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**Moving and Learning Outside**

**Outputs**

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## Chapter 1. Introduction

### Contextualization

Moving and Learning Outside (MLO) is an international action-research project that aims at promoting the practice of outdoor education through a play-based and physical activity approach in preschools. This project was endorsed by the Portuguese municipality of Torres Vedras and it counted with the participation of 7 partners from different countries. From Portugal, besides the municipality, the partners were a preschool in Torres Vedras, Agrupamento de Escolas Madeira Torres, JI/EB Conquinha (<http://moodle.madeiratorres.com/>), and a faculty from the University of Lisbon, Faculdade de Motricidade Humana (<http://www.fmh.utl.pt/pt/>). The Croatian and Estonian partners were 2 preschools, Kindergarten Matije Gupca (<http://www.os-mgubec.hr/>) and Kindergarten Naba (<http://www.naba.ee/en/private-kindergarten-naba>), respectively. The Greek partner was an NGO called Payzontas ([http://paizontas.gr/index\\_en.asp](http://paizontas.gr/index_en.asp)), and the Norwegian one was the Queen Maud University College of Early Childhood Education (<https://dmmh.no/en>). The MLO project was carried out during the period of 30 months from the 15<sup>th</sup> of October, 2017 to 14<sup>th</sup> of April, 2020.

The knowledge and scientific background about cultural differences regarding the approach to preschool learning processes between Northern and Southern European countries served as starting points to devise this project. In Northern countries, namely in Scandinavia, the preschool curriculum and practice is predominantly based in play and child led strategies, in which autonomy and the contact with natural environments are privileged. While in the South, the pedagogical practices are strongly defined by the pursuit of academic success and standardized adult led processes, which privilege indoor sitting activities to foster the learning of writing, reading and counting skills. Therefore, the underlying motivation behind the MLO project was to devise a set of practical tools that could be useful to change this paradigm, in order for children in preschools to use the outdoor as a place where they can learn and develop through outdoor play, autonomy, independent movement, contact with nature and their communities.

### Partners' choice and roles

There were several steps taken in order to initiate the MLO project.

Firstly, in October 2016, the Municipality of Torres Vedras and the kindergartens Naba (EE) and Matije Gupca (HR) attended an Erasmus+ Contact Seminar in Turku (FI) within the field of school education, more specifically, Early Childhood Education and Care. From this seminar came the idea of designing a project that could address a common interest: the development of the offer of outdoor activities for preschoolers in the three countries

Secondly, the municipality of Torres Vedras invited the Motor Behavior Laboratory of the Faculdade de Motricidade Humana, University of Lisbon, to conceive an international action-research project that would privilege play based and outdoor pedagogical practices of early childhood education as promoters of children's health and well-being. This project should include a diagnosis of the use of outdoor for pedagogical activities and free play as well as an assessment of the perceptions of teachers, caretakers, staff and parents regarding the use of the outdoor; a collection of training resources pack and communication materials; and a set of guidelines as best practice indicators. The Faculdade de Motricidade Humana would be responsible to devise the project in terms of methodologies, scientific and interventional approaches and dissemination of the research findings in international peer reviewed journals and academic conferences.

Thirdly, although Portuguese municipalities have increased responsibilities and a reinforced role in the definition of local educational policies and strategies, it was necessary to involve as partner the Agrupamento de Escolas Madeira Torres so that the research could also take place in a Portuguese kindergarten.



Fourthly, the group of researchers in the Faculdade de Motricidade Humana suggested the inclusion of the Queen Maud University College of Early Childhood Education, in Norway, as an important partner. Norwegian preschool children, regardless of sometimes very severe weather conditions, play outdoors most of the time, and their educators and caretakers value the experience of the outdoor as a fundamental for learning and development. Moreover, professionals from that institution are recognized worldwide as experts on teaching of outdoor play and learning in Early Childhood Education Centers (ECEC), as well as conducting research studies in this area. In this way, it was important to have them included as partners in the project so that their good practices could be shared among the other participants.

Finally, it was established a contact with Payzontas Greek NGO due to their work in Greece in projects related with play provision and play advocacy. The local knowledge of preschools and municipal institutions detained by Payzontas was a valuable asset in order to gather the interest of preschools from Athens to become participants of the MLO project.

All partners have participated in transnational partnerships, either with financial support from the Erasmus+ program or with national programs. Although this is true, with the exception of both universities, none of the other partners had ever participated in a project with this dimension: 5 different countries and 7 different partners.

The project involved all partners in its different roles, working as an organism where each part contributes to the whole, having its specific role: the educational community (children as main actors, parents as informants, educators and caretakers as participating observers); the investigators who analyzed all results and transformed them in new practices and guidelines; and the municipality as a local policy maker and disseminator, allowing the results to go back to the schools and to the children.

### Aims of the project

The Moving and Learning Outside project aimed at promoting the practice of outdoor education through a play-based and physical activity approach in preschools. Inspired and supported by the kind of pedagogical approach widely spread in Norway, our **PROJECT AIMED** specifically at:

- Drawing changes on the perceptions of policy makers, teachers, caretakers and parents on the possibilities of the outdoor as a rich and valuable environment for preschool children's learning, development and well-being.
- Improving pedagogical competences of preschool teachers and caretakers working with children in the outdoor environment, adopting physical activity and play based strategies.

These objectives were achieved through the implementation of different activities and tasks involving children, preschool staff members, parents and municipality staff with the purpose of changing adult perception regarding the benefits of outdoor play and the use of outdoor pedagogical resources when working with preschool children. The design of the MLO, its conceptualization and methodological approach was carried out by the team members of the Faculdade de Motricidade Humana. The action-research stance on which the project was built enabled the designed of each phase of the project to be based on previous stages, including the feedback of the other partners regarding the processes which were being implemented.

### Design of the project

The design of this project was underpinned by a methodological framework constituted by four approaches:

- Conceptual- A methodological approach related with the conceptualization of data collection materials and subsequent training activities.
- Descriptive- A methodological approach related with portraying children's perceptions and behavior in the socio-physical environment.

- Participant- A methodological approach related with the active involvement of teachers and children as active co-researchers in the project.
- Comprehensive- A methodological approach related with producing scientific knowledge (papers, reports and other outputs) based on the juxtaposition of the three previous methodological approaches.

In this sense, after an initial diagnosis, the activities planned for this project aimed to contribute to 3 major outputs: Teacher's training pack; Didactic-pedagogical resources pack; Outdoor Activities Guidelines for Preschool Education (see Fig. 1).

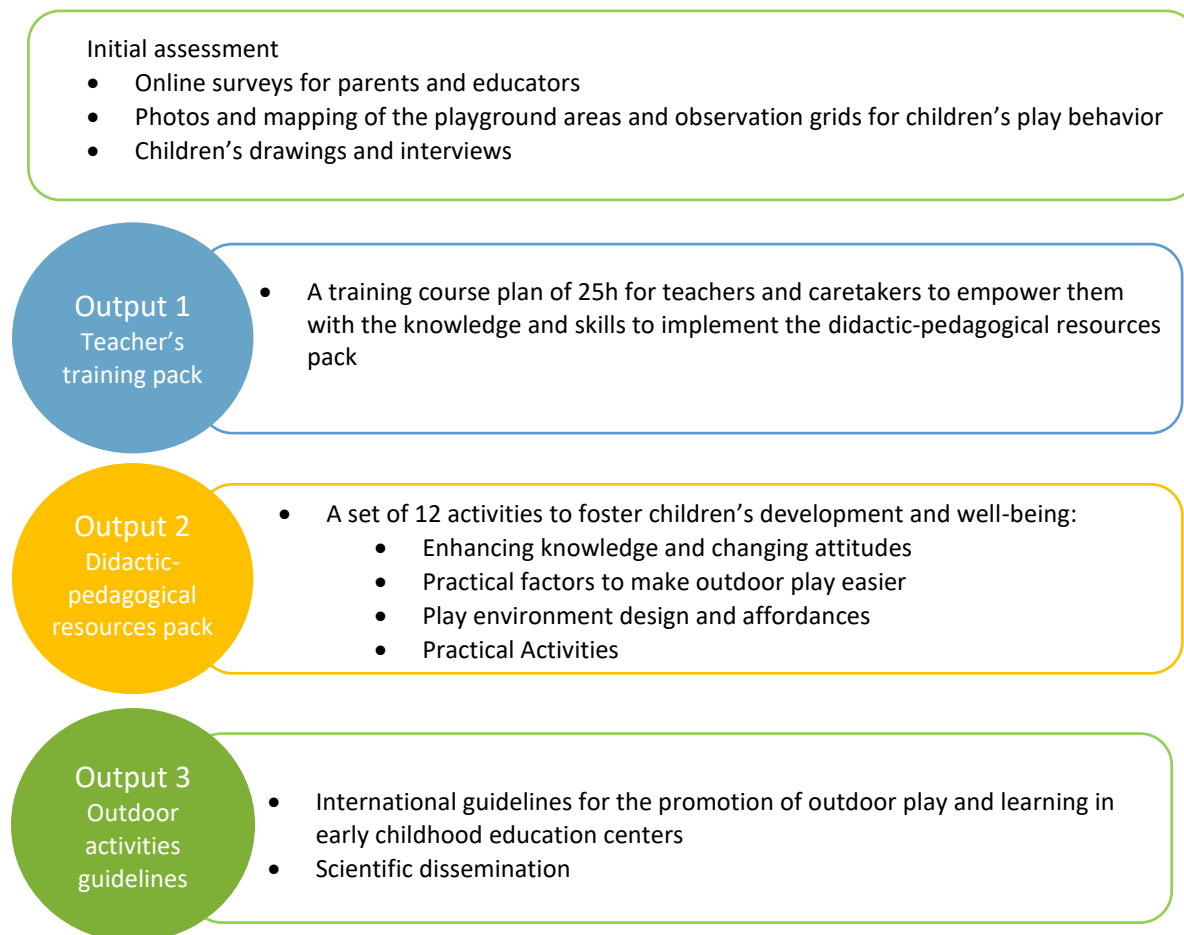


Fig. 1. Outputs and activities.

### State of the art

Nowadays, there is a growing concern about low physical activity levels and health related problems in young children. The sedentary lifestyle in modern societies is a global problem (WHO, 2010) and it starts early in life. Moreover, it is indisputable the drastic decrease of children's opportunities for free play, namely in what concerns contact with the outdoors and with nature, or nature elements (see e.g. Brussoni, Olsen, Pike, & Sleet, 2012; Freeman, 1995; Gray, 2011; Lester & Maudsley, 2006; Moss, 2012).

Play is a pivotal feature of the biological and historical evolution of mammals; ontogenetically it remains as a vital neurological mechanism that promotes an adaptive reaction to basic archetypal emotions of shock, anger, fear, disgust and sadness; and it also plays a therapeutic function of fighting against depression and other negative aspects of life through the enactment of cognitive processes that enable a sense of achievement, control and happiness (Sutton-Smith, 2008). Play changes the architecture of the brain (S. L. Brown & Vaughan, 2010) by operating simultaneously on several adaptive systems, *pleasure and enjoyment, emotion regulation, stress response; attachments, and learning and creativity*; and therefore children's play is addressed as a *self-protecting process* that allows maximizing adaptive capabilities, resilience, well-being

and health (Lester & Russell, 2010). Play is a leading source of development and learning for children. It is the universal cultural language children adopt to communicate with their inner and outside worlds and a privileged mean to exert participation in their communities (Lopes & Neto, 2014).

There is a lot of research that supports and documents the importance of the play for children's development, learning, health (both physical and mental) and quality of life (Cheng & Johnson, 2010; Gleave & Cole-Hamilton, 2012). Play is the leading source of development in the ages between 2 and 6 according to Vygotsky. They are also the years when children play the most. When possible, they spend their days at play. They develop their bodies and minds through play while they are inventing games and dramatizing fantasies (Frost, 2012). Through play children develop intrinsic interests and competencies; learn how to make decisions, solve problems, exert self-control, and follow rules; learn to regulate their emotions; make friends and learn to get along with others as equals; and experience joy (Gray, 2011). In a study about the connection between pre-schoolers' free play and social and emotional functioning, Veiga, Neto, and Rieffe (2016) found out that less time for free play is related to more disruptive behaviours in preschool children, suggesting that free play might help to prevent the development of disruptive behaviours.

**Playing in outdoor environments** is fundamental for promoting children's health and development and that complex and diverse natural landscape characteristics are associated with increase play affordances (Fjørtoft, 2004). Children's outdoor play in general has great importance for increased physical activity, which in turn has a number of positive health effects (less overweight, better physical form, less cardiovascular diseases, etc.), better mental health and quality of life (both for the child and for the family), better cognitive (learning outcomes and academic skills) and social competence (better social relations - also between different ethnic groups), better adaptation in school life, and reduction of antisocial behaviour and vandalism (Brussoni et al., 2012; Burriss & Burriss, 2011; Cheng & Johnson, 2010; Gill, 2014; Gleave & Cole-Hamilton, 2012; Moss, 2012).

The same positive effects have been found in studies on the effect of children's play in nature (see e.g. Moss, 2012). Fjørtoft (2004) found that children playing in the natural environment, when compared to those attending normal pre-school activities, displayed better coordinative skills. Unpredictability is one of the main features of the play activity (Lester & Russell, 2014), and, therefore, children seek risky forms of play in any play environment, namely in play spaces with natural and moveable features (Sandseter, 2009). Also, when playing in nature, research has also shown that this is important for children's relationship to nature and nature/environmental consciousness, independence, space orientation ability, and place belonging (see Lester & Maudsley, 2006 for review of existing research).

Playing in the outdoors enables children to be in contact with more risky play affordances. In a study conducted with pre-school children, Sandseter (2007) defines risky play as thrilling and exciting forms of play that take place in physical and emotional stimulating and challenging environments, involving a risk of physical injury. In this same work, Sandseter categorizes risky play in six categories, playing with great heights; playing with high speed; playing with harmful tools; playing near dangerous elements; rough-and-tumble play; and playing where the children can disappear escaping adult supervision.

Through risky play children engage in challenging, thrilling and scaring physical activities exploring bodily boundaries between being in and out of control in order to overcome the fears, unknown and uncertainty which in the first place drew them to those activities (Coster & Gleeve, 2008; Sandseter, 2010; Sandseter & Kennair, 2011; Stephenson, 2003). Risky play experiences enable children to engage in deep and immersive play which allows the development of survival skills and to conquer fear (Hughes, 2006). Moreover, risky play situations are likely to create conditions for children to build up their self-control in managing risk playing experiences (Coster & Gleeve, 2008). In the toolkit to assess and improve local play opportunities developed by PlayScotland, it is reinforced that by offering children risky play affordances, children learn to recognise and assess risk for themselves and to test and expand their capabilities (Cole-Hamilton & Crawford, 2011).

On this matter, Tim Gill (2007) argues that there are three main arguments in favor of children's contact with risk throughout development:

1 – Experiencing certain types of risk helps children to learn how to manage those risks. Such arguments underpin initiatives that teach children practical skills that help them to deal with risk, such as swimming or road safety skills;

2 – Many children like risk-taking and look for risky situations. This argument underpins initiatives such as the creation of skate parks and other 'extreme sports' facilities arguing that dedicated provision is preferable to compelling enthusiasts to pursue them in streets and other public spaces, where risk is more difficult to control.

3 – By undertaking activities with a degree of risk during childhood, children might gain other benefits, such as the development of risk management strategies and the ability to make appropriate decisions later in life related to substance use, relationships, and sexual behavior. By dealing with risk and overcoming challenging situations, children also become more adventurous, resilient, self-reliant, entrepreneurial and happy with life.

