always in conjunction with other roles, as in the following excerpt:

<i>Enabling the space's functionality, checking space's safety, supervision, intervention where needed, encouraging children, some engagement in their play. (Anastasia, 34 years old, University Degree, Questionnaire)</i>

vii. Supporting children's understanding of nature

In the interviews, an additional educator role was discussed, to support children's understanding of nature, with Khloe describing:

If someone discovers a living organism (...) I may approach and ask questions for them to express what they already know about it, help get to know it, and observe it together. (Interview)

Setting rules and boundaries

Both educators were observed to adhere to clear rules, explained in an age-appropriate way, using simple language. They referred to rules as 'agreements' that they made with the children. Visual cues relating to rules were not observed.

In the interview Mrs Xenaki described rules regarding time boundaries, describing how they signpost it for children:

When you hear the phrase ‘we’ll play for a little longer’ and a sound or a song, and everybody gathers, it is the sign that we’re going inside.

(Interview)

During the observations no boundaries were set regarding use of the play space, but time boundaries were indeed set in the described way by both educators, who informed the children of play time coming to an end and then used a common song prompting them to tidy up the toys, as in the following excerpt:

Khloe tells the children “It will soon be time to go inside” four times, starting 15 minutes ahead. (Observation, 25/2/20)

Mrs Xenaki also referred to rules relating to children’s safety, such as ways to use sticks and stones, or running and climbing with ‘free hands’, so that they don’t hurt themselves or another child, explaining that they aim to advance children’s risk management abilities:

Rules are more to do with their understanding, so they can be safe.

(Interview)

She also referred to boundaries relating to the educators’ ability to ensure safety:

When climbing we set boundaries e.g., that only three children can climb here, as many as the adult responsible can control. (Interview)

During the observations, rules appeared consistent and set phrases such as ‘free hands’ were used by both educators as reminders. Additionally, some rules were observed relating to social interaction, with educators prompting ‘we share the toys in the garden’, or ‘splashing in the puddles only when no other children are nearby’. Lydia appeared keener to enforce the splashing rule, at times stopping the children and reminding them as in the following excerpt, whereas Khloe appeared more relaxed:

A boy jumps in a puddle and a child next to him gets upset about getting wet. Lydia stops the boy and says: “Remember how we walk in the puddles, because maybe another friend doesn’t want to get wet”.

(Observation, 9/3/20)

Documentation and critical reflection practices

In accordance with institutional expectations, outdoor play documentation was confirmed by both educators in the interviews, with Lydia stating:

There is documentation (...) through a platform that me, my colleague, Mrs Xenaki and all involved in the interdisciplinary team can see.
(Interview)

However, differences in documentation practices between staff was identified through the educator diaries, with Lydia recording outdoor play documentation on all days, whereas Khloe on none. When discussing her outdoor play documentation in the interview Khloe described:

I don't do it as I regularly as I would like. (...) If it's something very important I will put it straight in the daily diary. For individual children, I will record from memory what I saw and how I interpreted it, let's say every fortnight. The formal documentation I do for the school is more descriptive and a bit more professional. The records I keep for myself are more about things that create meaning for me. (Interview)

Reflection upon outdoor practice was evident in all staff interviews, as well as in their educator diary entries. Teamwork practices to support group reflection were described, both regarding each class, as well as the entire preschool.

6.3 Physical environment

6.3.1 Space characteristics

Size and space-ratio

The preschool has an outdoor play area of approximately 200 square meters, presented in the following top-view depiction made to scale (Figure 6.4). The space-child ratio is 4 square meters per child in accordance with policy guidelines.

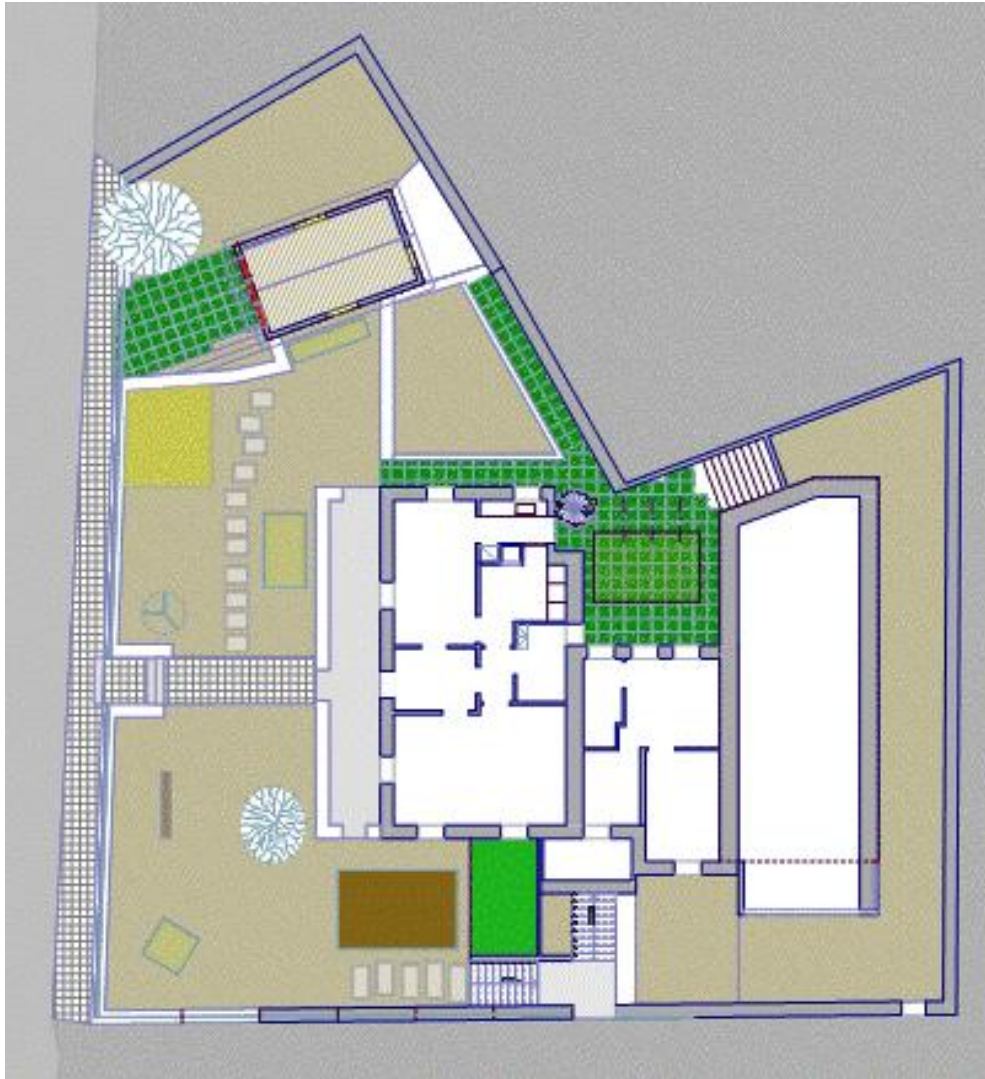


Figure 6.4: Playground view from above made to scale.

Access

The preschool is housed in a rented two-story building. Classroom A is on the ground floor with direct access to the garden. The two other classes are on the first floor with access to the garden through an outdoor staircase (Figure 6.5).



Figure 6.5: Staircase leading to the garden from first floor

Configuration

The outdoor play area consists of a space mostly covered in soil with various plants growing within it (Figures 6.6, 6.7, 6.8). At the far end through a door in the fence, lies a small peaked roofed building, called the ‘garden atelier’ operating as an indoor/outdoor space (Figure 6.9, 6.10) and behind that a small garden named the ‘secret garden’ (Figures 6.11, 6.17).

A description of the playground’s configuration using OPEC (Mårtensson, 2013) can be found in Table 6.10.

Total size of the outdoor area	200 square meters
Proportion of area with shrubs and trees	20%
Proportion of area with hilly terrain	10%
Integration between vegetation, open areas and play areas	Vegetation integrated within the play area; open spaces located between play areas.

Table 6.10: Play area’s description.

More information on the play facilities and materials will be discussed later in this section and can be found in Table 6.11.



Figure 6.6: View of the playground from the sandpit



Figure 6.7: View of the playground with elevated construction



Figure 6.8: View of the playground from the side of the garden atelier



Figure 6.9: View of the playground, with the roof of the 'garden atelier' at the far end



Figure 6.10: View from inside the garden atelier, towards the small area covered in protective flooring

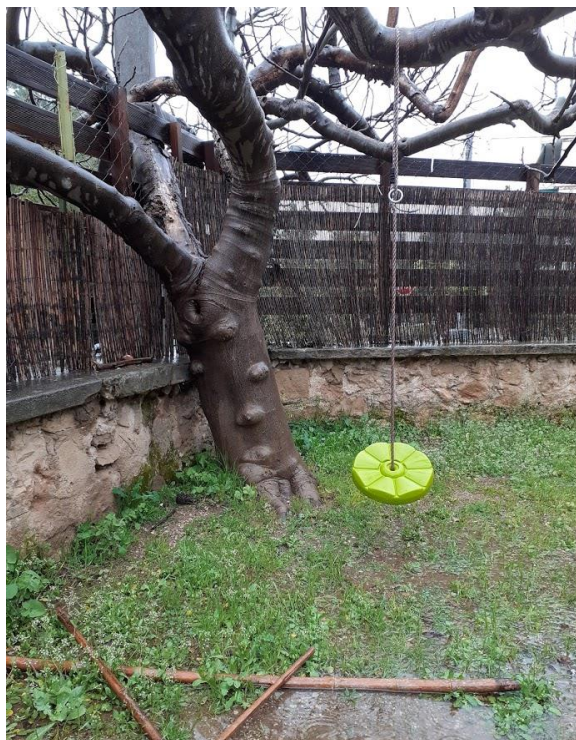


Figure 6.11: View of the 'secret garden' with swing hanging from a fig tree

Natural features

Various plants endemic to the Mediterranean grow within the play area, such as rosemary, thyme, lavender, and bay bushes, as well as small trees, such as fig and bitter orange. Outside the preschool's fence taller trees grow, such as beech and pine. Gardening plots are found in a separate area on the side of the building.

The garden is covered in soil, apart from the small area at the front of the garden atelier, covered in protective flooring.

Water was present in the garden, during all observations. Water taps exist in both the main garden and the 'secret garden', accessible to the children. When it rains, water collects in uneven surfaces, forming puddles, and also falls through drainpipes.

Various insects were observed in the garden, e.g., ants, snails, slugs, butterflies, bees, spiders, and ladybirds. Birds, such as sparrows, or pigeons, were also observed to fly in the area, sometimes resting on the trees.

Natural or artificial shading was adequate in most spaces and as recorded in the researcher's diary, it was pleasant to be outside, even at noon on a sunny day (Researcher diary, 15/6/20).

Storage

Large wooden and plastic storage boxes were accessibly positioned on the side of the building where the materials were collected after play, with pictures of what they contain on them, to help children locate and tidy up the materials (Fig. 6.12). Additionally outdoor storage existed for drying the raincoats and wellies (Fig. 6.2).



Figure 6.12: Storage boxes

6.3.2 Play facilities and materials

The play facilities and materials available, were recorded by the researcher on six occasions during the study and are reported in Table 6.11, organised in three categories according to their life span (Casey, 2007). The condition of the features, children's access to them and the number of occasions they were observed in the playground is also reported.

Life span of play features	Play features observed	Condition	Children's access	Number of occasions observed
Longer term	Sandpit	Good	Free	6/6
	Wooden elevated construction with slide	-"-	-"-	6/6
	Wooden house	-"-	-"-	6/6
	Water tap	-"-	-"-	6/6
Semi-permanent	'Mud kitchen'	-"-	-"-	6/6
	Balance constructions (4)	-"-	-"-	6/6
	Musical structures (2)	-"-	-"-	6/6
	Blackboard	-"-	-"-	6/6
	'Teepee'	No fabric cover	-"-	6/6
	Round swing	Good	When out in the 'secret garden'	6/6
Temporary	Wheelbarrows (7)	Good	Free	6/6
	Wooden planks	-"-	-"-	6/6
	Wooden stepping-stones	-"-	-"-	6/6
	Logs (various sizes)	-"-	-"-	6/6
	Sand toys	-"-	-"-	6/6
	Kitchen utensils	-"-	-"-	6/6
	Construction blocks	-"-	-"-	6/6
	Buckets of various sizes	-"-	-"-	6/6
	Balls (various sizes)	-"-	-"-	6/6
	Hoops (5)	-"-	-"-	6/6
	Pinecones, shells and other natural materials	-"-	-"-	6/6
	Water puddles	-"-	When it rains	3/6
	Bricks	-"-	When out in the 'secret garden'	6/6
	Binoculars (1)	-"-	Free	6/6
	Magnifying glasses (4)	-"-	Kept in the garden atelier	6/6
	Tyres (3)	Good– but joined together	Free	6/6
	Plastic tubing	Good – few pieces	When out in the 'secret garden'	6/6

Table 6.11: Outdoor play features and materials

Longer term features

Longer term features include: a large sandpit, under a canopy providing shade, with a removable cover to protect it from cat soiling (Fig. 6.13), an elevated wooden construction with a slide (Fig. 6.7) and a wooden house (Fig. 6.9).



Figure 6.13: Sandpit

Semi-permanent features

Semi-permanent features include: a wooden mud kitchen (Fig. 6.14), a teepee without fabric covering (Fig. 6.8), planks set up as balance constructions (Fig. 6.17), a round swing hanging from a tree (Fig. 6.11), a blackboard (Fig. 6.15) and self-made musical toys hanging on the wall of the building (Fig.6.16).



Figure 6.14: Mud kitchen, plants and logs of various shapes and sizes



Figure 6.15: Blackboard on the wall of the building



Figure 6.16: Musical toy

Temporary features

Various loose parts and toys were present in all parts of the playground (Fig. 6.17, 6.18, 6.19). Loose parts included natural materials, such as logs and pinecones, as well as manufactured material such as plastic tubes and bricks.



Figure 6.17: Wooden balance constructions



Figure 6.18: Part of the 'secret garden' with water puddles and bricks



Figure 6.19: Natural materials

6.3.3 Sensory characteristics

The sensory characteristics of the play environment and potential sensory opportunities afforded, are presented under the following seven sensory categories: visual, auditory, olfactory, taste, tactile, vestibular, and proprioceptive.

Visual opportunities existed in relation to natural features and light/shade variations. A set of binoculars and magnifying glasses for visual exploration were available for the children to use.

The playground is quiet, as the preschool is situated in a residential area with little traffic. The space is open with sounds dispersed. Constructions producing sound and musical instruments were present in the playground: a) a sound apparatus through which children could speak and hear each other, b) two wall-mounted musical instruments, one with metallic bars and one with plastic tubes.

Olfactory opportunities were provided through scented plants as well as flowers.

The educators were observed to encourage the children to taste the rainwater by sticking out their tongues (Observation, 10/3/20). Mrs Xenaki reported that vegetables are grown in the garden at times, which the children can taste.

Tactile opportunities were observed in relation to children playing with sand, leaves, soil, water, and mud. Water and mud play was observed by the researcher on all occasions, as well as educators modelling an accepting attitude towards tactile stimuli, such as messy elements.

Potential vestibular stimulation could come through running, climbing, balancing, rocking, all offering mostly linear movement. A round one-point swing in the 'secret garden' could offer rotatory input.

Potential proprioceptive stimulation could come through climbing on the fixed equipment, hanging from their hands, digging in the sand and mud, pushing the wheelbarrows, as well as lifting heavy materials.

6.3.4 Children's behaviours and interactions with the physical environment during outdoor play

The way the children of the two targeted classes behaved and interacted with the physical environment during outdoor play time was observed on four occasions, two for each class, during complete outdoor play sessions at the time when children would normally go outside. Detailed data on the circumstances for each observation can be found in Table 6.12.

	Class A – 24/2/20	Class A – 9/3/20	Class B – 25/2/20	Class B – 10/3/20
Weather	Sunny with few clouds, 14 °C	Moderate rain and thick clouds, 10 °C	Sunny with few clouds, 14 °C	Heavy rain and thick clouds, 10 °C
Location	Main garden	Main garden	Main garden	Main garden for 30 minutes and then 15 minutes in the 'secret garden' and the 'garden atelier'
Time outdoors	65 minutes (12.05-13.10)	30 minutes (12.30-13.00)	85 minutes (10.35-12.00)	45 minutes (10.35-11.20)
Number of children in observed group	12	13	17	14
Number of educators supporting observed group	2	2	3	3
Groups outside at the time	2 (until 12.55)	1	1	1
Total maximum number of children outside	27	13	17	14

Table 6.12: Circumstances of outdoor play observations

Group play was observed to mostly take place in small groups of two to five children on all occasions, but solitary play was also observed. The children appeared to engage in different play behaviours, often seeming to overlap e.g., moving through space and

pretending happening simultaneously. They were also observed in apparent non-play instances, e.g., sitting and talking.

The researcher's observations in relation to children's behaviours and interactions with the physical environment were analysed and coded into nine themes: a) Exploration of the space and materials, b) Handling sand and soil, c) Using water, d) Handling mud, e) Pretending, f) Observing and interacting with nature, g) Moving and being physically active, h) Using and manipulating objects and changing the environment, i) Experimenting with materials.

a) Exploration of the space and materials

The children of both groups were observed to actively explore the space and materials in the garden, moving around the whole space, inspecting, observing, and using objects in various ways. The children appeared intrigued by objects they discovered, showing them to their friends, commenting on their properties and speculating on their origin, as in the following excerpt:

Examining an unusual pod, one boy says to another: "It has a hole like the rabbit makes" with the other responding: "It's a big seashell"

(Observation, 25/2/20)

b) Handling sand and soil

The children of both classes appeared very keen to handle the sand, with at least two children in the sandbox at any time, going up to seven. As there was always water available, they could use the sand dry or wet. They handled the sand using their hands, spoons, shovels, rakes, and cauldrons. They would dig, stack, spread the sand and fill various containers and small trucks. They also filled cups and buckets and created 'castles' of different sizes. They also transported the sand using the wheelbarrows and spread it on other equipment. They often used the sand while pretending, for example that they were cooking. The children were also observed to dig the soil of the play area.

c) Using water

Using water was observed on all occasions. The children showed sustained interest in both static waters, as in the puddles formed by the rain, as well as running water e.g., from the tap or the drainpipes, which they referred to as 'waterfalls' or 'water-fountains', seen to observe them and utilise materials to explore them. They were witnessed to walk

and run through puddles, jump and splash, as well as observe various objects they put in them. They were seen to pass their hands and fingers under running water, as well as use utensils to disturb its flow. They filled spoons, shovels, cups, watering cans, pots, buckets, basins, and wheelbarrows with water, using them to collect, transfer and pour it. They also mixed water with sand or soil to create mud.

They seemed accustomed to being out in wet weather appearing to enjoy it, as in the following example:

Going out, a boy starts laughing and exclaims: "It's raining! It's raining!" (Observation, 10/3/20)

d) Handling mud

Handling mud was witnessed during all observations. Children would either collect it from the puddles or make it by mixing soil with water. They used spoons, cups, pots, buckets, and wheelbarrows to collect and transfer it in different parts of the playground; spread mud on other surfaces and equipment, using their hands or tools; or use it while pretending. They appeared to experiment with its consistency, as in the following example:

While digging, a child asks another: "Do you want some soft mud? I made it soft!" (Observation, 9/3/20)

e) Pretending

The children of both groups were observed to engage in pretense, in all parts of the playground, while moving or being sedentary. Various scenarios were observed, sometimes drawing from everyday life themes, such as cooking or driving, or from fantasy, such as pretending to be superheroes.

Sometimes the children would move their bodies and transform the use of objects while pretending, as in the following excerpt:

A group of three children pretend to be animals. One that she is a crab, using two spoons as claws. Another pretends to be a hedgehog,

using her fingers as thorns. The third pretends to be a frog leaping about. (Observation, 25/2/20)

At other times, the pretence became apparent through what the children were saying, as in the following example:

A boy stacks logs and explains to another boy: "I'm making a trap for the thieves. They will fall from this side, and they will be killed by the poison." (Observation, 24/2/20)

f) Observing and interacting with nature

The children of both classes showed interest in natural elements. They would observe the weather, making comments such as "Spring is here", as well as changes in the light, as in the following excerpt:

On a downcast morning three children go inside the wooden house and one says: "Look at something strange...". They then discuss that it is darker inside. (Observation, 9/3/20)

The children showed a lot of interest in plants, collecting leaves and seeds, which they then used either in combination with other materials or as part of pretence. They also showed interest in insects, appearing to use previous knowledge on nature, as in the following excerpt:

Nine children and two educators gather around a girl that found a caterpillar. A child says: "I think it's a worm". Another says: "It's a caterpillar". After observing it close up, a child comments "it has small thorns". Another child says: "Sea urchins also have thorns". (Observation, 25/2/20)

g) Moving and being physically active

The children in both groups were observed to actively move around the space and use their bodies in various ways, such as walk, run, gallop, dance, balance, climb, jump, dig, lift, and swing. The children used both the structural elements of the garden, such as the mantels, to climb, balance and jump off, as well as the equipment available. They were observed lifting heavy or bulky materials, such as logs or planks, as in the following example:

A boy tries different ways to move a long log, such as dragging, pulling, and lifting. He manages to move it near the fence and then rolls it onto the mud. (Observation, 24/2/20)

As in this example, children seemed keen to attempt different ways of using their bodies and did not seem to ask for adult help immediately when encountering difficulties.

h) Manipulating objects and changing the environment

The children in both groups were observed using various objects and changing their environment. This included using large objects for setting up play spaces, as well as manipulating smaller ones, as in the following example:

Two children use shovels to create a shallow ditch in the mud and observe the water flowing in it. (Observation, 10/3/20)

While engaging in changing their environment, children were observed to collaborate e.g., for lifting something bulky and to negotiate e.g., regarding setting-up the space.

i) Experimenting with materials.

Experimentation with materials was observed in both groups, either solitary or within a small group. Water appeared to facilitate different types of experimenting, such as throwing wood pieces in a puddle and observing them float or using shovels to disturb or redirect the flow of water from a drainpipe. Mud also appeared to create opportunities for experimentation, as in the following example:

A child steps on the mud and observes he has left a footprint. He looks at it with interest saying “look” to another child and then repeats.

(Observation, 9/3/20)

The planks and logs, often positioned to create ‘seesaws’, were also observed to be used in experimentation, either through body use, or in relation to gravity, as in the following example:

A boy places a plastic wheel on the ‘seesaw’ and observes how it lifts on one side. He takes a second wheel, places it on the other side and when it does not shift, he says “it should be heavier”. (Observation, 24/2/20)

Children were also observed to experiment with producing sound using different objects and surfaces, as in the following example:

Three boys take the plastic molds from the sandpit and rub them on the marble mantel and then on the wall, listening to the different sounds. Then they bang the marble using the shovels and scratch it, using the plastic rakes. (Observation, 25/2/20)

A summary of the themes of children’s behaviours and interactions with the physical environment during the observations is presented in Table 6.13, found to be common in both groups observed.

Play interactions with the physical environment	Class A	Class B
Exploration of the space and materials	X	X
Handling sand and soil	X	X
Using water	X	X
Handling mud	X	X
Pretending	X	X
Observing and interacting with nature	X	X
Moving and being physically active	X	X
Using and manipulating objects and changing the environment	X	X

Experimenting with materials	X	X

Table 6.13: Children's observed behaviours and interactions with the physical environment.

6.4 Summary

This chapter presented the findings of the second case study regarding how the organisational, human, and physical environments supported children's outdoor play.

Within the organisational environment, the preschool's operational policies were examined, in relation to group sizes, number of educators, adult-child ratio, staff stability, and scheduling practices. The preschool's outdoor play profile was also explored, including its outdoor play philosophy and policy, language used for outdoor play and its pedagogical framing, time for outdoor play, outdoor space use, clothing and footwear for play in all weathers, opportunities to play in nature, strategies to support the outdoor play of children with additional needs, provision of outdoor play training and resources, institutional expectations for educator practice, educator engagement and children's participation in planning for outdoor play provision, parental communication and involvement, as well as parental and management's influences on provision.

Within the human environment, the staff's training and working experience was explored, as well as their perceptions regarding outdoor play's value, outdoor play and children with additional needs, time outdoors and play in all weathers, factors inhibiting and facilitating outdoor play in their preschool, physical environment elements supporting outdoor play, stance towards water and messy play, as well as risk and safety. Staff's outdoor practice was also examined regarding setting-up and adapting the outdoor play environment, educator roles outdoors, setting rules and boundaries, documentation, and critical reflection practices.

Within the physical environment, the outdoor play area was examined regarding size and space-child ratio, access, configuration, natural features, play facilities and materials, sensory characteristics, and storage. Additionally, the children's behaviours and interactions with the environment during outdoor play were described.

The third case study findings will be presented in the next chapter.

CHAPTER 7: THIRD CASE STUDY FINDINGS

This is a report of the findings of the third case study, carried out in a public municipality-ran childcare centre, in the north sector of Athens, between February and July 2020.

7.1 Organisational environment

7.1.1 Operational policies

This preschool was established by the local municipality in 1997. It primarily caters for families residing within the municipality, with places allocated in accordance with state-defined social and financial criteria, aiming to support those most in need. Monthly tuition is scaled, depending on family income, with children from lower income families attending for free.

The preschool caters for 64 children, 18 months to five years old, in four groups divided by age, as presented in Table 7.1, with the two groups observed as part of the study marked in bold.

	18-30 months	2.5-3 years (Class A)	3–4-years	4-5 years (Class B)
Number of children	11	14	16	23
Number of educators	2	1	1	2

Table 7.1: Number of children and educators per group

Children spend a maximum of eight hours in the preschool, from 8.00 to 16.00, with most daily and educational activities taking place in their classrooms and lunch served in the preschool's dining area.

The preschool employs six female educators, including the manager, who also holds some pedagogical responsibilities in relation to the group of four- to five-year-olds. Details on each member of staff's formal education, age and working experience can be found in the next section on the Human Environment. The manager will from now on be referred to using the pseudonym *Mrs Pavlidi*, Class A's educator as *Markella* and Class B's as *Nicole*.

Group sizes, number of educators and adult-child ratio

Group sizes varied between 11 and 23 children, with one or two educators per class, in

accordance with current regulations. The adult-child ratio ranged between one adult to 5.5 children and one to 16.

During the study, Markella worked on her own in a class of two-and-a-half to three-year-olds, with 14 children. Nicole worked in a class of four- to five-year-olds, with 23 children, together with Mrs Pavlidi, and a learning support assistant for a child with special educational needs.

Staff stability

Mrs Pavlidi has been directing this preschool for 23 years since it was established. During the time of the study only staff on long-term contracts were employed in the preschool, with the mean duration of working within this preschool being 14.1 years. However, during the interviews, it transpired that short-term staff are occasionally employed by the municipality on two to 8-month contracts to cover ongoing needs, according to the municipality's periodic access to European funding.

Staff scheduling practices

Staff work six hours a day. No specific times are scheduled for breaks, but Mrs Pavlidi reported that educators can have a short break while the children are having lunch, or if they need a few minutes at other times they can do so at their discretion after communicating between them.

Allocated non-contact time for parental communication, documentation, or planning for outdoor play was not referred to in the interviews or in any document.

7.1.2 Outdoor play philosophy and pedagogical framing

Philosophy regarding play and the outdoors

No references to a philosophy relating to play, outdoor play, or outdoor pedagogy were located through document examination or on the municipality's website section on childcare centres.

In the interviews, Mrs Pavlidi and Markella replied negatively on having an outdoor play philosophy, with Mrs Pavlidi stating:

No, I would not say that we have a philosophy or pedagogical stance in relation to outdoor play. (Interview)

Nicole however suggested that a philosophy exists, developed by the educators themselves:

In essence we have formed it ourselves, the educators that are here for so many years. It boils down to this: that the children can play freely and that we ensure no child gets hurt. (Interview)

Language used for outdoor play

Referring to outdoor provision, Mrs Pavlidi used the greek verb “προαυλίζονται”, the equivalent of children ‘yarding’, which could be translated as ‘time in the yard’. Another term used by all interviewed staff was ‘going outside’.

Pedagogical framing of outdoor play

No references to pedagogical methods or programmes relating to outdoor play were made during the interviews. Similarly, document examination did not reveal a pedagogical framing of outdoor play, in accordance with its absence from policy guidelines.

7.1.3 Policy regarding play and the outdoors

No document or written policy was reported to exist in the preschool in relation to use of the outdoors or outdoor play, produced either by the preschool or the governing bodies, with Mrs Pavlidi stating:

I would not say there is a policy. (...) There is nothing in writing regarding outdoor play. (Interview)

Asked if there is a clear policy on outdoor play within this preschool in the questionnaire, three educators responded positively and three negatively.

Time for outdoor play

Mrs Pavlidi reported that outdoor play time was organised in accordance with a rough schedule, with no indoor-outdoor continuity rationale. Younger groups were reported to usually go out first, after 10.00 and the older groups after 11.00.

In the interviews children were reported to play outside once a day, for 20 minutes to an hour. Seasonal differences in outdoor play time were reported in the questionnaires and in all interviews. The times per season as reported in an open-ended question in the questionnaire can be found in Table 7.3. Based on the educators’ additional explanatory verbal reports (Researcher diary, 12/2/20), the mean scheduled daily outdoor time was estimated at 40 minutes.

	Autumn	Winter	Spring	Summer
Sandra	30-40	0-20	30? ¹⁰	50-60
Markella	40	30	40	50
Annie	60	Depending on the weather	30	60
Adriana	60	Depending on the weather	30	60
Mrs Pavlidi	45	30	40	45-50
Nicole	30-40	0-20	30-40	40-60

Table 7.2: Reported outdoor play time in minutes across four seasons

Significantly limited time outdoors in the winter, was indicated through the questionnaires and all interviews. Even though Mrs Pavlidi indicated an average winter outdoor time of 30 minutes in the questionnaire, in the interview she reported that it is common for children to go out for 15 minutes or not at all. All interviewed staff acknowledged frequent outdoor omission due to the weather, with Mrs Pavlidi reporting:

In the winter they may not go out at all during the week. (Interview)

This was confirmed by Nicole, who additionally acknowledged missing outdoor play in the autumn:

There's a reduction from the middle of autumn to approximately the end of winter. (...) In the winter we might not go out at all for a week, mostly because of the weather. In the autumn, which is a more intermediate situation, we'll go out two-three times a week for sure. (Interview)

Mrs Pavlidi explained that the children are not taken out when it rains or drizzles:

If it rains, we won't go outside, that is a given. (Interview)

Interviewed staff also acknowledged children are not taken outside in temperatures below 12°-13°C. Markella suggested that children are not taken out to play when it's cold as:

They would not enjoy it. (Interview)

An additional finding reported in all interviews, was that the children are not only kept indoors when it rains, but also one or two days afterwards. The carpet surfacing taking a

¹⁰ The question mark was present in the original questionnaire-entry.

long time to dry was reported as a reason not going out in the small yard, with Mrs Pavlidi explaining:

Even if it's sunny the next day, we can't go out. We have to wait for it to dry first and then go outside. (Interview)

As for the large playground, Mrs Pavlidi and Nicole justified not going out after the rain because the toys are wet, the grass retains water and some parts of the protective surfacing become slippery which could lead to falls.

Even though the summer was presented as a time when outdoor time increases, hot weather conditions were also reported to present challenges for outdoor provision by all interviewed staff, with Mrs Pavlidi explaining:

We have no shading structures. (Interview)

Children's age, linked to learning-demands, was also reported to influence outdoor time, with Mrs Pavlidi stating:

The younger ones can go outside for longer, because they don't have such a strict schedule. (...) The learning part takes up more time for the older children. (Interview)

This was corroborated by Nicole, explaining that outdoor play could be omitted in favour of classroom activities:

If we do an activity taking more time to complete, some craft mostly, we don't have the leeway to go outside. (Interview)

Outdoor space use

An issue that transpired during all interviews was that four years earlier, in 2016, the preschool's playground went through a remodeling, including musical features, to also be used by students of the adjacent municipality's conservatory in the evenings or on weekends, when the preschool is closed, with Mrs Pavlidi reporting:

It is now also used by the conservatory, thereby is open to the public. When it was just the childcare centre using it, there was a door we locked and there was no access. Although they could still jump over the

fence... But we held responsibility for the playground, we locked it, no one else used it. (Interview)

This arrangement was described by all interviewed staff as affording less control over the space and materials, even though the playground was reported to remain locked outside the conservatory's working hours and is not included in the list of public playgrounds on the municipality's website. A practice observed corroborating this, was that all moveable play equipment was kept in the small yard and moved to the main playground each time a group went out, for fear of getting stolen or vandalised.

The preschool's outdoor space was described by all interviewed staff to be used for 'free play' in two separate parts, with Mrs Pavlidi explaining that the two younger groups utilise the small yard (Figure 7.1) and the other two the main playground (Figure 7.2).

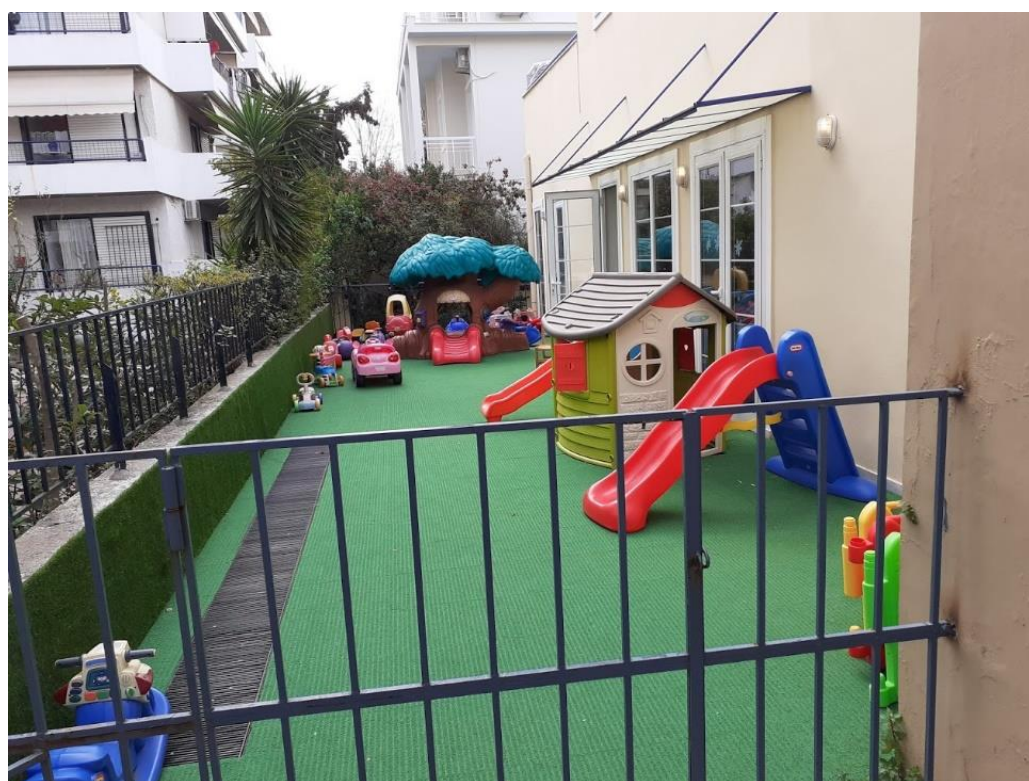


Figure 7.1: Small play area



Figure 7.2: View of the main playground

Markella nevertheless reported that the small play area is sometimes also used by a third group, explaining:

*We also share with the group of three-and-a-half-year-olds, who sometimes stay here and at other times go to the big playground.
(Interview)*

She explained that the educators arranged use of the small yard between them:

*Because we need to share the space with the other groups, and it is relatively small for many children to be outside at the same time.
(Interview)*

All interviewed staff reported that the outdoor space is also used for adult-led activities, taking place during the time allocated for 'free play', with Nicole explaining:

We mostly play movement games (...) or do something parallel to an activity we're doing indoors (Interview)

Mrs Pavlidi also described moving furniture outdoors to have snacks or meals:

We take out tables and chairs – the children help with that- and set up the space to eat outside. We have, let's say, a 'picnic'. (Interview)

She clarified that this happens rarely and only in the summer:

Not very often, but we do it. During the summer of course, so that it's feasible. (...) For each class two to three times a year. (Interview)

Using the outdoor area for special occasions, such as children's birthdays, puppet shows, as well as a 'pool party' once a year was also reported, with Mrs Pavlidi explaining:

It's like a farewell party at the end of the year. We fill the plastic inflatable pools with water (...) and have a pool party. (Interview)

Clothing and footwear for play in all weathers

No clothing or footwear for playing outdoors in wet weather was observed in the preschool, confirmed by all interviewed staff, and no parental guidelines regarding children's clothing for playing outdoors in wet or cold weather were reported.

In relation to hot and sunny weather, Mrs Pavlidi stated:

We have instructed the parents to send in a hat and sunscreen. (Interview)

Opportunities for playing in nature

When asked if children were taken to natural areas for play, all interviewed staff responded negatively, with Nicole commenting:

That never happened. (Interview)

Nicole reported that in the past outings took place in the neighborhood, but that this practice no longer occurred due to a municipality decision, as well as reduced adult-child ratio:

We had more staff, so more adults could accompany the children. (Interview)

Strategies to support the outdoor play of children with additional needs

No specific policy regarding outdoor play for children with additional needs was reported. If a child has a learning support assistant, they also accompany them outdoors.

Provision of training and resources on outdoor play

Mrs Pavlidi reported that no training targeting outdoor play or outdoor education has been organised by the preschool, nor have the staff been offered any external training on this subject since the preschool's foundation.

No books or other resources on outdoor play were observed in the preschool or were referred to by the interviewed staff.

Institutional expectations for educator practice outdoors

Ensuring children's safety was described as the main institutional expectation for educator practice outdoors in all interviews, with Mrs Pavlidi associating it with supervision and direction:

We supervise and the teachers of course always guide the children. For instance, we shout "Don't run so fast because you might fall", so that they understand it. (Interview)

Mrs Pavlidi described that the educators are also expected to engage in adult-led activities when outdoors:

It's not just free play (...) they also do something organised. (Interview)

This practice was confirmed by the researcher's observations, as adult-led activities were documented to take place outdoors on three out of the four play observations.

Mrs Pavlidi referred to observing children stating:

You also observe for a little what they play with and how. (Interview)

However, none of the educators referred to observation in the questionnaire.

Mrs Pavlidi did not propose documenting children's outdoor play as an expectation, stating:

In writing? No, I wouldn't say so. (Interview)

This was confirmed by both interviewed educators, with Markella reporting:

No. We have not been asked (Interview)

Planning for outdoor play provision

No scheduling for non-contact time allocated to planning for outdoor play provision was reported, nor any team-work practices for this purpose.

Educators were described to suggest toys that they would like purchased to the manager, who would forward their requests to the municipality, with Markella describing:

We inform Mrs Pavlidi, who informs her superiors. (Interview)

Children's participation in decision-making for outdoor play provision

No formal way of including the children's views in the planning for outdoor play provision was described during the interviews or was included in the preschool's documents. When asked about any existing practice aiming to include children's views, Mrs Pavlidi reported:

I cannot think of something. (Interview)

Children's wishes in relation to outdoor play, as informally expressed during everyday communications or observations were acknowledged by all interviewed staff, such as requesting more time outdoors, more toys, or enjoying water play. For instance, referring to outdoor play time, Mrs Pavlidi stated:

Of course, the children always say that we could stay a little longer.

(Interview)

Nevertheless, no strategies for adjusting outdoor provision in accordance with children's wishes were reported. For instance, Nicole identified that children enjoyed digging at a spot where there is soil, but when asked if shovels are available, she replied:

We used to have shovels in the past, now we don't. (Interview)

Acquiring shovels, or other such material, was not suggested as an outdoor improvement in the questionnaires or interviews.

However, Markella reported that when they observed children needing toys, they would forward requests to Mrs Pavlidi:

In the past we saw they wanted more cars, we asked, and the municipality provided them. (Interview)

Parental communication and involvement regarding outdoor play

Communication with the parents on outdoor play was reported in all interviews to be informal, mostly containing factual information such as on whether they went out that day. When asked if they provide information on outdoor play during enrolment or in the beginning of the year, Mrs Pavlidi reported:

No, because the parents consider it self-explanatory that the children will go out in the yard. They see the outdoor space when they come to see the childcare centre anyway, so they know that we play in the specific playground. (Interview)

All interviewed staff reported that no written information or guidelines are provided to the parents in relation to outdoor play. There was no report of parents being invited to take part in any outdoor activities.

7.1.4 Influences on outdoor play provision

In this section, reported parental and municipality officials' influences on outdoor play provision are discussed.

Parental influences on outdoor play provision

Parental concerns and anxiety were not indicated as a barrier to outdoor play in the questionnaire (Table 7.8). However, all interviewed staff reported parental fears for children's health influencing outdoor play provision, with Mrs Pavlidi explaining:

We mostly think about the parents, because there are many viral infections in the winter and we don't want to be "accused"¹¹, that the children get sick because we went outside. (Interview)

Discussing playing outside in all weathers, Mrs Pavlidi reported:

¹¹ The quotation marks were gestured by Mrs Pavlidi in the interview.

The parents would definitely be negative about going out in the rain.

(Interview)

Nevertheless, she later suggested:

But we have also not considered doing it. I think that we are also a little hesitant towards it. (Interview)

Municipality officials' influence on outdoor play provision

All interviewed staff referred to the municipality officials' influence on the playground's remodeling and current shared use. Mrs Pavlidi reported that neither her opinion, nor the preschool's staff, was asked on this matter, explaining:

They did not ask for our opinion. The decision was made from the municipality and the study was prepared. (...) One day they came and started digging the garden. (Researcher diary, 22/6/20)

Another influence reported, related to stopping the outings outside the preschool's grounds. Again, this decision was described to be taken without consultation with the preschool staff, with Markella stating:

It's not my decision, I don't know how they decide. (Interview)

Nevertheless, Mrs Pavlidi reported that the municipality officials are supportive in relation to supplying play equipment, in accordance with staff's suggestions:

The municipality brings us toys every so often, which we choose of course, according to what we consider suitable for the children's ages. (Interview)

7.2 Human environment

7.2.1 Staff training and working experience

Details on each member of staff's formal education, age and working experience, is presented in Table 7.2. All staff had training in preschool education. The two educators and preschool manager interviewed for the research are marked in bold in the table.

Educator pseudonyms	Formal Education	Age	Years working in preschool education and care	Years working in this preschool
Mrs Pavlidi	University degree	50	28	23
Adriana	Diploma of Higher Education	45	23	2
Nicole	Diploma of Higher Education	43	18	17
Sandra	Vocational training (Post-secondary)	40	20	20
Markella	Vocational training (Post-secondary)	40	19	19
Annie	Vocational training (Post-secondary)	36	4	4

Table 7.3: Staff education, age and working experience

In two of the groups a vocationally-trained educator was the sole member of staff, which was not consistent with guidelines for municipality-ran preschools at the time of the study, proposing at least one educator with a degree or diploma within each group.

Outdoor play training

When asked whether they have had training on outdoor play in the questionnaire, four educators responded negatively and two positively, with one specifying that this was part of her initial vocational training and the other that it related to group motor games.

Mrs Pavlidi reported not having seen any book in Greek on this subject:

I am not aware of any resource or any book specifically for outdoor play.

What exists I would think lies within the general books referring to organised games. (Interview)

7.2.2 Staff perceptions

Perceived outdoor play value

All educators stated that they consider outdoor play important in the questionnaire and completed the add-on open ended question regarding why they believe that is. Educator statements were coded into themes reported in Table 7.4, together with quotes to allow for better understanding of the nuances in their views, as well as frequency.

Theme	Statements	Frequency
Social development	"Social skills" "Being part of the group-cooperation"	5
Motor development	"Gross and fine motor development" "Physical ability and coordination"	3
Imagination		3
Freedom of expression		2
Physical activity		1
Health		1
Learning		1
Emotional development		1
Sensory development		1
Use of natural materials		1
Self confidence		1
Play organisation		1
Exploration		1

Table 7.4: Why do you believe that outdoor play is important? (n=6)

All educators referred to more than one justification for outdoor play's importance in their questionnaire responses, as in the following statement:

*For children's health, self-confidence, physical ability and coordination, sociability and social skills, imagination, and learning.
(Annie, 36 years old, Vocational training, Questionnaire)*

Similarly, all interviewed staff identified outdoor play as important, recognising various benefits, as highlighted by Nicole:

*It is very important. It allows children to change scenery, move more freely, release their energy through running, jumping, shouting and connecting with nature – seeing that our garden has grass and flowers.
(Interview)*

The outdoor environment's effect on children's freedom of expression was discussed by all interviewed staff in contrast to the indoors, with Markella commenting:

Outdoors they express themselves, they leave the tight classroom framework where we have more specific rules (...) they let themselves free. (Interview)

Mrs Pavlidi similarly conveyed a view of differentiation between the indoors and outdoors in relation not only to children's behaviour but also to educators' perceptions:

We also see them differently than inside the classroom. (Interview)

Views on outdoor play and children with additional needs

Outdoor play was reported to be positive for children with additional needs in the interviews, with Nicole stating:

It helps them release tension. (Interview)

Mrs Pavlidi reported that the playground is accessible, with children with additional needs joining in play:

There are no problems outdoors. (Interview)

During the observations staff displayed a supportive stance towards the participation of children with additional needs.

Views on time outdoors and play in all weathers

Four out of the six educators supported children in their preschool spend adequate time playing outdoors in the questionnaire, as presented in Table 7.5.

In your opinion, do children in your preschool spend enough time playing outside?	Frequency
Yes	4
No	2
I don't know	0
Total	6

Table 7.5: Educators' opinions on adequacy of children's play time outdoors (n=6)

Mrs Pavlidi expressed contrasting views on the adequacy of outdoor play time. Discussing children's needs she proposed more time outdoors, stating:

They need that, to shout loudly, to play, to run, which cannot be done inside the classroom. (...) I think they should have more time.
(Interview)

Nevertheless, later in the interview she stated that time is adequate:

As for free play, I think that there is adequate time. (Interview)

Both interviewed educators related adequacy of outdoor time to the season, with Nicole explaining:

Outdoor time is not enough in the winter, but it is in the summer.
(Interview)

Markella proposed increased outdoor time at the start of the year as conducive to children's adjustment to the childcare centre:

We go out more in the beginning of September, during the adjustment period, when the yard is very useful to us. (Interview)

When asked if children should be allowed to play outside in all weather conditions in the questionnaire, half of the educators responded positively, nevertheless, five out of six indicated inappropriate weather conditions for outdoor play in the follow up question, suggesting: high or low temperatures, rain, and snow.

Markella suggested going out when it is over 15°C as optimal, linking it to children's enjoyment:

We want a temperature where the children are able to play, because when they're covered with jackets and hats, they also don't enjoy playing outside. (Interview)

Even though Mrs Pavlidi supported going out in cold weather, she displayed some ambivalence:

I think that we should go out more, even when it's very cold. (...) OK, when it's 2-3°C then it's quite cold, we couldn't. But at 10-12°C, we could wear our coats and go outside. (Interview)

Not taking the children out in the rain or drizzle was supported by all interviewed staff, indicating rain as a hazard. Although Mrs Pavlidi suggested that it would be nice for the children to be out in a summer rain, at another point she commented:

In the rain it would surely be dangerous. (Interview)

Nicole similarly expressed a positive view towards going outside in wet weather, but concluded that current conditions are unfavorable:

For me it would be ideal to be able to go outside even when the weather conditions don't allow it, that is with wellies and raincoats. (...) But with the current situation in the playground, I prefer not to. (Interview)

Presence of water in the playground after the rain was described by all interviewed staff as a barrier to going outside, with Nicole describing:

The garden may be filled with water and the toys are still wet. The grass retains moisture (...) and part of the surfacing in the entrance collects water, so there's a possibility children will slip. (Interview)

Continuing the discussion after the interview, Mrs Pavlidi suggested that educators finding changing children's clothes and shoes laborious may influence their practice of staying indoors when it's wet. (Researcher diary, 12/2/20)

This was confirmed by Nicole, reporting:

It is not so practical to change shoes. (Interview)

Discussing hot weather, limiting time outdoors when hot and sunny was reported by both educators, with Markella explaining:

If it's too sunny it tires the children too, they start saying "I want water, I want to go to the toilet...", things like that, only to go indoors. (Interview)

The educators were asked to choose between six options, regarding the most important influence on how much the children are taken outdoors, presented in Table 7.6.

Influences on how much the children are taken outside to play	Frequency
Pedagogical framework	4
Conditions in the preschool	1

Own beliefs	1
Preschool policy	0
Staff training	0
Parental expectations	0
Total	6

Table 7.6: Influences on how much the children are taken outside to play (n=6)

Views on factors inhibiting outdoor play

The educators were asked which factors inhibit outdoor play in their preschool, by marking as many of the possible 13 answers as they saw fit, with results presented in Table 7.7. Weather conditions was the top factor indicated by all educators, followed by lack of play materials and fear of children getting injured.

Which of the following, if any, are in your opinion barriers for children to play outside in your preschool?	Frequency
Weather conditions	6
Lack of play materials	5
Fear of children getting injured	3
Lack of time	1
Poor play facilities	1
Fear of litigation	1
Staff concerns/ anxiety	1
Not enough adult supervision in the playground	1
Other ("Dangerous toys")	1
Parental concerns/ anxiety	0
Lack of relevant training	0
Limited play space	0
Concerns about children getting dirty	0

Table 7.7: Which of the following, if any, are in your opinion barriers for children to play outside in your preschool? (n=6)

Views on factors facilitating children's outdoor play within this preschool

The educators were asked about the main factor facilitating the development of children's outdoor play within their preschool, in an open-ended question, completed by five out of the six educators. All educators' answers were grouped into one theme relating to improvements to the space and materials, presented in Table 7.8, together with quotes.

Themes	Subcategories	Frequency
Improvements to the space and materials	"Increased safety and enrichment with some outdoor toys" "Removal of unsuitable structures, replacement with age-appropriate ones"	5

Table 7.8: In your opinion, which is the main factor which would facilitate the development of children's outdoor play within your preschool? (n=6)

Perceptions of physical environment elements supporting outdoor play in this preschool

The educators were asked in an open-ended question, which elements of their preschool's outdoor physical environment they found conducive to play. Their answers were coded into themes, found in Table 7.9, together with quotes and frequency.

Themes	Statements	Frequency
Wheeled toys		6
Plastic play equipment		4
Balls		3
Psychomotor equipment	"Hoops, cones, skipping rope, for group organised games"	1
Static play structures	"Musical structures (...) balance beams"	1

Table 7.9: Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool? (n=6)

All educator statements referred to play equipment and structures being conducive to outdoor play, with wheeled toys mentioned in all questionnaires. None of the educators referred to the natural elements in the questionnaire, but Mrs Pavlidi positively referred to them in the interview:

Surely the natural environment plays a role, especially in the large playground, the grass, the trees around, help a lot. (Interview)

Similarly, Nicole commented:

The grass and the spot with soil. (Interview)

Even though the playground is referred to as a 'musical playground', on the website of the architectural firm¹² that designed it, it does not appear to be perceived by the educators as affording increased musical play opportunities, with only one mentioning the sound structures as conducive to play in the questionnaire and Nicole stating in the interview:

We mostly don't do musical-motor games outdoors, as we don't have music. (Interview)

¹² <http://kom37.gr>

The educators were asked which elements of the outdoor physical environment they believe should be improved and in what way, in an open-ended question. Their answers were coded into themes, found in Table 7.10.

Themes	Statements	Frequency
Play equipment	"More age-appropriate equipment" "Slide and sandpit" "Swing"	4
Surfacing	"Playground surfacing" "Improve the carpeting"	3
Removal of metal and granite musical structures		1

Table 7.10: Which elements of the outdoor physical environment do you believe should be improved and in what way?(n=6)

The top theme identified was the introduction of more play equipment, which is consistent with educators' answers on barriers to outdoor play, where five educators reported lack of play materials (Table 7.5), as well as with their answers on which elements of the physical environment are conducive to play, where only play equipment was referenced (Table 7.8). In this open-ended question only static structures, such as a sandpit, a swing and a slide were specifically referenced as proposed additions, consistently with views expressed during the interviews, with Mrs Pavlidi stating:

We're not short on toys. (Interview)

No mention was given to loose parts or open-ended materials in the questionnaires or in any of the interviews, even though Mrs Pavlidi acknowledged the play potential of found materials, such as pinecones:

The children play with everything they find outside. (Interview)

Surfacing improvements was proposed by three educators in the questionnaire, with two making only this suggestion. This topic was also discussed by both educators in the interview, with Markella explaining:

I believe that if we had safer flooring, maybe a sturdy foam one, the children would be more comfortable and we would be more relaxed, we would allow them more initiative. (Interview)

One educator in the questionnaire referred to the removal of the granite and metal musical structures, which was consistent with views expressed by Mrs Pavlidi and Nicole in the interviews, considering them hazardous and unsuitable for this age group.

Additionally, developing a space for gardening was suggested in all interviews, with Nicole stating:

I think that we could make a small garden there, for the children to get involved with. (Interview)

Nevertheless, Nicole explained that introducing gardening plots would be difficult due to lack of exclusive use of the space:

We tried setting up a gardening plot in the past, but it did not last, the older children using the playground (after-hours) uprooted the plants... (Interview)

An improvement Mrs Pavlidi proposed related to shading:

I would like to have some protection from the sun (...) In both the large and the small playground, the sun comes very early, one is not able to withstand it after 12.00. (Interview)

Educator stance towards the use of water and messy materials

Both Mrs Pavlidi and Markella supported children enjoy water and messy play, with Mrs Pavlidi stating:

I think they generally like coming in contact with the soil, the sand, and water. (Interview)

In the interviews it was reported that before the playground's restructuring there was sand available under two stable play structures with slides, which the children enjoyed, however Nicole explained that re-introducing sand would be difficult due to lack of exclusive use of the space:

Because we don't have full control of the playground, we can't have such play elements. (Interview)

When asked about water play, Mrs Pavlidi only referred to the ‘pool party’ at the end of the year, explaining that the children are not allowed to use the water taps for play:

We tell them not to, because they get drenched. (Interview)

Lack of regular water play was confirmed by Markella, reporting that it is sporadically introduced by the adults, only in the summer:

They don't play with water unless I do it with them. Sometimes I set up water basins for them and they play with the plastic animals and fish we have. (Interview)

No water or messy play was witnessed by the researcher on any of the visits, including the play observations taking place in late June.

Risk and safety perceptions

Safety during outdoor play was mentioned as a priority in all interviews. In the questionnaires fear of children getting injured was proposed as a barrier to outdoor play by half of the educators (Table 7.5). The large granite and metal musical instruments (Figures 7.3, 7.4) were discussed as hazardous, with staff fencing off the granite one, as Mrs Pavlidi reported:

In the past we used pillows (...) we have to enclose it. (Interview)

This was confirmed by researcher observations of the educators placing a plastic fence around it every time they went outside with the children.



Figure 7.3: Granite musical instrument and plastic fence



Figure 7.4: Metal musical instrument

The choice of using the small playground by the younger groups was linked to safety in the interviews. When asked about the possibility of the younger children using the main playground, Markella explained:

The truth is we don't prefer it because of some toys they are not used to, which are a little dangerous, the way they run, the way they play.
(Interview)

Mrs Pavlidi proposed that the small yard is safer additionally due to its surfacing, explain that it was installed as a safety precaution:

The small yard is a little restricted, but we have protected it with carpet.
(...) *as the younger children use it. Lately carpet was also installed on the wall because we were made aware of the danger for the children, although no child has ever hurt themselves on the wall.* (Interview)

Nevertheless, Markella indicated that the quality of the carpet flooring did not guarantee children's safety. Additionally, she referred to the width of gaps in the small yard's fence as a potential hazard.

Nicole referred to the following elements in the main playground as hazardous: the two musical structures, parts of the surfacing getting slippery, the cement around the water taps and the curb around the grass area (Figure 7.5).



Figure 7.5: Water taps and curb around the grass area

Natural elements, such as leaves and pinecones were also discussed as hazardous by Nicole and confirmed by Mrs Pavlidi, who reported:

There is a janitor that goes outside and cleans the space from the leaves and pinecones, because they are also a little dangerous, the children may step on them and get injured. (Interview)

Nevertheless, both Mrs Pavlidi and Nicole acknowledged that the children enjoy incorporating them in their play, with Mrs Pavlidi reporting:

Some pinecones are left. It's the dangerous ones that are removed, because the rest the children like. (Interview)

Nicole also reported use of sticks as hazardous, explaining:

I don't allow them to use large sticks, because the boys usually play-fight and I'm afraid they might poke an eye out. (Interview)

Furthermore, having visual contact with the children was highlighted as a safety precaution, with Nicole describing that she does not allow the children to go behind the bushes at the top of the playground (Figure 7.6):

Not that anything will happen to them, but I have to ensure that they don't get hurt. That I have visual contact (Interview)



Figure 7.6: Space behind the bushes at the top side of the playground

When asked, both educators expressed a positive view towards risk, focusing on the educator's guiding role to ensure children's safety. No reference was made to supporting the development of children's risk management abilities, in contrast focusing on children's lack of sense of danger and the educators' need to protect them, as in the following quote by Nicole:

I think there should be risk in play at this age. I also think it's impossible not to have it, precisely because they lack sense of danger and it's after they hurt themselves that they think about why that happened. But if they didn't even have that risk, they would not discover things, understand their limits, or learn how to protect themselves. The issue for us is to make it less dangerous. (Interview)

7.2.3 Staff engagement

Setting-up and adapting the outdoor play environment

The educators were asked whether they organise the outdoor area before taking the children out to play and how often, with the results in Table 7.11.

How often do you organise the outdoor area before you take the children outside to play?	Frequency
Every day	4
Once a week	0
Once a month	0
At the beginning of the year	0
Never	2
Total	6

Table 7.11: How often do you organise the outdoor area before you take the children outside to play? (n=6)

Mrs Pavlidi reported that the groups using the main playground choose toys from the small yard to take with them each time they go outside, with the children and educators moving it together, confirmed through the researcher's observations, as in the following excerpt:

At the beginning of playtime Nicole's group go past the small play area and she tells them: "Whoever wants to, can get a toy and come to the playground." She helps them carry the toys. (Observation, 23/6/20)

Nicole documented organising the outdoor environment every day in the educator diary. This related to daily positioning of the fence around the granite musical construction, moving the slide to the main playground on one occasion and once referring to organising an adult-led activity. She documented adapting the environment on six occasions, four of them relating to adult-led activities, as in the following excerpt:

Adapted the environment in preparation for traditional games. (Educator diary, 24/6 and 25/6/20)

Markella documented organising the environment on three occasions in the two weeks of keeping an educator diary, twice moving the toys to make more space, whilst once referring to organising a game. She did not report any adaptations to the environment, however she was observed to adapt the environment by moving the toys when they were getting in the way of children playing.

Educator roles during outdoor play

All educators completed the open-ended question on how they would describe what they do when outside with the children. Their statements were grouped into themes reported in Table 7.12, together with quotes, as well as frequency.

Themes	Statements	Frequency
Supervision	"Supervision" "Take care of children's safety"	4
Direct	"Musical-motor games, sport activities" "Organising group games"	4
Facilitation	"Encouraging them to engage with all the stimuli that our playground has to offer"	2
Join in play		1

Support environmental exploration and respect		1

Table 7.12: How would you describe what you do when you are outdoors with the children? (n=6)

i. Supervision

Supervision was reported by four educators in the questionnaire, such as in the following quote:

I make sure the children are safe, that they avoid dangerous play.
(Adriana, 45 years old, Diploma of Higher Education, Questionnaire)

Supervision was also set as an institutional expectation for educator practice and was referred to in the interviews, with the term at times appearing to be used interchangeably with observation, as in the following quote by Nicole:

Mostly observation, that is mostly supervision. My role in the beginning of the year is to set some ground rules (...) so that no child gets hurt.
(Interview)

Consistently during the play observations both educators sustained constant visual attention to the children. Nicole was witnessed to mostly stand or sit at the bottom end of the playground, in the shaded area with the benches (Figure 7.9), approaching the children when required. Markella was observed to be standing for almost the entire time, mostly in the middle of the play area and moving towards children as required. In both cases educator-initiated interactions with the children were observed to mostly relate to safety or conflicts.

ii. Directing play

Directing play was proposed by four educators in the questionnaire, with Mrs Pavlidi stating:

I direct the children on some organised game, on how they will play by the rules, so that all children can play correctly between them.
(Questionnaire)

Engaging children in adult-directed activities during outdoor play time was proposed as an institutional expectation and consistently was observed in three play observations, such as in the following excerpt:

Nicole sets-up a jumping game made of foam tiles and asks the children to sit on the bench, saying: "You will play with the toys afterwards." She explains the instructions and says: "Sit and wait your turn". She calls one child at a time, helps them through the moves and congratulates them. (Observation, 23/6/20)

Nicole was also observed directing the children after the game had finished and they chose to jump on the tiles independently, saying:

"Start on this side so you don't get hurt. Line up." (Observation, 23/6/20)

Markella was also observed to direct children's self-initiated play, such as in the following excerpt:

A small group of children start playing with a ball. Markella says: "Make a circle and throw the ball to each other." (Observation, 15/6/20)

iii. Facilitation

Actions facilitating children's play were reported by two educators in the questionnaire, such as in the following quote:

I encourage the children to occupy themselves with all the stimuli available in our playground. (Adrana, 45 years old, Diploma of Higher Education, Questionnaire)

During the play observations both educators were witnessed to be available for help when needed, as in the following example:

A girl approaches and Markella says: "You want to go on the swing? Come." She lifts her in and swings her softly. (Observation, 22/6/20)

iv. Joining in children's play

One educator referred to joining in children's play in the questionnaire. In the interview Markella associated the presence of more adults to allowing increased interaction and play participation:

Now that there is a student doing her placement my participation in playing with the children is more active. The truth is, when I'm on my own I necessarily mainly focus on no child getting hurt. (Interview)

During the play observations the educators were not observed to physically join in with children's play, but both responded to children's pretend play, as in the following example:

Two girls approach Nicole saying "We're going to make pizza. She playfully pretends the pizza is too hot, saying "My tongue is burned!" (Observation, 23/6/20)

v. Support environmental exploration and respect

One educator referred to supporting children's environmental exploration and respect for nature in the questionnaire, stating:

Help the children explore, discover, take care of and respect the environment. (Annie, 36 years old, Vocational training, Questionnaire)

During the play observations in the main playground Nicole responded to children's interests in natural elements, appearing to focus on the importance of not harming live creatures, as in the following excerpt:

Two girls show Nicole a beetle. She says: "We don't harm them. (...) You can look at it." After five children gather around it, Nicole says "I think you have made the poor beetle dizzy, shouting over it. Go somewhere else to play." (Observation, 29/6/20)

vi. Conflict resolution

In the interview Markella referred to educators supporting conflict resolution when needed:

They usually fight over some toy or wanting to go first. (...) Children usually sort it out themselves, if we see the tension build up then we intervene. (Interview)

During the play observations instances of educators resolving conflicts were witnessed, relating to children fighting over the same toy, such as in the following excerpt:

Two children fight over a wheeled toy. Nicole approaches them and says: "Mark will go in for a short time and then you will. Everyone can have a go for a little while, you have so many friends! (Observation, 29/6/20)

Setting rules and boundaries

In the interviews the educators referred to outdoor rules for ensuring children's safety.

No visual representation of the rules was observed. Both educators were observed to verbally explain the rules in an age-appropriate way to the children, as in the following excerpt:

A girl tries rolling a wheeled toy inside the plastic 'treehouse'. Markella says: "No cars allowed in the treehouse." (Observation, 22/6/20)

Rules regarding space use were observed in the main playground, such as children not allowed to go behind the bushes (Figure 7.6) or approach the granite musical instrument (Figure 7.3) due to safety concerns. However, accessibility to spaces sometimes appeared unclear, as in the following example:

A boy climbs on the low wall of the fence behind the water taps. Nicole says: "Not up there!" (Observation, 23/6/20, Figure 7.7)



Figure 7.7: Space behind the water taps

As for use of materials, large sticks were reported as not allowed for safety reasons, with Nicole however explaining that they could use the small ones:

With the small ones they can dig the soil. (Interview)

The children were also not allowed to turn on the water taps, which though not explained to them during the observations they were witnessed to be aware of, as evidenced in the following excerpt:

Nicole prompts a boy to clean his hands and he turns on the tap slightly. Another child shouts "Mrs Nicole he turned on the tap!" (Observation, 29/6/20)

Both educators were observed to interrupt children's play when there were safety concerns. Markella's interventions often seemed to relate to lack of space in the small yard, as in the following excerpt:

Four children ride wheeled toys. Markella stops them and continues in a sweet tone "My dears, you are going too fast, you may hit another child". (Observation, 22/6/20)

Scheduled time outdoors created a boundary for outdoor play, with children's activities observed to be interrupted when it was time to go inside. No set routine was observed indicating the end of playtime. Markella informed the children once, a few minutes ahead of time. Nicole appeared to use tidying the toys as an indication of going inside, as in the following excerpt:

When it is time to go in, Nicole says: "Children come now, it's time to tidy up." (Observation, 23/6/20)

Documentation and critical reflection practices

In accordance with institutional expectations no outdoor play documentation was reported by staff in the interviews or the educator diaries.

All staff showed critical reflection upon their outdoor play practice during the interviews. However, no formal individual or teamwork practices were described specifically supporting reflection for outdoor play practice.

7.3 Physical environment

7.3.1 Space characteristics

Size and space-child ratio

The preschool has an outdoor play space of 660 sqm presented in the following top-view depiction made to scale, with the main playground at the top and the small play area indicated by an arrow (Figure 7.8). The space-child ratio for the entire outdoor play space is 10.31 square meters per child, exceeding the national licensing guidelines. However, taking into account that the younger groups only utilised the small play area, the space-

child ratio for that would fall to 3.8 square meters per child if used by one group at a time, thereby falling marginally below guidelines for children over 2.5 years of age.



Figure 7.8: Playground view from above made to scale.

Access

The preschool is housed in a two-story, purpose-built building, completed in 1997 when the childcare opened. Three out of the four classrooms are on the ground-floor, with two having direct access to the small play area, leading to the main playground. The 18–30-month-old group uses the room on the top floor, accessed by stairs and a lift.

Configuration and space use

Seeing that the two play areas within this preschool are used in isolation by different groups, the configuration of both will be presented, starting with the small play area.

The small play area sized 54sqm is a rectangle space, with cement surfacing covered by thin carpet, adjacent to the building. It is surrounded by a low wall, also carpeted, with a fence separating it from the parking of the apartment block next door (Figure 7.9). There are no plants inside the small play area and no shading structures. All the plastic play equipment is kept within this space. A metal door at the far end leads to the main playground through a 7 meters passage (Figure 7.10).

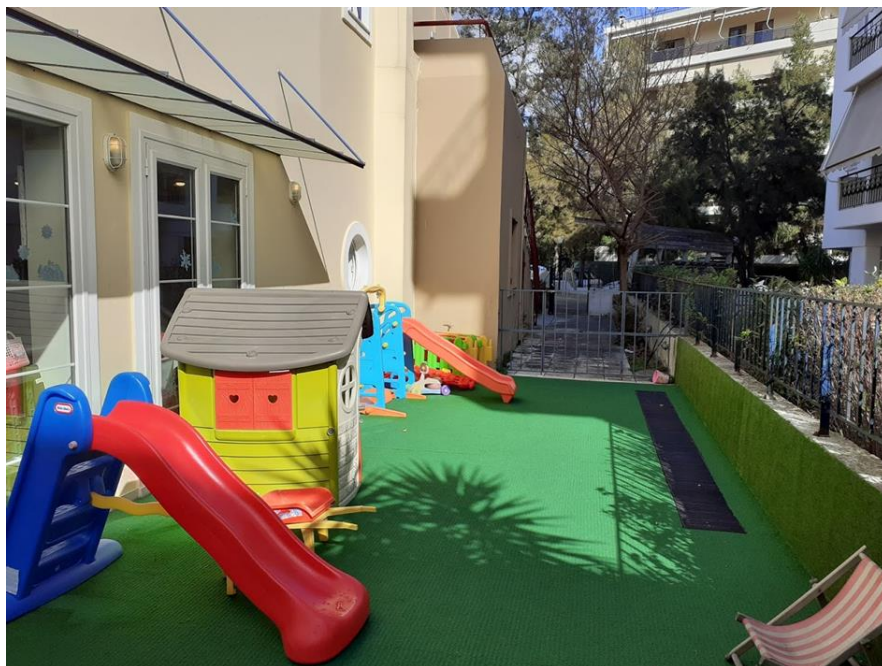


Figure 7.9: Small play area and metal door leading to the main playground.



Figure 7.10: View of the small play area from the main playground's shaded area with benches.

The main playground is 606 square meters, surrounded by a fence and facing two quiet residential streets, lined with tall trees (Figure 7.11). Half is covered by protective flooring and the rest by grass. Spots where the grass has withered are covered by soil. It has limited shading offered by the tall trees outside the fence, as well as one wooden construction over the benches.



Figure 7.11: View of the playground when accessing it from the preschool.

A description of the two play spaces in accordance with OPEC (Mårtensson, 2013) can be found in Tables 7.13 and 7.14.

Total size	54 square meters
Proportion of area with shrubs and trees	0%
Proportion of area with hilly terrain	0%
Integration between vegetation, open areas and play areas	None

Table 7.13: Small play area's description.

Total size	606 square meters
Proportion of area with shrubs and trees	15%
Proportion of area with hilly terrain	10%
Integration between vegetation, open areas and play areas	Very limited, bushes mostly on the outskirts of the play area

Table 7.14: Main play area's description.

Natural features

The main playground is partly covered by grass and hard soil, has bushes forming hedges on the top and left side, two rose-bushes and two young trees. The small yard has no soil or plants.

Both play areas have water taps, but no water was witnessed on any of the observations.

Ants, beetles, butterflies and bees were observed in the main playground. Birds, such as sparrows and pigeons, were seen to fly overhead, or sit on tree branches.

Storage

There was no storage for play materials in either play areas.

7.3.2 Play facilities and materials

The play facilities and materials available, were recorded by the researcher on six occasions and are reported in Table 7.15 according to their life span (Casey, 2007). The condition of the features, children's access to them and the number of occasions they were observed in the playground is also reported.