Nevertheless, the concept of childhood has changed and a generational shift has occurred from playing freely outdoors to a more restricted and sedentary ethos of play in the indoors (Clements, 2004; Francis & Lorenzo, 2006; Ginsburg, 2007; Kemple, Oh, Kenney, & Smith-Bonahue, 2016). Concomitantly, children's independent mobility, meaning their parental licenses and opportunities for autonomous movement in the local community, in their school itinerary and to other meaningful places have become very restricted (Brussoni et al., 2012; Lester & Maudsley, 2006; Shaw et al., 2015). This deprivation of public space use for independent travel is particularly noted in the United States (Alparone & Pacilli, 2012), and in southern European countries, such as Portugal and Italy (Cordovil, Lopes, & Neto, 2015; Marzi & Reimers, 2018). The playability of urban neighbourhoods has also been compromised, preventing children from playing freely outside (Francis & Lorenzo, 2006), leading them to spend more time in indoor places such as homes, day care and schools (Kernan, 2010). An increased safety focus on eliminating all opportunities for risk in children's lives has been thoroughly adopted by an over-protective society, which is driven by false-beliefs, misconceptions and moral judgements regarding safety and parental rearing of children (Thomas, Stanford, & Sarnecka, 2016). The concern with "stranger danger" (i.e., fear that children can be kidnapped by strangers), with the fear of being sued by accidents and injuries, and the pressure from the insurance industry to avoid any injuries (Brussoni et al., 2012; Gleave, 2008; Lester & Maudsley, 2006; Sandseter & Sando, 2016; Skår, Wold, Gundersen, & O'Brien, 2016) reinforce the view of a 21<sup>st</sup> century ultra-securitized childhood. A part of the safety focus is also related with the traffic situation and the fear that children would be harmed by cars (Gielen et al., 2004; Gray, 2011; Jolleyman, McPhee, Brussoni, Bundy, & Duncan, 2019; Witten, Kearns, Carroll, Asiasiga, & Tava'e, 2013), leading to a restriction of children's access to residential streets, which also contributes to the decline of outdoor free play (Tranter, 2015). Additionally, the increasing concern with cognitive skills and a traditional view of the learning process, where non-play strategies are used as a vehicle for learning and development (Frost, 2006) have led to a decrease of children's outdoor play time, even in pre-school settings. In preschools, methodologies that use scripted teaching, computerized learning and standardized assessment have become popular (Almon, 2003) and at the same time the full potential of outdoor experiences is not properly valued. Research shows that pre-schoolers' physical activity level is characterized as sedentary throughout their preschool day (W. H. Brown et al., 2009). In addition, at home, many children spend an excessive amount of time in front of screens (television, video games and computers) and children's free play with other children has declined sharply (Gray, 2011). Today studies indicate that play in nature environments no longer have the same frequency and importance and children's exploration in neighbourhoods and nature environments is replaced by adult led and organised activities (Gray, 2011; Skår & Krogh, 2009). Amongst early years practitioners there has been a recent resurgence in the provision of outdoor play, and an increasing interest in Forest schools and the outdoor schools in some areas of Scandinavia (Frost, 2012; Tovey, 2007). However, these positive experiences have not been widespread. Sandseter and Sando (2016) underline that Norwegian early-childhood education and care (ECEC) practitioners view risky play positively compared to practitioners in other Western countries.

In sum, nowadays the lives of children and young people, particularly in economically developed societies, are under a series of constraints that limit their motor, social and cognitive development, as pointed out by Neto and Lopes (2017), namely:

- The increase in screen culture, which implicates a predominantly sedentary involvement by children;
- The progressive disappearance of the "street game culture", also caused by changes in children's spaces, affected for example by the increase in traffic density and the urbanization phenomenon;

- The increased sense of insecurity that drives families to change the standards of freedom in their children's education, often taking a restrictive and overprotective position;
- The increased formality of school life, with more organized curricular activities and less free play (e.g., little recess time);
- The increase in institutionalized activities and games (sports, artistic and religious activities), which often function as "parallel schools", with some children having heavier schedules than many adults;
- The decrease in the levels of independent mobility, which led to a significant decrease in the autonomy of children in the urban space in recent years.

In order to tackle the play deprivation, namely in the outdoors, and the lack of physical activity that characterizes contemporary childhood, national and international guidelines and recommendations have been advanced by researchers, paediatricians, play advocates, and other organizations spread around the world. The International Play Association (IPA) clearly underlines the importance and implications of fulfilling article 31<sup>o</sup> of the Convention on the Rights of the Child. In this way, the right to play, recreation, rest, leisure and participation in cultural and artistic life is not only a fundamental right of every child, and also a promoter of significant societal benefits (UNICEF, 2014). The final *Position Statement on Active Outdoor Play* states that access to active play in nature and outdoors—with its risks— is essential for healthy child development, recommending that children's opportunities for self-directed play outdoors in all settings (home, school, child care, community and nature) should be increased (Tremblay et al., 2015). A recent systematic review also underlines the importance of supporting children's risky outdoor play opportunities as a means of promoting children's health and active lifestyles (Brussoni et al., 2015). The recognition that playing actively outdoors has several benefits for the development of children, is the basis of different initiatives that have emerged with the aim of promoting free and spontaneous play (e.g., ParticipACTION, 2015; Tremblay et al., 2015). According to physical activity guidelines, 3 to 4-year-old children should be physically active every day for at least three hours, spread throughout the day (WHO, 2019).

Very recently the American Academy of Pediatrics reinforced the need for clinical providers to tell parents about the benefits of play, and also to encourage them to grant their children opportunities for free play, namely in the outdoors (Yogman, Garner, Hutchinson, Hirsh-Pasek, & Golinkoff, 2018).

Considering the current state of the art and the above-mentioned concerns and barriers for children's outdoor play, it is important to carry out initiatives and projects that comprise both scientific and interventional domains in a cross-cultural perspective. The Moving and Learning Outside project aimed at filling this gap (see fig. 1). The first step was to enable the partners to make an initial diagnosis of the opportunities and perceptions regarding outdoor play in each preschool (initial assessment). The second step was to create a Teacher's Training Resources Pack (Output 1 – Chapter 2) that would empower teachers and caretakers with the knowledge and skills to implement a set of practices to enhance children's physical activity and play in the outdoors. The third step was to devise a set of 12 activities (Didactic-pedagogical Resources Pack for Teachers and Caretakers) based on the initial assessments to promote children's physical, motor, social, emotional and cognitive development in the outdoors (Output 2 - Chapter 3). Finally, and stemming from the three previous phases, a set of Outdoor Activities Guidelines and Recommendations for Preschool Education are presented (Output 3 - Chapter 4) to be made accessible online to researchers, teachers, practitioners, play advocates, organizations, municipalities, policy-makers and other relevant stakeholders who have an interest in promoting children's outdoor play in educational settings.

## Initial assessment

### The toolkit

The initial assessment was devised upon the premises of two different axis and levels of intervention within the different school community actors. In order to engage parents and school staff on the need to increase children's opportunities for playing and learning in the outdoors it is important to assess their perception regarding the existing benefits and constricts for children to play and move freely in the preschool outdoor



spaces (axis 1 – questionnaires for parents and school staff); and to characterize children's real use of the different play settings, together with their perception regarding the meaningfulness of the outdoor play experience (axis 2 – mapping of play space, observation grid, children's drawings and photo/video diary). Prior to data collection a declaration of consent was delivered for the participants in the study (Appendix 1)

### Data collection resources pack to assess parents' perceptions of the outdoor

A close-ended questionnaire (Appendix 2) was applied to assess parental perception on children's use of the outdoor environment as a promoter of a physically active and playful learning in each of the participating preschools.

The first section of the questionnaire aimed at collecting biographic data regarding the parent and the child in question (e.g., age, gender, place where adults grew up, age of the child). The second section was about comparing the different play experiences that parents had playing outdoors when they were children, with the experiences their children have currently (e.g., where did adults play vs. where do children play; age for different independent mobility licenses). The third section aimed to assess parental barriers to children's play outside (e.g., reasons for not letting children to play outside, permission to play out in different weather conditions). Finally, the fourth section assessed parents' views on the importance of outdoor play (e.g., time available for playing outdoors, benefits of playing outdoors and important features to play outdoors).

### Data collection resources pack to assess teachers' and caretakers' perceptions of the outdoor

A close-ended questionnaire (Appendix 3), similar to the one for the parents, was also completed by teachers and caretakers to assess their perception on children's use of the outdoor environment as a promoter of a physically active and playful learning in each of the participating preschools.

The first section of the questionnaire aimed at collecting biographic data regarding the school staff and the children that they are responsible for (e.g., age, gender, years of experience working with children, number of children in the preschool group). The second section was about the institutional barriers for children to play outside (e.g., identification of environmental and personal barriers, rules and policy for play in the preschool, play under different weather conditions and appropriate clothing, and factors that influence on the decision of letting children play outside). The third section aimed to identify school staff perspectives on the importance of outdoor play (e.g., time available for playing outdoors, benefits of playing outdoors and important features to play outdoors). An extra open question was added to this section that aimed at identifying the styles of supervision when children are playing outside.

### Mapping of play space

Guidelines for this specific task (Appendix 4) were sent to preschool partners. School staff were asked to draw a sketch-map of the school playground and take photos of the different play areas where children play. Each play space was identified with a letter and a brief description of main environmental features was added.

### Observation grid

Guidelines for this specific task (Appendix 4) were sent to preschool partners. School staff were asked to complete an observation grid of children's behaviour in the playground (Appendix 5). Each play area was observed 3 times (on different days or on the same day but at different time periods that children spend outdoors), each time corresponded to a period of 5 minutes. The idea behind this was to access the dynamics of play of each area used by the children.

### Children's drawings

Guidelines for this specific task (Appendix 4) were sent to preschool partners. To better comprehend children's perspectives on outdoor playing spaces, it is necessary to adopt a participatory technique that was adequate to children's cultures and languages. Children were asked to draw their favourite outdoor play spaces. Based on the drawings, the teacher conducted an individual short semi-structured interview, in which children reported about the reasons of their choices, the places they dislike, the most exciting places to play and the elements children would add to their playground.

## Photo/video diary

Guidelines for this specific task (Appendix 4) were sent to preschool partners. The idea was to have at least one photo or video (optional) for each period of the 5 minutes observation of children playing in each area. A minimum of 3 photos was requested for each play area. Photos are a valuable source of data to complement the assessments using the play space observation grids.

## Results

### Results regarding parents' questionnaires

The questionnaires were completed by 184 parents. The number of respondents varied across countries: 62 in Croatia, 41 in Estonia, 35 in Greece, 15 in Norway and 31 in Portugal. Due to the small number of respondents in some countries, data should be interpreted with caution. Most respondents were mothers (mothers: n=133; 72.3%; fathers: n=51; 27.7%) and 139 (75.5%) grew up in the city and 45 (24.5%) grew up in a village (in Portugal more parents grew up in a village).

The results regarding children's and parents' play spaces are presented in Fig. 2.

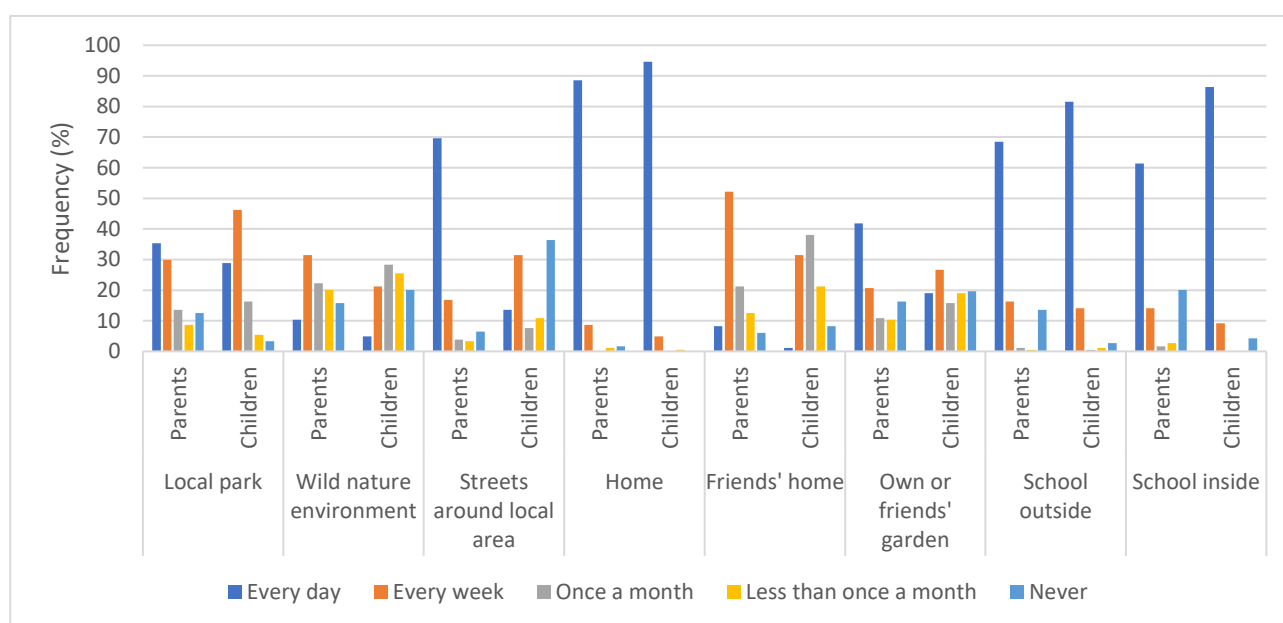


Fig. 2. Where did parents and children play when they were 4 to 5 five years old.

As shown in Fig. 1. There were some differences between generations regarding play spaces, namely, parents played at streets, home, and at school (more than 50% everyday), whereas children play mostly at home and at school (more than 50% everyday). Most parents also played every week at a friend's home and both parents and children played at least once a week at a local park. There were also some differences between countries regarding play spaces, namely: playing at wild nature / forest and at streets around local area was more frequent in Norway and playing at local parks less frequent in Estonia.

The results regarding the mean age for parents to grant the different mobility licenses are presented in Fig. 3.



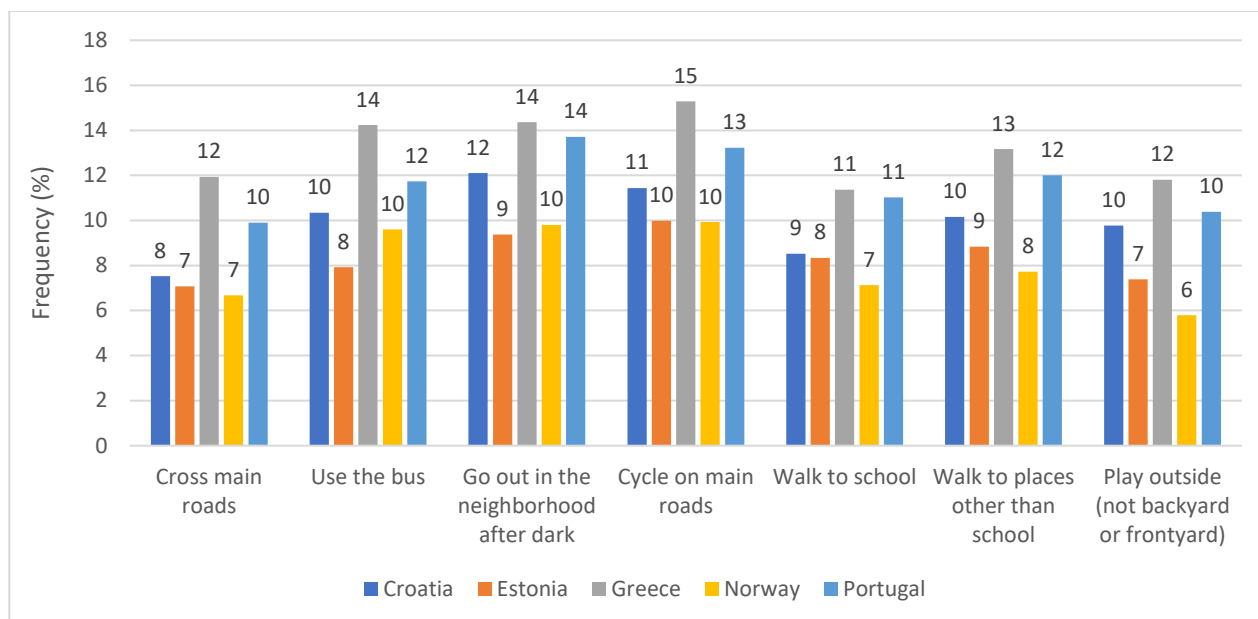


Fig. 3. Mean age for parents to grant the different mobility licenses in the different countries.

As shown in Fig. 3, according to the responses in our sample, parental licenses of independent mobility are granted earlier in northern Europe than in southern Europe. For instance, the license to play outside (not in the backyard or front yard) is granted usually around 6 years of age in Norway, but only at 12 years of age in Greece.