Life span of play features	Play features observed	Condition	Children's access	Number of occasions observed
Longer-term	Granite musical instrument	Good	None	6/6
	Pressure-activated sound structure	-"-	Was switched off	6/6
	'Sound columns'	-"-	Partial, due to height	6/6
	Metal musical instrument	-"-	Older groups only	6/6
	Balance steps	Requiring maintenance, one step missing	-"-	6/6
	Rotating balance beam	Good	-"-	6/6
	Rotating cone-shaped toy	-"-	Older groups only, with supervision	6/6
Semi-permanent	Plastic toddler-sized slides (2)	Good	According to positioning	6/6
	Infant-sized swing	-"-	Younger groups only	4/6 (Seat removed when not in use)
	Plastic 'tree-house'	-"-	-"-	6/6
	Plastic house	-"-	-"-	6/6
Temporary	Plastic pedal car	Broken pedal	Depending on sharing	6/6

	Plastic push-along car	Faded colours	-"-	6/6
	Plastic infant-sized wheeled toys – no pedals (3)	Two with faded colours	-"-	6/6
	Toddler-sized tricycle	Good	-"-	6/6
	Plastic double 'seesaws' (2)	Worn - broken handles	-"-	6/6
	Plastic single rocking toys (6)	Worn, some broken handles	-"-	6/6
	Plastic battery-operated car	Worn, no battery	-"-	6/6
	Plastic motorcycle wheeled toy	Broken front	-"-	6/6
	Small plastic buckets (6)	Worn	-"-	6/6
	Small plastic wheelbarrows (2)	One broken	-"-	6/6
	Balls (One foam ball and one air-ball) (2)	Good	-"-	2/6
	Very small plastic shopping cart	Broken	-"-	6/6
	Plastic trucks (3)	Missing parts	-"-	6/6

Table 7.15: Outdoor play features and materials

Longer-term features

All longer-term features were positioned in the main playground installed during the playground's renovation four years prior. They include sound structures, namely the granite and metal musical instruments, the pressure-activated floor structure, which was switched off, and the two 'communication columns' (Figures 7.4, 7.12, 7.13), as well as two wooden balance structures and one metal rotating element (Figure 7.14).



Figure 7.12: Granite musical instrument and 'communication column'.



Figure 7.13: Pressure-activated sound floor structure.



Figure 7.14: Balance structures and round rotating element.

Semi-permanent features

All semi-permanent features were made of plastic (Figures 7.15, 7.16), namely two slides, one infant-sized swing, a ‘tree-house’, and a house. They were all infant to toddler-sized, with the plastic ‘tree-house’ having a sign reading “For children under two years old” (Figure 7.17).



Figure 7.15: Slides, small house and plastic 'tree-house'.



Figure 7.16: Infant-sized swing.



Figure 7.17: Plastic 'tree-house' and sign.

Temporary features

Various infant or toddler-sized plastic wheeled or rocking toys were available, with only one having working pedals (Figure 7.18). Other materials were very limited, namely six small buckets, two balls and two worn plastic wheelbarrows (Figure 7.19). No outdoor storage was available, all toys were collected in the small play area when not in use.



Figure 7.18: Plastic wheeled and rocking toys.



Figure 7.19: Plastic buckets available.

7.3.3 Sensory characteristics

The potential sensory opportunities afforded by the outdoor play environment are presented under the following seven sensory categories: visual, auditory, olfactory, taste, tactile, vestibular, and proprioceptive.

Visual opportunities existed in relation to the light and shade variations. Observation of natural features was possible only in the main playground. No special equipment targeting visual exploration, such as magnifying glasses, or binoculars, was available.

Both outdoor areas were quiet. The main playground was wide, with the sounds produced by children's activity dispersed, not creating a cacophony. Three stable musical structures and one sound game existed in the main playground (Figures 7.4, 7.11, 7.12), no elements producing sound were observed in the small yard. Nevertheless, the granite instrument, as well as the pressure-activated musical squares were not available for use and some of the children found the 'communication columns' too high to reach, thereby limiting the actual auditory opportunities offered by this equipment.

In the main playground the grass and pine trees, produced a discreet scent. There were no scented shrubs present in any area of the preschool and the children were discouraged from approaching the rose bushes which could potentially offer olfactory stimulation. The small play area did not contain any elements producing olfactory stimuli.

No elements affording taste opportunities were observed outdoors. The children were reported to have snack outside two-three-times a year.

In the main playground tactile opportunities related to contact with the grass, pinecones, pine needles and soil. None were observed in the small play area.

In the main playground vestibular stimulation could be achieved through running and riding on the wheeled toys, offering mostly linear movement, as well as balancing on the two stable structures. The rotating cone could afford rotatory vestibular input, but the children were not able to use it independently and were discouraged from using it in pairs for fear of trapping their fingers. When used with adult-support it was observed to only be moved in gentle side-to-side movement, thereby affording limited vestibular stimulation. Potential vestibular stimuli in the small play area related to the infant-sized swing, the toddler-sized plastic slide, and the small rocking toys, affording limited movement. Because of the small size of the space, vestibular stimulation through running or riding on the wheeled toys would be very restricted.

Limited proprioceptive stimulation could be achieved through children pushing the wheeled toys, using their legs while on the rocking toys, and digging the soil in the main playground. No climbing equipment or climbable trees were available.

7.3.4 Children's behaviours and interactions with the physical environment during outdoor play

The way the children of the two targeted classes behaved and interacted with the physical environment during outdoor play time was observed on four occasions, two for each class. Due to COVID-19 restrictions each group was divided in two, with children attending the preschool on alternate days. The researcher observed both subgroups for each class. Detailed data referring to the circumstances of each observation can be found in Table 7.16.

	Class A – 15/6/20	Class A – 22/6/20	Class B – 16/6/20	Class B – 23/6/20
Weather	Sunny and warm, 28°C	Sunny, few clouds and warm, 27°C	Sunny, scattered clouds and warm, 25°C	Sunny and hot, 31°C
Location	Small play area	Small play area	Main playground	Main playground
Time outdoors	60 minutes (10.25-11.25)	50 minutes (11.00-11.50)	50 minutes (10.00-10.50)	50 minutes (10.00-10.50)
Number of children in observed group	7	5	8	11
Number of educators supporting observed group	1	1 educator and 1 student	1 educator and 1 shadow teacher	1 educator and 1 shadow teacher
Groups outside at the time	2	2	1	1
Total maximum number of children outside	11	10	8	11

Table 7.16: Circumstances of outdoor play observations

Group play was observed to mostly take place in small groups of two to five children on all occasions, but solitary play was also observed. The children appeared to engage in different play behaviours which often seemed to overlap e.g., moving through space and pretending happening simultaneously. They were also observed in apparent non-play instances, e.g., sitting and talking.

The researcher's observations in relation to children's behaviours and interactions with the physical environment were analysed and coded into seven themes: a) Movement, b) Being physically active, c) Pretending, d) Observing insects and birds, e) Handling materials, f) Experimenting with sound, g) Sedentary. The themes of movement and being

physically active were separated, as there was a big difference in the opportunities for physical activity between the two groups utilising different play spaces.

a) Movement

Children were observed to move in various ways, such as: walk, run, crawl, jump. The children were also observed to rock on the rocking toys, as well as ride or push wheeled toys. There was a big difference in the use of wheeled toys within the two play areas, as only the main playground afforded enough space to achieve reasonable speed.

The children were also observed to use some of the equipment available in other than the expected ways, possibly seeking more challenge, as in the following example involving a child in the younger group:

A girl gets on the slide and slides down on her tummy, head-first.

(Observation, 22/6/20)

or an experience not afforded to them, as in this excerpt:

A girl tries climbing on the 'communication column' as if it's a pole.

She then briefly hangs from her hands. (Observation, 29/6/20)

In the main playground children were observed to attempt the balance constructions, but appeared to find it difficult, at times using their bodies in alternative ways, as in the following excerpt:

One boy walks on the rotating balance beam, losing his balance after

four steps. Two other children observe him but do not attempt it.

Afterwards, a boy lies on the beam on his tummy, holding on for about five seconds. (Observation, 29/6/20)

The children were also observed to play with balls, with the younger children mainly rolling or making single throws and the older ones kicking and pretending to score goals.

b) Being physically active

Only the older group using the main playground was observed to engage in moderate to high physical activity through running, pushing on the wheeled toys, as well as chasing

the ball. All children in the main playground sought the shade after about 10-15 minutes, as it was hot and most of the space was in direct sunlight, resting there for periods of 2-3 minutes. The younger children were only observed to be sedentary or engage in low physical activity, possibly because of the very restricted space.

c) Pretending

Children from both groups were observed to engage in pretense, playing out everyday themes like family, cleaning, or being stuck in traffic, or themes from their imaginations, such as the big bad wolf or robbers, as in the following excerpt:

Two boys run chasing each other. They hide behind the water taps wall, shouting: "We're inside. We're all robbers, one team!"

(Observation, 23/6/20)

The space behind the water taps, used by this group as a 'hideout', appeared to be the only 'hidden' space the children had access to in the main playground (Figure 7.6). The children in the younger group also appeared to utilise the enclosed spaces offered by the plastic house and tree-house while pretending.

The children also appeared to use the limited loose parts available in their pretending, as in the following example:

Two boys go towards the car. One of them holds a small stick and the other says "Give me the key" pointing at it. (Observation, 23/6/20)

d) Observing insects and birds

The children of both groups appeared to show interest in insects and birds, as in the following excerpt:

The sound of a bird singing is heard. One child says to another: "What was that sound?". The other says "It was a little bird". They try to spot the bird looking over the fence towards the adjacent apartment building for a few seconds. (Observation, 15/6/20)

Children seemed keen to interact with insects, as in the following example from the main playground:

A child shouts: "A butterfly!". The other children look, and one shouts: "Catch it!". They run behind the butterfly for about three minutes.

(Observation, 23/6/20)

The duration of engagement appeared to relate to whether there was interest from other children or adults, as in the following excerpt:

A boy shouts "Guys an ant! Many ants!". When no one goes near, he stops observing and moves away. (Observation, 23/6/20)

Children at times did not continue with the observation because of adults considering it unsafe, as in the following example:

Two boys observe a dead insect. One of them concludes: "Dead bee". Markella asks "Is it a bug?". Another educator tells the children "I'll take it now, it has germs" and throws it away. (Observation, 15/6/20)

e) Handling natural materials

No natural materials were afforded in the small yard during the observations. On one instance only, two children were observed briefly handling dried leaves that had landed in the play area:

A boy sits on the ground touching about ten dried and crushed leaves on the carpet. A girl goes near him, looks at the dried leaves, touches them a little and quickly moves on. (Observation, 15/6/20)

The children in the main playground were observed handling soil, small rocks, small pinecones, small sticks, and pine needles, all in very limited quantities, which they appeared to seek out, as in the following excerpt:

A boy collects soil, small pinecones and pine needles with his hands and puts it in the back of the toy truck. (Observation, 29/6/20)

They appeared proud of their discoveries, as in the following excerpt:

A boy digs next to the curb using his hand. He shouts: "Look I found a rare stone!" (Observation, 23/6/20)

However, there were limited places where the children could dig, had no digging materials apart from a couple of small sticks and the soil was quite hard (Figure 7.20), making it difficult to dig out.



Figure 7.20: Hole in the soil made by the children using a small stick.

No water was available for the children to use on any observation, although the educators reported they seek it, as was evidenced in the following excerpt:

A boy turns on the water tap very slightly, wetting his hand, while looking around him as if expecting to be reprimanded. He lets very little water drop inside a wheelbarrow positioned underneath. He takes the wheelbarrow behind the wall and spills the water onto the ground. (Observation, 23/6/20)

f) Experimenting with sound

Only the children in the main playground were observed experimenting with sound, briefly and on limited occasions, using the communication columns or the metal musical instrument, as in the following excerpt:

One boy stands on tiptoe and shouts something inside the 'communication column'. Another boy standing next to him bangs it with his hand a few times. (Observation, 23/6/20)

g) Sedentary

Children in both groups were observed to remain sedentary on occasions, sitting on the wheeled or rocking toys alone or in conversation, lying down inside the plastic 'treehouse', or sitting on the benches together with the educator, as in the following excerpt:

A girl says: "I'm a little tired, we want to rest" and sits on the bench with two other girls conversing with Nicole for about five minutes. (Observation, 23/6/20)

A summary of the themes of children's behaviours and interactions with the physical environment during the observations can be found in Table 7.17.

Play interactions with the physical environment	Class A	Class B
Movement	X	X
Being physically active		X
Pretending	X	X
Observing insects and birds	X	X
Handling natural materials		X
Experimenting with sound		X
Sedentary	X	X

Table 7.17: Children's observed behaviours and interactions with the physical environment.

7.4 Summary

This chapter presented the findings of the third case study regarding how the organisational, human, and physical environments supported children's outdoor play.

Within the organisational environment, the preschool's operational policies were examined, in relation to group sizes, number of educators, adult-child ratio, staff stability,

and scheduling practices. The preschool's outdoor play profile was also explored, including its outdoor play philosophy and policy, language used for outdoor play and its pedagogical framing, time for outdoor play, outdoor space use, clothing and footwear for play in all weathers, opportunities to play in nature, strategies to support the outdoor play of children with additional needs, provision of outdoor play training and resources, institutional expectations for educator practice, educator engagement and children's participation in planning for outdoor play provision, parental communication and involvement, as well as parental and municipality officials' influences on provision.

Within the human environment, the staff's training and working experience was explored, as well as their perceptions regarding outdoor play's value, outdoor play and children with additional needs, time outdoors and play in all weathers, factors inhibiting and facilitating outdoor play in their preschool, physical environment elements supporting outdoor play, stance towards water and messy play, as well as risk and safety. Staff's outdoor practice was also examined regarding setting-up and adapting the outdoor play environment, educator roles outdoors, setting rules and boundaries, documentation, and critical reflection practices.

Within the physical environment, the outdoor play area was examined regarding size and space-child ratio, access, configuration, natural features, play facilities and materials, sensory characteristics, and storage. Additionally, the children's behaviours and interactions with the environment during outdoor play were described.

A discussion of the synthesis of findings from the first and second phase of the study is presented in the next chapter.

CHAPTER 8: DISCUSSION

8.1 Introduction

This chapter aims to address the study's main research question: 'What are the main barriers and enablers to the environmental supportiveness for outdoor play in Greek childcare centres?' and provide a theoretical discussion focused on the integrated analysis of the data presented in the previous chapters.

The first phase of the research explored outdoor play provision in Greek childcare centres, through desk research and empirical study using a survey design. The second phase using a multiple embedded case study design examined how the organisational, human, and physical environments influence outdoor play provision within three childcare centres, non-profit (Case Study 1, CS1¹³), private play-based (Case Study 2, CS2) and public municipality-run (Case Study 3, CS3), as described in the three respective Chapters 5, 6 and 7. The integrated analysis of the findings utilised a reflexive thematic analysis rationale, following the six-phases described by Braun et al. (2018), assisted through keeping a reflective diary and the creation of diagrams and mind-maps to explore the interrelationship between factors. Abductive reasoning guided the interpretation of findings in accordance with Bazeley's (2018) mixed-methods integrated analysis model, leading to this study's metainferences discussed within this chapter. The study's interpretations aspire to go beyond what Schein and Schein (2017) referred to as an "artifact" level (p.17), towards deeper levels of analysis relating to "espoused beliefs and values" (p.19), as well as "underlying basic assumptions" (p.21). Following the integrated analysis and interpretation of the findings, the preliminary conceptual model presented in Chapter 2 was further developed to incorporate the main barriers and enablers, with an updated visual representation provided in Figure 8.1 later in this chapter.

In the next section, the main barriers and enablers to the environmental supportiveness for outdoor play in preschool identified in this study will be discussed in connection with previous research. The final section of this chapter (8.3) will present the updated ESOPP conceptual model and discuss its theoretical contribution.

¹³ The abbreviations CS1, CS2 and CS3 will be used to refer to the case studies in the text.

8.2 Main barriers and enablers to the environmental supportiveness for outdoor play in Greek childcare centres

Within this study barriers are identified as factors impeding or inhibiting outdoor play provision, whereas enablers are viewed as elements facilitating and enhancing it. However, barriers and enablers can be two sides of the same coin, as became apparent within this study. Following the integrated analysis of the findings, the main themes identified as barriers and enablers for the environmental supportiveness for outdoor play in Greek childcare centres were:

- Cultural perceptions
- Policy
- Pedagogical framing
- Staff training
- Staff engagement
- Physical environment's use
- Presence of loose parts, water, and messy materials
- Time

In accordance with the interrelationship between environments proposed in the ESOPP conceptual framework, these factors were found to interlink. The complexity surrounding the environmental supportiveness for outdoor play proposed through this model will be further discussed at the end of this chapter. The cultural perceptions viewed to influence outdoor play will be discussed first.

8.2.1 Cultural perceptions

Cultural perceptions identified as hindering outdoor play provision related to viewing outdoor play as a break from learning, negative perceptions of wet and cold weather, and a tendency to overprotect children. These cultural perceptions are proposed to relate to what Schein and Schein (2017) referred to as “underlying basic assumptions” (p.27). In support of this study’s findings, the importance of cultural perceptions for children’s care and educational opportunities have long been identified by ecological theorists such as Lewin (1935) and Bronfenbrenner (1979) and their effects on outdoor play provision have

been highlighted by other authors (Bilton & Waters, 2017, Cheng et al., 2022; Van Rooijen & Newstead, 2017; Wood & Chesworth, 2017).

Outdoor play as a break from learning

Starting with a view of outdoor play as a break from learning, academic expectations and indoor learning activities were described as rivaling outdoor play time in all case studies. The distinction between work and play has been postulated as a factor hindering play's true incorporation within preschool pedagogy (Rogers, 2010, 2011), perpetuating timetabling practices and play interruptions, though they are identified as restrictive for children's play development and skill acquisition (Ailwood, 2003; Bilton, 2002; Rose and Rogers, 2012).

Coming to the language used for outdoor play, an examination of official documents revealed that the terms 'recess' and 'yarding' are widely used to describe outdoor time within Greek education. Recess is a term referring to a break from more serious, productive activities, whereas 'yarding' highlights the need for physical discharge of someone who is supposed to mostly be indoors, primarily used for prison inmates. These terms were indeed recorded in the manager interviews of CS1 and CS3, where outdoor time was scheduled in the form of a break from the indoor activities. In contrast, the play-based preschool manager made a point of not calling outdoor time 'recess', affirming not viewing it as a break for either the children nor the educators. Giddens (1984) proposed 'signification', as one of three levels of organisational structure, referring to the way language is used to express meaning. Ailwood (2003) supported that the language surrounding outdoor play is indicative of the way that it is perceived and practiced. Similarly, the language commonly used to refer to wet or cold weather as 'bad' would indicate negative perceptions, as discussed in the next section.

Negative weather perceptions

A major study finding related to weather perceptions severely limiting outdoor play time. The weather had not been included as a category potentially hindering outdoor play in the questionnaire used in the first phase of the study, which would explain why it was not highlighted. In the case studies though, weather perceptions were unveiled as a strong influence on children's outdoor play opportunities. Frequent reduction or complete deprivation of outdoor time due to weather conditions, such as temperatures under 13°C, rain or drizzle was reported by the educators in CS1 and CS3, with children missing out sometimes for many consecutive days throughout the year, but most intently during autumn and winter. Weather conditions were ranked as the top outdoor play barrier by the educators in the public preschool, while not identified at all as a hindering factor in the

play-based one, even though the two preschools are situated four blocks from each other, thereby have identical weather conditions. This finding would support that it is weather perceptions, rather than weather conditions influencing children's outdoor play opportunities. However, negative weather perceptions were not identified as limited to the staff, but to be aligned with parental and societal attitudes, viewing wet or cold weather as bad for children's health or uncomfortable. This study proposes that negative cultural weather perceptions may impede outdoor play provision and limit children's outdoor time. This finding is supported by studies referring to children having less outdoor play opportunities due to negative perceptions of wet and cold weather in Greece and other Southern European countries (Bento & Dias, 2017; Bitou & Waller, 2017; Sandseter et al., 2019), as well as in other parts of the world (Bilton, 2020; Boyle et al., 2022; Cheng et al., 2022; Copeland et al., 2012; Kernan, 2007; Maynard & Waters, 2007; Predy et al., 2020). Negative weather perceptions were also identified to link with a view of children as vulnerable and a tendency to overprotect them, discussed in the next section.

Overprotectiveness towards children

A tendency to overprotect children was identified through both the first and second phases of the study. Overprotectiveness in this context refers to "undue or excessive protection or shielding" regarding children's health and welfare, stemming from the adults' anxiety, insecurity, or domineering stance (Merriam-Webster, n.d.). In the first phase survey more than a third of the educators reported that what they viewed as most important for children's play was for them 'Not to get hurt'. Similarly, 'Prevent accidents' ranked third as the main proposed educator role during play. Additionally, about one in 10 educators proposed 'Health and safety' concerns as the most important factor decreasing children's outdoor play opportunities in preschool, followed by 'Parental views and fears' and 'Staff views and fears'. Consistently, in CS1 and CS3 fears of children getting injured was proposed and observed to inhibit outdoor play. Limitations to children's access to the play space were also observed, more excessively in CS3, justified through fears for children's safety. These findings could be explained to be related to personal risk perceptions, however, they were acknowledged to be in accordance with a societal tendency of overprotectiveness towards children in Greece, viewing them as vulnerable (Giosafat, 2010; Kalyvas, 2017). Such a societal perception could heighten safety concerns, as identified in a recent study by Sandseter et al. (2019). This study proposes that a view of children as vulnerable and in need of protection forms a basic underlying assumption hindering outdoor play practice (Schein & Schein, 2017).

In contrast to the other two preschools, a view of children as competent was proposed in the play-based preschool, linked to their pedagogical philosophy, with outdoor play proposed to enhance children's independence and autonomy. The pedagogical frameworks referred by the manager to inform this preschool's practice, such as the Danish Forest Schools approach, New Zealand's Te Whāriki, and Reggio Emilia, on top of valuing playing outdoors and in nature, share a view of children as capable, having a high regard for children's agency and empowerment (Knight, 2009; Moss, 2019; New Zealand Ministry of Education, 2017; Waite et al., 2013; Wagner & Einarsdottir, 2006). A view of children as competent, rather than in need of adult protection, supports the provision of opportunities for children to assess the conditions around them and develop their independence and capabilities (Haughton & Ellis, 2016). Consistently, this preschool was the only one to deliberately support play with an element of risk, as well as actively involve the children in developing independence and risk-management strategies outdoors. Thereby, this preschool's practice could relate to an adoption of viewing children as competent, differing from prominent assumptions within Greek society. A view of children as competent is proposed within this study to enable the environmental supportiveness for outdoor play in preschool. Cultural norms, societal expectations, assumptions about childhood and constructs regarding children's competence or vulnerability have been highlighted as factors influencing children's play opportunities in ECEC by previous studies, especially in relation to play involving risk (Jerebine et al., 2022; Obee et al., 2020, Spencer et al., 2021, Van Rooijen & Newstead, 2017). Limitations in risk in play, despite its positive function for children's health and development, is nevertheless a topic widely discussed in recent years (Brussoni et al., 2015, 2022; Obee et al., 2020; Sandseter & Kennair, 2011; Sandseter et al., 2021; Spencer et al., 2021; Van Rooijen and Newstead, 2017), making this finding additionally important regarding children's risky play opportunities within Greek preschools. Desk research revealed an absence of policy and guidelines regarding the incorporation of risky play within childcare, which could indicate a lack of understanding of its purpose, but as will be discussed in the next section, appears to be in line with a more general omission of outdoor play from childcare policy.

8.2.2 Policy

Policy was identified as an influencing factor through this study, both at the national level, as well as regarding internal operational preschool policy. Starting with Greek childcare policy, a lack of pedagogical framework for childcare centres was revealed, as well as low

proposed adult-child ratios, and no mandatory continuing professional development provision for staff. Additionally, an absence of policies specifically relating to outdoor play provision was unveiled. Standing policy at the time of the study included no educator guidelines for practice, no staff training on this topic, no suggestions for minimum time outdoors, no mention of play in natural settings, and no guidelines on space configuration and materials with a view to support play. Outdoor play was only acknowledged in terms of space, however policy examination additionally uncovered vague spatial requirements with the term 'semi-outdoor' used as an alternative to 'outdoor' space and low proposed space-child ratios. Thereby on a policy level, it appears as if outdoor play provision in childcare has not been taken into thoughtful consideration, which is proposed as a barrier. This finding is supported by previous studies in Greece, with Rentzou and Sakellariou (2011) identifying the exosystem and specifically childcare legislation to negatively affect quality within childcare services, whilst Zafeiroudi (2021) implicated lack of systemic support as restricting outdoor play in preschool. Taking an opposing example such as Scotland, the adoption of a national policy supporting outdoor play has been acknowledged as producing positive change for children's opportunities, especially when educator views have been considered (Howe et al., 2021; Scottish Government, 2021).

Coming to the preschools' internal policies, during the case studies they were examined through questionnaires, interviews, observations, and document examination, relating to practical aspects such as affordance of time outdoors, use and organisation of the outdoor space, having appropriate clothing for play in all weathers, offering opportunities for play in natural areas, and incorporating strategies for supporting inclusivity. The case studies revealed that only the play-based preschool appeared to have an outdoor play policy, acknowledged by both educators and managers, reported to be based upon their own perceptions of outdoor play pedagogy, whilst governmental guidelines were described by the manager as lacking, and potentially restrictive for outdoor play practice. The existence of this policy appeared to act as an enabler for the preschool's outdoor play practice. In contrast, the staff in the two preschools only following governmental guidelines, displayed lack of clarity on whether an internal outdoor play policy existed or what it would entail. This uncertainty and confusion appeared to mirror outdoor play policy's absence on a central level. Thereby, this study proposes that lack of national policy affects the development and implementation of preschool outdoor play policies, acting as a barrier for provision. This finding is supported by prominent ecological theorists highlighting policy's influence on children's education and care experiences (Lewin, 1935; Bronfenbrenner, 1979), as well as authors who have acknowledged the effects of policy

factors on outdoor play (Bilton & Waters, 2017; Ramsden et al., 2022; Rentzou & Sakellariou, 2011; Wright et al., 2019; Zafeiroudi, 2021).

Outdoor play's pedagogical framing will be discussed next.

8.2.3 Pedagogical framing

In the previous section differences in the outdoor play policies of the case studies were discussed. Further examining the play-based institution though, it became apparent that its outdoor play policy did not stand in isolation, but was supported by the preschool's adopted pedagogy, with outdoor play described by the manager to be framed by approaches such as the Danish Forest Schools, Reggio Emilia, and Te Whāriki. These approaches highlight the role of the environment and value children's agency, competence, and empowerment, incorporating democratic values (Knight, 2009; Moss, 2019; New Zealand Ministry of Education, 2017; Waite et al., 2013; Wagner & Einarsdottir, 2006), thereby could be considered compatible with self-directed outdoor play. This pedagogical framing of outdoor play appeared to inform the group's espoused beliefs and values (Schein & Schein, 2017), underpin the development and implementation of the play-based preschool's outdoor play policy and to provide a rationale for safeguarding and prioritising it both in everyday practices, as well as through the provision of educator training and resources, positively influencing provision.

In contrast, limited pedagogical framing for outdoor play was identified in the other two preschools following governmental guidelines, consistently with the lack of an overarching pedagogical framework within Greek childcare services. Seeing that play has been highlighted not to be clearly defined or fully integrated within preschool education and care (Bilton, 2010;2014b; Department of Education, 2017; Haughton and Ellis, 2016; Ploof, 2014; Rogers, 2011; Tovey, 2007; Wood & Chesworth, 2017), such lack of explicit pedagogical framing could mean that outdoor play may be embedded within a more instructional, adult-directed practice (Papadopoulou et al., 2014). If we took directing play as a manifestation of a more instructional rationale, in the Phase 1 survey almost one in ten educators reported directing play as the main proposed role outdoors. Consistently, in the public preschool the expectation for educators to direct children's outdoor play was expressed in the questionnaires and interviews, and in the play observations both CS3 educators were documented to direct children's play into games with rules. At the same time, outdoor play was scheduled as recess and appeared to be viewed in contrast to indoor learning activities, with 'Pedagogical framework' reported as the top factor influencing taking the children outside in the questionnaire. It thereby appears that the

pedagogical framing of outdoor play within compatible pedagogical frameworks valuing children's agency and independence acts as an enabling factor, whereas attempting to package outdoor play within instructional, adult-directed pedagogical practice appears to hinder provision. Supporting this standpoint, the effects of the preschool overarching pedagogy on play practice have been identified by other authors (Ailwood, 2003; Malaguzzi, 2016; Rogers, 2010, 2011; Waller et al., 2010; Wyver, 2017).

The way outdoor play was framed within the pedagogical programme of the preschools also appeared to influence parental communication and outdoor play involvement strategies. Differences were uncovered in the way that outdoor play practice was communicated with the parents, between the play-based and the other two preschools, as evidenced through the interviews and document examination. The former appeared to showcase outdoor play during parental communications, displaying a more organised, consistent, and ongoing approach, that included discussions on how outdoor play fitted in with the philosophy and pedagogy of the preschool, inviting the parents to outdoor activities and events, outdoor play presented as a positive experience and learning opportunity for children through both written and verbal communication, as well as provision of written practical guidelines regarding clothing and footwear. Communication with parents regarding outdoor play in the other two preschools was described in the interviews as limited, fragmented, and inconsistent, with no provision of written materials or regular inclusion of the parents in outdoor play activities reported. This finding of limited parental involvement is supported by Sakellariou and Rentzou (2009) who identified minimal quality in parental provision and involvement in preschool settings using the ECERS-R, as well as Megalonidou (2020) who reported low scores on the ITES-R in Greek childcare centres. This study proposes that a solid and compatible pedagogical framing of outdoor play supports its more effective communication with parents, as well as their more active involvement.

In turn, parental influences were proposed as a parameter affecting provision through the interviews in CS1 and CS3, reported to limit time outdoors and play in all weathers, increase indoor structured activities with an academic focus, as well as affect the set-up of the physical environment and materials available, such as water. By contrast, in the play-based preschool parental influences were not presented as hindering outdoor play provision, with communication with parents reported to enhance their understanding and positive stance, thereby supporting educators' practice and children's outdoor play opportunities. Thus, parental communication and involvement appeared to support outdoor practice. Inclusion of strategies to inform parents and reframe their perceptions have been proposed by other authors to support outdoor play provision within education

and care institutions (Bundy et al., 2017; Ramsden et al., 2022; Van Rooijen & Newstead, 2017). Nevertheless, this study proposes that parental involvement would require the pedagogical framing of outdoor play and the establishment of a solid outdoor play philosophy within the staff, for this to be effectively communicated to the parents. The influences of staff training will be discussed next.

8.2.4 Staff training

Within the case studies, variations were identified regarding educators' early years training level, with more vocationally trained staff and no staff with postgraduate training in the public preschool. Educators' training level could be a parameter affecting outdoor play practice, consistently with Predy's et al. (2020) large scale study in Canadian child-care centres, identifying higher education certification as a correlate to outdoor play provision. This is also in accordance with the EPPE project (Sylva et al., 2004) and the SEED study identifying higher level of staff qualification as conducive for early years provision quality (Melhuish & Gardiner, 2018).

Differences in post-graduation outdoor play training were also identified within the case studies. Provision of outdoor play training and resources was only documented within the play-based preschool, with no relevant CPD opportunities or resources offered to the staff in the other two institutions, even though both managers expressed positive views towards outdoor play and its benefits for children. This is consistent with the general lack of mandatory centrally regulated CPD for childcare centre staff in Greece revealed through the desk research, with opportunities dependent upon the circumstances of the municipality or institution within which they are employed (Megalonidou, 2020), despite planning and budgeting for staff's CPD identified as facilitating quality early years provision (Melhuish & Gardiner, 2018). This is consistent with a societal undervaluing of childcare identified by previous studies, linking the educators' role more with care rather than education (Petrogiannis, 2010; Rentzou & Sakellariou, 2011; Rentzou, 2013; 2018).

Perhaps not surprisingly, in the play-based preschool the educators appeared more confident and coherent when discussing outdoor play and its role within preschool education, but additionally were observed to have established practices to encourage it, such as facilitating play, or encouraging children's risk management, as well as clear practical supportive routines e.g., on how to clean children's footwear after playing in the mud. The positive influence of training on educator outdoor practice has been supported by previous studies (Bilton, 2020; Gehris et al., 2015; Kantz, 2004; McInnes et al., 2011; Pyle & Daniels, 2017; Vu et al., 2011) with Predy's et al. (2020) recent study associating

more frequent educator CPD opportunities with meeting outdoor play best practices, and is proposed as an enabler for outdoor play provision.

Though all educators in CS1 and CS3 stated they valued outdoor play and identified multiple reasons why it benefits children, most appeared to have limited knowledge on how to implement actions to support it, in line with the study by McClintic & Petty (2015), which could be explained by lack of relevant training. Additionally, lack of clarity regarding their role in supporting outdoor play could accentuate a tendency to focus on physical environment limitations or the children's behaviours rather than their own practice (McInnes et al., 2011), a finding noted in the survey as well as CS1 and CS3. This study thereby proposes that lack of outdoor play training is a barrier for outdoor play provision.

Nevertheless, it would be important to point out that in the play-based preschool the existence of outdoor play training and resources were in accordance with the preschool's philosophy and pedagogy, possibly further strengthening the group's espoused beliefs and values (Schein & Schein, 2017). Moreover, the effects of training could be assumed to be further enhanced by the additional ongoing support and teamwork practices available. This view is supported by studies proposing that CPD interventions integrated within the preschool's practice, incorporating the active engagement of practitioners and peer exchanges, would enhance shared reflection and strengthen the effectiveness of training regarding changes in practice (Eurofound, 2015; Lazzari et al., 2013). Thoonen et al. (2011) proposed that learning activities, incorporating experimenting and reflection are particularly beneficial for practice, identifying the educator's sense of self-efficacy as the most prominent motivational factor. The influences of staff engagement on outdoor play provision will be discussed next.

8.2.5 Staff engagement

Staff outdoor play engagement is proposed within this study as a factor influencing outdoor play provision, with limited engagement acting as a barrier, whereas active engagement as an enabler. Within this section, engagement in planning for provision, during outdoor play, as well as in reflection over outdoor play practice, will be discussed. It is proposed that staff engagement relates both to personal attributes, such as knowledge and perceptions, as well as to factors regarding policy, staff working conditions, training provision and intentional leadership.

Engagement in planning for outdoor play

A striking difference between the play-based preschool (CS2) and the municipality-run public one (CS3) related to the educators' engagement in planning for outdoor play.

Starting with CS2, explicit practices to include educator views on outdoor play provision through team meetings were reported, especially when the preschool was first established. This practice was linked to the preschool's proclaimed outdoor play philosophy and pedagogy. Management and educators were described to jointly partake in decision-making on what the outdoor play environment should offer, actively participate in setting it up, and reflect upon how it could be changed, making relevant adaptations. This appeared, through the interviews, questionnaires, and observations, to enhance the educators' sense of ownership of the outdoor play environment, a more active stance in relation to its organisation, as well as an atmosphere of shared rather than individual goals regarding the outdoors. When asked about improvements to the outdoor play physical environment, the educators expressed no complaints in relation to the outdoor play infrastructure of the preschool.

On the contrary, the outdoor play area of the public preschool was reported to have been re-designed by architects through a higher-level municipality decision, without consultation with the preschool staff. The educators expressed concerns regarding safety and suggested 'Poor play facilities' and 'Lack of materials' as inhibiting factors for outdoor play, proposing improvements in relation to play features and materials. This was consistent with the findings from the Phase 1 survey, where a large percentage of educators had raised concerns regarding the appropriateness of their preschool's outdoor play area, with 'Lack of suitable space' proposed by more than half as the top factor decreasing children's outdoor play opportunities. This dissonance between the municipality-afforded outdoor play environment and the educators' views on its suitability would support the notion that educator involvement in planning for outdoor play provision is lacking in Greek public preschools.

Supporting this finding, document examination of the state regulations for municipality-run childcare centres (Skourletis & Fotiou, 2017) revealed that educators were expected to "Suggest needs for supplies for the rooms to support programme implementation (toys, cleaning supplies)" (p.55993), but no discussion of including the educators' suggestions regarding the configuration and set-up of the outdoor environment was found, nor any description of proposed teamwork practices to include the educators' views regarding outdoor provision. Similarly, in the presidential decree regarding the licensing and operation of municipality-run childcare centres no reference was made to the inclusion of the educators' views in relation to the set-up of the outdoor area (Pavlopoulos, 2017). Indeed, the educators in the public preschool reported that they would give suggestions for 'toys' that they needed, which the municipality would supply. It thereby appears that omitting to include staff views in the redesigning of the CS3 outdoor space may not be

due to unresponsive management, but rather to a lack of policy and subsequent teamwork practices ensuring educator participation in decision-making for the outdoors, which currently seem to only include design professionals, the municipality's technical services and higher-level officials. Such policy could be linked to what previous researchers have identified as a cultural perception undervaluing childcare (Petrogiannis, 2010; Rentzou & Sakellariou, 2011; Rentzou, 2013a), which could breed an atmosphere where the educators' views are considered less important in relation to decision making.

Coming to educator engagement in planning for adaptations to improve the physical environment, though staff in CS1 and CS3 expressed concerns about lack of materials inhibiting children's outdoor play, their involvement in enhancing it appeared very limited, even in relation to low-cost or no-cost open-ended materials requiring minimal budgeting. No expectations for educators to organise the outdoor play environment were reported in CS1 and CS3, nor teamwork strategies aiming at planning for provision, in accordance with their absence from guidelines. It would therefore appear that lack of educators' involvement in the planning for outdoor provision within policy, is mirrored within internal practice and may perpetuate a passive educator stance towards their engagement in the setting-up and enhancement of the outdoor play environment.

An additional revealing finding related to planning for outdoor play feared to restrict children's freedom, as expressed by the manager in CS1. Dewey (1938) had commented on teachers revolting against the notion of organisation because of its links to more authoritarian educational approaches. This confusion could relate to the lack of pedagogical framing of outdoor play, viewing it as 'free play', as if it occurs outside of the preschool's pedagogical programme. Legget and Newman (2017) contested the notion of 'free play', stressing the importance of educator intentionality to avoid missing out on learning opportunities outdoors. It is proposed that as in support of outdoor learning, to support children's outdoor play in preschool, one needs to acknowledge that it does take place in an adult-controlled environment and is inherently not 'free' (Kytä, 2002; Reed, 1996). Thereby, lack of staff engagement and intentionality in planning for rich outdoor play provision is proposed to act as a barrier to children's opportunities and choice (Dietze & Kashin, 2019; Haughton & Ellis, 2016).

However, it is important to note that Greek policy guidelines do not include recommendations on how the physical environment should be organised to support outdoor play, apart from a mention of stable structures and the safety guidelines they should comply to. Furthermore, no outdoor play training provision was provided to the educators in CS1 and CS3. The absence of guidelines, coupled with lack of outdoor play

training, could be hypothesised to create uneasiness and uncertainty even to educators willing to engage in enhancing the outdoor play environment. (Cheng et al., 2022; Dietze & Kashin, 2019; Van Rooijen & Newstead, 2017).

Nevertheless, this study's acknowledgement of organisational factors encumbering educator engagement does not imply that individual educators are incapable of engaging in planning and initiating change (Giddens, 1984). Even within this study one of the CS1 educators reported introducing messy materials, even though this was not accustomed within the preschool's outdoor practice. She did however also comment on negative comments from colleagues, appearing to have a dampening effect on her practice decisions. Previous studies have highlighted the opinion of other staff members as a factor influencing educators (Bilton, 2020, Cheng et al., 2022; Dietze & Kashin, 2019; Ploof, 2014). The tendency to conform to shared values and practices has also been stressed by theorists discussing the effects of organisational culture on the individual's ability to open-mindedly assess and adopt differing approaches to practice (Alvesson, 2002; Lewin, 1948; Schein & Schein, 2017). Thereby, educator engagement in planning for outdoor provision is proposed to be more effectively addressed not as an individual, but rather as a group endeavor.

An important enabler identified in the play-based preschool related to the leadership role of the manager, expressing clear intent to support outdoor play, based on coherent personal and professional values, and a vision guiding the preschool's operation. This intentional influence appeared to reinforce the espoused outdoor play beliefs and values of the group, as well as motivate staff to actively engage in outdoor play planning and practice. Bush and Glover (2003) identified that in cases of successful leadership "the philosophy, structures and activities of the school are geared towards the achievement of this shared vision" (p.5), which appeared to apply in this case. It is important to note though that this preschool was private, with the manager being one of the owners, which could be seen to create conditions not necessarily transferable to public preschools falling under centralised control. Thereby, even though intent to support outdoor play through leadership is proposed as an enabling factor for individual institutions, it may not suffice for larger-scale change, in light of the aforementioned cultural and policy barriers. Pressures to conform to centralized expectations, as well as the imposing of governmental values to leaders has been acknowledged by other authors (Bush, 2008; Hoyle and Wallace, 2005).

This study proposes that active engagement in planning for outdoor play provision, organising and enhancing the outdoor play environment is not only dependent upon

individual educators but is influenced by policy, pedagogy, training, teamwork practices, as well as leadership, which supports the proposed interrelationship between environments. Thereby though acknowledging that many individual educators can and do engage in planning for rich outdoor play even in the absence of outdoor play policy, pedagogy, or support from management and colleagues, this study highlights that it may leave them open to tensions, and additionally stresses that relying on the willingness of individuals to take it upon themselves to create change would not appear as a sturdy approach to secure improvement on a grand scale.

Engagement during outdoor play

The educator engagement during outdoor play will be discussed both in relation to institutional expectations, as well as to self-reported and observed educator roles outdoors. Within the case studies differences were unveiled regarding institutional expectations for educator outdoor practice, tentatively proposed to guide educator actions. The identified absence of outdoor play from childcare pedagogical guidelines leaves national expectations for educator outdoor practice in Greece unspecified. However, previous studies have identified a societal view of childcare centres as welfare institutions, with expectations focusing on care rather than education (Petrogiannis, 2010; Rentzou & Sakellariou, 2011; Rentzou, 2013).

A common expectation for educator outdoor practice in all case studies related to ensuring children's safety. A difference though related to whether this was addressed through a supervisory role (CS1, CS3) or through educators' risk management and children's active involvement in safety strategies (CS2). Most educators in CS1 and CS3 highlighted the supervisory role as main in their practice and an emphasis on supervision was confirmed by the play observations in three out of the four embedded cases in these preschools. An overemphasis on supervision within outdoor educator practice has been supported by studies in different countries (Chakravarthi, 2009; Copeland et al., 2012; Ihmeideh & Al-Qaryouti, 2016; Legget & Newman, 2017; Rennick, 2009) and appears consistent with the unveiled Greek cultural tendency of overprotectiveness towards children. In contrast, in the play-based preschool both participating educators were not observed to act in a supervisory capacity during the play observations nor proposed supervision in the interviews, with the preschool manager consistently expressing that supervision was not the expected practice.

The supervisory role has been identified as more detached and affording less opportunities for meaningful interaction with the children (Legget & Newman, 2017). An interesting finding related to the positioning and mobility of the educators during outdoor

play, with the ones appearing to assume a primarily supervisory role observed to stand in the outskirts of the play area, whereas the ones adopting a more active engagement to the play process to be positioned within the area where play occurred and move in accordance with children's actions. Though the roles of 'Facilitation' and 'Joining in play' were proposed in all case studies, variations were identified during the observations, with the educators primarily assuming a supervisory role appearing to display less facilitatory or joining in play behaviours.

Discussing her engagement outdoors in the interview, one of the public preschool educators raised that being alone while outdoors limited her interactions with the children, restricting her to a supervisory role to ensure children's safety. She went on to propose that increased adult presence, through staff occasionally employed on short term contracts or having students on placement, allowed for more possibilities to engage with the children. Though group sizes within the case studies appeared comparable and did not exceed governmental guidelines, the public preschool was the sole to have groups with only one educator and showed the lowest adult-child ratios, which could be seen to affect outdoor practice. This finding is in line with previous research in Greece (UNICEF, 2014, 2021), with educators in the study by Papadopoulou et al (2014) identifying large group sizes and small adult-child ratios as obstacles to practice and Rentzou and Sakellariou (2011) proposing these to affect educator-child interactions. In accordance, higher adult-child ratio and lower staff turnover were identified as conducive to early years provision quality in the SEED study (Melhuish & Gardiner, 2018). However, the way the number of educators, adult-child ratio and staff stability specifically influence educator outdoor play practice is an area requiring further study.

An additional finding, from the observations in CS1 and CS3, related to the absence of one or more of the groups' educators while the children played outdoors, attending to other responsibilities during that time, such as documentation or communication with the parents. A lack of scheduling for non-contact time was identified through the interviews with the managers, with outdoor play seen as one of the periods where these other tasks could be tackled. The effect of lack of scheduling for non-contact time on educator presence during outdoor play has not been raised by previous studies and is an area warranting further examination. In contrast to the other two institutions, the play-based preschool manager reported increased educator presence while outdoors, presenting outdoor play as an important time for active observation and interaction with the children. Thereby, it could be argued that reduced educator presence could indicate a view that the educators' active engagement is not as required outdoors as during classroom learning activities. This interpretation is supported by McClintic and Petty (2015) who

raised the issue of a prevailing educational view of the outdoors as requiring less educator attention than the indoors, allowing the educators to have a break while ensuring children's safety.

Furthermore, lack of scheduled breaks for the educators was reported in this study, although their need to take a breath from interacting with the children, as well as socialise between them was identified to affect their outdoor engagement. Educators disengaging and socializing during outdoor play has been raised in previous studies (Copeland et al., 2012; Johnson et al., 2005; McClintic & Petty, 2015), however its relationship with scheduling for educator breaks has not attracted research attention and should be further studied.

This study's findings would indicate staff engagement during outdoor play is influenced not only by the educators' individual characteristics, but additionally by policy, perceptions of the profession, provision of training, and staff working conditions.

Engagement in reflection

Though all educators showed varying degrees of reflection upon their outdoor play practice in the interviews, differences were identified both between preschools, as well as between staff, regarding regular intentional incorporation of reflection within practice. Scheduled teamwork to reflect and plan for outdoor play was only documented in CS2, informal team reflection was reported in CS1, whereas in CS3 no reports of group reflection practices were recorded. Additionally, staff in the play-based preschool engaged in in-service outdoor play training, which could provide further opportunities for shared reflection, benefiting practice (Thoonen et al., 2011), with previous studies identifying peer exchanges as enhancing shared reflection within preschool educators (Eurofound, 2015; Lazzari et al., 2013). However, though reflective practice is acknowledged to support play's pedagogical integration (Broadhead, 2007), it is also recognised to take time and be difficult to incorporate within a pressing daily schedule (Canning, 2022). This study identified lack of scheduling for non-contact time in CS1 and CS3, which could impede the educators' opportunities to reflect.

Nevertheless, apart from time, reflective practice also depends upon the educators' stance. Rose and Rogers (2012) identified 'Critical Reflector' as one of the plural practitioner roles, acknowledging how this requires an individual's constant challenging of the legitimised, prevailing traditions and habits within their institution. Dewey (1922/2008) differentiated between decisions based on 'habit' occurring in a relatively unquestioned semi-automated way, and 'inquiry' involving a self-conscious, reflective, interpretative process (Morgan, 2014). Thereby, reflective practice implies a self-

conscious, questioning stance on the part of the educators. The extent to which this stance occurs in practice though would be an area requiring further research.

Application of reflection in practice has also been linked to educators' observation of children's play (Haughton & Ellis, 2016). However, within this study confusion regarding the content and function of outdoor play observation was revealed. In CS1 and CS3 the term observation was sometimes used to refer to supervision or monitoring, confirming the hypothesis formed from the Phase 1 survey findings. Additionally, the understanding of the content and function of observation appeared to be limited, especially within CS3 where the role of 'Observer' was not proposed by any of the educators. In contrast, the educators of the play-based preschool reported to adopt the role of 'Observer', describing what it entails, and proposed strategies to document observations in writing and through photos, also confirmed through the play observations. Outdoor play documentation was only reported as an institutional expectation in CS2, which apart from its other functions, can form part of the reflective process, putting the practitioner in a position to critically reflect upon what has already occurred.

This study proposes reflective practice, both individually and through teamwork, as an enabler to outdoor play practice. However, the ways educators reflect upon outdoor play practice, or the institutional conditions influencing staff reflection appear to have received limited research attention and would require further study.

8.2.6 Physical environment's use

Coming to the physical outdoor play environment, an important finding from the case studies related to the difference between its potential and actual use. This was found to relate to access, zoning practices and permission to use materials, influencing the environment's use by the children.

Starting with use of the outdoor environment for everyday activities apart from play, differences were identified between the preschools. In the play-based preschool the outdoor space was described to be intensely used for both learning and everyday activities, such as snacks, whereas rarely in the other two preschools. This could indicate a rationale towards the outdoors as disjointed from the indoor classroom environment, which could also relate to the omission of the outdoors from practice guidelines (Maynard & Waters, 2007; Bilton & Waters, 2017).

Coming to the use of the outdoor environment for play, the interviews and play observations in CS1 and CS3 revealed fragmented use of the space and limitations to

children's access. In CS1, though the space was physically unified, zoning practices were identified, with children observed to be instructed by the educators to remain in either the left or the right side of the garden, reported in the interviews to be the standard preschool practice to avoid overcrowding, despite the play area being very spacious. This however appeared to have implications for children's play experiences, as the two separate parts of the play area afforded different possibilities, with sand for instance only existing in one and wheeled toys only in the other. It also appeared to affect children's freedom of movement and put the educators in a position where they had to limit children's access and possibly reprimand them for non-compliance.

In CS3 the segregated use of the space was more distinct, with the differences in play experiences offered being even more pronounced. Though this preschool's main play area was quite spacious, two out of the four groups of children only had access to a very small space adjacent to the building. This was a fenced rectangle area of 54sqm, with cement surfacing covered by carpet, with no natural features and containing only plastic infant and toddler-sized toys, and no natural elements. This practice seriously altered the space-child ratio from 10.3 to 3.8 square meters per child¹⁴, as well as restricted the children's play opportunities. This finding is consistent with Copeland et al. (2012) who proposed that variations in access to space and equipment could lead to children having very different movement experiences even within the same institution. This finding also raises concerns regarding children's sensory opportunities during outdoor play, as to support sensory integration children need to engage in sensory processing behaviours that are frequent, meaningful, and challenging (Ayres, 2005). Other authors have identified the crucial role of everyday environments such as preschool for children's sensory development (Roley et al., 2009; Schaaf & Smith Roley, 2006; Tovey, 2007; Wang et al., 2021), however this study proposes that children's sensory processing opportunities may not only depend upon the sensory characteristics of the environment, but also on the way that it is utilised during outdoor play.

The rationale behind the practice of reduced access in CS3, as expressed in the manager and educators' interviews, related to safety, with the main playground presented as unsafe for the younger groups. This could indicate that staff's perceptions of children's competence as well as risk and safety affect children's outdoor play access and opportunities, as supported by other authors (Brussoni et al., 2012, 2015; Gull et al., 2020;

¹⁴ This ratio would be further reduced if more than one groups were in the small play area concurrently.

Hill & Bundy, 2014; Sandseter, 2016; Sandseter & Sando, 2016; Tovey, 2010; Wyver et al., 2010). Nevertheless, an alternative or additional hypothesis for the use of this space could be that it was viewed by the educators as more convenient, as it was small and easily supervised, with direct indoor access. Previous studies have identified educators' comfort perceptions as influencing the way they utilise the physical environment and the play experiences they afford to children (Copeland et al., 2012; Johnson et al., 2005; Kernan et al., 2007), however further study would be required in this area.

This study supports that the way the physical environment is used, or rather controlled, by adults affects children's play opportunities and experiences. Actual use of the space, facilities, and materials is suggested to be considered when examining the play value of preschool outdoor areas, as merely documenting 'artifacts' (Schein & Schein, 2017) regarding their physical characteristics may not be indicative of the play opportunities they really afford children. Even quantitative parameters such as the size and space-child ratio could be severely influenced through practices of restricted access. Thereby, this finding stands in contrast to the use of instruments that assess the physical preschool play environment without including observations of the way that it is used in practice.

8.2.7 Presence of loose parts, water, and messy materials

Wide variations in the play materials' quantity, variety, mutability, aesthetics, condition, and age-appropriateness, were identified in the case studies, especially evident between the play-based and public preschools. This finding is consistent with the Phase 1 survey where play materials' limitations in public childcare centres were proposed as hindering outdoor play, whilst their enhancement was proposed as the main factor facilitating it. However, the presence of loose parts, water, and messy materials appeared to largely account for the differences between the case studies. In this section loose parts, water, and messy materials will be jointly discussed not only because of similarities in their play function, but additionally because their presence and use were identified to be influenced by common factors.

Loose parts are defined within this study as open-ended, moveable, low-cost materials, with no specific play function, from either natural or manufactured origin (Casey, 2019; Gull et al., 2019). A large number and variety of loose parts was recorded in the play-based institution, while limited loose parts were observed in CS1 and almost completely lacking in CS3. During the outdoor play observations, children in CS2 were observed to incorporate a variety of loose parts in their play, while moving, pretending, and constructing, seen to explore, manipulate, experiment, and alter the environment using

them. Similarly, the children in CS1 were observed to utilise all loose materials available, such as sand, soil, and tyres. The children in CS3, where the least loose parts were documented, were observed to utilise the very few materials available in pretense, such as using a small stick as a car key, and were also witnessed attempting to find more, for instance searching for small rocks and pinecones. Loose parts were thereby observed to attract children's attention, enhance their sensory opportunities, and enrich their play where available, thus are proposed as outdoor play enablers. This view of loose parts as enhancing children's play opportunities is supported by other authors (Bilton, 2010; Bundy et al., 2017; Casey, 2019; Engelen et al., 2018; Gibson et al., 2017; Gull et al., 2019; Houser et al., 2016; Johnson et al., 2005; Nicholson, 1971, 1972; Spencer et al., 2019; Storli et al., 2020). In the Phase 1 survey concerns regarding children's behaviour, especially in relation to conflicts regarding fighting over the same toy, difficulty sharing, or competitiveness, were highlighted by the majority of educators (88%). Similarly, minor conflicts were reported and observed in relation to sharing toys in CS1 and CS3, which could be attributed to their limited number. It could thereby be hypothesized that the play material quantity could influence children's behaviour and conflicts, which could be a factor ameliorated through the introduction of loose parts (Engelen et al., 2018).

Nevertheless, variations were identified regarding the educators' acknowledgement of loose parts' value for children's outdoor play. In the public preschool the educators did not report the use of loose parts as an element supporting children's outdoor play and did not share any knowledge regarding their function, appearing to equate play materials with toys. In contrast, staff in the play-based preschool both appeared to comprehend loose parts' usefulness as well as value their presence. Thereby a link could be proposed between educators' understanding of the value and function of loose parts in preschool outdoor play and their incorporation into practice. Variations in loose parts use within preschools has been identified in previous studies (Gull et al., 2019; Spencer et al., 2019; Houser et al., 2016), nevertheless the relationship between educators' knowledge and perceptions of loose parts play and their integration in practice has received limited attention, with Spencer et al. (2019) proposing that "the perspectives of childcare providers on the benefits and challenges of this type of play have been overlooked" (p.461).

Coming to water and messy elements, these were observed in all CS2 play observations, but not at all in the other preschools, though multiple water taps outdoors were available. In the CS2 play observations water appeared to have an invigorating effect on children's play behaviour and encourage their active engagement, with children observed to use it in a multitude of ways, such as sensory exploration, pretense, experimentation, or for

creative purposes, on its own or in conjunction with other materials. The presence of water and messy elements was also positively associated with richer sensory experiences. On top of that though, during the play observations water appeared to have a positive effect on children's emotional state, with children witnessed to be smiling, laughing, or singing while engaging with it. Water's and related messy elements' importance for the play of young children has long been recognised, both in the writings of past prominent authors such as Froebel and McMillan, as well as in contemporary studies (Bilton, 2014; Bilton et al., 2017; Kuh et al., 2013; Sando & Sandseter, 2020; Sandseter et al., 2022; Storli et al., 2020; Tovey, 2014; Woolley & Lowe, 2013), with their presence proposed within this study as enabling children's outdoor play.

An intriguing finding was that though staff in all three institutions acknowledged that children were seeking water and took joy in playing with it, yet water and all the messy materials that go with it, such as mud or wet sand, were still absent in CS1 and CS3, appearing only on special occasions and through explicit adult control. This finding is consistent with the study by Gregoriadis et al. (2016) examining childcare quality using the ECERS-R scales, where 'Sand and water' was identified as the item with the lowest score within the 'Activities' and 'Programme Structure' subscales, substantially lower than all other items. Additionally, water and messy materials were not reported as physical elements conducive to play by staff in CS1 and CS3, in contrast with the play-based one where they were highlighted by both staff and management. Apart from referring to water and messy materials in very positive terms in the questionnaires and during the interviews, CS2 staff were also observed to act accordingly, for instance encouraging the children to go out in wet weather, showing a positive attitude e.g. singing that it is raining or referring to mud as 'lovely', giving them permission to engage in water and messy play e.g. suggesting that they play in the puddles or setting up water basins, as well as coming in contact with the water and messy materials themselves. On the contrary, in the CS1 and CS3 interviews avoiding access to water was linked to children getting 'drenched' or ill, and rainwater was discussed as potentially dangerous, as it might make surfaces slippery which could result in falls. Consistently, the inclusion of water as a way to enhance the outdoor play environment was proposed by only two out of the 23 educators in the questionnaires in CS1, and by none in CS3. Staff attitudes towards play and messy materials could thereby be proposed to affect practice and limit children's outdoor play experiences, as evidenced in a CS3 observation on a sunny and hot summer's day, when a boy was witnessed secretly turning on the water tap slightly and wetting his hand, while looking around him as if expecting to be reprimanded. Previous authors have supported the relationship between staff perceptions and children's outdoor play opportunities

(Copeland et al., 2012; Brussoni et al., 2022; Dietze & Kashin, 2019; Gull et al., 2020; Kernan, 2007; Maynard & Waters, 2007; McClintic & Petty, 2015; Renick, 2009; Spencer et al., 2021; Van Rooijen & Newstead, 2017), however the effects of educator perceptions towards water and messy elements would warrant further study.

A factor proposed to influence educators' knowledge and perceptions on loose parts, water, and messy materials, relates to staff outdoor play training, as none of the educators in CS1 and CS3 had received any, in contrast to staff in CS2. Training, as discussed before, has been proposed to support educators' understanding and outdoor play practice (Bilton, 2020; Gehris et al., 2015; Johnson et al., 2005; Kantz, 2004; McInnes et al., 2011; Pyle & Daniels, 2017; Vu et al., 2011). Another factor proposed to inhibit the use of loose parts, water and messy materials is their absence from policy and pedagogical guidelines, indicating that their value for play in preschool is not widely acknowledged or promoted within Greek childcare provision. Furthermore, negative parental views regarding children getting wet or dirty, were discussed in CS1 and CS3 as affecting practice. This finding is supported by Rentzou's (2013) study exploring parental preferences, where the 'Sand/water play' item scored the lowest in both the ECERS-PQ and the ITES-PQ scales.

Additionally though, a factor that has been identified to limit both use of loose parts as well as water and messy play is that they may be considered laborious by staff. Use of loose parts implies many actions on the part of the educators, such as collecting, organising, checking for wear and tear, and renewing them, which can prove challenging (Bilton, 2014; Bilton et al., 2017; Casey, 2019; Johnson et al., 2005; Ragen, 2015; Spencer et al., 2019) especially if not supported by teamwork planning practices, such as those reported in CS2. An additional enabling physical element only observed in CS2 related to outdoor storage for play materials, with easy access to storage proposed as central in supporting the use of loose parts by previous studies (Goodling, 2016; Olsen & Smith, 2017; Spencer et al., 2019; Storli et al., 2019). As for water play, in both CS1 and CS3 children getting wet and dirty and requiring to change clothes and footwear were described as burdensome or impractical. This finding is supported by Copeland et al. (2012) who identified educators finding such routines laborious to hinder outdoor play provision. On the contrary, the routines of changing clothes and shoes appeared to be well integrated within everyday practice in the play-based preschool, with the educators helping the children, but also taking the time to encourage their independence and skill development. It thereby appears that the educator's attitudes towards the routines that surround the use of loose parts, water and messy materials might affect their integration in preschool practice, but the area of how daily activity routines influence educator play

practice does not seem to have attracted a lot of research attention in recent years and would require further study.

Another aspect of water play though was highlighted through a point in the interview with the manager of the play-based preschool, who identified that providing children with direct access to water relates to allowing them control and command over their play. Seen in this light, the permission to engage in water and messy play could be an expression, both actual and symbolic of affording children self-directedness and control. Similarly to water play, loose parts have also been associated with children's self-directedness, the ability to shape the play environment and create their own meaning (Casey, 2019; Gibson et al., 2017; Engelen et al., 2018; Nicholson, 1971, 1972; Storli et al., 2020; Tovey, 2007). Adopting a processual approach to participation (Hultgren & Johansson, 2019) defined by children's "agency, identity, and empowerment" (Alme & Reime, 2021, p.4), one could argue that promoting the use of mutable materials, such as loose parts, water, and messy elements, could be seen to support children's participation through their play actions.

The importance of children's participation has been widely discussed from a human rights perspective as well as within preschool pedagogy in recent years (Alden & Pyle, 2019; Bilton, 2014a; Clark & Moss, 2006; Hamilton & Wood, 2020; Sandseter & Seland, 2016; Wagner & Einarsdottir, 2006), yet in the case studies no formal ways to include children in decision-making for outdoor play provision were identified. This finding is consistent with the observations by Rentzou and Sakellariou (2011) who identified limited educator interactions eliciting children's opinions and interests within Greek childcare centres. In addition, the desk research and preschools' document examination revealed no proposed strategies for ensuring children's inclusion in decision-making within governmental guidelines for childcare services. In the play-based preschool informal ways for supporting children's participation were identified, through observation, documentation, as well as the use of mutable materials and nature play affording children's agency and empowerment outdoors, which could be deemed compatible with a processual (Hultgren & Johansson, 2019), spatial-relational rationale, characterised by children's "inclusion, inspiration, involvement, and challenge" (Alme & Reime, 2021, p.5). Enhancing children's participation in this way could be seen to facilitate changes to the structure and function of the physical environment in line with their needs and wishes, supporting a transition from childhood spaces, as in those assigned to children, towards children's spaces, referring to those that the children create for themselves (Bollig and Millei, 2018; Moss & Petrie, 2002) and providing a sense of meaning (Tovey, 2007). This study thereby proposes that it is not solely the materials in themselves that could enhance participation, but the whole reflective process of planning for, observing, and actively supporting

children's agency in play with mutable and messy elements, affording them control and choice. However, adults' difficulty and reluctance to allow children control and choice in their play has been highlighted in previous studies (Brown & Lynch, 2022; Copeland et al., 2012; McClintic & Petty, 2015; McInnes et al., 2011; Wood & Chesworth, 2017) and could be an additional parameter limiting loose parts, water, and messy play.

Loose parts as well as water and messy materials are inexpensive or even free, and thereby could act as enablers to outdoor play provision without the need for extensive changes in budgeting, which is especially crucial in a country such as Greece experiencing financial restrictions. However, within this study the presence and use of loose parts, water and messy materials is seen to depend not only on parameters connected to the design of the physical environment, but in their interrelationship with policy, perceptions, knowledge, as well as children's participation. Such a multifactorial view would suggest that for interventions to be successful they would need to go beyond the affordance of the materials in the physical environment, to also incorporate educator training and support, parental involvement, as well as aim for changes within policy and pedagogical guidelines.

8.2.8 Time

This study unveiled limited, scheduled daily outdoor play time in Greek childcare centres, as well as outdoor play's regular reduction or omission due to the weather. However, time for outdoor play in preschool has been highlighted as playing a defining role for children's health, development, and well-being (Bilton, 2002; Burdette & Whitaker, 2005; Kemple et al., 2016; Sando & Sandseter, 2020; Tandon et al., 2012, 2015; Ulset et al., 2017). Limited outdoor time is proposed as a barrier for outdoor play, identified through the integrated analysis to link with two primary issues: scheduling it as 'recess' and weather-related outdoor play deprivation.

Scheduling outdoor play as 'recess'

Starting with scheduling, children in all case studies were allowed to go outdoors only at a group level, for a limited time, mostly at pre-scheduled periods, albeit with varying degrees of flexibility. Desk research revealed that current childcare guidelines make no reference to outdoor play time, nor suggestions for minimum time outdoors. Previous long-standing childcare governmental guidelines in effect until 2017 though, referred to a 30-minute 'recess' per day, with most educators in the Phase 1 survey as well as in CS1 indicating daily outdoor play times revolving around this duration. Policy effects on

preschool outdoor play have been proposed by previous studies, supporting this finding (Bilton & Waters, 2017, Van Rooijen & Newstead, 2017; Wood & Chesworth, 2017).

Additionally, avoiding crowding in the playground was reported in support of scheduling practices in the case studies, even in the preschools where the size of the space exceeded governmental guidelines. One would expect that this would be more pronounced in other preschools with limited outdoor spaces and smaller space-child ratios. Desk research revealed vague outdoor space regulations and low space-child ratios, which were additionally not always adhered to, which would perpetuate the need for outdoor play scheduling within childcare centres (National Technical University of Athens, 2013). However, the relationship between scheduled time outdoors and size of the outdoor play area would require further study.

Scheduling play as 'recess', may also affect the way policy makers, preschool managers and educators approach the outdoor physical environment, implying no need for planning, resembling a 'Victorian England school yard' approach (Bilton, 2002; Garrick, 2011). However, this approach would perpetuate physical environments affording limited play opportunities for children, which in turn makes them less probable for sustaining rich play for longer periods, reinforcing the stance that scheduling short bursts of outdoor time is optimal.

In contrast to scheduling, indoor-outdoor continuity has been proposed as a strategy to increase outdoor play time in preschool (Bilton, 2002; Jones et al, 2020; Lasenby, 1990; Yoong et al, 2022). However, desk research revealed no recommendations on space configuration to accommodate indoor-outdoor continuity in childcare centres, nor any relevant pedagogical guidelines. Consistently, indoor-outdoor continuity practice was not documented in any of the case-studies. The connection between ease of access and outdoor play time was examined, with half of the classes participating as embedded cases documented to have direct outdoor access. In the play-based preschool the group with direct access to the garden reported more time outdoors than the ones situated on the first floor of the building. However, access did not appear to affect outdoor time in the other two preschools, with similar scheduled outdoor times identified between classes. Thereby, even in situations where the potential of physical indoor-outdoor continuity was afforded through direct access to the garden, indoor-outdoor separation was found to occur. This was indeed evident in the views of the managers and educators, presenting the indoor and outdoor environments in separation. This could be accentuated by the absence of a pedagogical framework promoting indoor-outdoor flow, as well as the lack

of educator training on this practice. However, the obstacles to indoor-outdoor continuity practice as well as ways to enable it would require further study (Jones et al., 2020).

Weather-related outdoor play deprivation

A major study finding related to weather conditions, or rather weather perceptions, severely limiting outdoor play time. This finding is supported by previous studies in Greece and other Southern European countries (Bento & Dias, 2017; Bitou & Waller, 2017; Sandseter, Cordovil, Hagen, Lopes, 2019), as well as studies in other parts of the world (Bilton, 2020; Boyle et al., 2022; Cheng et al., 2022; Copeland et al, 2012; Kernan, 2007; Maynard & Waters, 2007). In contrast to CS1 and CS3 where children were reported to consistently miss-out on outdoor play due to wet or cold weather, weather-associated deprivation of outdoor time was not reported or observed in the play-based preschool. This practice appeared to be supported by its expressed outdoor play philosophy and pedagogy, explicit policy of taking the children outside in all weathers, communication with the parents on the rationale behind this practice, positive educator attitudes, valuing weather variations as experience-enhancing opportunities, as well as the existence of appropriate clothing and footwear for both children and educators. Lack of waterproof clothing and footwear was identified in CS1 and CS3, but appeared indicative of the overall planning for outdoor play not to happen in wet weather rather than a causal factor.

As discussed earlier, viewing outdoor play as recess and negative weather perceptions were revealed as 'cultural perceptions' within this study, forming part of the preschool educators' basic assumptions (Schein & Schein, 2017). This study proposes that even though outdoor play time appears to rely upon individual preschools' and educators' decisions, it is influenced by interlinking organisational, human and physical factors, contrasting Copeland et al. (2012). Supporting this study, the influence of societal values, and pedagogical demands and priorities on outdoor time was proposed by Birkeland & Sørensen (2021) in a study comparing Norwegian and Chinese preschools, proposing a view of time regulation as more than an individual or internal organisational issue. The present study supports that time is not only affected by the organisational, human, and physical environments but in return also acts as an influencing factor on children's outdoor play, on a micro level, referring to daily outdoor play time, as well as on a meso and macro level (Bronfenbrenner, 2006). Interventions to increase children's outdoor play time would thereby benefit from consideration of the complex interrelationship of factors identified within this study, to be further discussed in the next section presenting the updated ESOPP conceptual model.

8.3 The updated Environmental Supportiveness for Outdoor Play in Preschool (ESOPP) conceptual model

The ESOPP model was first introduced within this study, based on the findings of the first phase of the research and the review of the literature, expanding upon the work of Bundy (1999, 2003). The initial visual representation of the model can be found in Chapter 2 (Fig. 2.1). Through the integrated analysis and interpretation of the study's findings the model was further developed to include the main barriers and enablers, as can be seen in Figure 8.1. The indicated factors were identified to both be the main barriers as well as the main enablers, viewed as two sides of the same coin.