The results regarding parental barriers to children's play outside are presented in Figure 4.

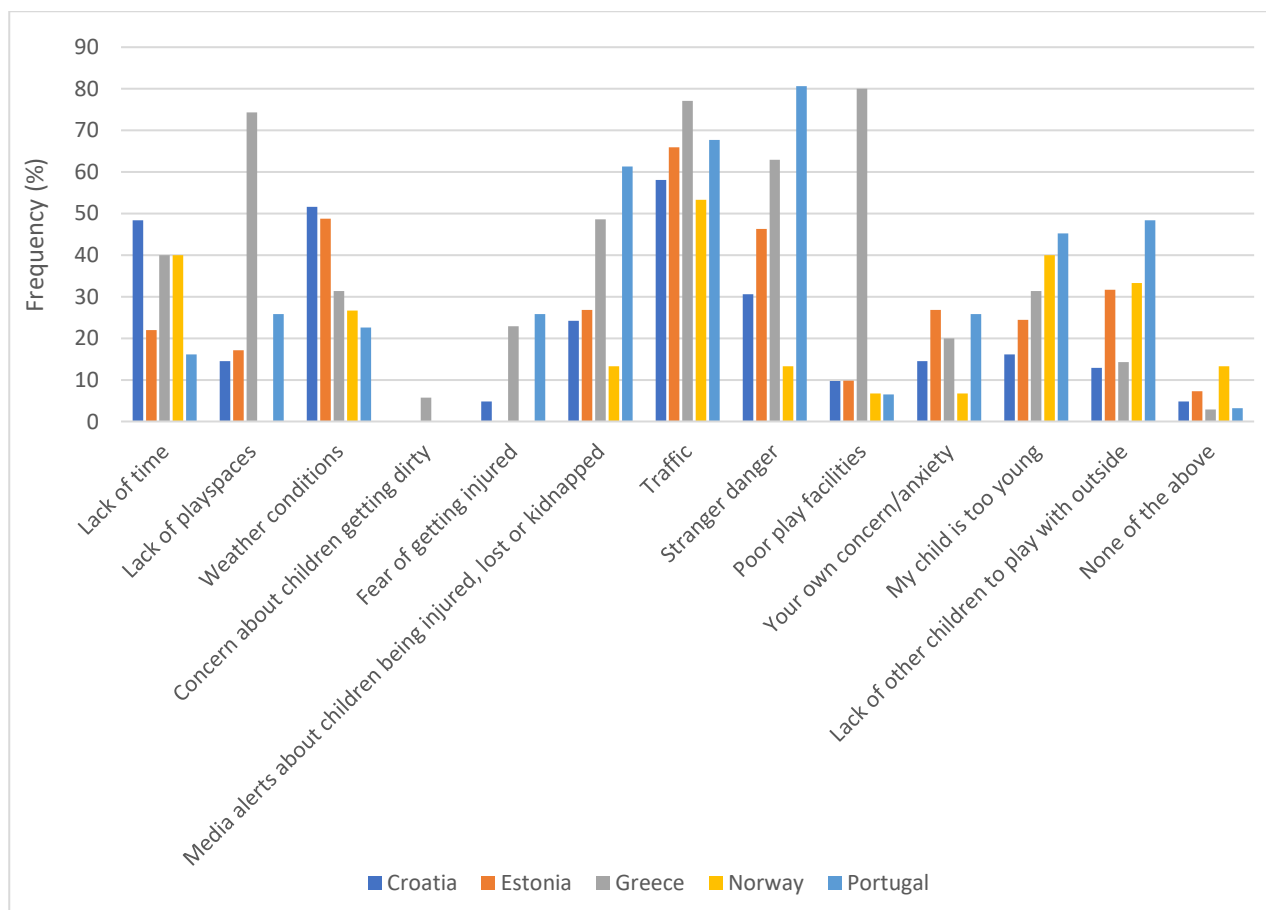


Fig. 4. Parental barriers to children's play outside in the different countries.

These results highlight that Greek and Portuguese parents refer to more barriers for children to play outside than the other parents, specifically, regarding media alerts (Greece=48.6%; Portugal=61.3%) and stranger danger (Greece=62.9%; Portugal=80.6%). The lack of play spaces and poor play facilities are also highly mentioned in Greece (74.3% and 80%, respectively). However, most parents let their children play in the same ways/spaces as they did (57.1%). When they don't, it's because they believe society is less safe than before (87.3%) (see Fig. 5)

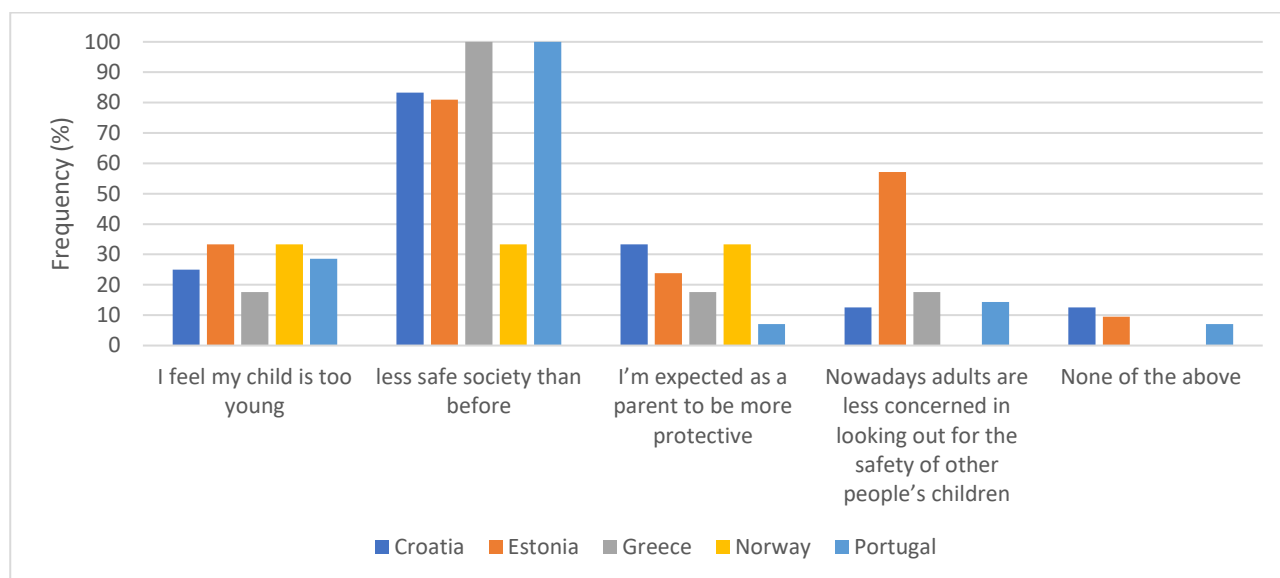


Fig. 5. Reasons for not allowing children to play outside in the same ways/spaces as parents did when they were their children's age.

Regarding weather conditions most parents think their children should be allowed to play outside in rain (73.9%), snow (97.3%) and cold weather (91.3%). In Norway, all parents think children should play outside despite all weather conditions (see Fig. 6).

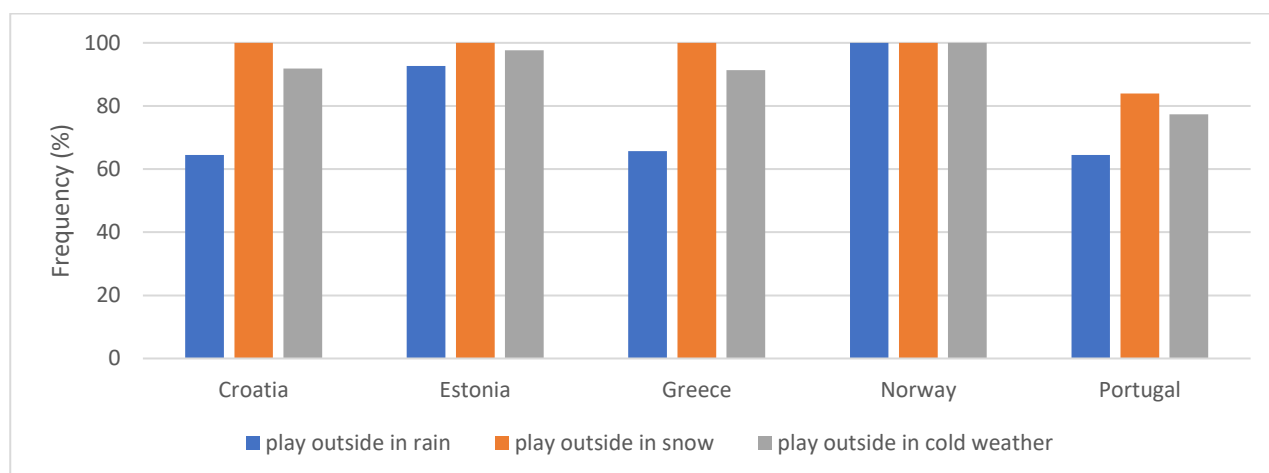


Fig. 6. Percentage of parents that believe children should be allowed to play outside in different weather conditions.

The expectations about time distribution regarding free play or adult led activities indoors and outdoors are presented in Fig. 7. In our sample, Norwegian parents believe children should play freely outdoors more time than parents from the other countries.

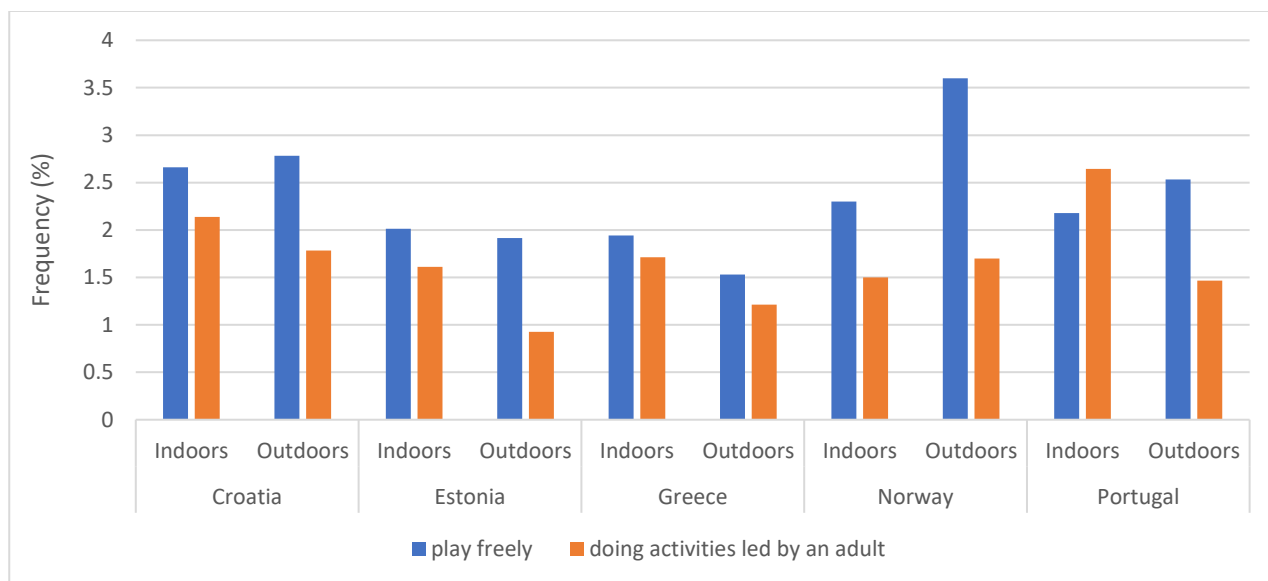


Fig. 7. Hours that parents think children should be playing freely and doing activities led by an adult indoors and outdoors.

Most parents believe that their children should spend more time playing outside in preschool (81%) and when not in preschool (81.5%). See Fig. 8.

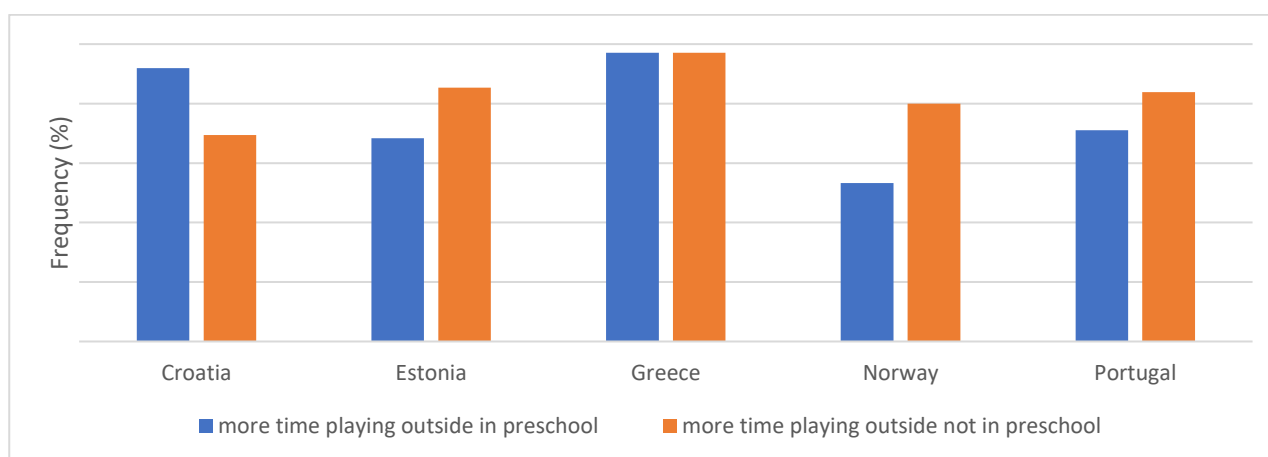


Fig. 8. Percentage of parents in the different countries that would you like their children to spend more time playing outside in preschool and when not in preschool.

Most parents (57.1%) believe that by playing outside children become healthier. Happiness is also frequently mentioned as a benefit of playing outdoors (48.4%) (see Fig. 9).

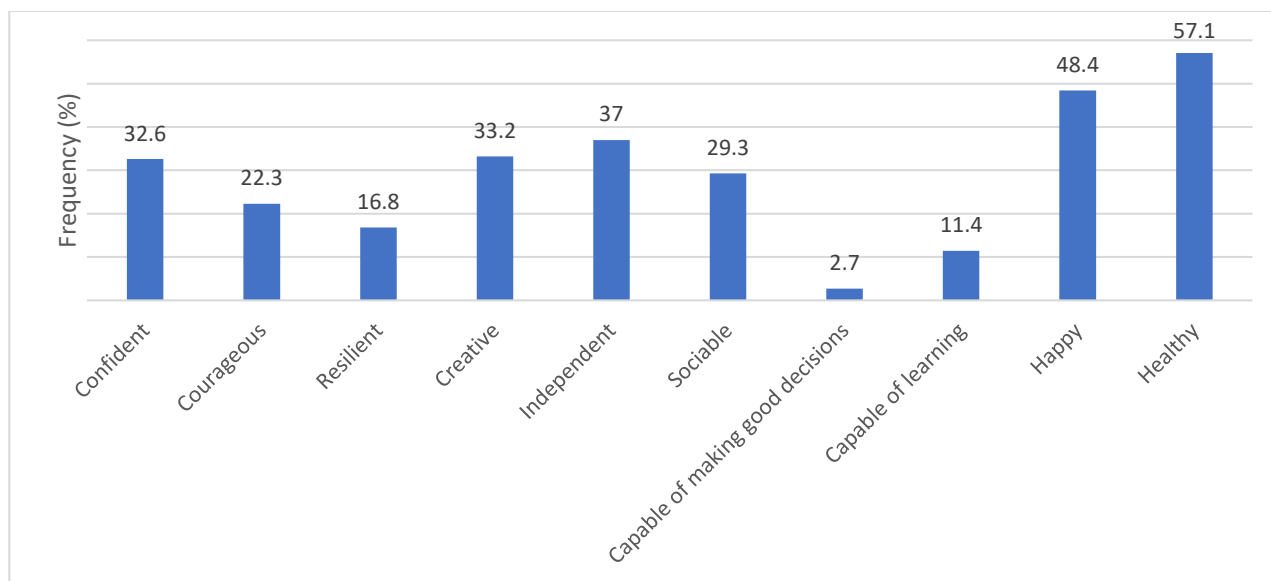


Fig. 9. Parents' opinion regarding the 3 major children's benefits from playing outside.

The results regarding the play features that parents considered important for outdoor play are presented in Fig. 10.

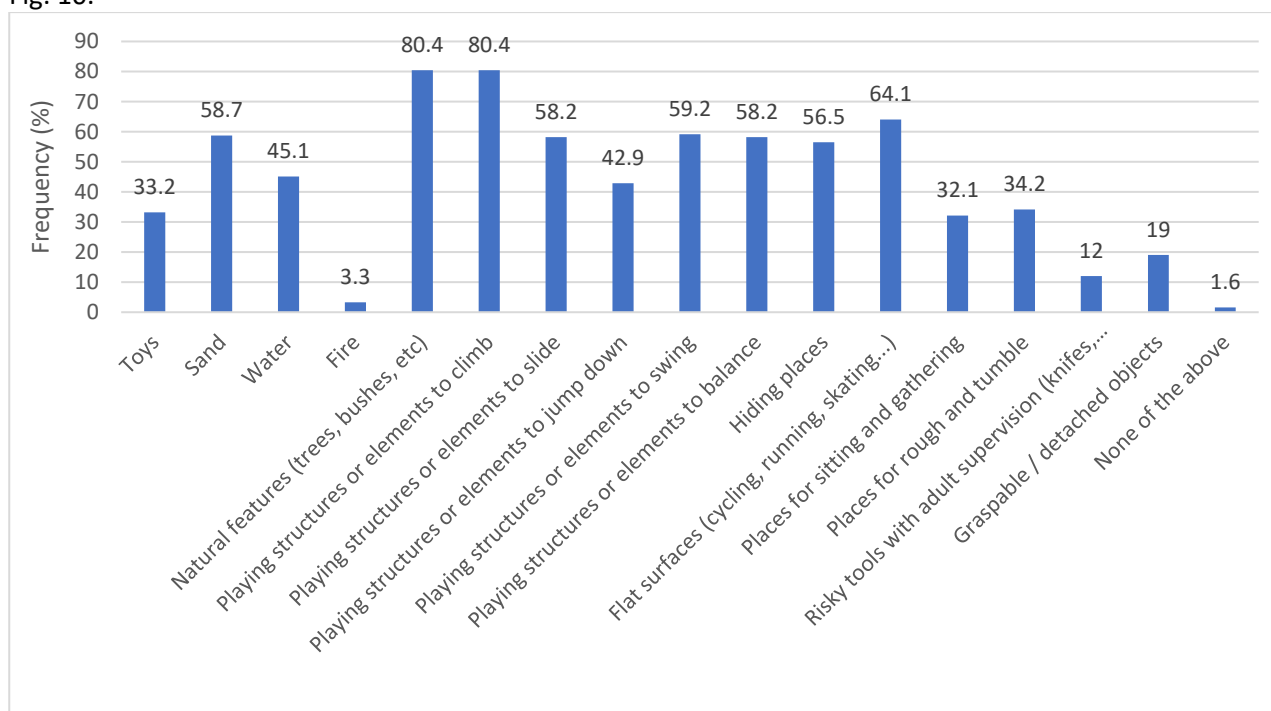


Fig. 10. Features that parents consider important for outdoor play.

### Results regarding teachers' and caretakers' perceptions of the outdoor

The questionnaires were completed by 32 teachers and caretakers, with ages between 22 and 64 years ( $M=40.4$  yrs), and experience dealing with children between 1 and 39 years ( $M=14.7$  yrs). Teachers and caretakers were responsible for 10 (Greece) to 29 (Croatia) ( $M=20$ ) children, depending on the country. The number of respondents varied across countries: 6 in Croatia, 10 in Estonia, 6 in Greece, 4 in Norway and 6 in Portugal. Due to the small number of respondents, data should be interpreted with caution.

Regarding the preschool barriers to children's play outside, most teachers don't consider that there are many barriers (see Fig.11).

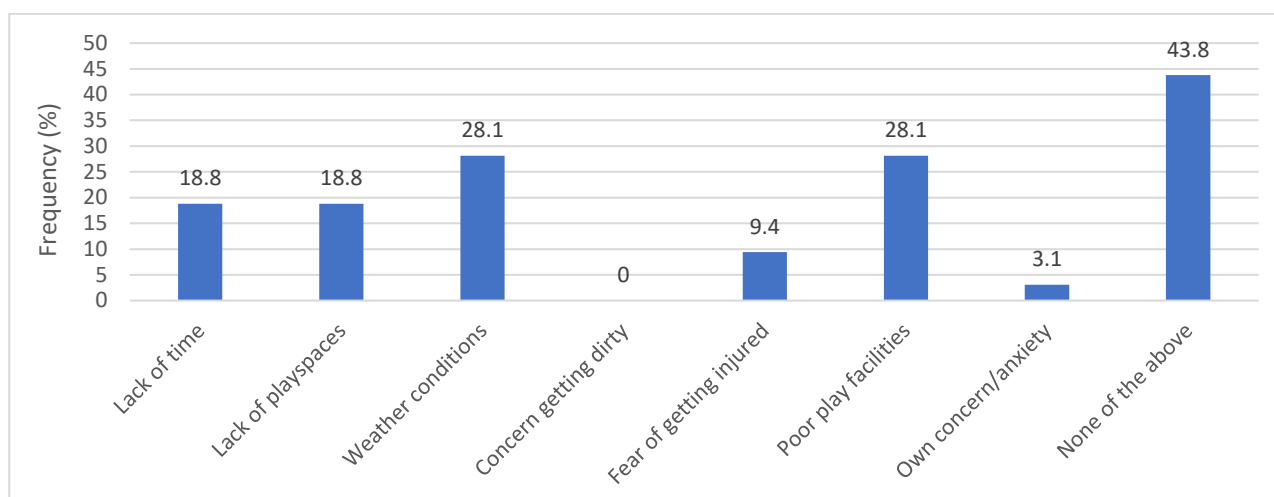


Fig. 11. Preschool barriers to children's play outside.

When analyzing these results by country (Fig 12) we can see that Norwegian teachers don't point any barrier, whereas Greek teachers consider there are more barriers (even weather conditions).

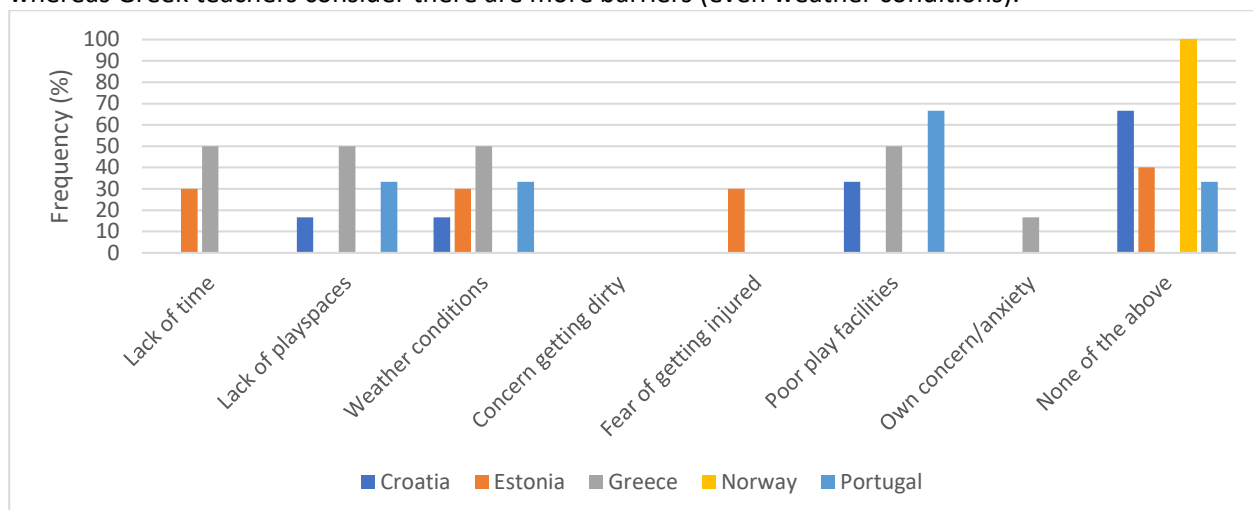


Fig. 12. Preschool barriers to children's play outside by country.

Regarding the rules concerning playing outside, 93.8% of the teachers say there are no rules preventing children from playing outside. There are a few rules related to weather conditions (Norway and Estonia). Most teachers (65.6%) say there is no specific school policy concerning playing outside. The percentage of teachers that claim that policy exists varies across countries (50% in Croatia; 50% in Estonia; 0% in Greece; 75% in Norway; and 0% in Portugal).

In what concerns play in different weather conditions, most teachers think children should be allowed to play outside in rain (83.3%), snow (100%) and cold weather (100%). Only in Croatia and Portugal some teachers (16.7% and 33.3% respectively) did not consider children should be allowed to play outside in rain. In addition, in southern countries (Portugal and Greece) children do not have special clothing to play outside in bad weather conditions. All teachers in Norway, 90% of teachers in Estonia and 33.3% of teachers in Croatia mention that children have special clothing at school to play outside in bad weather conditions.

Regarding the reasons that influence the decision of letting children play outside, teachers were asked to rank them according to their importance (rank 1 – most influent; rank 4 – least influent). Teacher's own beliefs and school conditions were the major influences, whereas parental influence was the less valued influence, ranked in last place by 50% of the teachers (see Fig.13).

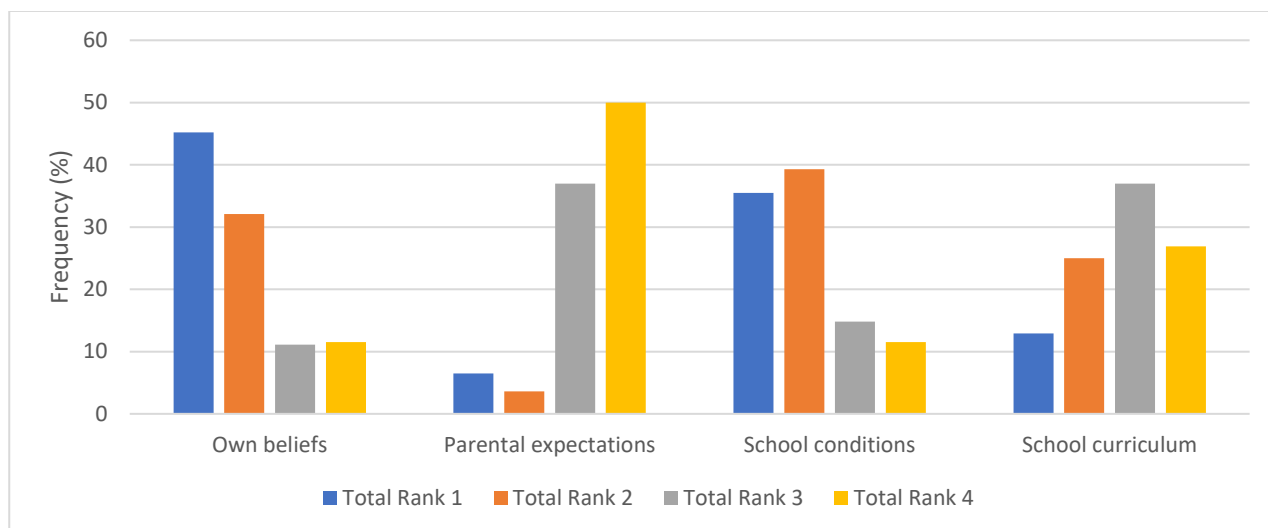


Fig. 13. Influences the decision of letting children play outside.

In all the countries, children spend more time playing outside in the Summer than in other seasons (specially Winter). According to teachers' reports, Norway is the country where children spend more time playing outside, whereas Greece is the country where they spend less time playing outside. In fact, the mean number of hours that children play outside during the winter in Norway (about 3 hours) is almost double than the mean number of hours children play outside in Greece during the Summer (see Fig. 14)

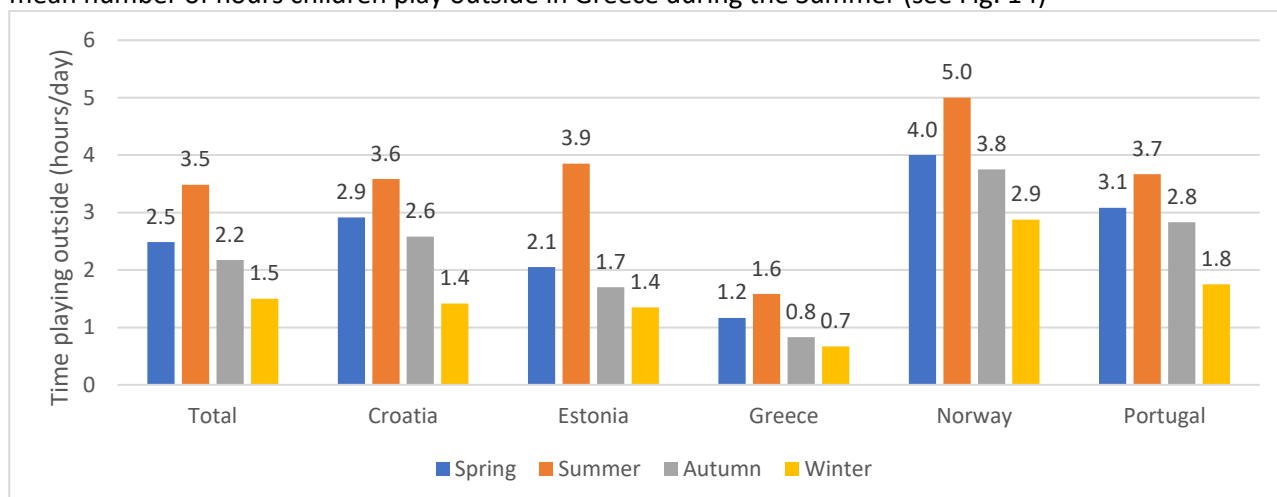


Fig. 14. Hours per day playing outside in the different countries.

In most countries, except for Greece, teachers think that children spend enough time playing outside (Fig. 15).

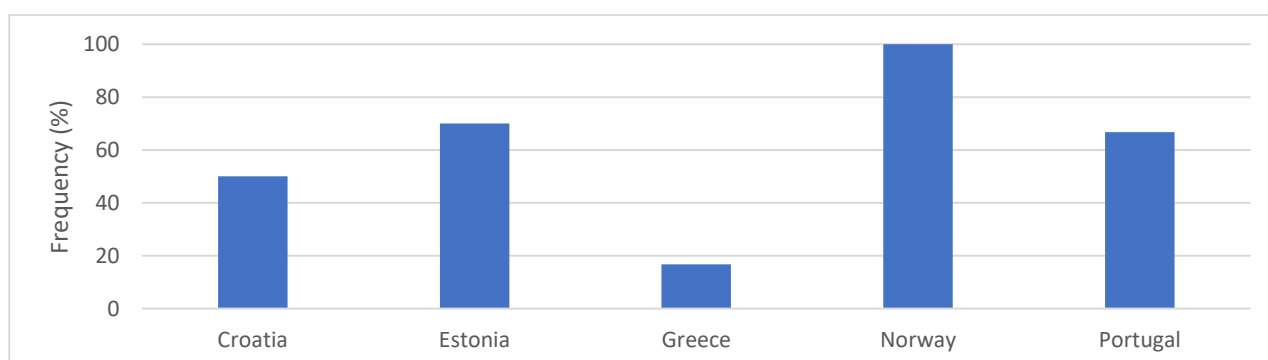


Fig. 15. Frequency of teachers that believe children spend enough time playing outside.

Regarding the expectations about time distribution, free play was quite valued by the participating teachers since most teachers believed children should spend more time in free play (both indoors and outdoors) than doing activities led by adults (Fig. 16).