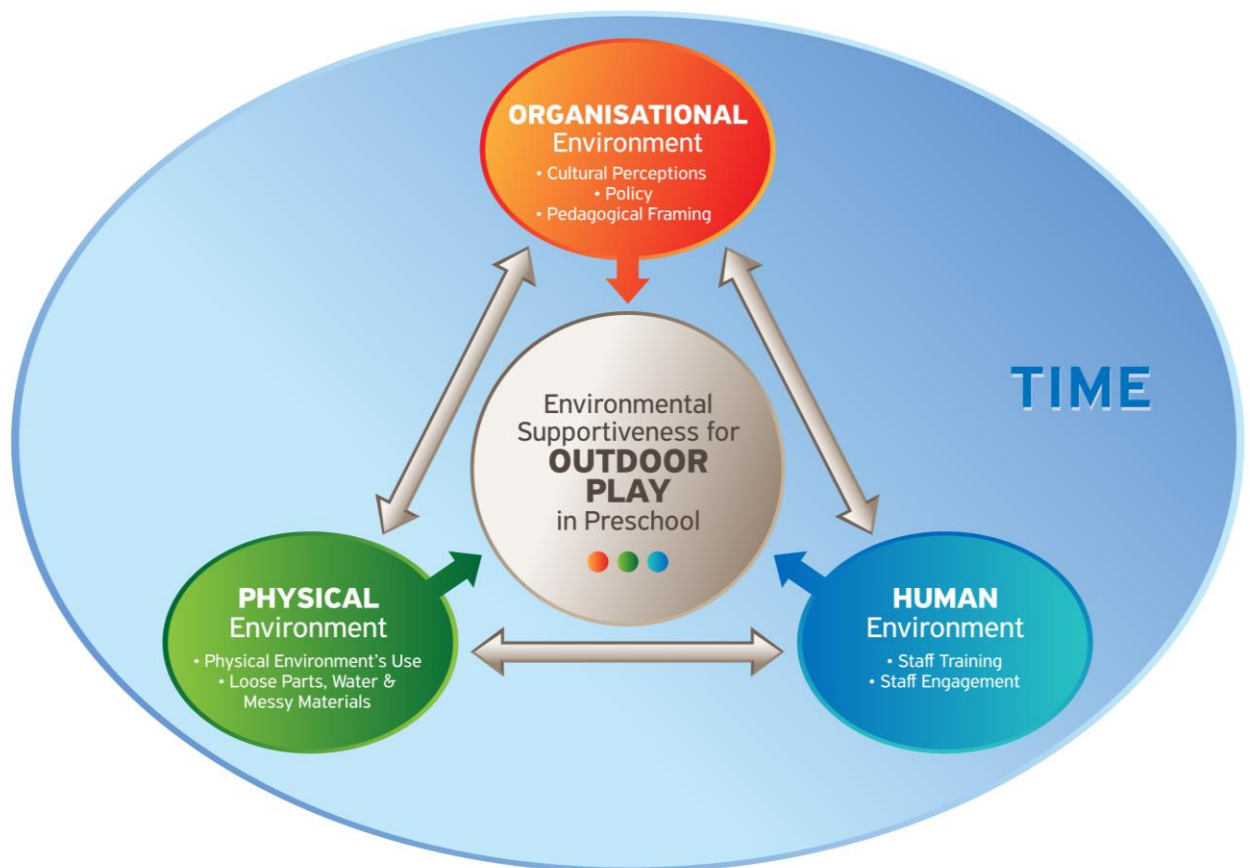


Figure 8.1: Updated Environmental Supportiveness for Outdoor Play in Preschool conceptual model.

The main influencing factors identified within the Organisational Environment were: Cultural Perceptions, Policy, and Pedagogical Framing; within the Human Environment: Staff Training and Staff Engagement; and within the Physical Environment: Physical environment's use, and Presence of loose parts, water, and messy materials. However, even though these barriers and enablers were separated within each environment for

clarity purposes, this ecological model supports that they are formed through the interrelationship between the organisational, human, and physical environments. This interrelationship highlights that the shaping of the Environmental Supportiveness for Outdoor Play is a dynamic and complex process. Time was decided not to be included as an organisational factor but to be positioned surrounding the three environments in line with Bronfenbrenner and Morris' (2006) conception of time as a Chronosystem, as it was recognised to both be influenced by all three of them, as well as form a basic influence within outdoor play provision, at the micro, meso, and macro level.

As discussed earlier in the thesis, the omission of children's role within this model was not due to lack of appreciation of their agency and participation, but because it was deemed best to firstly examine the organisational, human, and physical elements surrounding the children and determining their play environment. It is envisaged that the children will be included within this model when it is fully developed, reflecting its ecological nature, as well as the researcher's personal commitment children's agency and participation.

The ESOPP model is this study's main theoretical contribution, relating to: a) introducing the concept of environmental supportiveness for outdoor play in preschool as an ecological process shaped by the interrelationship of the organisational, human, and physical environments within time, b) viewing outdoor play provision as a responsibility in the context of human rights, c) recognising outdoor play provision as a complex phenomenon, d) proposing the ESOPP model as a way of examining and evaluating preschool outdoor play provision. These topics will now be further discussed.

8.3.1 Environmental Supportiveness for Outdoor Play in Preschool as an ecological process

This study introduced the concept of Environmental Supportiveness for Outdoor Play in Preschool, as the degree to which the interrelationship between the organisational, human, and physical elements of the environment facilitates preschool outdoor play provision. An ecological view of play was adopted, perceiving it as interlinked with the environment within which it occurs (Bilton, 2002; Bundy, 2003, 2012; IPA, 2016; Loebach & Cox, 2020; Sando & Sandseter, 2020; Wyver & Sandseter, 2019). This study's findings confirmed the interrelationship within the organisational, human, and physical environments as shaping the environmental supportiveness for outdoor play in preschool, also highlighting time as an important ecological element.

This framework addresses a gap in knowledge regarding shifting the focus towards examining how the interaction between these three environments shapes preschool outdoor play provision. This study highlighted the interrelationship between organisational factors, such as cultural perceptions, policy and outdoor play's pedagogical framing, human factors, such as educator training and engagement, and physical, such as the use of the physical environment and the presence of loose parts, water, and messy materials, for outdoor play provision, as well as the effects and importance of time. Previous studies have identified cultural and policy effects on outdoor play (Dietze & Jerebine et al., 2022; Kashin, 2019; Rogers, 2010; Spencer et al., 2021; Van Rooijen and Newstead, 2017; Wood & Chesworth, 2017), have highlighted the influences of educators' role (Bilton, 2020; Copeland et al., 2012; Dietze & Kashin, 2019; Goodling, 2016; McClintic & Petty, 2015; Spencer et al., 2019, 2021), as well as the physical environment's impact (Czalczyńska-Podolska, 2014; Dymont & O'Connell, 2013; Gibson et al., 2017; Gull et al., 2020; Larrea et al., 2019; Luchs & Fikus, 2013; Olsen & Smith, 2017; Sando & Sandseter, 2020; Sandseter et al., 2022; Söderström et al., 2013; Woolley & Lowe, 2013). The need to adopt an ecological rationale has been highlighted by other authors (Cheng et al., 2022; Lee et al., 2021; Ramsden et al., 2022), especially when it comes to framing interventions for supporting outdoor play provision in practice. Additionally, acknowledging time's crucial influence on outdoor play opportunities, as identified by other studies (Birkeland & Sørensen, 2021; Jones et al., 2020; Söderström et al., 2013; Yoong et al., 2022), this model integrates time within the ESOPP process. This conceptual model provides an initial framework supporting outdoor play's ecological examination, with the organisational, human, and physical parameters examined not in isolation but as interlinked, which could further support theory development.

8.3.2 Environmental Supportiveness for Outdoor Play in Preschool as a responsibility in the context of human rights

This conceptual framework embraces outdoor play as a human right (UN, 2013) and a valid occupation, highlighting the moral, pedagogical, and political responsibility to support it. The role of preschool institutions is recognised as vital in supporting children's outdoor play opportunities (Howard & MacInnes, 2013; Kemple et al., 2016; King & Howard, 2012; Nathan et al., 2022; Tandon et al., 2012), enhancing social justice. Considering outdoor play's benefits for children's health, development, learning, and overall well-being (Australian Government, 2022; Dodd et al., 2022; Gray et al., 2015; NHS, 2022; Nigg et al., 2021; Pellegrini, 2009; Sando & Sandseter, 2020; Tandon et al.,

2015; Tremblay et al., 2015; Wyver, 2017) this study acknowledges its decline as placing children in a disadvantageous position (Clements, 2004; Lee et al., 2021; Preub et al., 2019; Tremblay et al., 2015; Waller et al., 2017; WHO, 2017; Yogman et al., 2018), further accentuated by issues such as socio-economic conditions, or disability (Flynn & Kieff, 2002; Moore et al., 2020, 2022; Taylor et al., 2022).

This conceptual model thereby highlights the responsibility for creating preschool environments supportive of outdoor play, not only held by the individual educators and managers, but also institutions, local authorities, governments, and policy makers. By placing this responsibility on a theoretical basis, this framework could support further theory development in this area, as well as facilitate change on a real-world level.

8.3.3 Preschool outdoor play provision recognised as a complex phenomenon

This conceptual model highlights the dynamic interrelationship of the organisational, human, and physical environments within the chronosystem, showcasing outdoor play provision as a complex phenomenon. Complexity is increasingly recognised within educational research (Koopmans, 2020), with Kaplan & Garner (2020) cautioning that linear examinations of complex phenomena could lead to misrepresentation “in ways that may misguide researchers, practitioners, and policymakers” (p.486). The ESOPP framework highlights the complexity surrounding outdoor play provision, to be considered for future theory development and research planning.

As for interventions to improve outdoor play provision, this study supports that only targeting isolated factors, such as the play materials, or the educators’ personal views, will have limited effect, if their interrelationship with wider aspects of culture, policy, and pedagogy is not also addressed. This ecological viewpoint towards improving outdoor play provision was also supported by Cheng et al. (2022) stressing: “an in-depth understanding of challenges, which considers diverse ecological system levels and their interactions and various stakeholders, is necessary to inform practical and well-founded strategies to support change” (p.3). This study’s additional implications for policy development and educator training will be further discussed in the next and final chapter.

8.3.4 Proposing the ESOPP model as a way to examine and evaluate preschool outdoor play provision

This study introduced the ESOPP model and utilised it for an in-depth examination of outdoor play provision within three case studies. This examination unveiled a multitude of information in relation to how the preschools' organisational, human, and physical environments influenced outdoor play provision, as well as main factors identified to act as barriers or enablers. This type of examination showed to be holistic and ecological, producing a coherent picture of the preschools' outdoor play provision, encompassing not only what Schein and Schein (2017) referred to as obvious 'artifacts', such as the space and materials, but also unveiling more obscure analytical aspects, relating to the groups 'espoused beliefs and values', and 'underlying assumptions', additionally identifying differences within institutions.

This study thereby proposes the ESOPP model as a way to examine and evaluate preschool outdoor play provision. The scope of this process relates to further research, and the evaluation of practice together with the educators, and by no means as an external punitive measure. Through further development, this model could also potentially be used to identify areas of improvement to guide intervention, aiming to create change. To achieve this though, further study would be required both to evaluate this model's generalisability, as well as to devise and test appropriate measures and processes that would facilitate its wider application.

8.4 Summary

This chapter addressed the study's main research question: 'What are the main barriers and enablers to the environmental supportiveness for outdoor play in Greek childcare centres?' and provided a theoretical discussion on the integrated data from both phases of the study in relation to the literature.

The main themes identified as barriers and enablers for the environmental supportiveness for outdoor play in Greek childcare centres were: a) cultural perceptions, b) policy, c) pedagogical framing, d) staff training, e) staff engagement, f) physical environment's use, g) presence of loose parts, water and messy materials, and h) time.

In the second part of the chapter the updated ESOPP model was presented and the study's theoretical contribution to knowledge was discussed, in relation to the introduction of the ESOPP ecological framework, positioning outdoor play provision in the context of

human rights, recognising it as a complex phenomenon, and proposing the ESOPP model as a way to examine and evaluate preschool outdoor play provision.

The next and final chapter will further discuss the study's original contribution to knowledge, its limitations, implications for policy and educator training, as well as suggestions for further research.

CHAPTER 9: CONCLUSION

9.1 Introduction

This chapter will present a summary of the study, its main research findings and original contribution to knowledge, implications for policy and educator training, the study's limitations, as well as suggestions for further research. This chapter will end with a final personal note providing an account of my research journey.

9.2 Summary of the study

This study employed a sequential mixed methods design to explore preschool outdoor play provision in Greece, with the overarching research question being: 'What are the main barriers and enablers to the environmental supportiveness for outdoor play in Greek childcare centres?'. The study's first phase combined desk research with a survey study of educators from around Greece, to explore existing conditions surrounding outdoor play practice and gain a better understanding of the factors that support or limit outdoor play within childcare centres. The findings of this first phase identified limitations in the outdoor play opportunities of children within Greek childcare centres in relation to time, space, and resources. However, issues relating to staff attitudes, as well as the policy and cultural context overarching early childhood education and care services, appeared to influence provision. This highlighted the need for further in-depth research, which led to the study's second phase.

The second phase of the study employed a mixed methods multiple embedded case study design. Based on the literature review and the first phase findings, the conceptual model of Environmental Supportiveness for Outdoor Play in Preschool (ESOPP) was developed, examining the influence of the interrelationship between the organisational, human, and physical environments on outdoor play provision.

The following subquestions were addressed through the case studies:

RSQ1: How does the Organisational Environment influence the environmental supportiveness for outdoor play within this childcare setting?

RSQ2: How does the Human Environment influence the environmental supportiveness for outdoor play within this childcare setting?

RSQ3: How does the Physical Environment influence the environmental supportiveness for outdoor play within this childcare setting?

Three childcare centres were examined, non-profit (CS1), private play-based (CS2) and public (CS3), with two groups as embedded cases within each, producing an in-depth description of their outdoor play provision and the characteristics of their organisational, human and physical environments, as presented in the three respective Chapters 5, 6 and 7. Following the data analysis of each case in separation, research findings from both phases of the study were re-visited, re-analysed and interpreted in combination, adopting a holistic approach. The integrated analysis utilised a reflexive thematic analysis rationale, following Braun et al.'s (2018) six-phase approach, assisted through keeping a reflective diary and creating mind-maps and diagrams to explore the interrelationship between factors. Bazeley's (2018) mixed methods integrated analysis model guided the interpretation of findings, employing abductive reasoning, leading to the meta-inferences discussed within the Discussion chapter. Through this process, the preliminary ESOPP conceptual model (Fig. 2.1) was further developed (Fig. 8.1).

9.3 Main research findings

This study proposed the construct of Environmental Supportiveness for Outdoor Play in Preschool (ESOPP), defined as the degree to which the interrelationship between the organisational, human, and physical elements of the environment facilitates preschool outdoor play provision.

The main themes identified as barriers and enablers for the environmental supportiveness for outdoor play in Greek childcare centres were:

- Cultural perceptions
- Policy
- Pedagogical framing
- Staff training
- Staff engagement
- Physical environment's use
- Presence of loose parts, water, and messy materials
- Time

Dependent upon their presence and characteristics, the above factors were identified to potentially act as barriers or enablers for outdoor play provision, acting as the two sides of the same coin.

Most importantly though, the study's findings confirmed the interrelationship between the organisational, human, and physical environments shaping the preschools' environmental supportiveness for outdoor play, within the chronosystem. Thereby the study's main theoretical contribution, as discussed in the previous chapter, relates to: a) introducing the conceptual framework of environmental supportiveness for outdoor play in preschool as an ecological process shaped by the interrelationship of the organisational, human, and physical environments within time, b) highlighting outdoor play provision as a responsibility in the context of human rights, c) recognising outdoor play practice as a complex phenomenon, and d) proposing the ESOPP model as a way of examining and evaluating preschool outdoor play provision. The study's original contribution to knowledge will be discussed in the next section.

9.4 Study's original contribution to knowledge

This study's original contribution to knowledge relates to the development of a novel analytical frame in the conceptual model of Environmental Supportiveness for Outdoor Play in Preschool and the enhancement of the knowledge base regarding Greek childcare outdoor play provision.

Development of the conceptual model of Environmental Supportiveness for Outdoor Play in Preschool.

Firstly, this study's original contribution to knowledge relates to the development and use of the Environmental Supportiveness for Outdoor Play in Preschool conceptual model. The concept of Environmental Supportiveness which was introduced by Bundy (1999, 2003) to examine the play of individual children, has never before been used in the examination of outdoor play within preschool. The ESOPP ecological model, as it was further developed and enriched through the course of this study, offers a novel way to approach outdoor play provision, focusing on the interrelationship between factors from the organisational, human, and physical environments of the preschool within the chronosystem and emphasising the role of the environment on children's outdoor play opportunities. This study highlights the responsibility held not only by the individual educators, but also the managers, preschool institutions, local municipalities, government

officials and policy makers, to support children's outdoor play in one of their most important everyday environments, as is childcare.

An implication for theory relates to this study's support for an ecological approach to the examination of outdoor play provision, viewing it as a dynamic, complex phenomenon. Within this framework, though the need for identification of individual influencing factors within the organisational, human, and physical environments is recognised, the emphasis is placed on the interrelationship between them. Additionally, this study proposes analysing outdoor play provision not only on the observable artifact level, such as the space and materials or practice descriptions, but moving towards Schein and Schein's (2017) deeper analytical levels of espoused beliefs and values, as well as underlying assumptions. Such a rationale could provide a theoretical basis supporting a more in-depth understanding of the barriers to outdoor play practice and help identify effective ways to improve it.

The ESOPP analytical frame offers new theoretical insights to outdoor play provision, which could inform theory, policy and practice development, educator training, environmental design, and future research. Additionally, this model could be developed into a tool to examine and evaluate preschool outdoor play provision.

Enhancement of the knowledge base regarding Greek childcare outdoor play provision

Outdoor play provision within childcare has been sparsely researched in Greece, indicating a gap in knowledge. This study's findings have added to the knowledge-base on this subject both in relation to providing an outline of Greek outdoor play provision, as well as through a novel approach examining the complex mechanisms influencing it.

On the one hand enhancement of the knowledge base was achieved through acquiring data on issues such as outdoor play time, educator views and practice, as well as the preschools' physical environment, for which limited evidence was available in Greece.

On the other hand, the ecological exploration of this topic through the ESOPP model enhanced the knowledge base on outdoor play provision, widening the field of study regarding this topic, including elements which had not received prior research attention, such as the educators' working conditions, but additionally through this study's in-depth approach offering novel explanatory insights concerning barriers and enablers to Greek outdoor play provision. This study however further enhances the knowledge base not only in relation to Greece, but also regarding the general discourse on outdoor play provision within preschool. The study's implications for policy will be discussed in the next section.

9.5 Implications for Policy

This study's implications for policy development relate to both national policy as well as preschool's internal operational policies, identified to influence the environmental supportiveness for outdoor play in preschool. However, other factors such as pedagogical framing, staff training, educator engagement in planning for provision, physical environment's use, presence of play materials, and time for outdoor play are also dependent upon policy, making this study's policy implications multifold, identifying needs in the following areas:

- Development of a solid pedagogical framing of outdoor play, through the implementation of a national pedagogical framework for childcare centres that values outdoor play, as well as children's competence and participation, and includes clear practice guidelines. The recently developed 'Beehive' pedagogical framework (Meghir et al., 2022) could fulfill this role, however no steps towards its piloting or implementation had been taken by the time this study was concluded.
- Improvement of staff working conditions, regarding group sizes, number of educators per group, adult-child ratios, staff stability, CPD provision, as well as scheduling for non-contact time and breaks.
- Establishing outdoor play training both on an undergraduate level and through regulated CPD provision.
- Changes in the outdoor play physical environment regulations to safeguard minimum space-child ratios and include guidelines on the use of the physical environment and the presence of play materials, such as loose parts, water, and messy elements.
- Development of policy guidelines regarding minimum daily outdoor play time and play in all weathers.
- Development and implementation of policy supporting educator and children participation in the planning for outdoor play provision.

This study has highlighted the effects of policy on children's outdoor play opportunities, but also acknowledges that such policy is embedded within the country's cultural perceptions. Underlying assumptions identified to hinder outdoor play related to outdoor play viewed as a break from learning, negative weather perceptions, and an overprotective stance towards children. Thereby, an additional implication of this study relates to the need to promote changes in these perceptions on a societal level through raising awareness initiatives, lobbying, and advocacy for children's right to play, as this

would subsequently support policy development and implementation. To achieve this aim, the involvement of all stakeholders would be required, such as government officials, Universities, municipalities, staff unions, managers, educators, and parents. Change in policy thereby is considered necessary but not sufficient to create change.

The study's implications for Educator Training will be discussed in the next section.

9.6 Implications for Educator Training

This study proposes the need for enhancing staff outdoor play training both within undergraduate programmes as well as through CPD opportunities, including both theory, related to the philosophy and pedagogy supporting it, reflection upon practice, as well as practical strategies. Educator training would be helpful to include practices supporting planning for rich outdoor play, educator engagement outdoors, use of loose parts, incorporation of water and messy materials, sensory processing, playing outside in all weathers, indoor-outdoor continuity, risk management, children's participation, parental communication and involvement, inclusivity, as well as practical everyday routines. Incorporating practitioner active engagement and team reflection, with the inclusion of management staff, would support a shared philosophy and pedagogical framing underpinning outdoor play provision.

The study's limitations will be discussed in the next section.

9.7 Limitations of the study

This study's main limitations, as previously identified in the Methodology Chapter, relate to the researcher's subjectivity and the generalisability of the findings.

The subjectivity I bring as a researcher has been acknowledged throughout the course of this study and I have actively strived to remain open and sensitive to personal biases and values. Strategies such as keeping a reflective diary and the support of a 'critical friend' providing insights and promoting opportunities for critical discussion, were used to assist in the process of monitoring and disciplining my subjectivity. This was particularly pertinent in relation to acknowledging feelings of frustration about children's limited play opportunities or highlighting a sense of kinship with some educators, which could cloud the research process especially during the analysis and interpretation. Nevertheless, both my choice of research paradigm (Morgan, 2014), research design (Thomas, 2016), as

well as reflective and abductive approach to analysis (Bazeley, 2018; Braun et al., 2018), do not propose the researcher as neutral or objective, on the contrary acknowledge that my personal viewpoint and experience played a vital role in the understanding and interpretation of my findings.

As for generalisability, this study makes no claims that the findings are statistically generalisable, due to the methodological choices regarding its research design. In the first phase of the study a convenience sample was used, hence no claims of sample representativeness are made. However, the inclusion of municipalities from around Greece, and co-organising the events where data collection took place with the local authorities, supported the attempt to reach a wider representation of educators, and appeared to succeed in having a large number of educators included in the survey, based on rough estimates of the total number of educators employed within public childcare centres. Though this does not change the lack of statistical generalisation of the findings, the exploratory and descriptive aims of this first phase of the study were met, in the sense that it sketched an initial outline of outdoor play provision within Greek public childcare centres and raised issues to be further explored. Limitations were identified in relation to the survey questionnaire, primarily that seasonal differences in outdoor time and an exploration of educator weather perceptions were not included, which could have provided more data on the clearly pertinent topic of outdoor time.

Coming to the second phase of the study, the choice of a multiple embedded case study design again allows no claims for generalisability. Nevertheless, the in-depth nature of this study afforded rich findings which could potentially be transferable, relevant, and helpful for people in other settings, for them to explore further and reflect upon how they relate to their unique environment. Overall, the introduction and trial of the ESOPP model, as well as the study's findings do add to the knowledge base, increasing our understanding regarding the environmental supportiveness towards outdoor play, which could help guide theory, policy, practice, and educator training development, as well as further research, to be discussed in the next section.

9.8 Suggestions for further research

This study introduced the ESOPP model, which could be further explored through future studies. The influence of children's agency on the environmental supportiveness for outdoor play in preschool would be an area warranting further study, to clarify the way children will be included in the ESOPP model. To facilitate the measuring of the proposed

degree of environmental supportiveness for outdoor play provision, research would be needed to identify how factors identified within the organisational, human, and physical environments, as well as time, could be developed into indicators within a concise tool, which would then need to be piloted. The model's statistical generalisability within Greece would also warrant further investigation, possibly through a mixed-methods approach using random sampling. The relevance of this model to the examination of preschool outdoor play provision in other countries could also be studied.

In addition, this study raised the need for further research in the following areas:

- The effects of childcare educators working conditions on outdoor play practice, also including parameters not considered within the present study, such as financial criteria, or career advancement opportunities.
- Parental and educator weather perceptions in Greece.
- Parental and educator views of childhood and children as competent.
- The influences of educator training and incorporation of practical everyday routines on outdoor play provision.
- The influences of physical environment parameters, such as safety, size, and space-child ratio on outdoor play provision and practices such as zoning and indoor-outdoor continuity.
- The organisational, human, and physical environment influences on the use of loose parts, water, and messy materials.
- The role of loose parts, water, and messy elements in relation to enhancing children's participation.
- The influences of the sensory characteristics of the preschool outdoor play environment on children's sensory processing.

This chapter will conclude with a personal note regarding my research journey.

9.9 A final personal note: An account of my research journey

When I embarked on this research, I already had more than 20 years of clinical experience as an occupational therapist and was working within the field of play promotion and advocacy, to which the roles of researcher and Education student were added. The course of my research has helped me better comprehend the different viewpoints held

within these fields of practice, but most importantly clarified the need to find ways to bridge the interdisciplinary gaps, with an aim to support children's outdoor play.

Through my study I expanded my understanding of outdoor play within education and preschool pedagogy and developed my knowledge on concepts guiding educator practice. Additionally, trying to comprehend the factors surrounding outdoor play I went on to discover areas of study that I did not know existed and acquainted myself with concepts within fields that would at first glance seem alien to my subject, such as politics or business, but nevertheless proved pertinent. I also developed my skills as a researcher, firstly through reading other people's research, learning about methodology, applying methods to practice, analysing my data, and becoming more confident in putting my thoughts on paper. One of the most important guiding lessons that I will strive to keep in the future though was to adopt a stance of constantly questioning my assumptions. The end of this journey finds me richer not only in the understanding of the topic of outdoor play in preschool which I embarked to examine, but also as a person.

This study started with a real-world question: "Why are the children not outdoors?" and the aspiration to support the development of real-world solutions. Writing these last few lines that mark the end of this study I can confirm that I fully realise that short questions don't necessarily have easy, straightforward answers. Starting upon my research I soon realised that the area I had chosen to explore was characterised by complexity, making the choice of the 'lens' that I would use to pursue my study crucial. I believe that the adopted ecological rationale and mixed methods approach helped unravel the complexity surrounding outdoor play provision within Greek childcare. This study highlights the responsibility of individuals, institutions, and governments to support children's outdoor play. I end with the hope that its insights will prove helpful to others in the quest for improving children's outdoor play opportunities within preschool.

9.10 Summary

This final chapter presented a summary of the research, the main study findings, its original contribution to knowledge and implications for policy and educator training. Additionally, limitations of the study were discussed, as well as suggestions for further research. Finally, this chapter concluded with a personal account of my research journey.

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APPENDIX A

Test of Environmental Supportiveness (TOES) Scoring Sheet and elements for the evaluation of the environment (Skard & Bundy, 2008, p.81-82)

TEST OF ENVIRONMENTAL SUPPORTIVENESS (TOES)-7/03

Child's Name: _____		Apparent Source(s) of Motivation: _____	
Date of Observation: _____			
Child's Birth Date: _____		Location of Observation: _____	
Age at Observation: _____		Examiner: _____	
CONTINUA OF ITEMS 2 = strongly favors description on right 1 = slightly favors description on right -1 = slightly favors description on left -2 = strongly favors description on left NA = not applicable			Comments
Caregivers interfere with player's activities and opportunities	-2 -1 1 2 NA	Caregivers promote player's activities and opportunities	
Caregivers change the rules	-2 -1 1 2 NA	Caregivers adhere to consistent boundaries/rules	
Caregivers enforce unreasonably strict boundaries or fail to set boundaries	-2 -1 1 2 NA	Caregivers adhere to reasonable boundaries/rules	
Peer playmate's response to player's cues interferes with transaction	-2 -1 1 2 NA	Peer playmate's response to player's cues supports transaction	
Peer playmates do not give clear cues or give cues that interfere with the transaction	-2 -1 1 2 NA	Peer playmates give clear cues that support the transaction	
Peer playmates are dominated by player or dominate players	-2 -1 1 2 NA	Peer playmates participate as equals with player	
Older playmate's response to player's cues interferes with transaction	-2 -1 1 2 NA	Older playmate's response to player's cues supports transaction	
Older playmates fail to give clear cues or give cues that interfere with transaction	-2 -1 1 2 NA	Older playmates give clear cues that support the transaction	
Older playmates are dominated by or dominate player	-2 -1 1 2 NA	Older playmates participate as equals with player	
Younger playmate's response to player's cues interferes with transaction	-2 -1 1 2 NA	Younger playmate's response to player's cues supports transaction	
Younger playmates fail to give clear cues or give cues that interfere with transaction	-2 -1 1 2 NA	Younger playmates give clear cues that support the transaction	
Younger playmates are dominated by or dominate player	-2 -1 1 2 NA	Younger playmates participate as equals with player	
Natural/fabricated objects do not support activity of player	-2 -1 1 2 NA	Natural/fabricated objects support activity of player	
Amount and configuration of space do not support type of play	-2 -1 1 2 NA	Amount and configuration of space support activity of player	
Sensory environment does not offer adequate invitation to play	-2 -1 1 2 NA	Sensory environment offers adequate invitation to play	
Space is not physically safe	-2 -1 1 2 NA	Space is physically safe	
Space is not accessible	-2 -1 1 2 NA	Space is accessible	
Additional comments: _____			

Figure 4-11
TOES scoring sheet.

Table 4-2

Elements for Evaluation of Human and Nonhuman Environment

<i>Item</i>	<i>Description</i>
Caregiver promotes player's activities and opportunities.	Gives player access to possibilities if needed (e.g., ideas, props, or playthings). Facilitates interactions of entire group (including player). Acts in a way that says play and player's motivations are important (e.g., does not interrupt player or stop play unnecessarily). Responds to player's cues in a way that sanctions play. Available for help if needed. Shows respect for players. Is unobtrusive when appropriate. Gives only amount of direction necessary to facilitate play.
Caregiver adheres to consistent boundaries and rules.	Rules can be flexible but do not change unexpectedly or irrationally.
Caregiver adheres to reasonable boundaries and rules.	Enough to make player safe and comfortable. Not derived from power struggle. Not excessively strict; flexible when appropriate. Tacit or explicit permission to choose objects, activities, type of play, play locations.
Playmate(s) response to player's cues supports transaction.	Behaves toward player in logical, supportive way. Waits for responses (timing). Contributes to maintaining the flow of the play.
Playmate(s) gives clear cues that support transaction.	Gives clear messages about how player should interact with him or her. Messages reflect a continuation of the frame or a logical change.
Playmate(s) participates as equal with player.	Gets involved in activity. Adapts activity so it is play for self and player. Contributes good ideas. Does not get suppressed by player. Has skills to engage in the play. Plays with (rather than directs) player. Not bossy, manipulative. Shares common interests. Seems happy with status and roles in the situation.
Natural and fabricated object(s) support activity and apparent motivations of player.	Support player in his or her efforts to fulfill motivations. Allow modification of challenges. Sufficient number exists to support play. Engender feeling to do something with them.
Amount and configuration of space support activity.	Allow modification of challenges. Boundaries of play space evident when necessary.
Sensory environment offers adequate invitation to play.	Meets player's needs (this is the most important element). Colors—neither overstimulating nor drab. Level and type of noise are conducive to play (anger, crying versus laughing, chatting). Neither sterile nor overly cluttered. Temperature well controlled.
Space is physically safe.	No objects or surfaces pose an imminent threat to player's safety.
Space is accessible.	Objects are placed where player can get them readily. Readily permits movement. Provides physical support as needed for player.

APPENDIX B

Summary of tools evaluating the outdoor play environment

Some of the instruments found in the literature, aiming at evaluating the preschool outdoor play environment, are the following:

- **Preschool Outdoor Environment Measurement Scale (POEMS)** (De Bord, Hestenes, Moore, Cosco & McGinnis, 2005). This scale aims to evaluate the quality of preschool outdoor environments for 3-5-year-olds, as well as to act as a resource for environmental improvements for teachers and administrators. It uses a scale containing 56 items grouped in five domains: a) Physical environment, b) Interactions, c) Play and learning Settings, d) Programme, e) Teacher/ Caregiver role (which also includes an interview).
- **The Outdoor Play Environment Categories (OPEC)** which assesses the physical environment, through looking at: a) size, b) proportion of vegetation and hilly terrain and c) level of integration between open spaces, vegetation and play structures (Mårtensson, Boldemann, Söderström, Blennow, Englund, Grahn, 2009; Boldemann, Dal, Mårtensson, Cosco, Moore, Bieber, Blennow, Pagels, Raustorpe, Wester, Söderström, 2011; Mårtensson, 2013).
- **The Outdoor Play Rating Scale (OPRS)** was developed for measuring the quality of children's outdoor play in Chinese ECEC programs. The OPRS has nine items grouped in two subscales, a) the Space and Equipment subscale, which measures the structural quality of the outdoor play environment and b) the Activity and Organization subscale, which measures the process quality of outdoor play. Each item is scored on a 7-point Likert scale (Hu, Li, De Marco & Chen, 2014).
- **The Play Space Assessment** was developed by the Head Start Body Start National Center for Physical Development and Outdoor Play (HSBS, 2010) for early childhood centres to assess and create quality outdoor play spaces. This measure contains eleven categories which are rated by practitioners on a 5-point Likert scale. The eleven categories are: key features, movement opportunities, flexibility and play, shelter and shade structures, natural features, welcoming atmosphere, sensory elements, accessibility and inclusive play, risk and challenge, surfacing, and enclosures and safety features. This scale was based on the work by Casey (2007) and the POEMS measure by DeBord et al. (2005).

- The 7Cs Framework. This framework is coming from a landscape architecture perspective. Herrington and Lesmeister (2006) identified the following seven criteria, named the 7Cs, as important physical dimensions of the landscaped outdoor preschool physical environment: character, context, connectivity, change, chances, clarity and challenge.
- Simply Play is an assessment developed with the purpose to support the development of high-quality playable spaces through effective evaluation. This tool is based on Else's 'Integral Play Framework' (Else, 2014). It comprises 45 questions, grouped into ten themes (Else, 2014).
- The Children's Physical Environment Rating Scale (CPERS) focuses on the assessment of the physical environment of early childhood educational and care environments. The scale is divided into four parts: a) Planning, b) Building as a whole, c) Indoor Activity Spaces, d) Outdoor Spaces, with 124 items organised in 14 subscales (Moore and Sugiyama, 2007).

APPENDIX C

Data Collection Tools used in the Piloting Stage

This Appendix includes the following tools in the version used during the piloting stage:

- Phase 1 Survey Questionnaire
- Preschool managers' Interview Schedule
- Educators' Interview Schedule
- Educator questionnaire
- ESOPP Observation Tool
- Educator Diary

Educator Questionnaire on Outdoor Play in Childcare (Pilot)

1. What is your age? _____
2. How many years have you been working in preschool education and care?

3. How did you train to become a preschool educator?
 - a. University Degree
 - b. Technological Educational Institution Diploma
 - c. Post-secondary professional Training (IEK)
 - d. Vocational training (EPAL)
 - e. No special training

Please indicate the duration of your training in years/months: _____

4. Including yourself, how many members of staff work in your childcare centre?

5. What age group does the class you work in cover? (please indicate with X)

up to 18 months		18-30 months		2,5-3,5 years		3,5-5 years	

6. How many children in total are there in your class this year?

<15		15-20		21-25		26-30		>30	

7. Do you have an outdoor play area in the childcare centre you work?

Yes		No	

8. In your opinion, how appropriate is the outdoor play area of your childcare centre?

Not at all appropriate		A little appropriate		Appropriate enough		Very appropriate		Do not know/ No opinion	

9. How much time per day do the children spend outdoors while in your childcare centre? (please mark the amount of time)

_____ minutes

10. What are the main problems that arise during play?

11. In your opinion should the children spend more time playing outdoors?

Yes	
No	
Do not know/ No opinion	

12. Please rank what is most important **for you** in relation to children's play? (from 1- most important to 10-least important):

Not to get hurt		To have fun	
Not to get dirty		To learn	
To follow their own ideas		To explore	
To play in a group		To resolve their conflicts	
To follow the rules		Other (please indicate)	

13. Which in your opinion is the **main role** the educator should assume during children's unstructured play? (**please only choose one role**)

Observer		Resolves conflicts	
Facilitator		Educational	
Directing		Recreational	
Prevents accidents		Other _____ _____ _____ _____	

14. What is in your opinion the main factor that would enhance play within the childcare centre?

15. Please rank the factors that decrease the opportunities for outdoor play in the childcare centre you work (from 1-most important to 10-least important):

Lack of suitable space		Parental views & fears	
Inadequate supervision		Staff views & fears	
Need to take the children outside the childcare centre		Financial reasons	
Health and safety		Inadequate relevant training	
Legal responsibility		Other (please indicate) _____ _____ _____ _____	

16. Do you need to advise parents on issues related to their child's play?

Yes	
No	
Do not know/ No opinion	

Thank you very much for your time!