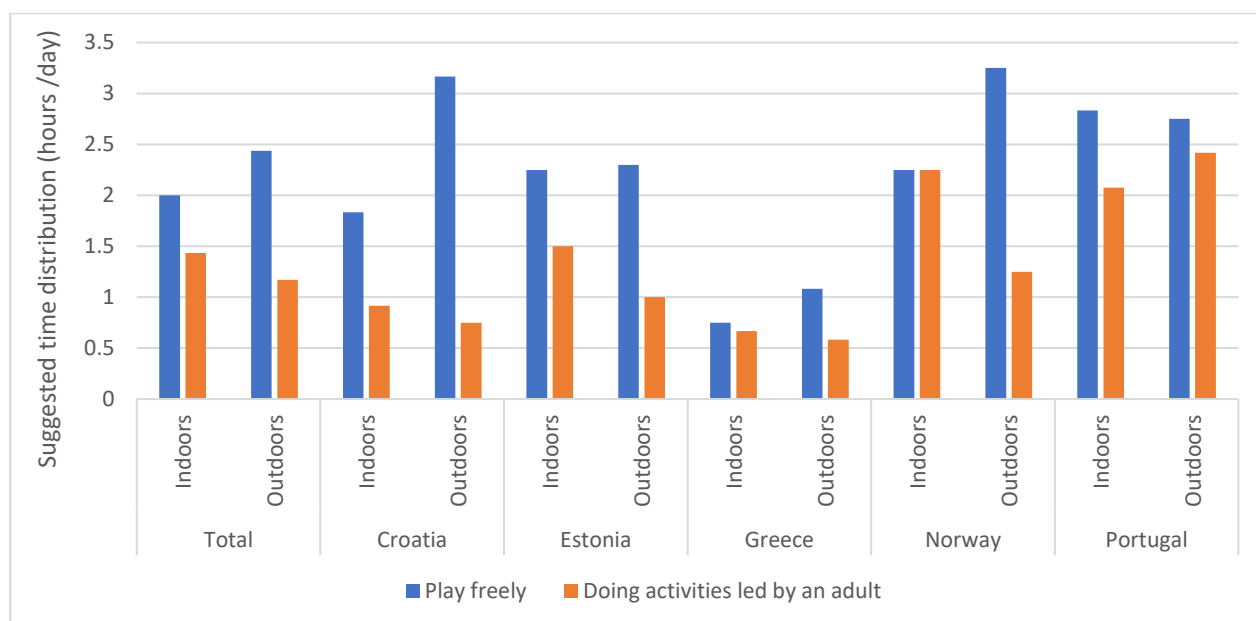


Fig 16. Hours that teachers think children should be playing freely and doing activities led by an adult indoors and outdoors.

Regarding the benefits of playing outside, when asked to mention the 3 major benefits, most teachers mention that children become healthier (53.1%) and more creative (50%) by playing outside (Fig. 17).

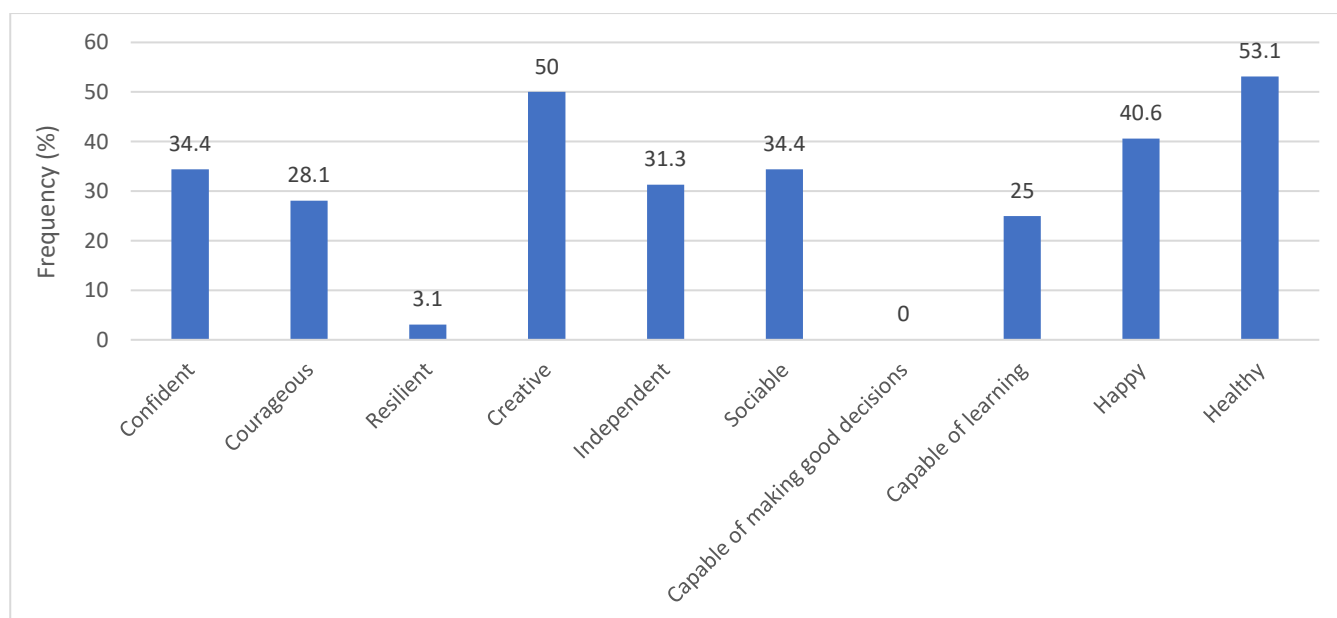


Fig 17. Teacher's opinion regarding the 3 major children's benefits from playing outside.

The results regarding the play features that teachers considered important for outdoor play are presented in Fig. 18.



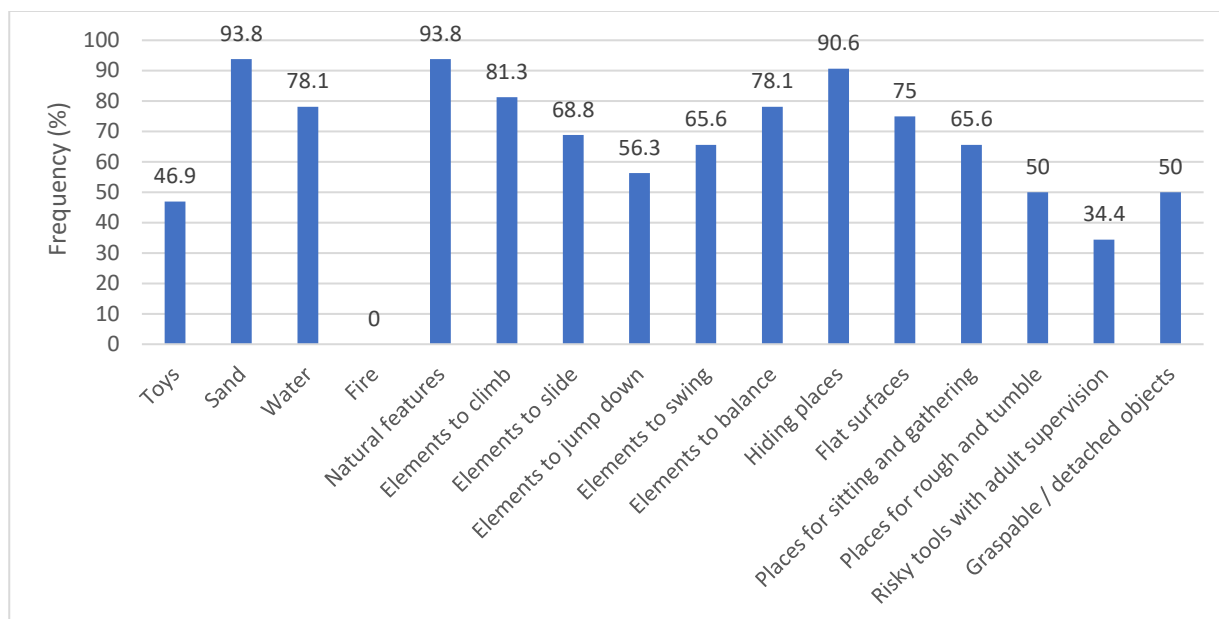


Fig. 18. Features that teachers consider important for outdoor play.

### Results regarding the mapping of play space, observation grids and photo/video diaries

In order to better comprehend the relation between children and the physical and social environment of the playground in each participating preschool, the results on the mapping of play space, observation grids and photo/video diaries are presented together. The theoretical concept from which this perspective yields from, it refers to affordances (Gibson, 1979; Heft, 1988; Lim & Barton, 2010; Sandseter, 2009) comes from the field of ecological and environmental psychology.

Next these results are outlined by each country.

## Croatia

Croatian partners divided the playground in 4 areas (see Fig 19 and Table 1).

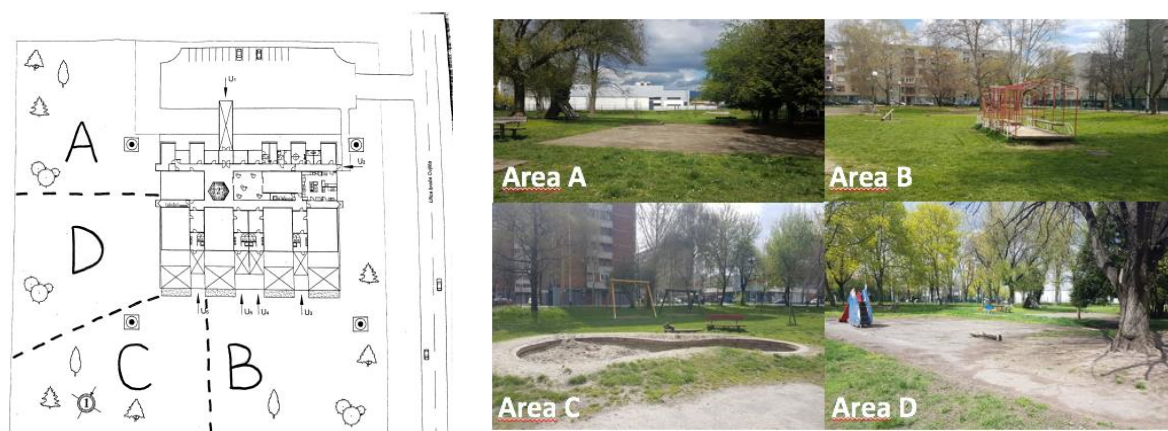


Fig. 19. Sketch-map and photos of the school playground in Croatia.

Table 1. Description of the physical settings and more frequent behaviours in each area in the Croatian preschool playground.

Area	Description	More frequent behaviours
A	Physical description and layout: concrete field, wooden structure for playing, places to sit-bench, trees, areas to hide, grass field	Walking, travelling through the space; Use of natural features (e.g. trees, bushes, mounds, hills); Playing alone; Playing together
B	Climbing construction in the shape of a train-climbing and clambering, carousel, teeter	Walking, travelling through the space; Sitting and gathering; Movement (e.g. running, jumping, climbing, balancing, rolling); Risk and challenge (physical); Playing together
C	Freestone, swings, place to sit-bench, trees, open grass field	Walking, travelling through the space; Playing with elements (water, earth [mud], sand...); Movement (e.g. running, jumping, climbing, balancing, rolling); Playing alone; Playing together
D	Concrete field, toboggan, wooden log for play, big tree with dirt field, teeter (in the background)	Walking, travelling through the space; Use of natural features (e.g. trees, bushes, mounds, hills); Playing with elements (water, earth [mud], sand...); Use of senses (taste, smell, sight, sound, texture); Playing with props/loose parts; Playing alone; Playing together

## Estonia

Estonian partners divided the playground in 4 areas (see Fig. 20 and Table 2).



Fig. 20. Sketch-map and photos of the school playground in Estonia.

Table 2. Description of the physical settings and more frequent behaviours in each area in the Estonian preschool playground.

Area	Description	More frequent behaviours
A	Creative play area / shelters - The play area features 2 shelters. The larger one accommodates a table and seating, fun pictures on the walls, tree-shaped chalkboards for writing/drawing in chalk, and a weather watching calendar. The smaller shelter was built by parents as a children's play corner. A large tractor tire filled with sand sits in the area between the two shelters, surrounded by tree trunks for sitting and climbing, there are a few trees in the area. The kindergarten groups' plant cultivation boxes (beds where various plants are grown in the spring/summer) are located next to the play area. Outdoor tables with benches are situated next to the plant cultivation boxes. The play area is easily accessible from the kindergarten's courtyard.	Walking, travelling through the space; Use of senses (taste, smell, sight, sound, texture); Movement (e.g. running, jumping, climbing, balancing, rolling); Playing with props/loose parts; Pretend Play; Playing together
B	Sandbox area - The sandbox area is surrounded by a wooden terrace, featuring tables/seating made of EUR pallets; a table sits in the middle of the sandbox area which is accessible from all sides. In one end of the sandbox area there is a small slide on which children can slide into the sandbox. In the other end of the sandbox area are located a large chestnut tree, three spring riders, and small hills. One can walk around the sandbox area in a circle.	Walking, travelling through the space; Sitting and gathering; Playing with elements (water, earth [mud], sand...); Use of senses (taste, smell, sight, sound, texture); Playing with props/loose parts; Pretend Play; Playing together
C	Climbing area (Dragon) - The climbing area features a large climbing installation called the Dragon; the Dragon is accessible by way of different ladders and climbing walls. Children can slide down the Dragon on a slide or "fireman's pole", play and climb across underneath the Dragon. On one side of the climbing area there are trees and a hill while the other side features shrubs.	Use of senses (taste, smell, sight, sound, texture); Movement (e.g. running, jumping, climbing, balancing, rolling); Risk and challenge (physical); Playing together
D	Swing area - The swing area features two spring riders and four swings; the area is accessible from all sides, shrubs and the fence surrounding the outdoor area are close by. There is a log bench in the swing area. A path with light cover heads from the swing area across the outdoor area.	Walking, travelling through the space; Use of senses (taste, smell, sight, sound, texture); Movement (e.g. running, jumping, climbing, balancing, rolling); Risk and challenge (physical); Playing together

## Greece

Estonian partners divided the playground in 6 areas (see Fig. 21 and Table 3).



Fig. 21. Sketch-map and photos of the school playground in Greece.

Table 3. Description of the physical settings and more frequent behaviours in each area in the Greek preschool playground.

Area	Description	More frequent behaviours
<b>A</b>	Sandpit It is covered and children do not use for play. The sand pit is covered because cats use it as a litter box. Moreover the area is not shaded in the morning and during summer it gets very hot.	movement and social play
<b>B</b>	Small double slide A structure of a double plastic slide on a area covered with black tarmac. The slide is under a tree.	Movement (e.g. running, jumping, climbing, balancing, rolling); Risk and challenge (physical); Playing together
<b>C</b>	Small house A small house, made of wood, on a area covered with black tarmac	Sitting and gathering; Movement (e.g. running, jumping, climbing, balancing, rolling); Playing together
<b>D</b>	Trees with basketball hoops Two opposite facing trees, which two basketball hoops, placed at a low level. The area is covered in black tarmac, but children can not play basketball, because balls are not allowed.	Movement and playing together
<b>E</b>	Table and car An area of a low table and two cars. All elements of this area are movable and are considered as “loose” parts by the teachers, because they are not fixed.	Movement
<b>F</b>	Soil An area where children play with soil and small toys.	Playing with elements (water, earth [mud], sand...); Playing together
<b>G</b>	Herb garden A small area used to plant seeds. It is mainly used for educational purposes and not for play. The area is not shaded and is surrounded by a fence.	Playing alone
<b>H</b>	Big slide, bridge and climbing area A big slide with a bridge and a curved climbing area.	Observation grids not completed



## Norway

Norwegian partners divided the playground in 3 areas (see Fig. 22 and Table 4).



Fig. 22. Photos of the school playground in Norway.

Table 4. Description of the physical settings and more frequent behaviours in each area in the Norwegian preschool playground.

Area	Description	More frequent behaviours
<b>A</b>	<p>Sandpit</p> <ul style="list-style-type: none"> <li>- A play house of wood with openings on all sides, easy to enter for all children. The children use this a lot.</li> <li>- A play kitchen with two sinks. The children use this a lot.</li> <li>- Moveable tree stumps I different size.</li> <li>- Plastic tubes in different size and lenghts</li> <li>- Different equipment as buckets, shovels, strainer (filter) tractors, boats, pans</li> <li>- Grass and climbing trees outside the sandpit, and a big rock to climb on</li> </ul>	Playing with elements (water, earth [mud], sand...); Use of senses (taste, smell, sight, sound, texture); Playing together
<b>B</b>	<p>Flat sand pool close to the entrance. It contains different play installations: two swings, a rocking animal, a boat in full size and a slide with a ladder and a space underneath. Also some loose materials available.</p>	Playing alone; Playing together
<b>C</b>	<p>Pirate ship and a shelter house. Located at the back of the preschool. The area is flat and contain a smal shelter house, a pirate ship, a small tilt swing, two big rocks and wooden floor use as a bicycle track. Inside the shelter house there are benches to sit on. The pirate ship contains different levels to play on, two inside spaces and two stairs. A steering wheel and a small slide I located in the middle of the ship. Normally there is also a lot of loose material around the ship (boxes, car tires, wooden pallets, logs and sticks)</p>	Riding bikes, scooters, skateboards; Use of senses (taste, smell, sight, sound, texture); Pretend Play; Playing together

## Portugal

Portuguese partners divided the playground in 3 areas (see Fig 23 and Table 5).



Fig 23. Sketch-map and photos of the school playground in Portugal.

Table 5. Description of the physical settings and more frequent behaviours in each area in the Norwegian preschool playground.

Area	Description	More frequent behaviours
A	Building area for constructions It's an area with plastic bricks, giant legos, arches, boxes ... and this is where children make their constructions	Walking, travelling through the space; Sitting and gathering; Use of senses (taste, smell, sight, sound, texture); Movement (e.g. running, jumping, climbing, balancing, rolling); Pretend Play; Playing together
B	Creative play area (grass) In this area, children play freely, with various materials and give space to their imagination and creativity. They are not given instructions and are free to choose what to do.	Walking, travelling through the space; Sitting and gathering; Use of senses (taste, smell, sight, sound, texture); Playing together
C	Dirty area The dirty area has a large tree further down the mud kitchen. The ground has mud and a little piece of grass. In the rest of the space of this area, the floor is of cement and there are no trees or shadows.	Walking, travelling through the space; Playing with elements (water, earth [mud], sand...); Use of senses (taste, smell, sight, sound, texture); Pretend Play; Playing together
D	Climbing area, tires and tricycles The climbing area features a large climbing installation that is accessible by way of different ladders and climbing bridges. Children can slide down on a slide or "fireman's pole", climb, play and cross underneath the slide. They also can play with tires and tricycles.	Walking, travelling through the space; Riding bikes, scooters, skateboards; Use of senses (taste, smell, sight, sound, texture); Movement (e.g. running, jumping, climbing, balancing, rolling); Risk and challenge (physical); Pretend Play; Playing together

### Results regarding children's drawings and interviews

A child-led participatory methodological approach was used, based on the child's drawing of the favorite place to play as a basis for a semi-structured conversation between the teacher and the child. A total of 10 children, in each country, aged five years old, participated in this research. Generally, our findings across countries revealed that children value or dislike places to play based on the existence and non-existence of multidimensional affordances nested within those places, and on their individual preferences and dislikes of certain elements or equipment "I don't like toboggan-slide and I don't like teeter. You can't do much on it. They are boring". In this sense, play types were found to be diverse, although physical activity play is very expressive among most children's drawings and opinions "Pirate ship. Because it is so many things we can play at the pirate ship. We can climb, slide and "drive with the steering wheel". As for the elements children would add to the playground, our results show that children are critical of their current play spaces and would like to introduce novelty, risk, loose parts and moveable toys in their play settings, such as "cars, lot of cars", "one more adventure trail". Concerning, the most exciting places to play, generally, it was found that children refer to places where they afford risky play behaviors". The climbing frame, here we can climb all the way to the outer space", and where it is possible to contact with loose parts. Some examples of drawings of children in the different countries and their interviews are presented next.



*"Favourite place: Train! (climbing construction)  
Because you can do lots of strange-wierd things, and  
you can learn acrobatics, also you can walk high on  
the crossbars of the train. I don't like toboggan-slide  
and I don't like teeter. You can't do much on it. They  
are boring. I would like to add trampoline. Train is the  
most exciting place. Today I did something that I  
thought I couldn't do, I was scared but I did it."*

Fig. 24. Drawing and responses to the interview of a Croatian preschooler.



*"Favorite place to play area C. Because I can slide  
there and play hide and seek and play home. I do  
not like the swing. There are few places to swing  
and I have to wait a long time. I would add bicycles  
or cars. There could be more places to hide or  
where to play hide and seek."*

Fig. 25. Drawing and responses to the interview of an Estonian preschooler.



*"Favorite place: the house because I can hide  
inside for a long time. Don't like to play with soil,  
because I get dirty and my mother says that I  
don't have a lot of clothes. To add: swings. Best  
place: the slide, because I have a lot of fun there."*

Fig. 26. Drawing and responses to the interview of a Greek preschooler.





*"Favorite: Sandpit. You can dig - all the way to China! Don't like: The "yellow house" There is nothing inside it, but I like to climb on the roof. To add: More slides, most of all a water slide. Exciting: The climbing frame, here we can climb all the way to the outer space"*

Fig. 27. Drawing and responses to the interview of a Norwegian preschooler.



*"Favorite place: the tires (area D), because we can hide, play games and it's very fun. Don't like: The little slide. Because it's very little. To add: swing, skates, trees to climb and a tree house to hide and play. Exciting: playing with the tires."*

Fig.28. Drawing and responses to the interview of a Portuguese preschooler.

Drawings of children were quite diverse even within the same preschool and the favourite place of one child was frequently the least favourite of other child: "my favourite place is the mud kitchen. We get the mud to make cakes, and pretend we are baking shrimp" / "I don't like the mud kitchen, because I get dirty with mud and my mother doesn't like it."; "my favourite is the big slide. When we slide we imagine that it is a giant time machine." / "I don't like the slides. Because I don't like to slide, I just like to climb." This emphasizes the need to have diverse playgrounds with multiple affordances. Good playgrounds are challenging for children of different ages, they look dangerous but are completely safe, offering ways to play based on skill level, strength, and bravery; they also have different play affordances, and should have the top five: grass, sand, climbing, swinging, and sliding. Water and loose parts are another plus (Studioludo, 2017). Children are considered competent social actors (James, 2007) who are able providers of relevant opinions regarding their social and material worlds (Corsaro, 2018) and spatial experts of their meaningful geographies (Lopes, Cordovil, & Neto, 2018). According to Article 12 of the Convention of The Rights of the Child, children have the right to express their views in all matters affecting them and their views have to be given due weight in accordance with their age and maturity. The results of the analysis of children's drawings and interviews reinforce the importance of consulting children when creating meaningful outdoor play opportunities that are in line with children's development, needs and perspectives.

## Chapter 2: Output 1. Teacher's Training Resources Pack

### Training plan

The training plan that has been devised aims to prepare teachers and teacher assistants that work in preschools to recognize outdoor active play, physical activity and active participation as fundamental for children's development, learning and well-being. In addition, this training plan enables teachers and teacher assistants to acquire more experience and grasp more knowledge, which will allow them to be better equipped to carry out the 12 activities, fully describe in Output 2. More specifically, with this training plan, teachers and teacher assistants have the opportunity to:

- Become more aware of the importance of outdoor play and learning for children's development and well-being.
- Develop new competences in analysing children's motor, social, emotional and cognitive development when children are playing freely or carrying out adult-led activities in the outdoors.
- Learn about consultancy processes that include children's perspectives regarding outdoor play and place meaning.
- Acquire practical pedagogical strategies to work with children adopting an active play-based approach to the outdoors.
- Enhance knowledge about how to create a higher quality play environment for children when playing in the outdoors.
- Promote children's connection with the community and neighbourhood surrounding the preschool.

The training plan is composed by 6 sessions. In principle, and for better results, the complete training plan should be carried out in the order that it is presented. Nevertheless, it is also possible to choose the sessions that are considered more relevant by teachers and teachers assistants, according to the preschool resources, existent play culture, and children's needs. In addition, participants should readapt the exercises that are proposed if there are practical benefits in terms of implementation. The training sessions should include a maximum of 16 adult participants (teachers and teacher assistants) and of 25 children.

### Learning outcomes

- Developing new competences in analysing children's development on physical and motor, social, emotional and cognitive domains.
- Learning about practical pedagogical strategies to work with children adopting a play-based learning in the outdoors approach.
- Delivering the 12 activities

### Activities plan and timeline

The activities of this training plan last approximately 40 hours along 1 month.

#### SESSION 1 (3 hours)

##### Specific learning outcome:

- Learn about the generational differences in terms of play opportunities for children and the impacts of play deprivation in contemporary childhood.

##### Contents:

- Reconnecting to memories of childhood.
- Contemporary childhood and role of outdoor play and of physical activity in children's development.

**Resources:**

- Computer, projector, access to internet, tables, chairs, A4 and A3 paper, sellotape white bond paper, colouring pens, collage, cardboard, corks, scraps from magazines, action figures from lego/playmobil, glue, plastic bottle tops, and small loose parts that can be used to build small constructions.
- One facilitator (a teacher or a teacher assistant)

**Working strategies:**1<sup>st</sup> part of the session

- The facilitator asks participants to remember about their memories of play when they were children. Afterwards, the facilitator asks participants to select from that recollection 3 favourite play episodes, and to write down those episodes in terms of “what was the play about”, “where did it take place” and “with whom it was happening” (including adults, if they were present), and “what do they cherish from that moment that is still within them as adults” . (10 minutes).
- Groups of 4 to 6 persons are created. Each group should have at least two dyads of teachers and teachers’ assistants that co-work with a group of children. The facilitators asks participants within each group to individually depict with most details as possible one of the play episodes (how old they were, how the play evolved, how they felt, the environmental and physical features of the place where the play happened, what they learnt from it, etc) . For this task, participants are invited to use drawing, collage, glue, cardboard, corks, scraps from magazines, colouring pens, action figures from lego/playmobil, sellotape, plastic bottle tops, etc). In each group, participants are encouraged to talk between them and exchange help, as they build up their play memory. After all participants finish their construction, in each group, each play memory is then located in a white large piece of white bond paper. (45 minutes).
- Each group sets up their registration of the play memories on a table at the centre of the room, so that all other participants can make a visit (as an exhibition) and asks questions about the constructions. (5 minutes for each group).
- After the previous task, a brake is to be made before participants start the 2<sup>nd</sup> session of the activity (20 minutes).

2<sup>nd</sup> part of the session

- Participants watch two short films about the referred contents, one more focused in children’s independent mobility and another one more focused on children’s outdoor play. There is a variety of this type of media available in the internet, which can be used for such an effect (i.e. : “Running Free: Children’s Independent Mobility” and “3 ingredients for supporting children’s outdoor play”). (30-40 minutes, it depends on the length of the films)
- After watching each of these films, the facilitator asks each participant to register, according his or her perspective, one word or idea that stressed out, on the white bond paper that was previously attached to wall or to a board. (5 minutes)
- Groups of 4 to 6 persons are created. Each group should have at least two dyads of teachers and teachers’ assistants that co-work with a group of children. The facilitator asks each group to focus on each film that was screened and write down the main ideas that participants considered as most important. (25 minutes)

- Each group then presents their notes to the wider group. These notes are displayed next to the previous notes taken by the facilitator on the white bond paper. (3 minutes for each group)
- After the previous task, a brake is made before participants start the 3<sup>rd</sup> session of the activity (15 minutes).

### 3<sup>rd</sup> part of the session:

- The same groups as in the 1<sup>st</sup> and 2<sup>nd</sup> parts of the session are set. The facilitator asks groups to describe what children do when they are outside playing and what resources they have to play with. Afterwards, each group presents to the others their ideas and thoughts (15 minutes).
- The facilitator then asks “Based on what we have learned and shared between ourselves in this training session today, are children being given all opportunities and everything they need to play when they are outside in the preschool?”; “What are they lacking?”, “What do we need to change in the preschool playground when they are playing”, “What do we need to change in ourselves for them to have access to a better play provision?”. Participants’ opinions are registered by the facilitator on the white bond paper (10 minutes).

## SESSION 2 (5 hours)

### Specific learning outcome:

- Learn about creating a pedagogical diary to characterize different play situations that children get involved when they are playing outdoors.

### Contents:

- Techniques for mapping children’s behaviour outside.

### Resources:

- Computer, projector, camera or phone, tables, chairs, A4 and A3 paper, sellotape white bond paper, colouring pens.
- One facilitator (a teacher or a teacher assistant)

### Working strategies:

- To carry out this session is necessary that dyads of teacher and teacher assistants work together. The facilitator requests participants to observe children while they are playing outdoors across different periods and register as much information as possible of what is happening, without using any camera or video resources. Each dyad has to have a total of 3 hours of observations. The observations are done using a notebook or paper. The facilitator explains that the pedagogical diaries consists of mapping children’s behaviour in the playground using a sketch-map of the physical features with different layers of observations.
- The first set of observations (1 hour) should focus on portraying an overall view of what is taking place in the whole playground across different periods (the periods are to be linked to the observations that where made).

- The second set of observations (1 hour) should focus on a specific child and register the behaviour of the child with the other children (what is the child saying and doing) as the child moves about freely in the playground, across different periods.
- The third set of observations (1 hour) should focus on a specific child and register the behaviour of the child playing in the playground, but stressing the involvement with the different physical features and resources available.
- After finishing all of the observations, participants discuss their observation notes with each other. The facilitator asks participants to create groups of 4 to 6 persons. Each group should have at least two dyads of teachers and teachers' assistants. Then, the facilitator asks the groups to register the insights, thoughts and ideas on a piece of white bond paper, which stemmed from the three different sets of observations (20 minutes).
- The facilitator asks each group to present their conclusions to the wider audience (3 minutes for each group). Each piece of white bond paper is fixed to the wall for subsequent use.
- The facilitator asks each group to draw a sketch-map of the playground. This sketch-map should emphasize the physical features of the playground as well as its different play areas (20 minutes).
- After each sketch-map is fixed to the wall, the facilitator asks participants from each group to rewrite the conclusions regarding the play observations (that were tapped to the wall) on the spaces/places in the map, where they were actually observed. Different colouring pencils should be used in this task (10 minutes).
- After the previous task, a break occurs before participants restart the session (20 minutes).
- The facilitator asks all participants to agree to a common A3 size sketch-map of the playground. This new sketch-map is drawn by some of the participants with the collaboration of others and is tapped to the wall for later use (25 minutes). One copy of the sketch-map for each classroom should be made available, so that it can be used in a subsequent training session (session 4).

### SESSION 3 (4 hours)

#### Specific learning outcome:

- Learn how to characterize children's play in the outdoors with detail.

#### Contents:

- Techniques for mapping children's play behaviour outside.

#### Resources:

- Computer, projector, camera or phone, tables, chairs, A4 and A3 paper, sellotape white bond paper, colouring pens.
- One facilitator (a teacher or a teacher assistant)

**Working strategies:**

- To carry out this session is necessary that dyads of teacher and teacher assistants work together. The facilitator requests participants to observe children while they are playing outdoors across different periods and register as much information as possible of what is happening, using a camera or video resources. Each dyad has to record 25 consecutive minutes of children playing in the outside playground. The observations should focus on a specific child, or group of children (25 minutes).
- In a first moment, each video observation is analysed by the teacher and by the teacher assistant separately. Each participant analyses the behaviours with more details as possible using 5 minutes slots (a total of 5 slots, corresponding to 25 minutes), according 3 domains: children's social interactions (between children), verbal content (voice, stories, narratives), and spatial interactions (involvement with physical features). This information is to be written in the note book which was used in the previous training session, when the first set of three observations were done. (2 hours)
- In a second moment, the two participants who are part of the same dyad, get together, discuss their observations, and register their observations in the A3 size sketch-map of the outdoor playground that was devised in the previous training momentum. (1 hour)
- In the third moment, participants get together and discuss in groups (use the same groups as before) the overall observations that were made by each dyad (15 minutes).
- After the three previous moments, the facilitator asks each group to list what they think children were learning from their play moments that were registered in the video observations, in terms of motor, social, emotional and cognitive domains. Each participant in their observation notebooks, which have been used previously in other tasks (25 minutes), registers these perspectives.
- Each group adds these perspectives on the learning outcomes to the A3 size sketch-map of the outdoor playground (3 minutes for each group).