Preschool Manager Interview Schedule (Pilot)

- Demographic information (in relation to age, working experience, training)
- Do you believe that outdoor play in preschool is important?
 - If yes, why is that?
 - If no, why not?
- What play activities do you believe the children should engage in when outdoors in preschool?
- What would you encourage the educators in your preschool to do while outdoors with the children?
- Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool?
- Which elements of the outdoor physical environment should be improved and in what way?
- Do you have concerns for children's safety when outdoors?
 - If so, what are they?
- Do you take the children to locations outside the preschool grounds so that they can play outdoors?
 - If yes, why and how often?
 - If no, why not?
- Do you organise the outdoor physical environment for play in your preschool?
 - If yes, how do you go about it?
 - How often do you organise the environment?
 - If no, why not?
- Do you record observations of children's outdoor play?
 - If yes, for what purpose?
 - Do you also encourage the educators to do so?

- If no, why not?
 - Do you encourage the educators to do so?
- During your time as a manager, have you made changes to the outdoor play environment in order to improve it?
 - If yes, what kind of changes?
 - Would you consider that these changes were helpful?
 - Were there more changes that you wanted to implement?
 - If so, what were the reasons that you did not go ahead with them?
 - If no, why not?
- Does your preschool have a policy in relation to children's outdoor play?
 - If yes, what does it entail?
 - Are there written regulations in relation to children's outdoor play?
 - Have you involved the parents in the preschool's policy in relation to outdoor play?
 - If yes, in which ways?
 - If no, why not?
- How often are the children allowed to go out to play?
- How long does each outdoor play session last approximately?
- Do you believe that children's time outdoors is sufficient?
 - If not, what are the factors that keep it limited?
- Are there differences in outdoor time according to children's age?
 - If yes, why is that?
- Are there differences in outdoor time between different seasons of the year?
 - If yes, why?

- Do you believe that children should be allowed to play outside in preschool in all weather conditions?
 - If no, which weather conditions do you believe are not good for outdoor play in preschool?
- In your preschool, do children have special clothing to play outside in wet or cold weather conditions (e.g., raincoats, rain boots)?
 - If no, why not?
- Do you provide extra support for children with additional needs e.g. developmental, emotional, communication, while outdoors?
 - If no, why not?
- Have you personally had any training on supporting outdoor play?
- Have you organised any training on supporting outdoor play for your staff in this preschool?
- Do you believe that children's outdoor play in your preschool should be further supported?
 - If yes in which ways?
 - If no, why not?

Educator's Interview Schedule (Pilot)

- Demographic information (in relation to age, working experience, training, child group)
- Do you believe that outdoor play in preschool is important?
 - If yes, why is that?
 - If no, why not?
- What play activities do you believe the children should engage in when outdoors in preschool?
- How would you describe what you do when you are outdoors with the children?
- Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool?
- Which elements of the outdoor physical environment should be improved and in what way?
- Do you organise the outdoor physical environment for play in your preschool?
 - If yes, how do you go about it?
 - How often do you organise the outdoor environment?
 - If no, why not?
- While outdoors with the children, do you adapt the environment during play?
 - If yes, what is the purpose of your adaptations?
 - If no, why not?
- Do you record your observations of children's outdoor play?
 - If yes, for what purpose?
 - If no, why not?
- Does your preschool have a policy in relation to children's outdoor play?
 - If yes, what does it entail?

- Have you involved the parents in the preschool's policy in relation to outdoor play?
 - If yes, in which ways?
 - If no, why not?
- How often are the children allowed to go out to play?
- How long does each outdoor play session last approximately?
- Are there differences in outdoor time between different seasons of the year?
 - If so, why?
- Do you believe that children's time outdoors is sufficient?
 - If not, what are the factors that keep it limited?
- Do you have concerns for children's safety when outdoors?
 - If so, what are they?
- Do you take the children to locations outside the preschool grounds so that they can play outdoors?
 - If yes, why?
 - How often?
 - If no, why not?
- In your preschool, do children have special clothing to play outside in wet or cold weather conditions (e.g., raincoats, rain boots)?
 - If no, why not?
- Is there extra support available for children with additional needs e.g. developmental, emotional, communication, when outside?
 - If no, why not?
- Have you had training in relation to supporting children's outdoor play?
 - If yes, was it organised by the preschool where you are currently employed?

- Do you believe that children's outdoor play in your preschool should be further supported?
 - If yes in which ways?
 - If no, why not?

**Educator Questionnaire for Environmental Supportiveness for Outdoor Play Study
(Pilot)**

1. What is your age? _____
2. Gender:
3. How many years have you been working in preschool education and care?

4. How many years have you been working in the current preschool?

5. How did you train to become a preschool educator?
 - a. University Degree
 - b. Technological Educational Institution Diploma
 - c. Post-secondary professional Training (IEK)
 - d. Vocational training (EPAL)
 - e. No special training

Please indicate the duration of your training in years/months: _____

6. What is the age of the children in your group?
 - a) Under 1 year
 - b) 1-2 years old
 - c) 2-3 years old
 - d) 3-4 years old
 - e) 4-5 years old
 - f) 5-6 years old
 - g) I work in more than one groups. Please define your role:

7. How many children are there in your group? _____

8. On an average day, how long do children spend playing outside (please write down the time in minutes)?

In spring:

In summer:

In autumn:

In winter:

9. In your opinion, do children in your preschool spend enough time playing outside?

Yes

No

Don't know

10. In your opinion, is playing outside during preschool hours important?

Yes

No

Don't know

If yes, why do you believe that children's outdoor play in preschool is important?

11. Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool?

12. Which elements of the outdoor physical environment should be improved and in what way?

13. Which of the following, if any, are in your opinion barriers for children to play outside in your preschool's playground?

- a) Lack of time
- b) Limited play space
- c) Weather conditions
- d) Concern about children getting dirty
- e) Fear of children getting injured
- f) Poor play facilities
- g) Fear of litigation
- h) Lack of play materials
- i) Staff concerns/anxiety
- j) Parental concerns/anxiety
- k) Lack of relevant training
- l) Not enough adult supervision in the playground
- m) Other.

Please specify: _____

14. In your opinion, which is the main factor which would facilitate the development of children's outdoor play within your preschool?

15. Is there a clear policy concerning playing outside in your preschool?

Yes

No

Don't know

16. Do you believe that children should be allowed to play outside in preschool in all weather conditions?

Yes

No

Don't know

If no, which weather conditions do you believe are not good for outdoor play in preschool?

17. In your preschool, do children have special clothing to play outside in wet or cold weather conditions (e.g., raincoats, rain boots)?

Yes

No

Don't know

18. Taking the children outside to play is mostly influenced by: (please only mark one option according to what is most important for you)

- a) Own beliefs
- b) Parental expectations
- c) Pedagogical framework
- d) Preschool conditions
- e) Training
- f) Preschool policy

19. Have you had specific training on supporting children's outdoor play?

If yes, please specify:

20. What play activities do you believe the children should engage in when outdoors in preschool?

21. Do you organise the outdoor area before you take the children outside to play?

Yes No

If yes how often?

In the beginning of the year Once a month Once a week Everyday

22. How would you describe what you do when you are outdoors with the children?

Thank you for your participation!

Environmental Supportiveness for Outdoor Play in Preschool Observation Tool (Pilot)

Date of observation:

Weather conditions:

Time (start/finish):

Duration:

Number of children in the class group:

Adults supporting class group:

Number of classes playing outside at this time:

Total of children outside:

Total number of adults supporting play:

Children/adult ratio:

Presence of extra support for children with additional needs:

A) Examining the Adult Human Environment (Educators)

a) Educator promotes players' outdoor play opportunities.

Indicators

- organises the outdoor play environment beforehand
- offers tacit or explicit permission to choose objects, activities, type of play, play locations
- observes play in an active way
- available for help if needed
- adapts the physical environment in response to players' actions
- gives only amount of direction necessary to facilitate play

b) Educator supports players' play activities.

Indicators

- acts in a way that says play and players' motivations are important (e.g., does not interrupt player or stop play unnecessarily)
- facilitates interactions of entire group
- responds to players' cues in a way that sanctions play
- shows respect for players
- is unobtrusive when appropriate
- gives players access to possibilities if needed (e.g., ideas, props or playthings)
- shows playful attitude

c) Educator adheres to clear boundaries/rules

Indicators

- rules have been explained to the players in an age-appropriate way
- boundaries/ rules are evident in a visual way when necessary (e.g. signs)

d) Educator adheres to reasonable boundaries/rules

Indicators

- enough boundaries to make players safe/comfortable
- rules not derived from power struggle
- rules not excessively strict
- rules flexible when appropriate

e) Educator adheres to consistent boundaries/rules

Indicators

- rules are consistent
- rules can be flexible but do not change unexpectedly or irrationally

B) Examining the Physical Environment

1. Space

a) Amount of space supports activity of players

Indicators

- space of adequate size in relation to the number of children playing outside
- amount of space in play areas within the space adequate for group of players (e.g. size of sandbox, size of area for wheeled toys etc)

b) Configuration of space supports activity of players

Indicators

- space configuration promotes various types of play activities
- existence of areas which support basic play possibilities (e.g. locomotor play, sensory play, sociodramatic play, construction play), either separately or in combination
- space allows modification of challenges
- boundaries of play space evident when necessary

c) Space is physically safe

Indicators

- space is bound in an appropriate way in relation to the surrounding environment (e.g. height of fence, wall, plants etc)
- all areas in the space accessible by the children are safe

- no surfaces pose an imminent threat to players' safety as they engage in desired activity.
- no objects pose an imminent threat to players' safety as they engage in desired activity.

d) Space is accessible

Indicators

- outdoor play space is easily accessible from the classroom
- objects players need to attain desired benefits are placed where they can get them readily.
- space readily permits movement.
- space provides physical support as needed for players to attain desired benefits.

2. Objects.

a)Existence of adequate natural/fabricated objects

Indicators

- existence of various natural elements in the play environment (e.g. trees, plants, pine cones, leaves, sand, mud etc)
- existence of an adequate number of loose parts
- existence of various types of loose parts (e.g. sand, cardboard boxes, fabrics, wood, tyres etc)
- sufficient number of objects exist to support play without interfering with it

b) Objects support play activity and apparent motivations of players

Indicators

- objects support players in their efforts to fulfill motivations (e.g. mastery, social, sensory)
- objects allow modification of challenges
- objects engender feeling to do something with them

3. Sensory environment

a) Sensory environment supportive of players' sensory integration

Indicators

- sensory environment meets players' sensory needs (neither too intense nor too unstimulating)
- colors - neither overstimulating nor drab
- level and type of noise are conducive to play (anger, crying vs. laughing, chatting).
- offers adequate shading.

b) Sensory environment offers adequate invitation to play

Indicators

- neither sterile nor overly cluttered.
- existence of appropriate tactile elements e.g. sand, water.
- existence of appropriate vestibular elements e.g. wheeled toys, suspended equipment, rotating toys.
- existence of appropriate proprioceptive elements e.g. climbing, loose parts for lifting/ manipulating.
- existence of appropriate olfactory elements e.g. herb garden, plants, trees.

4. Observations of children's play:

Educator diary (Pilot)

Date:

- a) Did you go outside with the children today? Yes No

If yes, how long did you spend outside and if no, why not?

- b) What were the main play activities that the children engaged in today while outdoors?

- c) Did you organise the outdoor physical environment in some way before you went outside today with the children?

Yes No

- If yes, for what purpose and in what way?

d) Did you adapt the physical environment during outdoor play?

Yes

No

■ If yes, for what purpose and in what way?

e) Did you record any written observations of children's outdoor play today?

Yes

No

f) Have you got any thoughts on planning for outdoor play based on today's experience?

APPENDIX D

Data Collection Tools used in the study

This Appendix includes the following tools used in the study:

- Phase 1 Survey Questionnaire
- Preschool managers' Interview Schedule
- Educators' Interview Schedule
- Educator questionnaire
- ESOPP Observation Tool
- Educator Diary

Educator Questionnaire on Outdoor Play in Childcare

1. What is your age? _____

2. How many years have you been working in preschool education and care?

3. What age group does the class you work in cover? (please, indicate with X)

up to 18 months		18-30 months		2,5-3,5 years		3,5-5 years	

4. How many children in total are there in your class this year? (please indicate with X)

<15		15-20		21-25		26-30		>30	

5. Do you have an outdoor play area in the childcare centre you work? (please indicate with X)

Yes		No	

6. In your opinion, how appropriate is the outdoor play area of your childcare centre?
(please indicate with X)

Not at all appropriate		A little appropriate		Appropriate enough		Very appropriate		Do not know/ No opinion	

7. How much time per day do the children spend outdoors while in your childcare centre?
(please mark the amount of time in minutes)

_____ minutes

8. What are the main problems that arise during play?

9. In your opinion should the children spend more time playing outdoors? (please indicate with X)

Yes	
No	
Do not know/ No opinion	

10. Please rank what is most important **for you** in relation to children's play? (with 1 being the most important to 10 the least important):

Not to get hurt		To have fun	
Not to get dirty		To learn	
To follow their own ideas		To explore	
To play in a group		To resolve their conflicts	
To follow the rules		Other (please indicate) _____ _____ _____ _____	

11. Which in your opinion is the **main role** the educator should assume during children's unstructured play? (**please only choose one role**)

Observer		Resolves conflicts	
Facilitator		Educational	
Directing		Recreational	
Prevents accidents		Other _____ _____ _____	

12. What is in your opinion the main factor that would enhance play within the childcare centre?

13. Please rank the factors that decrease the opportunities for outdoor play in the childcare centre you work (with 1 being the most important to 10 the least important):

Lack of suitable space		Parental views & fears	
Inadequate supervision		Staff views & fears	
Need to take the children outside the childcare centre		Financial reasons	
Health and safety		Inadequate relevant training	
Legal responsibility		Other (please indicate) _____ _____ _____	

14. Do you need to advise parents on issues related to their child's play?

Yes	
No	
Do not know/ No opinion	

Thank you very much for your time!

Ερωτηματολόγιο Παιδαγωγών για το Παιχνίδι στον εξωτερικό χώρο
του Παιδικού Σταθμού

1. Ποια είναι η ηλικία σας; _____

2. Έτη που εργάζεστε στην προσχολική αγωγή: _____

3. Ποια ηλικιακή ομάδα καλύπτει το τμήμα στο οποίο εργάζεστε; (X στην επιλογή σας)

Βρεφικό (ως 18 μηνών)		Μεταβρεφικό (18 μηνών μέχρι 2½ ετών)		Προ-προνήπιο (2,5-3,5 ετών)		Προνήπιο (3,5-5 ετών)	

4. Πόσα παιδιά υπάρχουν φέτος συνολικά στην τάξη σας;

<15		15-20		21-25		26-30		>30	

5. Έχετε εξωτερικό χώρο παιχνιδιού στο σταθμό σας;

ΝΑΙ		ΟΧΙ	

6. Κατά τη γνώμη σας, ο εξωτερικός χώρος παιχνιδιού πιστεύετε πως είναι κατάλληλος;

Καθόλου		Λίγο		Αρκετά		Πολύ		Δεν ξέρω/δεν απαντώ	

7. Πόσο χρόνο την ημέρα περνούν τα παιδιά στον εξωτερικό χώρο: (παρακαλώ σημειώστε το χρόνο σε λεπτά)

_____ λεπτά

8. Ποια είναι τα κύρια προβλήματα που δημιουργούνται την ώρα του παιχνιδιού;

9. Κατά τη γνώμη σας, τα παιδιά θα πρέπει να παίζουν έξω περισσότερο χρόνο στον παιδικό σταθμό;

ΝΑΙ	
ΟΧΙ	
ΔΕΝ ΞΕΡΩ/ ΔΕΝ ΑΠΑΝΤΩ	

10. Παρακαλώ ιεραρχήστε σύμφωνα με το τι είναι πιο σημαντικό για σας σε σχέση με το παιχνίδι των παιδιών (με το 1 να είναι το πιο σημαντικό έως το 10 για το λιγότερο σημαντικό):

Να μη χτυπήσουν		Να διασκεδάζουν	
Να μη λερωθούν		Να μαθαίνουν	
Να ακολουθούν τις ιδέες τους		Να εξερευνούν	
Να παίζουν ομαδικά		Να λύνουν τις διαφορές τους μόνο τους	
Να ακολουθούν τους κανόνες		Άλλο (παρακαλώ σημειώστε) _____ _____ _____	

11. Κατά τη γνώμη σας, ποιος είναι ο κύριος ρόλος που θα πρέπει να έχει ο παιδαγωγός στο ελεύθερο παιχνίδι των παιδιών; (παρακαλώ επιλέξτε μόνο ένα ρόλο)

Παρατηρητή		Επιλύει συγκρούσεις	
Διευκολυντικός		Εκπαιδευτικός	
Κατευθυντικός		Ψυχαγωγικός	
Προλαμβάνει ατυχήματα		Άλλο _____ _____ _____	

12. Κατά τη γνώμη σας ποιος είναι ο κύριος παράγοντας που θα διευκόλυνε την ανάπτυξη του παιχνιδιού των παιδιών στον Παιδικό Σταθμό;

13. Παρακαλούμε ιεραρχήστε τους παράγοντες που μειώνουν τις ευκαιρίες για παιχνίδι έξω, στον παιδικό σταθμό όπου εργάζεστε (από 1- επηρεάζει περισσότερο έως 10- επηρεάζει λιγότερο);

Έλλειψη κατάλληλου χώρου		Στάσεις και φόβοι των γονέων	
Φύλαξη χώρου		Στάσεις και φόβοι του προσωπικού	
Ανάγκη μεταφοράς εκτός του Παιδικού Σταθμού		Οικονομικοί λόγοι	
Ασφάλεια και υγιεινή		Ελλιπής σχετική εκπαίδευση	
Θέματα νομικής ευθύνης		Άλλο (παρακαλώ σημειώστε) _____ _____ _____	

14. Χρειάζεται να συμβουλευέτε τους γονείς για θέματα που έχουν να κάνουν με το παιχνίδι των παιδιών τους;

ΝΑΙ	
ΟΧΙ	
ΔΕΝ ΞΕΡΩ/ ΔΕΝ ΑΠΑΝΤΩ	

Σας ευχαριστώ πολύ για το χρόνο σας!

Preschool Manager Interview Schedule

- Demographic information (in relation to age, working experience, training)
- Do you believe that outdoor play in preschool is important?
 - If yes, why is that?
 - If no, why not?
- What play activities do you believe the children should engage in when outdoors in preschool?
- What would you encourage the educators in your preschool to do while outdoors with the children?
- Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool?
- Which elements of the outdoor physical environment should be improved and in what way?
- Do you have rules in relation to outdoor play that have been discussed with the children?
- Do you have concerns for children's safety when outdoors?
 - If so, what are they?
- Do you believe that children should take risks during play?
- What would you consider unacceptable risk during children's play in preschool?
- Do you take the children to locations outside the preschool grounds so that they can play outdoors?
 - If yes, why and how often?
 - If no, why not?
- Do you organise the outdoor physical environment for play in your preschool?
 - If yes, how do you go about it?
 - How often do you organise the environment?
 - If no, why not?
- Do you record observations of children's outdoor play?
 - If yes, for what purpose?
 - Do you also encourage the educators to do so?

- Do the educators have time within the day or week to record their observations?
 - If no, why not?
 - Do you encourage the educators to do so?
- Do the educators have set breaks during the day?
- During your time as a manager, have you made changes to the outdoor play environment in order to improve it?
 - If yes, what kind of changes?
 - Would you consider that these changes were helpful?
 - Were there more changes that you wanted to implement?
 - If so, what were the reasons that you did not go ahead with them?
 - If no, why not?
- Does your preschool have a policy in relation to children's outdoor play?
 - If yes, what does it entail?
 - Are there written regulations in relation to children's outdoor play?
 - Have you involved the parents in the preschool's policy in relation to outdoor play?
 - If yes, in which ways?
 - If no, why not?
- How often are the children allowed to go out to play?
- How long does each outdoor play session last approximately?
- Do you believe that children's time outdoors is sufficient?
 - If not, what are the factors that keep it limited?
- Are there differences in outdoor time according to children's age?
 - If yes, why is that?
- Are there differences in outdoor time between different seasons of the year?
 - If yes, why?
- Do you believe that children should be allowed to play outside in preschool in all weather conditions?
 - If no, which weather conditions do you believe are not good for outdoor play in preschool?
- In your preschool, do children have special clothing to play outside in wet or cold weather conditions (e.g., raincoats, rain boots)?
 - If no, why not?

- Do you provide extra support for children with additional needs e.g. developmental, emotional, communication, while outdoors?
 - If no, why not?
- Have you personally had any training on supporting outdoor play?
- Have you organised any training on supporting outdoor play for your staff in this preschool?
- Do you have literature on outdoor play within the preschool, available for the educators to use?
- Do you believe that children's outdoor play in your preschool should be further supported?
 - If yes in which ways?
 - If no, why not?

Educator's Interview Schedule

- Demographic information (in relation to age, working experience, training, child group)
- Do you believe that outdoor play in preschool is important?
 - If yes, why is that?
 - If no, why not?
- What play activities do you believe the children should engage in when outdoors in preschool?
- How would you describe what you do when you are outdoors with the children?
- Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool?
- Which elements of the outdoor physical environment should be improved and in what way?
- Do you organise the outdoor physical environment for play in your preschool?
 - If yes, how do you go about it?
 - How often do you organise the outdoor environment?
 - If no, why not?
- While outdoors with the children, do you adapt the environment during play?
 - If yes, what is the purpose of your adaptations?
 - If no, why not?
- Do you record your observations of children's outdoor play?
 - If yes, for what purpose?
 - If no, why not?
- Does your preschool have a policy in relation to children's outdoor play?
 - If yes, what does it entail?
 - Have you involved the parents in the preschool's policy in relation to outdoor play?
 - If yes, in which ways?
 - If no, why not?
- How often are the children allowed to go out to play?

- How long does each outdoor play session last approximately?
- Are there differences in outdoor time between different seasons of the year?
 - If so, why?
- Do you believe that children's time outdoors is sufficient?
 - If not, what are the factors that keep it limited?
- Do you have rules in relation to outdoor play that have been discussed with the children?
- Do you have concerns for children's safety when outdoors?
 - If so, what are they?
- Do you believe that children should take risks during play?
- What would you consider unacceptable risk during children's play in preschool?
- Do you take the children to locations outside the preschool grounds so that they can play outdoors?
 - If yes, why?
 - How often?
 - If no, why not?
- In your preschool, do children have special clothing to play outside in wet or cold weather conditions (e.g., raincoats, rain boots)?
 - If no, why not?
- Is there extra support available for children with additional needs e.g. developmental, emotional, communication, when outside?
 - If no, why not?
- Have you had training in relation to supporting children's outdoor play?
 - If yes, was it organised by the preschool where you are currently employed?
- Do you believe that children's outdoor play in your preschool should be further supported?
 - If yes in which ways?
 - If no, why not?

Educator Questionnaire for Environmental Supportiveness for Outdoor Play Study

1. What is your age? _____
2. Gender: _____
3. How many years have you been working in preschool education and care?

4. How many years have you been working in the current preschool?

5. How did you train to become a preschool educator?
 - a. University Degree
 - b. Technological Educational Institution Diploma
 - c. Post-secondary professional Training (IEK)
 - d. Vocational training (EPAL)
 - e. No special training

Please indicate the duration of your training in years/months: _____

6. What is the age of the children in your group?
 - a) Under 1 year
 - b) 1-2 years old
 - c) 2-3 years old
 - d) 3-4 years old
 - e) 4-5 years old
 - f) 5-6 years old
 - g) I work in more than one groups. Please define your role:

6. How many children are there in your group? _____

7. On an average day, how long do children spend playing outside (please write down the time in minutes)?

In spring:
In summer:
In autumn:
In winter:

8. In your opinion, do children in your preschool spend enough time playing outside?

Yes No Don't know

9. In your opinion, is playing outside during preschool hours important?

Yes No Don't know

If yes, why do you believe that children's outdoor play in preschool is important?

10. Which elements of the outdoor physical environment do you believe are conducive to outdoor play in your preschool?

11. Which elements of the outdoor physical environment should be improved and in what way?

12. Which of the following, if any, are in your opinion barriers for children to play outside in your preschool's playground? Please check all that apply:

- a) Lack of time
- b) Limited play space
- c) Weather conditions
- d) Concern about children getting dirty
- e) Fear of children getting injured
- f) Poor play facilities
- g) Fear of litigation
- h) Lack of play materials
- i) Staff concerns/anxiety
- j) Parental concerns/anxiety
- k) Lack of relevant training
- l) Not enough adult supervision in the playground
- m) Other. Please specify:

13. In your opinion, which is the main factor which would facilitate the development of children's outdoor play within your preschool?

14. Is there a clear policy concerning playing outside in your preschool?

Yes

No

Don't know

15. Do you believe that children should be allowed to play outside in preschool in all weather conditions?

Yes

No

Don't know

If no, which weather conditions do you believe are not good for outdoor play in preschool?

16. In your preschool, do children have special clothing to play outside in wet or cold weather conditions (e.g., raincoats, rain boots)?

Yes

No

Don't know

17. How much the children are taken outside to play is mostly influenced by: (please only mark one option according to what is most important for you)

- a) Own beliefs
- b) Parental expectations
- c) Pedagogical framework
- d) Preschool conditions
- e) Training
- f) Preschool policy

18. Have you had specific training on supporting children's outdoor play?

If yes, please specify:

19. What play activities do you believe the children should engage in when outdoors in preschool?

20. Do you organise the outdoor area before you take the children outside to play?

Yes

No

If yes how often?

In the beginning of the year Once a month Once a week Everyday

21. How would you describe what you do when you are outdoors with the children?

Thank you for your participation.

Ερωτηματολόγιο παιδαγωγών σχετικά με το παιχνίδι στον εξωτερικό χώρο

1. Ποιά είναι η ηλικία σας; _____
2. Φύλο: _____
3. Πόσα χρόνια εργάζεστε στην προσχολική αγωγή; _____
4. Πόσα χρόνια εργάζεστε στο συγκεκριμένο πλαίσιο προσχολικής αγωγής;

5. Ποιά είναι η εκπαίδευσή σας στην προσχολική αγωγή (παρακαλούμε κυκλώστε όλα όσα ισχύουν):

- α. Μεταπτυχιακός τίτλος
- β. Δίπλωμα Πανεπιστημίου
- γ. Πτυχίο Τεχνολογικού Επαιδευτικού Ιδρύματος
- δ. Ινστιτούτο Επαγγελματικής Κατάρτισης (ΙΕΚ)
- ε. Επαγγελματικό Λύκειο (ΕΠΑ.Λ)
- στ. Δεν έχω ειδική εκπαίδευση στην προσχολική αγωγή

Διάρκεια της εκπαίδευσής σας σε έτη/ μήνες: _____

6. Ποιά είναι η ηλικία των παιδιών στο τμήμα σας; (παρακαλούμε κυκλώστε)

- α. Κάτω του 1 έτους
 - β. 1-2 ετών
 - γ. 2-3 ετών
 - δ. 3-4 ετών
 - ε. 4-5 ετών
 - στ. 5-6 ετών
 - ζ. Εργάζομαι σε παραπάνω από ένα τμήματα. Παρακαλούμε διευκρινίστε το ρόλο σας:
-

7. Πόσα παιδιά έχετε φέτος στο τμήμα σας; _____

8. Σε μία τυπική μέρα στο προσχολικό πλαίσιο, πόσο χρόνο περνούν τα παιδιά του τμήματός σας έξω; (παρακαλούμε σημειώστε το χρόνο σε λεπτά, για κάθε εποχή του χρόνου)

Το Φθινόπωρο:

Τον Χειμώνα:

Την Άνοιξη:

Το Καλοκαίρι:

9. Κατά τη γνώμη σας, τα παιδιά στο προσχολικό σας πλαίσιο περνούν επαρκή χρόνο παίζοντας έξω;

Ναι

Όχι

Δεν ξέρω/ Δεν απαντώ

10. Κατά τη γνώμη σας, είναι σημαντικό το παιχνίδι στον εξωτερικό χώρο του παιδικού σταθμού/ νηπιαγωγείου;

Ναι

Όχι

Δεν ξέρω/ Δεν απαντώ

Αν ναι, για ποιό λόγο πιστεύετε πως είναι σημαντικό;

11. Ποιά στοιχεία του φυσικού περιβάλλοντος του παιδικού σταθμού/ νηπιαγωγείου σας πιστεύετε πως υποστηρίζουν το παιχνίδι έξω; (π.χ. αμμοδόχος, τρίκυκλα κ.λπ.)

12. Ποιά στοιχεία του εξωτερικού περιβάλλοντος του παιδικού σταθμού/ νηπιαγωγείου σας πιστεύετε πως θα έπρεπε να βελτιωθούν και πώς;

13. Κατά τη γνώμη σας, αποτελούν κάποια από τα παρακάτω εμπόδια για το παιχνίδι στον εξωτερικό χώρο του παιδικού σταθμού/ νηπιαγωγείου σας; (Παρακαλούμε κυκλώστε όλα όσα ισχύουν.)

- α. Έλλειψη χρόνου
- β. Έλλειψη χώρου
- γ. Καιρικές συνθήκες
- δ. Ανησυχία μήπως τα παιδιά λερωθούν
- ε. Φόβος μήπως τα παιδιά χτυπήσουν
- στ. Φτωχές υποδομές παιχνιδιού
- ζ. Φόβοι για πιθανές νομικές επιπτώσεις
- η. Έλλειψη υλικών παιχνιδιού
- θ. Άγχος/ ανησυχίες του προσωπικού
- ι. Άγχος/ ανησυχίες των γονέων
- κ. Έλλειψη σχετικής εκπαίδευσης
- λ. Ελλιπής εποπτεία από ενήλικες στην αυλή
- μ. Άλλο. Παρακαλούμε διευκρινίστε: _____
- ν. Δεν υπάρχουν εμπόδια για το παιχνίδι στον εξωτερικό χώρο

14. Κατά τη γνώμη σας, ποιος είναι ο βασικός παράγοντας που θα διευκόλυνε την ανάπτυξη του παιχνιδιού στον εξωτερικό χώρο, στο προσχολικό σας πλαίσιο

15. Υπάρχει ξεκάθαρη πολιτική σχετικά με το παιχνίδι στον εξωτερικό χώρο στο προσχολικό σας πλαίσιο;

Ναι

Όχι

Δεν ξέρω/ δεν απαντώ

16. Πιστεύετε πως θα έπρεπε να επιτρέπεται στα παιδιά να παίζουν έξω σε όλες τις καιρικές συνθήκες όταν βρίσκονται στον παιδικό σταθμό/ στο νηπιαγωγείο;

Ναι

Όχι

Δεν ξέρω/ δεν απαντώ

Αν όχι, ποιες καιρικές συνθήκες πιστεύετε πως δεν είναι κατάλληλες για παιχνίδι έξω, στον παιδικό σταθμό/ στο νηπιαγωγείο;

17. Στο δικό σας προσχολικό πλαίσιο, έχουν τα παιδιά κατάλληλα ρούχα ώστε να παίζουν έξω σε βροχερές ή κρύες συνθήκες (π.χ. αδιάβροχα, γαλότσες);

Ναι

Όχι

Δεν ξέρω/ δεν απαντώ

18. Κατά τη γνώμη σας, η μεγαλύτερη επιρροή στο πόσο βγάζουν οι παιδαγωγοί τα παιδιά έξω να παίζουν, προέρχεται από: (παρακαλούμε σημειώστε **μόνο μία** επιλογή, που είναι η πιο σημαντική για εσάς)

- α. Προσωπικά πιστεύω
- β. Προσδοκίες των γονέων
- γ. Παιδαγωγική κατεύθυνση
- δ. Συνθήκες στο προσχολικό πλαίσιο
- ε. Εκπαίδευση
- στ. Κανόνες λειτουργίας του πλαισίου

19. Έχετε λάβει ειδική εκπαίδευση στην υποστήριξη του παιχνιδιού των παιδιών στον εξωτερικό χώρο;

Ναι

Όχι

Δεν ξέρω/ δεν απαντώ

Εάν ναι, παρακαλούμε διευκρινείστε:

20. Σε τί είδους δραστηριότητες παιχνιδιού πιστεύετε πως θα πρέπει τα παιδιά να εμπλέκονται στον εξωτερικό χώρο του παιδικού σταθμού/ νηπιαγωγείου; (π.χ. κινητικό, κατασκευαστικό κ.λπ.)

21. Οργανώνετε τον εξωτερικό χώρο πριν βγάλετε τα παιδιά έξω να παίξουν;

Ναι

Όχι

Εάν ναι, πόσο συχνά; (παρακαλούμε κυκλώστε **ένα**):

Στην αρχή της χρονιάς

Μια φορά το μήνα

Μία φορά την εβδομάδα Κάθε μέρα

22. Πώς θα περιγράφατε το τί κάνετε εσείς, όταν βρίσκεστε έξω με τα παιδιά;

Σας ευχαριστώ πολύ για τη συμμετοχή σας και το χρόνο σας!

Environmental Supportiveness for Outdoor Play in Preschool Observation Tool

Date of observation:

Weather conditions:

Time (start/finish):

Duration:

Number of children in the class group:

Adults supporting class group:

Number of classes playing outside at this time:

Total of children outside:

Total number of adults supporting play:

Children/adult ratio:

Presence of extra support for children with additional needs:

B) Examining the Adult Human Environment (Educators)

a) Educator promotes players' outdoor play opportunities.

Indicators

- organises the outdoor play environment beforehand
- offers tacit or explicit permission to choose objects, activities, type of play, play locations
- observes play in an active way
- available for help if needed
- adapts the physical environment in response to players' actions
- gives only amount of direction necessary to facilitate play

Observations

b) Educator supports players' play activities.