**SESSION 4 (14 hours – along the week)****Specific learning outcome:**

- Learning to listen to children's own perspectives of the outdoor playground.

**Contents:**

- Techniques for mapping children's perspectives of their experiences when playing in the outdoor playground.

**Resources:**

- Tables, chairs, A4 and A3 paper, sellotape, white bond paper, colouring pens, collage, cardboard, corks, scraps from magazines, action figures from lego/playmobil, glue, plastic bottle tops, and small loose parts that can be used to build small constructions
- One facilitator (a teacher or a teacher assistant)
- Participants (teachers, teacher assistants and children)



## Working strategies:

- To carry out this session is necessary that dyads of teacher and teacher assistants work together. The facilitator requests participants to invite children to do a diagnose of their school playground, in which they express their views about their play behaviour and of what they feel when they are playing, and about the play equipment and resources used for play; and to capture their perspectives as co-designers of their playspace. The idea is to map children's perspectives of their play experiences and add it as a layer to the A3 size sketch-map of the playground, which was previously devised. Children should be informed in an honest way about how the process of listening to them is going to occur, of what is expected from them, and that their work is important for teachers and teacher assistants to create a higher quality play and learning environment, which is going to be put in practice in the next few months.

### 1<sup>st</sup> part of the session:

- The teacher asks children to draw the play spaces they like, the play spaces they do not like and to explain why. The drawing sessions should take place in small groups, outside, at the playground. As children are progressing through their drawings, the teacher or the teacher assistant engages in a conversation with the children in each group about their choices and writes down their perspectives in the notebook, which was previously used. (25 minutes for each group of children).
- After capturing all of children's drawings and perspectives, the teacher or the teacher assistant summons all of the children's contributions in to a copy of the A3 size sketch map of the playground. Children's drawings are exhibited in the classroom in places where they can be viewed by parents and by children themselves. The teacher and the teacher assistant as they present children's contributions in each space/place in the sketch-map, engage in a conversation with children and register extra information that children want to add to their map of the playground (25 minutes for each group of children).

### 2<sup>nd</sup> part of the session:

- Between the first and second part of session 4, children should be allowed to play freely. In this sense, the second part of this session may occur in the following day.
- In the second part of this session, teachers invite children to use different materials (i.e.: colouring pens, collage, cardboard, corks, scraps from magazines, action figures from lego/playmobil, glue, plastic bottle tops, and small loose parts) to do models of play areas they would like to have in their playground.
- The first step is to do an online search with children with the following search items "natural playgrounds" (or similar) and "loose parts playgrounds" (or similar). This online search is to take place with each group of 4/5 children (if possible, the same group as the one that was consulted with the drawings). Children select their 4 to 5 photos from the "natural playgrounds" search, and 4 to 5 photos of the "loose parts playgrounds". The photos are printed and the group is invited to do a model of the play space they would like to have in their playground based on their choice of photos, and in which place/space of the playground this ideally would happen. Children's opinions and explanations throughout the process of selection the photos and deciding on what their model is going to be about are to be registered by an adult (the teacher or the teacher assistant). All of this



process must be clearly explained to children, and the teacher or the teacher assistant must be supportive and act as facilitators. (25 minutes for each group).

- The second step is to initiate with the groups of children the construction of the models. The construction should take place across several days throughout one week (5 days), and photos of the building process are also taken. The teacher/teacher assistant co-work with the different groups in order to support children in their constructions; allow for children's creativity and theories to freely flow (it's not about doing right or wrong, it's about listening to what children think and giving them space and time to shape it); and provide plenty of time for children to play in between their constructions tasks throughout the week. (8 hours along the week).
- After all groups have finished their models, the teacher and teacher assistants display all constructions in a large area and summon all children to visualize each other's constructions. Each group carries its construction to the corresponding area of the playground and the teacher/teacher assistant takes photos of the moment. These photos are printed to be displayed in the classroom. The photos are sent by email to parents, as other photos that were taken of children building the models (15 minutes)

### 3<sup>rd</sup> part of the session

- To carry out this session is necessary that dyads of teacher and teacher assistants work together and that the artefacts co-constructed with children (sketch-map, models, children's photos) are brought to the session and displayed. The facilitator promotes an overall discussion of the previous processes enacted by children and adults around the question "what have we found out about children's play experiences by listening to children's perspectives (25 minutes).
- Afterwards, each group elaborates a synthesis of children and adults' contributions in the corresponding spaces/places/areas of the shared A3 size sketch-map, adding an additional layer to it. (20 minutes)

## SESSION 5 (5 hours along the week)

### Specific learning outcome:

- Learning about children's perspectives of the neighbourhood around the preschool area.

### Contents:

- Techniques for mapping children's perspectives of the neighbourhood around the preschool area.

### Resources:

- Tables, chairs, A4 and A3 paper, sellotape, white bond paper, colouring pens.
- One facilitator (a teacher or a teacher assistant)
- Participants (teachers, teacher assistants and children)

### Working strategies:

- To carry out this session is necessary that dyads of teacher and teacher assistants work together. Before the walk, the teacher has to make clear to children the purpose of the activity that they are going to undertake and form groups of 4 to 5 children. The teacher informs children of all aspects of the activity a couple of days before it takes place.
- Before the walk (a day before), the teacher and the teacher assistant draw a sketch-map on a very large size of white bond paper with the boundaries and the main landmarks of the places where the walk is going to take place. It must also include the areas that are going to be explored by each group of children more deeply (the number of areas depends on the number of groups of children). This sketch map is mostly blank, so that it can be used by each group of children for drawing in a subsequent stage of this process. As for size of the white bond paper, each group should have A2 size of paper to draw. (20 minutes).
- The teacher or the teacher assistants tells children about the purpose of the walk, which is to understand what children like, do not like and feel about the neighbourhood around school. For this effect, children are going to use a camera or a phone with a camera to take photos of what they like and dislike. Each group will have an area of the neighbourhood to explore and take photos within it. (10 minutes)
- The teacher shows children a web-map itinerary and the main places and landmarks that they are going to find across the walk, and organizes with the children the areas that each group will be responsible for to explore. Each group can take up to a maximum of 10 photos. It is important to keep in mind that at this stage, the teacher or the teacher assistant has to make sure that all children know how to use the photo device (20 minutes).
- Children accompanied by the teacher and the teacher assistant leave school and go for a walk around the neighbourhood preschool area. In each of the areas where each group was responsible to explore, children take the 10 photos. The idea is to grasp children's perspectives of the environment, and, therefore, adults do not interfere, except if they are called upon it. (1h30).
- When children return to the preschool, a brake for a meal and for play is made.
- Afterwards, each group looks at the photos they took and provide their ideas about them. The teacher or the teacher assistants engages in a conversation with the children, using the photos and the purpose of the walk (What children like and dislike about their neighbourhood), about their views and perspectives of the neighbourhood area they explored, including how felt in the different places. The teacher/teacher assistant registers the children's ideas on a blank A4 paper (15 minutes in each group).
- The sketch-map that was defined by the teacher and the teacher assistant is placed on the floor (due to its large size), and each group, once at a time, draws on the area that was explored by them the main features they liked and disliked. For this effect, children may go back to the photos they took on the computer to have ideas of what they would like to draw. The teacher and teacher assistant help children, if required, to make their ideas and perspectives visible on the sketch-map. The teacher uses the ideas that were synthesized in the conversation held in each group on the previous tasks to help children accomplish this task. All of children's contributions are included. As for verbal notes of children, the adult writes them on the sketch-map, on the respective area (25 minutes each group).

- After all groups have completed the sketch-map of the neighbourhood around the preschool, the teacher and the teacher assistant get all children around the sketch-map and recall the walk that was made from what is registered on the the sketch-map. This enables children to provide more details of their experience and of their perspective of the environment around the neighbourhood, and closes this activity (15 minutes). However, if it is possible to keep the sketch-map and make it accessible for children, they may go back to it, talk about it and even use it as a play resource.

## SESSION 6 (9 hours along 3 weeks)

### Specific learning outcome:

- Learning more about children's play in the outdoors by playing with them but allowing to be led by them.

### Contents:

- Learning about outdoor child-led play.

### Resources:

- Tables, chairs, A4 and A3 paper, sellotape, white bond paper, notebooks, colouring pens.
- One facilitator (a teacher or a teacher assistant)
- Participants (teachers, teacher assistants and children)

### Working strategies:

- To carry out this session is necessary that dyads of teacher and teacher assistants work together. These participants go to the playground of the school and make themselves fully available to play with the children, if they require it. The type of supervision required for this to happen must be a friendly one, encouraging children to take risks and manipulate the environment. Adults must be particularly sensitive not to disturb children's play settings and allow children to lead the play process, adopting a non-judgemental attitude of children's behaviours. In addition, adults should try to keep the environment for children to play interesting and challenging, introducing loose parts, natural features and novelty to keep children's interest on the play process, and accept its unpredictability. Moreover, physical activity play should be supported, including playing which involves a certain degree of risk (i.e.: playing with heights, rough-and-tumble play, playing at high speed; hiding away from adults). Therefore, adults must make an effort to be willing to let children play in such ways and take part in it, if children invite them to, specially, in rough-and-tumble play. When children play freely outdoors, it is natural that the environment becomes noisy, chaotic, messy and dirty. This is a sign that the play environment is in fact interesting for children. In this sense, it is natural for children to become messy and dirty, and that adults when involved in children's play, may become messy and dirty too. This is something that the teacher and the teacher assistant have to make an effort to accept in order to share the play environment with the children. When adults are sharing the play space with children, it is important to keep in mind a conscious determination to

look at the play space and play behaviours with children's eyes. (30 consecutive minutes every day in the first week, increasing to 60 consecutive minutes a day in the second week).

- The teacher and the teacher assistant are encouraged to take notes (writing, drawings, etc) of their involvement in children's play setting on their notebooks. (30 minutes every week, or right after the time spent facilitating children's play)
- After these two weeks, the facilitator promotes a discussion with the teachers and the teacher assistants based on two dimensions, "What have I learnt about children's play?" and "What have I seen children learning and what is the impact in their development and well-being?". It is important to set up groups of 4 to 6 participants (dyads of teacher and teacher assistant). In each group, participants use their play notes to organize their answers to the questions presented by the facilitator (20 minutes).
- Each group goes to the A3 size shared sketch-map, displays their conclusions next to it and presents it to the wider audience (3 minutes each group).
- To close this session, and as a wrap-up of the whole training sessions, the facilitator asks all participants 3 questions, "What can we do to carry on supporting a high quality play and learning environment?", "What kind of changes must we promote in ourselves?"; and "What kind of changes must we promote in the pedagogical processes that we use working with children?". These questions are written in a piece of white bond paper, as well as the answers, suggestions and opinions of participants. (20 minutes).

## Chapter 3: Output 2. Didactic-pedagogical resources pack

### Introduction

This output contains the didactic-pedagogical resources that integrate a set of 12 activities which, within this project, were implemented by the preschool teachers and caretakers with the children. These activities addressed the four main domains of the child's development, physical and motor, social, emotional and cognitive.

In contrast to a more traditional culture of indoor use for children's learning and development very much imprinted in the preschool culture of participating countries, the proposed activities were rooted on the following aspects:

- Enhancement of exploration, play opportunities and physical activity in different types of outdoor settings (kindergarten playground, school nearby playgrounds, built environment spaces, green and natural spaces located in the community).
- Expansion of children's mobility and place interactions in the socio-physical landscape around their preschool.
- Maximizing ludic-risk value of different settings in the outdoor environment.
- Increase physical activity and active mobility in the local community.
- Foster motor development, physical stamina and self-confidence towards an overall health and well-being.
- Increase opportunities of cooperation and sharing; and for the development of children's cultural identity and sense of self.
- Diversify possibilities for the development and expression of creativity and of emotional bonds between peers as between children and physical settings.
- Maximize the access to contexts and situations where children through constructive play develop perceptual, cognitive and problem-solving skills; and through fantasy play develop abstract and flexible thinking, language, emotions and imagination.

The final proposal of these resources was a result of the pilot testing in each of the participating schools, after the short-term joint training events.

### The 12 activities and the contribution for child development

The current state of the art regarding childhood and play (see introduction section of this report) calls to the attention of children's current play deprivation, reinforces the undisputable value of outdoor play for children's development, health and well-being, and the urgency of governments, municipalities, communities, research organizations and schools to carry out policies, initiatives and efforts that protect, promote and support children's outdoor play. In nowadays, play deprivation starts very early in the life cycle and in contexts, such as preschools, where children should spend most of their time playing freely, they are instead subjected to adult led, sitting-down activities, that take place mainly in the indoors, with a strong emphasis on academic success, which is jeopardizing children's health, well-being and development.

According to Frost, Wortham, and Reifel (2012) the preschool years are a fundamental period for children to acquire fine motor skills that involve use of the hands and fingers, gross-motor skills that enable body movement and mobility, and also perceptual-motor development, which is acquired through the relationship between the child's movement and the physical environment. Children learn how to move and to relate to the surrounding environment via a progression of motor skills acquisition in different phases, in which from 2/3 years to 6/7 years children are within the fundamental movement phase, enabling them to develop and refine gross motor skills, such as running, jumping, throwing, and catching (Gallahue, Ozmun, & Goodway, 2012). In this sense, both outdoor directed physical activity play and child-led physical activity play in preschools is crucial for children to engage in physical exercise and to develop motor skills (Frost et al., 2012). Frost and colleagues (2012), drawing on the work of Piaget, Vygotsky and Smilansky, reinforce that play is fundamental for cognitive development, namely, functional, constructive and symbolic types of play as well as games with rules. In the preschool years, functional play, which is very much related with object play, gains complexity and becomes more goal oriented, incorporating construction play, as constructions and social interactions become more complex. As for symbolic play, it starts with a substitution, or representation of

an object for another, gaining more complex forms across the preschool years, where children start enacting dramatic forms of play, which are affected by social interactions, language and motor development, and that include imitating, imagining, dramatizing and role play. As for games with rules, children start engaging with them in their early years, and are able to incorporate simple rules in games such as lotto, matching games, and games with spinners and dice. The relationship between play and social development has been well argued by the work of Piaget, Erikson, Vigotsky, Sutton-Smith, Parten among other scholars. Drawing on these authors, Frost et al (2012) reaffirm the fundamental role of social and sociodramatic play in social and emotional development during the preschool years. More specifically, at this time of life, children increasingly understand themselves as individuals and as part of the social world, due to the increase in autonomy, enhancement of cognitive skills and the development of their emotionality through empathy and social competence in their relationships with parents, siblings and peers. Social play includes solitary play, parallel play and group play (Parten, 1933). Children start to play by themselves (alone) and gradually they have the opportunity to become social players. Sociodramatic play, which includes pretend play and role play, is transversal to all developmental domains and facilitates the expression of feelings (Frost et al., 2012). This process is visible across the preschool years, in which young children include others in pretend and dramatic types of play. In a recent study about the connections of outdoor free play and social and emotional functioning in pre-schoolers, Veiga et al. (2016) found out that emotion recognition was positively associated with free play, which seems to support the idea that social skills further develop during free play in the outdoors.

Play is a pivotal feature of the biological and historical evolution of mammals; ontogenetically it remains as a vital neurological mechanism that promotes an adaptive reaction to basic archetypal emotions of shock, anger, fear, disgust and sadness; and it also plays a therapeutic function of fighting against depression and other negative aspects of life through the enactment of cognitive processes that enable a sense of achievement, control and happiness (Sutton-Smith, 2008). Play changes the architecture of the brain (S. L. Brown & Vaughan, 2010) by operating simultaneously on several adaptive systems, *pleasure and enjoyment, emotion regulation, stress response; attachments, and learning and creativity*; and therefore children's play is addressed as *a self-protecting process* that allows maximizing adaptive capabilities, resilience, well-being and health (Lester & Russell, 2010). Play is a fundamental learning mechanism for the developing child, in which one does not exist without the other, being therefore inseparable (Hughes, 2012; R. C. Moore, 2014). For play and learning to occur in the outdoors requires children to have access and permission to experience different types of play, according to their needs, in an enriched environment (Frost et al., 2012; Hughes, 2012; Hughes & Melville, 2002; Lester & Russell, 2010). In spite of this, the existent outdoor playgrounds available for children to play, including the ones available in school grounds, have been criticised by different authors because they do not meet children's developmental needs and provide a mono-culture of play affordances. More specifically, contemporary playgrounds share similar designs and equipment pieces that are isolated to each other (Herrington & Studtmann, 1998). Moreover, they are static, predictable and boring and do not provide contact with natural elements (R. Moore, 1989; Woolley, 2008) and offer poor stimulation and limited activities (Cohen, Moore, & McGinty, 1978; Frost, 1992). In addition, these playgrounds have been criticized for being sterile and free of challenge, and thus inappropriate for school-age children's development (Frost et al., 2012); and for providing poor social interactions (Czalczyńska-Podolska, 2014). Outdoor play spaces that are static and inflexible, are absent of natural and non-natural loose materials and fixed equipment, not allowing children to manipulate and recreate their play environments (Jansson, 2010); and to engage in challenging and risky play affordances (Jongeneel, Withagen, & Zaal, 2015).