Indicators

- acts in a way that says play and players' motivations are important (e.g., does not interrupt player or stop play unnecessarily)
- facilitates interactions of entire group
- responds to players' cues in a way that sanctions play
- shows respect for players
- is unobtrusive when appropriate
- gives players access to possibilities if needed (e.g., ideas, props or playthings)
- shows playful attitude

Observations

c) Educator adheres to clear, reasonable and consistent boundaries/rules

Indicators

- rules have been explained to the players in an age-appropriate way
- boundaries/ rules are evident in a visual way when necessary (e.g. signs)
- rules not derived from power struggle
- rules not excessively strict
- rules flexible when appropriate
- rules are consistent
- rules can be flexible but do not change unexpectedly or irrationally

Observations

C) Examining the Physical Environment

1. Space

a) Amount of space supports activity of players

Indicators

- space of adequate size in relation to the number of children playing outside
- size of play areas within the space adequate for group of players (e.g. size of sandbox, size of area for wheeled toys etc)

Observations

b) Configuration of space offers adequate invitation to play and supports activity of players

Indicators

- outdoor play space is easily accessible from the classroom
- space configuration promotes various types of play activities
- neither sterile nor overly cluttered.
- space readily permits movement
- existence of areas which support basic play possibilities either separately or in combination, such as:
 - physically active play
 - sensory play
 - social play
 - sociodramatic play
 - construction play
 - creative play
 - nature play
- space allows modification of challenges
- space includes areas where the children can 'hide' such as bushes, small houses, etc.
- boundaries of play space evident when necessary

Observations

c) Space is physically safe

Indicators

- space is bound in an appropriate way in relation to the surrounding environment (e.g. height of fence, wall, plants etc)
- all areas in the space accessible by the children are safe
- no surfaces pose an imminent threat to players' safety as they engage in desired activity.
- no objects pose an imminent threat to players' safety as they engage in desired activity.

Observations

2. Objects.

a)Existence of adequate natural/fabricated objects

Indicators

- existence of various natural elements in the play environment (e.g. trees, plants, pine cones, leaves, sand, mud etc)
- existence of an adequate number of loose parts
- objects players need to attain desired benefits are placed where they can get them readily.
- existence of various types of loose parts (e.g. sand, cardboard boxes, fabrics, wood, tyres etc)
- sufficient number of objects exist to support play without interfering with it
- existence of storage space for play materials outdoors

Observations

b) Objects support play activity and apparent motivations of players

Indicators

- objects support players in their efforts to fulfill motivations (e.g. mastery, social, sensory)
- objects allow modification of challenges
- objects engender feeling to do something with them

Observations

3. Sensory environment

a) Sensory environment supportive of players' sensory modulation¹⁵

Indicators

- sensory environment meets players' sensory needs (neither too intense nor too unstimulating)
- colors - neither overstimulating nor drab
- level and type of noise are conducive to play
- offers adequate shading

Observations

b) Sensory environment offers adequate opportunities for use of all senses

Indicators

- opportunities to visually explore e.g. light and shade, natural elements e.g. leaves, flowers, insects, observe through a magnifying glass
- opportunities to explore sound e.g. levels of sound, music, echo, rhythm
- existence of appropriate tactile opportunities e.g. different textures such as sand, soil, leaves, water, soapy water, mud, slime, finger paints
- existence of appropriate vestibular ¹⁶opportunities e.g. running, jumping, hopping, balancing, bouncing, sliding, moving through space on wheeled toys, rotating, hanging upside down, swinging
- existence of appropriate proprioceptive ¹⁷opportunities e.g. climbing, hanging on, lifting, digging, pedaling wheeled toys, pushing, pulling
- existence of appropriate olfactory elements e.g. scents from plants, trees, herbs
- opportunities for taste e.g. having snacks or food outdoors, edible plants

Observations

4. Children's play observed during outdoor time

Observations

¹⁶ Vestibular relates to “sensation derived from stimulation to the vestibular mechanism in the inner ear that occurs through movement and position of the head” contributing to postural and visual functions (Bundy et al., 2002, p. 480).

¹⁷ Proprioception relates to “sensations derived from movement and joint position” (Bundy et al., 2002 p.479).

Educator diary

Date:

g) Did you go outside with the children today? Yes No

■ If yes, how long did you spend outside? _____

■ If no, why not?

h) What were the main play activities that the children engaged in today while outdoors?

i) Did you organise the outdoor physical environment in some way before you went outside today with the children?

Yes

No

■ If yes, for what purpose and in what way?

j) Did you adapt the physical environment during outdoor play?

Yes

No

■ If yes, for what purpose and in what way?

k) Did you record any written observations of children's outdoor play today?

Yes

No

l) Have you got any thoughts on planning for outdoor play based on today's experience?

Ημερολόγιο Παιδαγωγού

Ημερομηνία:

α) Βγήκατε έξω με τα παιδιά σήμερα; Ναι Όχι

- Αν ναι, πόσο χρόνο περάσατε έξω;

- Αν όχι, γιατί όχι;

β) Ποιές ήταν οι κύριες δραστηριότητες παιχνιδιού στις οποίες ενεπλάκησαν τα παιδιά σήμερα, ενώ ήταν έξω;

γ) Οργανώσατε με κάποιο τρόπο το εξωτερικό περιβάλλον πριν βγείτε έξω σήμερα με τα παιδιά;

Ναι

Όχι

- Αν ναι, με ποιό τρόπο και για ποιό σκοπό;

δ) Προσαρμόσατε με κάποιο τρόπο το περιβάλλον κατά τη διάρκεια του παιχνιδιού έξω;

Ναι

Όχι

- Αν ναι, με ποιό τρόπο και για ποιό σκοπό;

ε) Κάνατε γραπτή καταγραφή σε σχέση με το παιχνίδι των παιδιών στον εξωτερικό χώρο σήμερα;

Ναι

Όχι

στ) Έχετε κάποιες σκέψεις σε σχέση με το μελλοντικό σχεδιασμό για παιχνίδι έξω, με βάση τη σημερινή εμπειρία;

APPENDIX E

University of Reading Ethical Approval Documents

This Appendix includes the completed Ethical Approval Form A and Risk Assessment Form approved by the University of Reading's Institute of Education Ethics Committee.

Tick one:
Staff project: _____ PhD X EdD _____

Name of applicant (s): Dimitra Elida Kalpogianni

Title of project: "An examination of the environmental supportiveness for outdoor play in preschool."

Name of supervisor (for student projects): Prof Helen Bilton and Prof Jill Porter

Please complete the form below including relevant sections overleaf.

	YES	NO
Have you prepared an Information Sheet for participants and/or their parents/carers that:	X	
a) explains the purpose(s) of the project	X	
b) explains how they have been selected as potential participants	X	
c) gives a full, fair and clear account of what will be asked of them and how the information that they provide will be used	X	
d) makes clear that participation in the project is voluntary	X	
e) explains the arrangements to allow participants to withdraw at any stage if they wish	X	
f) explains the arrangements to ensure the confidentiality of any material collected during the project, including secure arrangements for its storage, retention and disposal	X	
g) explains the arrangements for publishing the research results and, if confidentiality might be affected, for obtaining written consent for this	X	
h) explains the arrangements for providing participants with the research results if they wish to have them	X	
i) gives the name and designation of the member of staff with responsibility for the project together with contact details, including email. If any of the project investigators are students at the IoE, then this information must be included and their name provided	X	
k) explains, where applicable, the arrangements for expenses and other payments to be made to the participants		X
j) includes a standard statement indicating the process of ethical review at the University undergone by the project, as follows: 'This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct'.	X	
k) includes a standard statement regarding insurance: 'The University has the appropriate insurances in place. Full details are available on request'.	X	
Please answer the following questions		

1) Will you provide participants involved in your research with all the information necessary to ensure that they are fully informed and not in any way deceived or misled as to the purpose(s) and nature of the research? (Please use the subheadings used in the example information sheets on blackboard to ensure this).	X		
2) Will you seek written or other formal consent from all participants, if they are able to provide it, in addition to (1)?	X		
3) Is there any risk that participants may experience physical or psychological distress in taking part in your research?		X	
4) Have you taken the online training modules in data protection and information security (which can be found here: http://www.reading.ac.uk/internal/imps/Staffpages/imps-training.aspx)?	X		
5) Have you read the Health and Safety booklet (available on Blackboard) and completed a Risk Assessment Form to be included with this ethics application?	X		
6) Does your research comply with the University's Code of Good Practice in Research?	X		
	YES	NO	N.A.
7) If your research is taking place in a school, have you prepared an information sheet and consent form to gain the permission in writing of the head teacher or other relevant supervisory professional?	X		
8) Has the data collector obtained satisfactory DBS clearance?	X		
9) If your research involves working with children under the age of 16 (or those whose special educational needs mean they are unable to give informed consent), have you prepared an information sheet and consent form for parents/carers to seek permission in writing, or to give parents/carers the opportunity to decline consent?	X		
10) If your research involves processing sensitive personal data, or if it involves audio/video recordings, have you obtained the explicit consent of participants/parents?	X		
11) If you are using a data processor to subcontract any part of your research, have you got a written contract with that contractor which (a) specifies that the contractor is required to act only on your instructions, and (b) provides for appropriate technical and organisational security measures to protect the data?			X
12a) Does your research involve data collection outside the UK?	X		
12b) If the answer to question 12a is "yes", does your research comply with the legal and ethical requirements for doing research in that country?	X		
13a) Does your research involve collecting data in a language other than English?	X		
13b) If the answer to question 13a is "yes", please confirm that information sheets, consent forms, and research instruments, where appropriate, have been directly translated from the English versions submitted with this application.	X		
14a. Does the proposed research involve children under the age of 5?	X		
14b. If the answer to question 14a is "yes": My Head of School (or authorised Head of Department) has given details of the proposed research to the University's insurance officer, and the research will not proceed until I have confirmation that insurance cover is in place.	X		
If you have answered YES to Question 3, please complete Section B below			

Please complete either Section A or Section B and provide the details required in support of your application. Sign the form (Section C) then submit it with all relevant attachments (e.g. information sheets, consent forms, tests, questionnaires, interview schedules) to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.

A: My research goes beyond the 'accepted custom and practice of teaching' but I consider that this project has no significant ethical implications. (Please tick the box.) This study does not involve any intervention on the part of the researcher. The data to be collected is not considered sensitive and confidentiality guidelines will be adhered to. All observation to take place will be naturalistic and non-participatory. The researcher will be discreet and aim not to disrupt the play process in any way. Appropriate consent will be acquired by the preschool manager, the educators and the parents. The researcher will also be presented to the children and they will have the chance to ask any questions they might have.	X
Please state the total number of participants that will be involved in the project and give a breakdown of how many there are in each category e.g. teachers, parents, pupils etc. Two preschools will be involved in this study, with 2 preschool managers and 4 preschool educators to be interviewed, about 30 educators will complete questionnaires and about 100 children will be observed during outdoor play.	
Title: "An examination of the environmental supportiveness for outdoor play in preschool." This study using a multiple embedded case study design aims to examine the environmental supportiveness for outdoor play in preschool. The purpose of the study is to gain a deeper understanding of the way that the play environment affects and facilitates outdoor play, with a view to inform planning, training and policy regarding outdoor play in preschool education and care. Two preschool institutions will be the main cases of the study, with two classes from each institution being the embedded units. One of the preschools will have an expressed play-based philosophy, whereas the second one will follow the basic governmental guidelines. The cases were chosen so that they provide the researcher with ample opportunities to examine the environmental supportiveness for outdoor play phenomenon, within settings utilising a different pedagogical framework. This study does not involve any form of intervention on the part of the researcher. Various data collection methods will be employed in order to gain a fuller and deeper understanding of how the physical, human and organisational environments support outdoor play within preschool. The data collection methods will include: a questionnaire to be given to all the educators in the preschool regarding their views and practice in relation to outdoor play, an interview with the preschool manager and two educators from each preschool, an outline of the outdoor space and documentation of the play materials by the researcher, outdoor play observation of the two classes taking part during the normally occurring play-times, educator diaries relating to outdoor play practice, and examination of relevant regulation documents. Information sheets for the study will be given to all participants and consent forms will be acquired by the preschool managers, the educators and the parents. Participation is voluntary. Any data collected will be held strictly confidential and will only be seen by the researcher. The manager, the educators, the children, or the preschool will not be identifiable in any published report resulting from the study. No real names and no identifiers linking the manager, the educators, the preschool or any child to the study will be included in my thesis, or any sort of report or academic paper that might be published based on the data. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to them. Estimated start date of the project: The pilot study is estimated to begin in April 2019 and the main study in September 2019. Project duration: 6 months	

B: I consider that this project may have ethical implications that should be brought before the Institute's Ethics Committee.	
Please state the total number of participants that will be involved in the project and give a breakdown of how many there are in each category e.g. teachers, parents, pupils etc.	

C: SIGNATURE OF APPLICANT:

Note: a signature is required. Typed names are not acceptable.

I have declared all relevant information regarding my proposed project and confirm that ethical good practice will be followed within the project.

Signed:

Print Name:

Date: 16/1/2019

*DIMITRA ELIDA
KALPOGIANNI*

STATEMENT OF ETHICAL APPROVAL FOR PROPOSALS SUBMITTED TO THE INSTITUTE ETHICS COMMITTEE

This project has been considered using agreed Institute procedures and is now approved.

Signed:

Print Name

Karen Jones

Date 28 February 2019

(IoE Research Ethics Committee representative)*

* A decision to allow a project to proceed is not an expert assessment of its content or of the possible risks involved in the investigation, nor does it detract in any way from the ultimate responsibility which students/investigators must themselves have for these matters. Approval is granted on the basis of the information declared by the applicant.

Select one:

Staff project: ☐ PGR project: ☒ MA/UG project: ☐

Name of applicant (s): Dimitra Elida Kalpogianni

Title of project: "An examination of the environmental supportiveness for outdoor play in preschool."

Name of supervisor (for student projects): Prof Bilton and Prof Porter

A: Please complete the form below

Brief outline of Work/activity:	This study, using a case study design, aims to examine the environmental supportiveness for outdoor play in preschool, using various data collection tools, such as: questionnaires to be completed by the educators, interviews with preschool managers and educators, educator diaries, space outline and play material documentation, naturalistic observation of outdoor play and document examination.	
Where will data be collected?	Within preschool institutions.	
Significant hazards:	None	
Who might be exposed to hazards?	None	
Existing control measures:	The study does not involve any intervention on the part of researcher, nor would it be considered sensitive in relation to the information collected. Appropriate safety regulations already exist within the preschool institutions to take part, which will be adhered to.	
Are risks adequately controlled:	Yes ☒ No ☐	
If NO, list additional	Additional controls	Action by:

controls and actions required:		

B: SIGNATURE OF APPLICANT:

I have read the Health and Safety booklet posted on Blackboard, and the guidelines overleaf.
 I have declared all relevant information regarding my proposed project and confirm risks have been adequately assessed and will be minimized as far as possible during the course of the project.

Signed:

Print Name:

Date: 16/1/2019

*DIMITRA ELIDA
KALPOGIANNI*

STATEMENT OF APPROVAL TO BE COMPLETED BY SUPERVISOR (FOR UG AND MA STUDENTS) OR BY IOE ETHICS COMMITTEE REPRESENTATIVE (FOR PGR AND STAFF RESEARCH).

This project has been considered using agreed Institute procedures and is now approved.

Signed:

Print Name

Karen Jones Date 28 February 2019

* A decision to allow a project to proceed is not an expert assessment of its content or of the possible risks involved in the investigation, nor does it detract in any way from the ultimate responsibility which students/investigators must themselves have for these matters. Approval is granted on the basis of the information declared by the applicant.

APPENDIX F

Information and consent forms

This Appendix includes the information and consent forms for the study's participants, in the following order in English and in Greek:

- Educators asked to complete the questionnaires
- Preschool managers to take part in the case studies
- Educators to take part in the embedded case studies
- Parents whose children would be observed in the case studies

Educator Information Sheet - Questionnaire

Project name: An examination of the environmental supportiveness for outdoor play in preschool.

My name is Elida Dimitra Kalpogianni and I am a PhD student at the University of Reading. As part of my thesis I am conducting research into the environmental supportiveness for outdoor play in preschool.

What is the project?

I am conducting a study looking at the environmental supportiveness for outdoor play. I am interested in finding out more about the way that the physical, human and organisational environment supports children in engaging in outdoor play activities while in preschool. The purpose of the study is to gain a deeper understanding of the way that the play environment affects and facilitates outdoor play, with a view to inform planning, training and policy regarding outdoor play in preschool education and care.

Why have I been chosen?

You have been invited to take part in this study because you are an educator working within preschool with children aged 2-5 years old. The preschool where you work has expressed an interest in being involved in this research study. In addition, we have invited other educators working with 2-5 year old children in your preschool to take part in the study.

Do I have to take part?

Participation is entirely voluntary. You may also withdraw your consent to participation at any time during the project, without any repercussions to you, by contacting the researcher, Mrs Kalpogianni, Tel: , email: d.kalpogianni@pgr.reading.ac.uk

What will happen if I participate in this study?

This study does not involve any form of intervention on the part of the researcher. You will be invited to complete a questionnaire regarding your views and practice in relation to outdoor play. The questionnaire is expected to take up to 15-20 minutes to complete.

What are the advantages and disadvantages of taking part?

By consenting to taking part, you will be helping improve knowledge on outdoor play within preschool childcare. The findings of the study are anticipated to be useful for educators and preschool managers in planning how to support outdoor play within preschool, as well as for future policy development in this area.

The only disadvantage to you taking part in this study is that you have to give some of your time for the completion of the questionnaire.

What will happen to the data?

The information given by participants in the study will remain confidential and will only be seen by the researcher. The educators, the children or the preschool will not be identifiable in any published report resulting from the study. Information provided by the educators will not be shared with the preschool management. No real names and no identifiers linking the educator, the preschool or any child to the study will be included in my thesis, any sort of report or academic paper that might be published based on the data.

Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to them.

What happens if I change my mind?

You are free to withdraw from the study at any time you feel uncomfortable or unwilling to participate, and you do not have to specify a reason.

Who has reviewed the study?

This research project has been reviewed according to the procedures specified by the University of Reading's Research Ethics Committee, and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

Where can I get more information?

If at any stage you wish to receive further information about this research project please do not hesitate to contact me on the following contact details.

Student Contact Details

Elida Dimitra Kalpogianni
26 Papagou Street, Halandri

Athens, 15234

Phone:

E-Mail: d.kalpogianni@pgr.reading.ac.uk

What happens if something goes wrong?

If you are unsatisfied with any aspect of this project, please feel free to contact my supervisor.

Supervisor Contact Details

Name: Prof Helen Bilton

Phone: + 44 (0) 118 378 2683

E-Mail: h.o.bilton@reading.ac.uk

I do hope that you will agree to take part in the study. If you do, please complete the attached consent form.

Yours faithfully,

Elida Dimitra Kalpogianni

Research Project: An examination of the environmental supportiveness for outdoor play in preschool.

Participant Consent Form

I have read the Information Sheet about the project and received a copy of it.
I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Name of educator: _____

Name of preschool: _____

Please tick:

I consent to completing a questionnaire.

☐

Signed: _____

Date: _____

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Το όνομά μου είναι Ελίντα Δήμητρα Καλπογιάννη και εκπονώ το Διδακτορικό μου στο Πανεπιστήμιο του Reading στη Μεγάλη Βρετανία. Στα πλαίσια της διατριβής μου, πραγματοποιώ έρευνα γύρω από το πώς το περιβάλλον υποστηρίζει το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή.

Τί αφορά αυτή η μελέτη;

Πραγματοποιώ μία έρευνα που εξετάζει την περιβαλλοντική υποστήριξη για το παιχνίδι στον εξωτερικό χώρο. Ενδιαφέρομαι να μάθω περισσότερα γύρω από τον τρόπο που το φυσικό, το ανθρώπινο και το οργανωτικό περιβάλλον, υποστηρίζουν την εμπλοκή των παιδιών σε δραστηριότητες παιχνιδιού στον εξωτερικό χώρο του πλαισίου προσχολικής αγωγής. Αυτή η έρευνα περιλαμβάνει δύο ακόμη προσχολικά πλαίσια στην Αθήνα. Ο στόχος της μελέτης είναι να αποκτηθεί μία βαθύτερη κατανόηση του τρόπου που το περιβάλλον του παιχνιδιού επηρεάζει και διευκολύνει το παιχνίδι στον εξωτερικό χώρο, στοχεύοντας στη βελτίωση του σχεδιασμού, της εκπαίδευσης και της πολιτικής γύρω από το παιχνίδι στον εξωτερικό χώρο στην προσχολική αγωγή.

Γιατί έχω επιλεγεί;

Έχετε προσκληθεί να πάρετε μέρος στη μελέτη αυτή, γιατί είστε παιδαγωγός στην προσχολική αγωγή παιδιών ηλικίας 2-5 ετών. Το προσχολικό πλαίσιο στο οποίο δουλεύετε εξέφρασε ενδιαφέρον στο να συμμετάσχει σε αυτή την έρευνα. Όλοι οι παιδαγωγοί που δουλεύουν με παιδιά αυτής της ηλικίας στο ίδιο προσχολικό πλαίσιο, έχουν προσκληθεί να πάρουν μέρος στη μελέτη.

Είμαι υποχρεωμένη/ος να πάρω μέρος;

Η συμμετοχή είναι απολύτως εθελοντική. Επίσης, μπορείτε να αποσύρετε τη συναίνεσή σας σε οποιαδήποτε στιγμή κατά τη διάρκεια της μελέτης, χωρίς να υπάρχει καμία συνέπεια για εσάς, επικοινωνώντας με την ερευνήτρια, κυρία Καλπογιάννη, Τηλ. 6986755306, email: d.kalpogianni@pgr.reading.ac.uk

Τί εμπεριέχει η συμμετοχή μου στη μελέτη;

Θα προσκληθείτε να συμπληρώσετε ένα ερωτηματολόγιο σχετικά με τις απόψεις και την πρακτική σας, όσον αφορά το παιχνίδι στον εξωτερικό χώρο. Ο χρόνος συμπλήρωσης του ερωτηματολογίου υπολογίζεται έως 15-20 λεπτά.

Ποιά είναι τα πλεονεκτήματα και τα μειονεκτήματα της συμμετοχής μου;

Συναινώντας στο να συμμετάσχετε, βοηθάτε στην ανάπτυξη της γνώσης γύρω από το παιχνίδι στον εξωτερικό χώρο των παισίων προσχολικής αγωγής. Περιμένουμε πως τα ευρήματα της μελέτης θα είναι χρήσιμα για την υποστήριξη του παιχνιδιού στον εξωτερικό χώρο, τόσο από τις παιδαγωγούς όσο και από τις διευθύνσεις των παισίων, καθώς και για την ανάπτυξη πολιτικής σε σχέση με το θέμα αυτό στο χώρο της προσχολικής αγωγής.

Το μόνο μειονέκτημα σε σχέση με τη συμμετοχή σας σε αυτή τη μελέτη, είναι πως θα πρέπει να δώσετε λίγα λεπτά από το χρόνο σας για να συμπληρώσετε το ερωτηματολόγιο.

Τί θα συμβεί με τα δεδομένα που θα συλλεγούν;

Οι πληροφορίες που θα δοθούν από τους συμμετέχοντες στη μελέτη αυτή θα παραμείνουν εμπιστευτικές και μόνο η ερευνήτρια θα έχει πρόσβαση σε αυτές. Η ταυτότητα των παιδαγωγών, των παιδιών και του προσχολικού πλαισίου δε θα είναι αναγνωρίσιμη σε οποιοδήποτε έγγραφο που θα προκύψει από τη μελέτη. Κανένα πραγματικό όνομα ή αναγνωριστικό στοιχείο, που μπορεί να συνδέσει τους παιδαγωγούς, το προσχολικό πλαίσιο ή κάποιο παιδί με τη μελέτη δε θα συμπεριληφθεί στη διατριβή μου, οποιοδήποτε αναφορά ή ακαδημαϊκή εργασία που μπορεί να δημοσιευτεί με βάση τα δεδομένα που θα συλλεγούν.

Τα γραπτά αρχεία της έρευνας θα φυλάσσονται με ασφάλεια κλειδωμένα, καθώς και σε υπολογιστή προστατευμένο με κωδικό, στα οποία μόνο η ερευνήτρια θα έχει πρόσβαση.

Τι θα γίνει αν αλλάξω γνώμη;

Είστε ελεύθεροι να αποσυρθείτε από τη μελέτη σε οποιαδήποτε στιγμή, αν νιώσετε άβολα ή δε θέλετε πια να συμμετέχετε, χωρίς να χρειάζεται να δώσετε κάποιο λόγο για αυτό.

Ποιός έχει ελέγξει τη μελέτη;

Η ερευνητική αυτή μελέτη έχει ελεγχθεί σύμφωνα με τις διαδικασίες της Επιτροπής Ηθικής του Πανεπιστημίου του Reading, και έχει λάβει θετική εισήγηση για την εκπόνησή της. Το Πανεπιστήμιο έχει τις απαραίτητες ασφαλιστικές διαδικασίες σε εφαρμογή. Περισσότερες πληροφορίες είναι διαθέσιμες εφόσον ζητηθούν.

Από πού μπορώ να πάρω περισσότερες πληροφορίες;

Αν σε οποιαδήποτε στιγμή θελήσετε να λάβετε περισσότερες πληροφορίες για την ερευνητική αυτή μελέτη παρακαλούμε μη διστάσετε να επικοινωνήσετε μαζί μου, στα παρακάτω στοιχεία επικοινωνίας

Στοιχεία επικοινωνίας ερευνήτριας

Ελίνα Δήμητρα Καλπογιάννη, Παπάγου 26, Χαλάνδρι, Αθήνα, 15234. Τηλ.: 6986755306
E-Mail: d.kalpogianni@pgr.reading.ac.uk

Τι θα γίνει αν κάτι πάει λάθος;

Αν είστε δυσαρεστημένοι για οποιοδήποτε στοιχείο της μελέτης αυτής, παρακαλώ μη διστάσετε να επικοινωνήσετε με την εισηγήτριά μου.

Στοιχεία επικοινωνίας εισηγήτριας

Όνομα: Prof Helen Bilton Τηλ.: + 44 (0) 118 378 2683
E-Mail: h.o.bilton@reading.ac.uk

Ελπίζω πως θα δεχθείτε να πάρετε μέρος στη μελέτη. Αν δέχεστε, παρακαλώ συμπληρώστε τη φόρμα συναίνεσης που επισυνάπτεται.

Με εκτίμηση,

Ελίνα Δήμητρα Καλπογιάννη

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Φόρμα συναίνεσης για τη συμμετοχή στη μελέτη

Έχω διαβάσει τη φόρμα πληροφοριών για τη μελέτη και έχω λάβει αντίτυπο αυτής. Καταλαβαίνω το στόχο της μελέτης και το τί απαιτείται από εμένα. Όλες οι ερωτήσεις μου έχουν απαντηθεί.

Όνομα παιδαγωγού: _____

Όνομα πλαισίου προσχολικής αγωγής: _____

Παρακαλώ σημειώστε με X:

Συναινώ στο να συμπληρώσω το ερωτηματολόγιο.

☐

Υπογραφή: _____

Ημερομηνία: _____

Preschool Manager Information Sheet

Project name: An examination of the environmental supportiveness for outdoor play in preschool.

My name is Elida Dimitra Kalpogianni and I am a PhD student at the University of Reading. As part of my thesis I am conducting research into the environmental supportiveness for outdoor play in preschool.

What is the project?

I am conducting a study looking at the environmental supportiveness for outdoor play. I am interested in finding out more about the way that the environment supports children in engaging in outdoor play activities while in preschool. This research will involve three preschools in the Athens area, with two classes from each being observed. The purpose of the study is to gain a deeper understanding of the way that the play environment affects and facilitates outdoor play, with a view to inform planning, training and policy regarding outdoor play in preschool education and care.

Why has my preschool been chosen?

Your preschool has been invited to take part in this study because you cater for children aged 2-5 years old and you are in the Athens area.

Do I have to take part?

Participation is entirely voluntary. You may also withdraw your consent to participation at any time during the project, without any repercussions to you, by contacting the researcher, Mrs Kalpogianni, Tel: _____, email: d.kalpogianni@pgr.reading.ac.uk

What will happen if my preschool and I participate in this study?

This study does not involve any form of intervention on the part of the researcher. The study follows a multiple embedded case study design, with your preschool being one of the main cases and two of your classes being the embedded units. Data collection methods involve:

- a) an interview with yourself, lasting approximately 45-60 minutes at a time and place convenient for you.
- b) a questionnaire to be given to all the educators in the preschool, regarding their views and practice in relation to outdoor play, that is expected to take up to 10 minutes to complete.

c) an interview with one educator from each of the two classes taking part in the study, lasting approximately 45 minutes, at a time and place convenient for them and the preschool.

d) outdoor space outline and play materials documentation. The researcher will make a rough top view depiction of the outdoor play area to scale, indicating the configuration and organisation of the space and record the play materials available.

e) outdoor play observation of the two classes taking part, during the normally occurring play-times. Each class will be observed on two occasions. During the observation Mrs Kalpogianni will complete an observation form to record the ways that the human and physical environment support outdoor play. She will not need to interact with anyone during the observation and will not disrupt the play activities in any way.

f) the completion of a daily diary relating to outdoor play practice, for a total of two weeks, by the two educators taking part in the study. This diary will contain information such as time and duration of outdoor play, planning for outdoor play and educator reflection. The time needed for completing this diary is not expected to exceed 10 minutes per day.

g) examination of preschool documents that relate to outdoor play practice.

The purpose of employing the various data collection methods is to gain a fuller and deeper understanding of how the environment supports outdoor play within preschool.

What are the advantages and disadvantages of taking part?

By consenting to taking part, you will be helping improve knowledge on outdoor play within preschool. The findings of the study are anticipated to be useful for educators and preschool managers in planning how to support outdoor play within preschool, as well as for future training and policy development in this area.

The only disadvantage to you taking part in this study is that you have to give some of your and the educators' time for the interviews, the questionnaire and the completion of the diaries.

What will happen to the data?

Any data collected will be held strictly confidential and will only be seen by the researcher. The manager, the educators, the children, or the preschool will not be identifiable in any published report resulting from the study. No real names and no identifiers linking the manager, the educators, the preschool or any child to the study will be included in my thesis, or any sort of report or academic paper that might be published based on the data.

Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to them.

What happens if I change my mind?

You are free to withdraw from the study at any time you feel uncomfortable or unwilling to participate, and you do not have to specify a reason.

Who has reviewed the study?

This research project has been reviewed according to the procedures specified by the University of Reading's Research Ethics Committee, and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

Where can I get more information?

If at any stage you wish to receive further information about this research project please do not hesitate to contact me on the following contact details.

Student Contact Details

Elida Dimitra Kalpogianni
26 Papagou Street, Halandri
Athens, 15234

Phone:

E-Mail: d.kalpogianni@pgr.reading.ac.uk

What happens if something goes wrong?

If you are unsatisfied with any aspect of this project, please feel free to contact my supervisor.

Supervisor Contact Details

Name: Prof Helen Bilton
Phone: + 44 (0) 118 378 2683
E-Mail: h.o.bilton@reading.ac.uk

I do hope that you will agree to take part in the study. If you do, please complete the attached consent form.

Yours faithfully,

Elida Dimitra Kalpogianni

Principal researcher: Elida Dimitra Kalpogianni

Tel. number:

Email: d.kalpogiani@pgr.reading.ac.uk

Research Project: An examination of the environmental supportiveness for outdoor play in preschool.

Preschool Manager Consent Form

I have read the Information Sheet about the project and received a copy of it.
I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Name of Preschool Manager: _____

Name of preschool: _____

Please tick as appropriate:

I consent to the involvement of my school in the project as outlined in the Information Sheet.

☐

I consent to participating in an interview.

☐

I consent to the audio-recording of the interview

☐

Signed: _____

Date: _____

Φόρμα πληροφοριών για Διεύθυνση Πλαισίου Προσχολικής Αγωγής

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Το όνομά μου είναι Ελίντα Δήμητρα Καλπογιάννη και εκπονώ το Διδακτορικό μου στο Πανεπιστήμιο του Reading στη Μεγάλη Βρετανία. Στα πλαίσια της διατριβής μου, πραγματοποιώ έρευνα γύρω από το πώς το περιβάλλον υποστηρίζει το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή.

Τί αφορά αυτή η μελέτη;

Πραγματοποιώ μία έρευνα που εξετάζει την περιβαλλοντική υποστήριξη για το παιχνίδι στον εξωτερικό χώρο. Ενδιαφέρομαι να μάθω περισσότερα γύρω από τον τρόπο που το φυσικό, το ανθρώπινο και το οργανωτικό περιβάλλον, υποστηρίζουν την εμπλοκή των παιδιών σε δραστηριότητες παιχνιδιού στον εξωτερικό χώρο του πλαισίου προσχολικής αγωγής. Αυτή η έρευνα περιλαμβάνει δύο ακόμη προσχολικά πλαίσια στην Αθήνα. Ο στόχος της μελέτης είναι να αποκτηθεί μία βαθύτερη κατανόηση του τρόπου που το περιβάλλον του παιχνιδιού επηρεάζει και διευκολύνει το παιχνίδι στον εξωτερικό χώρο, στοχεύοντας στη βελτίωση του σχεδιασμού, της εκπαίδευσης και της πολιτικής γύρω από το παιχνίδι στον εξωτερικό χώρο στην προσχολική αγωγή.

Γιατί έχει επιλεγεί το δικό μας προσχολικό πλαίσιο;

Το προσχολικό σας πλαίσιο έχει προσκληθεί να πάρει μέρος στη μελέτη αυτή, γιατί βρίσκεται στην περιοχή της Αθήνας και εξυπηρετεί παιδιά ηλικίας 2-5 ετών.

Είμαι υποχρεωμένη/ος να πάρω μέρος;

Η συμμετοχή είναι απολύτως εθελοντική. Επίσης, μπορείτε να αποσύρετε τη συναίνεσή σας σε οποιαδήποτε στιγμή κατά τη διάρκεια της μελέτης, χωρίς να υπάρχει καμία συνέπεια για εσάς, επικοινωνώντας με την ερευνήτρια, κυρία Καλπογιάννη, Τηλ. 6986755306, email: d.kalpogianni@pgr.reading.ac.uk

Τί εμπεριέχει η συμμετοχή του προσχολικού πλαισίου στη μελέτη;

Η μελέτη ακολουθεί μία μεθοδολογία πολλαπλής ένθετης μελέτης περίπτωσης (multiple embedded case study design), με το προσχολικό σας πλαίσιο να αποτελεί μία από τις κύριες περιπτώσεις και δύο από τα τμήματα τις ένθετες μονάδες. Οι μέθοδοι συλλογής δεδομένων περιλαμβάνουν:

α) μία συνέντευξη μαζί σας, διάρκειας 45-60 λεπτών, σε χρόνο και τόπο που σας εξυπηρετεί.

β) ερωτηματολόγια που θα δοθούν σε όλες τις παιδαγωγούς του προσχολικού πλαισίου, σχετικά με τις απόψεις τους και την πρακτική τους, όσον αφορά το παιχνίδι στον εξωτερικό χώρο. . Ο χρόνος συμπλήρωσης του ερωτηματολογίου υπολογίζεται στα 15-20 λεπτά.

γ) μία συνέντευξη με τις δύο παιδαγωγούς από τα τμήματα που θα πάρουν μέρος στη μελέτη, διάρκειας περίπου 45 λεπτών, σε χρόνο και τόπο που εξυπηρετεί εκείνες και το προσχολικό σας πλαίσιο.

δ) καταγραφή του εξωτερικού χώρου και των υλικών παιχνιδιού. Η ερευνήτρια θα φτιάξει μία κάτοψη του εξωτερικού χώρου παιχνιδιού σε κλίμακα, που θα περιλαμβάνει τη διαμόρφωση και την οργάνωση του χώρου και θα καταγράψει τα υπάρχοντα υλικά παιχνιδιού.

ε) παρατήρηση του παιχνιδιού στην αυλή των δύο τάξεων που παίρνουν μέρος. Θα πραγματοποιηθούν δύο παρατηρήσεις για κάθε τάξη. Η ερευνήτρια θα συμπληρώσει μία φόρμα παρατήρησης, όπου θα καταγράφει τους τρόπους που το φυσικό και ανθρώπινο περιβάλλον υποστηρίζουν το παιχνίδι. Δεν απαιτείται επικοινωνία με τα παιδιά ή τις παιδαγωγούς κατά τη διάρκεια της παρατήρησης και το παιχνίδι δε θα διαταραχθεί με κανένα τρόπο.

στ) η συμπλήρωση ενός ημερολογίου, από τις δύο παιδαγωγούς που θα πάρουν μέρος στη μελέτη, σε σχέση με το παιχνίδι στον εξωτερικό χώρο, για συνολικά δύο εβδομάδες κατά τη διάρκεια της μελέτης. Το ημερολόγιο θα εμπεριέχει πληροφορίες, όπως η διάρκεια του παιχνιδιού, η οργάνωση του χώρου και σκέψεις για μελλοντικό σχεδιασμό. Ο χρόνος που απαιτείται για τη συμπλήρωση του ημερολογίου υπολογίζεται να μην ξεπερνά τα 10 λεπτά την ημέρα.

ζ) μελέτη των εγγράφων του προσχολικού πλαισίου που σχετίζονται με το παιχνίδι στον εξωτερικό χώρο π.χ. κανονισμός λειτουργίας

Ο στόχος της χρήσης ποικίλων μεθόδων συλλογής δεδομένων, είναι η ανάπτυξη μιας βαθύτερης κατανόησης του τρόπου που το περιβάλλον υποστηρίζει το παιχνίδι στον εξωτερικό χώρο μέσα στο προσχολικό πλαίσιο.

Ποιά είναι τα πλεονεκτήματα και τα μειονεκτήματα της συμμετοχής μου;

Συναινώντας στο να συμμετάσχετε, βοηθάτε στην ανάπτυξη της γνώσης γύρω από το παιχνίδι στον εξωτερικό χώρο των πλαισίων προσχολικής αγωγής. Περιμένουμε πως τα ευρήματα της μελέτης θα είναι χρήσιμα για την υποστήριξη του παιχνιδιού στον εξωτερικό χώρο, τόσο από τις παιδαγωγούς όσο και από τις διευθύνσεις των πλαισίων, καθώς και για την ανάπτυξη πολιτικής σε σχέση με το θέμα αυτό στο χώρο της προσχολικής αγωγής.

Το μόνο μειονέκτημα σε σχέση με τη συμμετοχή σας σε αυτή τη μελέτη, είναι πως θα πρέπει να δώσετε κάποιο από το χρόνο σας, καθώς και χρόνο των δύο παιδαγωγών για τις συνεντεύξεις, καθώς και για τη συμπλήρωση του ημερολογίου.

Τί θα συμβεί με τα δεδομένα που θα συλλεγούν;

Οι πληροφορίες που θα δοθούν από τους συμμετέχοντες στη μελέτη αυτή θα παραμείνουν εμπιστευτικές και μόνο η ερευνήτρια θα έχει πρόσβαση σε αυτές. Η ταυτότητα των παιδαγωγών, των παιδιών και του προσχολικού πλαισίου δε θα είναι αναγνωρίσιμη σε οποιοδήποτε έγγραφο που θα προκύψει από τη μελέτη. Κανένα πραγματικό όνομα ή αναγνωριστικό στοιχείο, που μπορεί να συνδέσει τους παιδαγωγούς, το προσχολικό πλαίσιο ή κάποιο παιδί με τη μελέτη δε θα συμπεριληφθεί στη διατριβή μου, οποιοδήποτε αναφορά ή ακαδημαϊκή εργασία που μπορεί να δημοσιευτεί με βάση τα δεδομένα που θα συλλεγούν.

Τα γραπτά αρχεία της έρευνας θα φυλάσσονται με ασφάλεια κλειδωμένα, καθώς και σε υπολογιστή προστατευμένο με κωδικό, στα οποία μόνο η ερευνήτρια θα έχει πρόσβαση.

Τι θα γίνει αν αλλάξω γνώμη;

Είστε ελεύθεροι να αποσυρθείτε από τη μελέτη σε οποιαδήποτε στιγμή, αν νιώσετε άβολα ή δε θέλετε πια να συμμετέχετε, χωρίς να χρειάζεται να δώσετε κάποιο λόγο για αυτό.

Ποιός έχει ελέγξει τη μελέτη;

Η ερευνητική αυτή μελέτη έχει ελεγχθεί σύμφωνα με τις διαδικασίες της Επιτροπής Ηθικής του Πανεπιστημίου του Reading, και έχει λάβει θετική εισήγηση για την εκπόνησή της. Το Πανεπιστήμιο έχει τις απαραίτητες ασφαλιστικές διαδικασίες σε εφαρμογή. Περισσότερες πληροφορίες είναι διαθέσιμες εφόσον ζητηθούν.

Από πού μπορώ να πάρω περισσότερες πληροφορίες;

Αν σε οποιαδήποτε στιγμή θελήσετε να λάβετε περισσότερες πληροφορίες για την ερευνητική αυτή μελέτη παρακαλούμε μη διστάσετε να επικοινωνήσετε μαζί μου, στα παρακάτω στοιχεία επικοινωνίας

Στοιχεία επικοινωνίας ερευνήτριας

Ελίντα Δήμητρα Καλπογιάννη, Παπάγου 26, Χαλάνδρι, Αθήνα, 15234, Τηλ.: 6986755306

E-Mail: d.kalpogianni@pgr.reading.ac.uk

Τι θα γίνει αν κάτι πάει λάθος;

Αν είστε δυσαρεστημένοι για οποιοδήποτε στοιχείο της μελέτης αυτής, παρακαλώ μη διστάσετε να επικοινωνήσετε με την εισηγήτριά μου.

Στοιχεία επικοινωνίας εισηγήτριας

Όνομα: Prof Helen Bilton, Τηλ.: + 44 (0) 118 378 2683, E-Mail: h.o.bilton@reading.ac.uk

Ελπίζω πως θα δεχθείτε να πάρετε μέρος στη μελέτη. Αν δέχεστε, παρακαλώ συμπληρώστε τη φόρμα συναίνεσης που επισυνάπτεται.

Με εκτίμηση,

Ελίντα Δήμητρα Καλπογιάννη

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Φόρμα συναίνεσης Διευθύντριας για τη συμμετοχή στη μελέτη

Έχω διαβάσει τη φόρμα πληροφοριών για τη μελέτη και έχω λάβει αντίτυπο αυτής. Καταλαβαίνω το στόχο της μελέτης και το τί απαιτείται από εμένα. Όλες οι ερωτήσεις μου έχουν απαντηθεί.

Όνομα Διευθύντριας: _____

Όνομα παιδικού σταθμού/ νηπιαγωγείου: _____

Παρακαλούμε σημειώστε με X:

Συναινώ στη συμμετοχή του παιδικού σταθμού/ νηπιαγωγείου στη μελέτη, όπως αναφέρεται στη φόρμα πληροφοριών.

☐

Συναινώ στο να πάρω μέρος στη συνέντευξη.

☐

Συναινώ στην ηχογράφηση της συνέντευξης.

☐

Υπογραφή: _____

Ημερομηνία: _____

Educator Information Sheet

Project name: An examination of the environmental supportiveness for outdoor play in preschool.

My name is Elida Dimitra Kalpogianni and I am a PhD student at the University of Reading. As part of my thesis I am conducting research into the environmental supportiveness for outdoor play in preschool.

What is the project?

I am conducting a study looking at the environmental supportiveness for outdoor play. I am interested in finding out more about the way that the physical, human and organisational environment supports children in engaging in outdoor play activities while in preschool. This research will involve three preschools in the Athens area, with two classes from each being observed. The purpose of the study is to gain a deeper understanding of the way that the play environment affects and facilitates outdoor play, with a view to inform planning, training and policy regarding outdoor play in preschool education and care.

Why have I been chosen?

You have been invited to take part in this study because you are an educator working within preschool with children aged 2-5 years old. The preschool where you work has expressed an interest in being involved in this research study. In addition, we have invited other educators working with 2-5 year old children in your preschool to take part in the study.

Do I have to take part?

Participation is entirely voluntary. You may also withdraw your consent to participation at any time during the project, without any repercussions to you, by contacting the researcher, Mrs Kalpogianni, Tel: _____, email: d.kalpogianni@pgr.reading.ac.uk

What will happen if I participate in this study?

This study does not involve any form of intervention on the part of the researcher. With your agreement, Mrs Kalpogianni, will observe two sessions of your class' outdoor play-time, during the normally occurring times. During the observation Mrs Kalpogianni will complete an observation form to record the ways that the human and physical environment support outdoor play. She will not need to interact with anyone during the observation and will not disrupt the play activities in any way. The purpose of the observations is to gain a deeper understanding of how the environment supports outdoor play within preschool.

In addition to the play observations, you will be interviewed by Mrs Kalpogianni, at a time and place convenient to you. The interview will take approximately 45 minutes. You will also be asked to complete a daily diary in relation to your outdoor play practice, for a total of two weeks during the study. This diary will contain information such as time and duration of outdoor play, planning for outdoor play and educator reflection. The time needed for completing this diary is not expected to exceed 10 minutes per day.

What are the advantages and disadvantages of taking part?

By consenting to taking part, you will be helping improve knowledge on outdoor play within preschool childcare. The findings of the study are anticipated to be useful for educators and preschool managers in planning how to support outdoor play within preschool, as well as for future policy development in this area.

The only disadvantage to you taking part in this study is that you have to give some of your time for the 45 minute interview and the completion of the daily diary for a total of two weeks.

What will happen to the data?

The information given by participants in the study will remain confidential and will only be seen by the researcher. The educators, the children or the preschool will not be identifiable in any published report resulting from the study. Information provided by the educators will not be shared with the preschool management. No real names and no identifiers linking the educator, the preschool or any child to the study will be included in my thesis, any sort of report or academic paper that might be published based on the data.

Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to them.

What happens if I change my mind?

You are free to withdraw from the study at any time you feel uncomfortable or unwilling to participate, and you do not have to specify a reason.

Who has reviewed the study?

This research project has been reviewed according to the procedures specified by the University of Reading's Research Ethics Committee, and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

Where can I get more information?

If at any stage you wish to receive further information about this research project please do not hesitate to contact me on the following contact details.

Student Contact Details

Elida Dimitra Kalpogianni
26 Papagou Street, Halandri
Athens, 15234

Phone:

E-Mail: d.kalpogianni@pgr.reading.ac.uk

What happens if something goes wrong?

If you are unsatisfied with any aspect of this project, please feel free to contact my supervisor.

Supervisor Contact Details

Name: Prof Helen Bilton
Phone: + 44 (0) 118 378 2683
E-Mail: h.o.bilton@reading.ac.uk

I do hope that you will agree to take part in the study. If you do, please complete the attached consent form.

Yours faithfully,

Elida Dimitra Kalpogianni



Principal researcher: Elida Dimitra Kalpogianni
Tel. number:
Email: d.kalpogiani@pgr.reading.ac.uk

Research Project: An examination of the environmental supportiveness for outdoor play in preschool.

Educator Consent Form

I have read the Information Sheet about the project and received a copy of it.
I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Name of educator: _____

Name of preschool: _____

Please tick as appropriate:

I consent to participating in an interview. ☐

I consent to the audio-recording of the interview ☐

I consent to being observed while outdoors with the children. ☐

I consent to completing the educator diary for the specified duration. ☐

Signed: _____

Date: _____

Φόρμα πληροφοριών για παιδαγωγούς

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Το όνομά μου είναι Ελίντα Δήμητρα Καλπογιάννη και εκπονώ το Διδακτορικό μου στο Πανεπιστήμιο του Reading στη Μεγάλη Βρετανία. Στα πλαίσια της διατριβής μου, πραγματοποιώ έρευνα γύρω από το πώς το περιβάλλον υποστηρίζει το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή.

Τί αφορά αυτή η μελέτη;

Πραγματοποιώ μία έρευνα που εξετάζει την περιβαλλοντική υποστήριξη για το παιχνίδι στον εξωτερικό χώρο. Ενδιαφέρομαι να μάθω περισσότερα γύρω από τον τρόπο που το φυσικό, το ανθρώπινο και το οργανωτικό περιβάλλον, υποστηρίζουν την εμπλοκή των παιδιών σε δραστηριότητες παιχνιδιού στον εξωτερικό χώρο του πλαισίου προσχολικής αγωγής. Αυτή η έρευνα περιλαμβάνει δύο ακόμη προσχολικά πλαίσια στην Αθήνα. Ο στόχος της μελέτης είναι να αποκτηθεί μία βαθύτερη κατανόηση του τρόπου που το περιβάλλον του παιχνιδιού επηρεάζει και διευκολύνει το παιχνίδι στον εξωτερικό χώρο, στοχεύοντας στη βελτίωση του σχεδιασμού, της εκπαίδευσης και της πολιτικής γύρω από το παιχνίδι στον εξωτερικό χώρο στην προσχολική αγωγή.

Γιατί έχω επιλεγεί;

Έχετε προσκληθεί να πάρετε μέρος στη μελέτη αυτή, γιατί είστε παιδαγωγός στην προσχολική αγωγή παιδιών ηλικίας 2-5 ετών. Το προσχολικό πλαίσιο στο οποίο δουλεύετε εξέφρασε ενδιαφέρον στο να συμμετάσχει σε αυτή την έρευνα. Όλοι οι παιδαγωγοί που δουλεύουν με παιδιά αυτής της ηλικίας στο ίδιο προσχολικό πλαίσιο, έχουν προσκληθεί να πάρουν μέρος στη μελέτη.

Είμαι υποχρεωμένη/ος να πάρω μέρος;

Η συμμετοχή είναι απολύτως εθελοντική. Επίσης, μπορείτε να αποσύρετε τη συναίνεσή σας σε οποιαδήποτε στιγμή κατά τη διάρκεια της μελέτης, χωρίς να υπάρχει καμία συνέπεια για εσάς, επικοινωνώντας με την ερευνήτρια, κυρία Καλπογιάννη, Τηλ. 6986755306, email: d.kalpogianni@pgr.reading.ac.uk

Τί εμπεριέχει η συμμετοχή μου στη μελέτη;

Εφόσον συναινέσετε να λάβετε μέρος στη μελέτη, η κα Καλπογιάννη θα παρατηρήσει δύο φορές το παιχνίδι της τάξης σας στον εξωτερικό χώρο του παιδικού σταθμού/ νηπιαγωγείου. Η ερευνήτρια θα συμπληρώσει μία φόρμα παρατήρησης, όπου θα καταγράφει τους τρόπους που το φυσικό και ανθρώπινο περιβάλλον υποστηρίζουν το παιχνίδι. Δεν απαιτείται επικοινωνία με τα παιδιά ή τις παιδαγωγούς κατά τη διάρκεια της παρατήρησης και το παιχνίδι δε θα διαταραχθεί με κανένα τρόπο. Ο στόχος των παρατηρήσεων είναι να αποκτηθεί μία μεγαλύτερη κατανόηση της περιβαλλοντικής υποστήριξης του παιχνιδιού στον εξωτερικό χώρο του προσχολικού πλαισίου.

Εκτός από τις παρατηρήσεις του παιχνιδιού, θα πάρετε μέρος σε μία συνέντευξη σε χρόνο και τόπο βολικό για εσάς. Η συνέντευξη θα διαρκέσει περίπου 45 λεπτά. Θα σας ζητηθεί επίσης να

συμπληρώσετε ένα ημερολόγιο σε σχέση με το παιχνίδι στον εξωτερικό χώρο, για συνολικά δύο εβδομάδες κατά τη διάρκεια της μελέτης. Το ημερολόγιο θα εμπεριέχει πληροφορίες, όπως η διάρκεια του παιχνιδιού, η οργάνωση του χώρου και σκέψεις για μελλοντικό σχεδιασμό. Ο χρόνος που απαιτείται για τη συμπλήρωση του ημερολογίου υπολογίζεται να μην ξεπερνά τα 10 λεπτά την ημέρα.

Ποιά είναι τα πλεονεκτήματα και τα μειονεκτήματα της συμμετοχής μου;

Συναινώντας στο να συμμετάσχετε, βοηθάτε στην ανάπτυξη της γνώσης γύρω από το παιχνίδι στον εξωτερικό χώρο των παισίων προσχολικής αγωγής. Περιμένουμε πως τα ευρήματα της μελέτης θα είναι χρήσιμα για την υποστήριξη του παιχνιδιού στον εξωτερικό χώρο, τόσο από τις παιδαγωγούς όσο και από τις διευθύνσεις των παισίων, καθώς και για την ανάπτυξη πολιτικής σε σχέση με το θέμα αυτό στο χώρο της προσχολικής αγωγής.

Το μόνο μειονέκτημα σε σχέση με τη συμμετοχή σας σε αυτή τη μελέτη, είναι πως θα πρέπει να δώσετε κάποιο από το χρόνο σας για τη συνέντευξη διάρκειας 45 λεπτών, καθώς και για τη συμπλήρωση του ημερολογίου για συνολική διάρκεια δύο εβδομάδων.

Τί θα συμβεί με τα δεδομένα που θα συλλεγούν;

Οι πληροφορίες που θα δοθούν από τους συμμετέχοντες στη μελέτη αυτή θα παραμείνουν εμπιστευτικές και μόνο η ερευνήτρια θα έχει πρόσβαση σε αυτές. Η ταυτότητα των παιδαγωγών, των παιδιών και του προσχολικού πλαισίου δε θα είναι αναγνωρίσιμη σε οποιοδήποτε έγγραφο που θα προκύψει από τη μελέτη. Κανένα πραγματικό όνομα ή αναγνωριστικό στοιχείο, που μπορεί να συνδέσει τους παιδαγωγούς, το προσχολικό πλαίσιο ή κάποιο παιδί με τη μελέτη δε θα συμπεριληφθεί στη διατριβή μου, οποιοδήποτε αναφορά ή ακαδημαϊκή εργασία που μπορεί να δημοσιευτεί με βάση τα δεδομένα που θα συλλεγούν.

Τα γραπτά αρχεία της έρευνας θα φυλάσσονται με ασφάλεια κλειδωμένα, καθώς και σε υπολογιστή προστατευμένο με κωδικό, στα οποία μόνο η ερευνήτρια θα έχει πρόσβαση.

Τι θα γίνει αν αλλάξω γνώμη;

Είστε ελεύθεροι να αποσυρθείτε από τη μελέτη σε οποιαδήποτε στιγμή, αν νιώσετε άβολα ή δε θέλετε πια να συμμετέχετε, χωρίς να χρειάζεται να δώσετε κάποιο λόγο για αυτό.

Ποιός έχει ελέγξει τη μελέτη;

Η ερευνητική αυτή μελέτη έχει ελεγχθεί σύμφωνα με τις διαδικασίες της Επιτροπής Ηθικής του Πανεπιστημίου του Reading, και έχει λάβει θετική εισήγηση για την εκπόνησή της. Το Πανεπιστήμιο έχει τις απαραίτητες ασφαλιστικές διαδικασίες σε εφαρμογή. Περισσότερες πληροφορίες είναι διαθέσιμες εφόσον ζητηθούν.

Από πού μπορώ να πάρω περισσότερες πληροφορίες;

Αν σε οποιαδήποτε στιγμή θελήσετε να λάβετε περισσότερες πληροφορίες για την ερευνητική αυτή μελέτη παρακαλούμε μη διστάσετε να επικοινωνήσετε μαζί μου, στα παρακάτω στοιχεία επικοινωνίας

Στοιχεία επικοινωνίας ερευνήτριας

Ελίντα Δήμητρα Καλπογιάννη, Παπάγου 26, Χαλάνδρι, Αθήνα, 15234, Τηλ.:

E-Mail: d.kalpogianni@pgr.reading.ac.uk

Τι θα γίνει αν κάτι πάει λάθος;

Αν είστε δυσαρεστημένοι για οποιοδήποτε στοιχείο της μελέτης αυτής, παρακαλώ μη διστάσετε να επικοινωνήσετε με την εισηγήτριά μου.

Στοιχεία επικοινωνίας εισηγήτριας

Όνομα: Prof Helen Bilton, Τηλ.: + 44 (0) 118 378 2683, E-Mail: h.o.bilton@reading.ac.uk

Ελπίζω πως θα δεχθείτε να πάρετε μέρος στη μελέτη. Αν δέχεστε, παρακαλώ συμπληρώστε τη φόρμα συναίνεσης που επισυνάπτεται.

Με εκτίμηση,

Ελίντα Δήμητρα Καλπογιάννη

Κύρια ερευνήτρια: Ελίντα Δήμητρα Καλπογιάννη
Τηλ.: 6986755306
Email: d.kalpogianni@pgr.reading.ac.uk

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Φόρμα συναίνεσης για τη συμμετοχή στη μελέτη

Έχω διαβάσει τη φόρμα πληροφοριών για τη μελέτη και έχω λάβει αντίτυπο αυτής.
Καταλαβαίνω το στόχο της μελέτης και το τί απαιτείται από εμένα. Όλες οι ερωτήσεις μου έχουν απαντηθεί.

Όνομα παιδαγωγού: _____

Όνομα πλαισίου προσχολικής αγωγής: _____

Παρακαλούμε σημειώστε με X:

Συναινώ στο να πάρω μέρος στη συνέντευξη. ☐

Συναινώ στην ηχογράφηση της συνέντευξης. ☐

Συναινώ στην παρατήρηση του παιχνιδιού έξω. ☐

Συναινώ στη συμπλήρωση του ημερολογίου για τη συγκεκριμένη διάρκεια. ☐

Υπογραφή: _____

Ημερομηνία: _____

Parent Information Sheet

Project name: An examination of the environmental supportiveness for outdoor play in preschool.

My name is Elida Dimitra Kalpogianni and I am a PhD student at the University of Reading. As part of my thesis I am conducting research into the environmental supportiveness for outdoor play in preschool.

What is the project?

I am conducting a study looking at the environmental supportiveness for outdoor play. I am interested in finding out more about the way that the environment supports children in engaging in outdoor play activities while in preschool. This research will involve three preschools in the Athens area, with two classes from each being observed. The purpose of the study is to gain a deeper understanding of the way that the play environment affects and facilitates outdoor play, with a view to inform planning, training and policy regarding outdoor play in preschool education and care.

Why has my child been chosen?

Your child has been invited to take part because he/she is 2-5 years old and attending preschool. The preschool institution and his/her teacher, have expressed an interest in being involved in this research study. In addition, we have invited the other children in his/her group to take part in the study.

What will happen if my child participates in this study?

This study does not involve any form of intervention on the part of the researcher. Mrs Kalpogianni, will observe two outdoor play-time sessions of your child's class, at a time convenient for the preschool. During the observation Mrs Kalpogianni will complete an observation form to record the ways that the environment supports children's outdoor play. She will not need to interact with anyone during the observation and will not disrupt the play activities in any way. By giving your consent, you agree that possible observations of your child, who will be unidentifiable, can be included in reports of the study. The purpose of the observations is to gain a deeper understanding of how the environment supports outdoor play within preschool.

Do I have to take part?

Participation is entirely voluntary. If you do not wish that your child's data is included in any reports of the study you may withdraw your consent at any time during the project,

without any repercussions to you, by contacting the Principal researcher, Mrs Kalpogianni, Tel: , email: d.kalpogianni@pgr.reading.ac.uk

What are the advantages and disadvantages of taking part?

By consenting to your child being observed while playing, you will be helping improve knowledge on outdoor play within preschool. The findings of the study are anticipated to be useful for educators and preschool managers in planning how to support outdoor play within preschool, as well as for future training and policy development in this area.

There are no foreseeable disadvantages to your child taking part in this study. No personal information about your child will be collected by the researcher.

What will happen to the data?

Any data collected will be held strictly confidential and will only be seen by the researcher. Information about individual children will not be shared with the preschool. Neither the children nor the preschool will be identifiable in any published report resulting from the study. No real names and no identifiers linking the educator, the preschool or any child to the study will be included in my thesis, or any sort of report or academic paper that might be published based on the data.

Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to them.

What happens if I change my mind?

You are free to withdraw your child's data from appearing in any report of the study, at any time you feel uncomfortable or unwilling to participate, and you do not have to specify a reason.

Who has reviewed the study?

This research project has been reviewed according to the procedures specified by the University of Reading's Research Ethics Committee, and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

Where can I get more information?

If at any stage you wish to receive further information about this research project please do not hesitate to contact me on the following contact details.

Student Contact Details

Elida Dimitra Kalpogianni
26 Papagou Street, Halandri

Athens, 15234

Phone:

E-Mail: d.kalpogianni@pgr.reading.ac.uk

What happens if something goes wrong?

If you are unsatisfied with any aspect of this project, please feel free to contact my supervisor.

Supervisor Contact Details

Name: Prof Helen Bilton

Phone: + 44 (0) 118 378 2683

E-Mail: h.o.bilton@reading.ac.uk

We do hope that you will agree for your child to take part in the study. If you do, please complete the attached consent form.

Yours faithfully,

Elida Dimitra Kalpogianni



Principal researcher: Elida Dimitra Kalpogianni
Tel. number:
Email: d.kalpogiani@pgr.reading.ac.uk

Research Project: An examination of the environmental supportiveness for outdoor play in preschool.

Parent/Carer Consent Form

I have read the Information Sheet about the project and received a copy of it.
I understand what the purpose of the project is and what is required of my child and me.
All my questions have been answered.

Name of child: _____

Name of preschool: _____

Please tick:

I consent to my child being observed during playtime. ☐

Signed: _____

Date: _____

Φόρμα πληροφοριών για τους γονείς

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Το όνομά μου είναι Ελίντα Δήμητρα Καλπογιάννη και εκπονώ το Διδακτορικό μου στο Πανεπιστήμιο του Reading στη Μεγάλη Βρετανία. Στα πλαίσια της διατριβής μου, πραγματοποιώ έρευνα γύρω από το πώς το περιβάλλον υποστηρίζει το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή.

Τί αφορά αυτή η μελέτη;

Πραγματοποιώ μία έρευνα που εξετάζει την περιβαλλοντική υποστήριξη για το παιχνίδι στον εξωτερικό χώρο. Ενδιαφέρομαι να μάθω περισσότερα γύρω από τον τρόπο που το φυσικό, το ανθρώπινο και το οργανωτικό περιβάλλον, υποστηρίζουν την εμπλοκή των παιδιών σε δραστηριότητες παιχνιδιού στον εξωτερικό χώρο του παισίου προσχολικής αγωγής. Αυτή η έρευνα περιλαμβάνει δύο ακόμη προσχολικά πλαίσια στην Αθήνα. Ο στόχος της μελέτης είναι να αποκτηθεί μία βαθύτερη κατανόηση του τρόπου που το περιβάλλον του παιχνιδιού επηρεάζει και διευκολύνει το παιχνίδι στον εξωτερικό χώρο, στοχεύοντας στη βελτίωση του σχεδιασμού, της εκπαίδευσης και της πολιτικής γύρω από το παιχνίδι στον εξωτερικό χώρο στην προσχολική αγωγή.

Γιατί έχει επιλεγεί το παιδί μου;

Το παιδί σας έχει προσκληθεί να πάρει μέρος στη μελέτη αυτή, γιατί είναι ηλικίας 2-5 ετών και φοιτά σε προσχολικό πλαίσιο. Ο παιδικός σταθμός/ νηπιαγωγείο στο οποίο φοιτά, καθώς και η παιδαγωγός του τμήματός του, εξέφρασαν ενδιαφέρον στο να συμμετάσχουν σε αυτή την έρευνα. Όλα τα παιδιά του τμήματός του έχουν προσκληθεί να πάρουν μέρος στη μελέτη.

Τί εμπεριέχει η συμμετοχή του παιδιού μου στη μελέτη;

Η κα Καλπογιάννη θα παρατηρήσει δύο φορές το παιχνίδι της τάξης του παιδιού σας στον εξωτερικό χώρο του παιδικού σταθμού/ νηπιαγωγείου, σε χρόνο που θα εξυπηρετεί το προσχολικό πλαίσιο. Η ερευνήτρια δε θα συλλέξει προσωπικές πληροφορίες για το παιδί σας. Η ερευνήτρια θα συμπληρώσει μία φόρμα παρατήρησης, όπου θα καταγράφει τους τρόπους που το φυσικό και ανθρώπινο περιβάλλον υποστηρίζουν το παιχνίδι. Δεν απαιτείται επικοινωνία με τα παιδιά ή τις παιδαγωγούς κατά τη διάρκεια της παρατήρησης και το παιχνίδι δε θα διαταραχθεί με κανένα τρόπο. Συναινώντας, συμφωνείτε στο να συμπεριληφθούν στις ερευνητικές αναφορές πιθανές παρατηρήσεις του παιδιού σας, από τις οποίες δε θα μπορεί να αναγνωριστεί η ταυτότητά του. Ο στόχος των παρατηρήσεων είναι να αποκτηθεί μία μεγαλύτερη κατανόηση της περιβαλλοντικής υποστήριξης του παιχνιδιού στον εξωτερικό χώρο του προσχολικού πλαισίου.

Είμαι υποχρεωμένη/ος το παιδί μου να πάρει μέρος;

Η συμμετοχή είναι απολύτως εθελοντική. Αν δεν επιθυμείτε να συμπεριληφθούν στις αναφορές της μελέτης δεδομένα που πιθανά προκύπτουν από παρατήρηση του παιδιού σας, μπορείτε να αποσύρετε τη συναίνεσή σας σε οποιαδήποτε στιγμή κατά τη διάρκεια της μελέτης, χωρίς να

υπάρχει καμία συνέπεια για εσάς, επικοινωνώντας με την ερευνήτρια, κυρία Καλπογιάννη, Τηλ. , email: d.kalpogianni@pgr.reading.ac.uk

Ποιά είναι τα πλεονεκτήματα και τα μειονεκτήματα της συμμετοχής του παιδιού μου;

Συναινώντας στο να γίνει παρατήρηση του παιδιού σας ενώ παίζει στην αυλή με την τάξη του, βοηθάτε στην ανάπτυξη της γνώσης γύρω από το παιχνίδι στον εξωτερικό χώρο των παισίων προσχολικής αγωγής. Περιμένουμε πως τα ευρήματα της μελέτης θα είναι χρήσιμα για την υποστήριξη του παιχνιδιού στον εξωτερικό χώρο, τόσο από τις παιδαγωγούς όσο και από τις διευθύνσεις των παισίων, καθώς και για την ανάπτυξη πολιτικής σε σχέση με το θέμα αυτό στο χώρο της προσχολικής αγωγής.

Δε διαφαίνονται μειονεκτήματα από τη συμμετοχή του παιδιού σας στη μελέτη. Η ερευνήτρια δε θα συλλέξει προσωπικές πληροφορίες για το παιδί σας.

Τί θα συμβεί με τα δεδομένα που θα συλλεγούν;

Οι πληροφορίες που θα συλλεγούν θα παραμείνουν εμπιστευτικές και μόνο η ερευνήτρια θα έχει πρόσβαση σε αυτές. Πληροφορίες για συγκεκριμένα παιδιά δε θα δοθούν στο προσχολικό πλαίσιο. Η ταυτότητα των παιδιών και του προσχολικού πλαισίου δε θα είναι αναγνωρίσιμη σε οποιοδήποτε έγγραφο που θα προκύψει από τη μελέτη. Κανένα πραγματικό όνομα ή αναγνωριστικό στοιχείο, που μπορεί να συνδέσει τους παιδαγωγούς, το προσχολικό πλαίσιο ή κάποιο παιδί με τη μελέτη δε θα συμπεριληφθεί στη διατριβή μου, οποιοδήποτε αναφορά ή ακαδημαϊκή εργασία που μπορεί να δημοσιευτεί με βάση τα δεδομένα που θα συλλεγούν.

Τα γραπτά αρχεία της έρευνας θα φυλάσσονται με ασφάλεια κλειδωμένα, καιθώς και σε υπολογιστή προστατευμένο με κωδικό, στα οποία μόνο η ερευνήτρια θα έχει πρόσβαση.

Τι θα γίνει αν αλλάξω γνώμη;

Είστε ελεύθεροι να αποσύρετε τα δεδομένα του παιδιού σας από το να συμπεριληφθούν σε οποιαδήποτε ερευνητική αναφορά σε οποιαδήποτε στιγμή, αν νιώσετε άβολα ή δε θέλετε πια να συμμετέχετε, χωρίς να χρειάζεται να δώσετε κάποιο λόγο για αυτό.

Ποιός έχει ελέγξει τη μελέτη;

Η ερευνητική αυτή μελέτη έχει ελεγχθεί σύμφωνα με τις διαδικασίες της Επιτροπής Ηθικής του Πανεπιστημίου του Reading, και έχει λάβει θετική εισήγηση για την εκπόνησή της. Το Πανεπιστήμιο έχει τις απαραίτητες ασφαλιστικές διαδικασίες σε εφαρμογή. Περισσότερες πληροφορίες είναι διαθέσιμες εφόσον ζητηθούν.

Από πού μπορώ να πάρω περισσότερες πληροφορίες;

Αν σε οποιαδήποτε στιγμή θελήσετε να λάβετε περισσότερες πληροφορίες για την ερευνητική αυτή μελέτη παρακαλούμε μη διστάσετε να επικοινωνήσετε μαζί μου, στα παρακάτω στοιχεία επικοινωνίας

Στοιχεία επικοινωνίας ερευνήτριας

Ελίντα Δήμητρα Καλπογιάννη, Παπάγου 26, Χαλάνδρι, Αθήνα, 15234. Τηλ.:

E-Mail: d.kalpogianni@pgr.reading.ac.uk

Τι θα γίνει αν κάτι πάει λάθος;

Αν είστε δυσαρεστημένοι για οποιοδήποτε στοιχείο της μελέτης αυτής, παρακαλώ μη διστάσετε να επικοινωνήσετε με την εισηγήτριά μου.

Στοιχεία επικοινωνίας εισηγήτριας

Όνομα: Prof Helen Bilton , Τηλ.: + 44 (0) 118 378 2683, E-Mail: h.o.bilton@reading.ac.uk

Ελπίζουμε πως θα δεχθείτε να πάρει το παιδί σας μέρος στη μελέτη. Αν δέχεστε, παρακαλώ συμπληρώστε τη φόρμα συναίνεσης που επισυνάπτεται.

Με εκτίμηση,

Ελίντα Δήμητρα Καλπογιάννη

Κύρια ερευνήτρια: Ελίντα Δήμητρα Καλπογιάννη

Τηλ.:

Email: d.kalpogianni@pgr.reading.ac.uk

Τίτλος έρευνας: Μελέτη της περιβαλλοντικής υποστήριξης για το παιχνίδι στον εξωτερικό χώρο, στην προσχολική αγωγή. (An examination of the environmental supportiveness for outdoor play in preschool).

Γονεϊκή φόρμα συναίνεσης για τη συμμετοχή στη μελέτη

Έχω διαβάσει τη φόρμα πληροφοριών για τη μελέτη και έχω λάβει αντίτυπο αυτής. Καταλαβαίνω το στόχο της μελέτης και το τί απαιτείται από το παιδί μου και εμένα. Όλες οι ερωτήσεις μου έχουν απαντηθεί.

Όνομα παιδιού: _____

Όνομα παιδικού σταθμού/ νηπιαγωγείου: _____

Παρακαλούμε σημειώστε με Χ:

Συναινώ στο να γίνει παρατήρηση του παιδιού μου ενώ παίζει έξω με την τάξη του. ☐

Υπογραφή: _____

Ημερομηνία: _____