Besides the quality of the play spaces, for children to play freely, it is also crucial that the adults who take an active part on their rearing, namely parents, teachers and other school staff members, are open to accept that high quality play and learning is linked with adult permission towards play. Therefore, adults need to understand and accept that play behaviours must take place in a safe environment, where children can be flexible, spontaneous, unpredictable and risky (Lester & Russell, 2008). According to McKendrick, Loebach, and Casey (2018), adults play a fundamental role in the removing of time and space barriers for children to play freely.

The 12 activities in the MLO action-research project were devised as a practical contribution that can be adopted by preschools to create an openness on the adults for the acceptance of a culture of free play and of a preschool education where outdoor play and learning are welcome. Moreover, the 12 activities also



contribute for the promotion of an appropriate motor, social, emotional and cognitive development and well-being of children, adopting an outdoor play and an outdoor learning approach. An activity is meaningful for a child if the child takes pleasure from it and is able to satisfy the biological drives that pushed the child in to being immersed in such activity or behaviour (Hughes, 2012). This means that if given a wide range of play based activities or possibilities of action, as the ones proposed in these 12 activities, children will have more possibilities to find what they need in terms of being and of becoming, and retain from it immediate and deferred motor, social, emotional and cognitive developmental benefits.

The 12 activities created for this project were structured according four dimensions of interventions, “Enhancing knowledge and changing attitudes”, “Practical factors to make outdoor play easier”, “Play environment design and affordances” and “Practical activities”. This enables preschool staff to act upon different levels in order to remove barriers for children to play outdoors and to increase the quality of their outdoor play and learning spaces. Concomitantly, the diversity of activities that were created enable children to develop their motor, social, emotional and cognitive skills, because they share four crucial developmental tenets, outdoor active movement; playful disposition and playful settings; flexibility and diversity of play resources; and contact with nature and with the wider community (please see full details of activities in the next section).

## The 12 activities layout

In the following section we present the 12 activities. These activities do not need to follow a specific order. They are grouped according to the 4 dimensions of intervention previously mentioned and we believe it is better to start by the activities that aim to enhance knowledge and change attitudes, after that there is no suggestion for a particular order and some activities can be repeated several times along the year. In each activity, we present a description of the activity, the resources that are needed to carry on the activity (human, material and time), the preliminary steps that should be taken, the benefits of the activity for children’s development and learning, a suggestion to adapt the activity to different SEN situations, and the assessment proposal (post-activity).

**General Goal: Enhancing knowledge and changing attitudes****Activity 1: Meeting with the staff****Description:**

**Meeting with the staff** (play, rules, affordances and benefits for children). Please see attached form for description of the staff meeting. This meeting should include a participatory approach with graphic recording. Examples of activities are provided in staff workshop document.

**Resources:****Human:**

1 or 2 teachers (one of them is the facilitator)  
Maximum of 20 participants (staff)

**Material:**

Roll of white bond paper / board  
Colouring pens  
25 Photos of nature play and loose parts play;  
Sellotape, A4 paper, A3 paper

**Time:**

1 to 2 hours, depending on the number of participatory activities selected

**Preliminary Steps:**

Make sure you are well acquainted with the ppt presentation and feel comfortable with the concepts presented. Make sure you have all the materials needed for the activity, including the 25 photos of nature play and loose parts play, which can be the photos of your own preschool or photos retrieved from the internet

**Benefits for children's development and learning:**

This workshop has an indirect benefit for children's outdoor play. Children's play is very much dictated by how the adult acts when children are playing, and what kind of environments the adult is providing children with. This workshop will create awareness about the role of the adult when providing the environment for children to play, when talking to parents about this issue (play advocacy), and when supervising children outdoors.

**Adapting the activity to SEN children:**

According to the UN General Comment on article 23 of the Convention on the rights of the child, Play has been recognised as the best source of learning various skills, including social skills. The attainment of full inclusion of children with disabilities in the society is realised when children are given the opportunity, places, and time to play with each other (children with disabilities and no disabilities). This should be highlighted in the workshop.

**Post-activity:**

The target population (staff) should complete the assessment form provided (Assessment 1). Schools should create other moments/meetings during the academic year to assess how are they managing attitudes toward outdoor play.

**Suggestions made by the partners after implementation:**

Organize at least part of this activity outdoors

**Staff workshop document****Workshop for staff: creating awareness for children's outdoor play and learning in preschools**

Slide 1 (8 minutes)	Powerpoint presentation (see Appendix 6)
Create groups of participants (2 minutes)	(2 minutes) Groups of 4 to 5 persons are created. Each group should have at least two dyads of teachers and teachers' assistants that co-work with a group of children.
<u>Exercise 1:</u>  <b>PAST AND PRESENT:</b> <b>How did you play as child?</b> <b>How do children play today?</b> (15 minutes)	(5 min) Each group writes two short lists answering the two questions. (5 minutes) Each group (a representative of the group should be selected) reads the answers aloud and the teacher in charge of conducting the workshop (facilitator) registers them on a board, or wallpaper. (5 minutes) The facilitator reads the answers back to all participants and promotes the discussion about possible reasons appointed by participants to explain what has changed and what has not changed in terms of play between generations. Participants' contributions should be registered on the board/ wallpaper by the facilitator.
Slide 3- Slide 6	Powerpoint presentation (see Appendix 6)
<u>Exercise 2:</u>  <b>TYPES OF PLAY AND ADVOCACY FOR FREE PLAY</b> (30 minutes)	(2 minutes) The facilitator provides each group with a set of photos of children playing in the outdoors and explains that each group will select 4/5 photos that will be used to make a role-play. The role-play consists of creating a situation in which the photos are used to explain to parents about the importance and the benefits of children playing outdoors, as it is shown in the photos. Each group is invited to present their arguments using the modes of expression that they are comfortable with it (i.e.: oral presentation type, drama type-one person can be teacher and the other can be the parent; etc). The photos should be diverse and include different types of play and different types of play environments, including nature elements and loose parts. (2 minutes) Each group chooses 4/5 photos. (10 min) Each group writes a list of arguments and reasons regarding the choice of the photos and prepares their presentation. (10 min) Each group provides their presentation, role-play or other using the photos as a background on the board/wallpaper. The facilitator writes down main points elicited by each group on the board/wallpaper (2 minutes for each group). (6 min) The facilitator summons the main conclusions of the previous presentations and promotes discussion of the critical aspects that should be shared with parents (children's well-being, learning aspects, development).
Slide 8- Slide 9	Powerpoint presentation (see Appendix 6)
<u>Exercise 3:</u>	(5 minutes) Each participant in each group is invited to assess priorities of action, which in their perspective should be implemented at the preschool

<p><b>Assessing priorities for action towards more and better quality of children's outdoor time</b></p> <p>(15 minutes)</p>	<p>in order to increase the time that children to play outdoors, as well as to increase the quality of the outdoor playing environment. 3 fields of action are considered, <i>time</i>, <i>space</i> and <i>friendly supervision</i>. In each of these fields, a set of 4 actions is presented. Each participant has to attribute a number to each action (1 to 4), where 1 refers to first priority, 2 refers to second priority and so on.</p> <p>Each group is provided with 3 sheets of papers, one for <i>time</i>, one for <i>space</i> and one for <i>friendly supervision</i>. In each sheet a diagram is drawn (one horizontal line crosses one vertical line) so that four sections are created. In each section is named with an action.</p> <p>For the "<i>time</i>" field the sections are:</p> <ul style="list-style-type: none"> <li>• "reorganize length of children's routines (i.e.: diminish time in certain activities, read one story instead of two, etc.)".</li> <li>• "change spaces where routines take place" (i.e.: trading indoor spaces for outdoor spaces for children's reception or meals, etc.)"</li> <li>• "diminish time to formal learning by increasing the time for outdoor free play".</li> <li>• "implementing special days (day to play outside when it's raining, day for outdoor free play, parents and children day to play outside, community day, etc).</li> </ul> <p>For the "<i>space</i>" field the sections are:</p> <ul style="list-style-type: none"> <li>• introduce natural materials.</li> <li>• introduce loose parts.</li> <li>• Introduce small constructions (music and water walls, swing with a tyre, etc).</li> <li>• eliminate barriers for the access of the outdoors (i.e.: use of appropriate clothing, cleaning reinforcement, punctual reinforcement of human resources, etc).</li> </ul> <p>For the "<i>friendly supervision</i>" field the sections are:</p> <ul style="list-style-type: none"> <li>• allow and support children to engage in physical risk while they play outdoors.</li> <li>• allow children to handle conflicts autonomously while they play outdoors.</li> <li>• decrease the number of adult interruptions on children's play.</li> <li>• increase communication with parents by sharing with them photo reports about their children's free play in the outdoors.</li> </ul> <p>(10 minutes) The facilitator summons the results on each group and presents them to all participants by reinforcing which priorities were mostly expressed. A discussion should be prompted in order to obtain a general consensus about how to enforce such priorities.</p>
Slide 10- Slide 14	Powerpoint presentation (see Appendix 6)



**General Goal: Enhancing knowledge and changing attitudes****Activity 2: Workshop for the parents****Description:**

**Workshop for the parents** (benefits of outdoor play and the importance of risk). Please see attached form for description of the parents meeting.

This meeting should include a participatory approach with graphic recording. Examples of activities are provided in parents workshop document.

**Resources:****Human:**

1 or 2 teachers (one of them is the facilitator)  
Parents of the class

**Material:**

Videos about loose parts play  
Roll of white bond paper / board  
Colouring pens, Sellotape, A4 paper, A3 paper

**Time:**

1 to 2 hours, depending on the number of participatory activities selected

**Preliminary Steps:**

Make sure you are well acquainted with the ppt presentation and video and feel comfortable with the concepts presented. Make sure you have all the materials needed for the activity. Download the videos so that you can use them as often as you like (link for the dropbox will be included here)

**Benefits for children's development and learning:**

This workshop has an indirect benefit for children's outdoor play. Children's play is very much dictated by how the adult acts when children are playing, and what kind of environments the adult is providing children with. This workshop will create awareness about the role of the parents when supervising children outdoors.

**Adapting the activity to SEN children:**

According to the UN General Comment on article 23 of the Convention on the rights of the child, Play has been recognised as the best source of learning various skills, including social skills. The attainment of full inclusion of children with disabilities in the society is realised when children are given the opportunity, places, and time to play with each other (children with disabilities and no disabilities). This should be highlighted in the workshop.

**Post-activity:**

The target population (parents) should complete the assessment form provided (Assessment 1). In order to keep parents motivated, teachers should communicate with them along the school year (using formal or informal communication platforms), sending suggestions of activities for the weekend/holidays, videos, etc...

**Suggestions made by the partners after implementation:**

Organize at least part of this activity outdoors

## Parents workshop document

### Workshop for parents: creating awareness for children's outdoor play and learning in preschools

SLIDE 1	Powerpoint presentation (see Appendix 7)																					
Create groups of participants (2 minutes)	(2 minutes) Groups of 4 to 5 persons are created. Each group should have at least two dyads of teachers and teachers’ assistants that co-work with a group of children.																					
<u>Exercise 1:</u>  <b>PAST AND PRESENT:</b> <b>How did you play as child?</b> <b>How do children play today?</b>  (15 minutes)	(5 min) Each group writes two short lists answering the two questions. (5 minutes) Each group (a representative of the group should be selected) reads the answers aloud and the teacher in charge of conducting the workshop (facilitator) registers them on a board, or roll of white bond paper. (5 minutes) The facilitator reads the answers back to all participants and promotes the discussion about possible reasons appointed by participants to explain what has changed and what has not changed in terms of play between generations. Participants’ contributions should be registered on the board/ roll of white bond paper by the facilitator.																					
Slide 3- Slide 4	Powerpoint presentation (see Appendix 7)																					
<u>Exercise 2:</u> <b>Play experiences as a child enabled me to become...</b> (25 minutes)	<p>(3 minutes)The facilitator writes on the board/roll of white bond paper the following question: “What did you learn through your play experiences when you were child and how did these experiences affect you as an adult? Each group starts to discuss the question. While the groups discuss the matter openly, the facilitator writes on the board/roll of white bond paper a table with the following words (or projects them using the powerpoint):</p> <table><tr><td>Assertive</td><td>Compassion</td><td>Confident</td></tr><tr><td>Corageous</td><td>Curious</td><td>Independent</td></tr><tr><td>Happy</td><td>Kind</td><td>Learning with mistakes</td></tr><tr><td>Making good decisions</td><td>Passionate</td><td>Powerful</td></tr><tr><td>Being recognized</td><td>Resilient</td><td>Feeling of belonging</td></tr><tr><td>Self-esteem</td><td>Socially just</td><td>Spiritual</td></tr><tr><td>Creative</td><td>Wealth</td><td>Wisdom</td></tr></table> <p>(6 minutes) Each group referring to the words on the table, chooses 5 features that better characterize what was learnt through play and registers them on a sheet of paper. From these 5 features, 1 is to be selected and associated it with 1 outdoor play experiences that occurred in their childhood. This is also to be registered on the same sheet of paper. Characteristics that are not mentioned on the table are also welcomed. A representative of each group takes the sheet of paper and places it on the board/roll of white bond paper area designated with “ADULTS”. (6 minutes) Each group referring to the words on the table, chooses 5</p>	Assertive	Compassion	Confident	Corageous	Curious	Independent	Happy	Kind	Learning with mistakes	Making good decisions	Passionate	Powerful	Being recognized	Resilient	Feeling of belonging	Self-esteem	Socially just	Spiritual	Creative	Wealth	Wisdom
Assertive	Compassion	Confident																				
Corageous	Curious	Independent																				
Happy	Kind	Learning with mistakes																				
Making good decisions	Passionate	Powerful																				
Being recognized	Resilient	Feeling of belonging																				
Self-esteem	Socially just	Spiritual																				
Creative	Wealth	Wisdom																				



	<p>features that they would like their children to learn through play. Characteristics that are not mentioned on the table are also welcomed. A representative of each group takes the sheet of paper and places it on the board/roll of white bond paper area designated with "CHILDREN". (10 minutes) The facilitator reads back to all participants all of the groups' notes and asks:</p> <ul style="list-style-type: none"> <li>• "What is missing then today in children's play?"</li> <li>• "Which are the main fears that adults feel today which are putting children's outdoor play at risk?"</li> <li>• How can parents overcome these fears?</li> </ul> <p>All, participants' contributions for each question should be registered on the roll of white bond paper/board.</p>
Slide 6- Slide 7	Powerpoint presentation (see Appendix 7)
<p><u>Exercise 3</u>  <b>PERSONAL CONSTRAINTS TO OUTDOOR PLAY AND WAYS TO OVERCOME</b>          What is preventing you from allowing your child to play freely outdoors?          How to overcome those barriers?  <u>(5 minutes)</u></p>	<p>(2.5 minutes) The facilitator asks participants to name personal reasons that act as barriers to allow their children to play outdoors and writes them on the roll of white bond paper/board. These reasons may be diverse, such as fears, beliefs, anxieties, safety issues, social pressure, dangers, risks, etc. (2.5 minutes) The facilitator asks participants to name possible strategies to overcome the previous appointed barriers.</p>
Slide 9- Slide 10	
<p><u>Exercise 4:</u>  <b>OUTDOOR PLAY ADVOCACY IN PRESCHOOLS: Screening of two short films and creating an advertisement</b>          (35 minutes)</p>	<p>(15 minutes) Screening of a short films featuring nature play environments and loose parts play. In the drive there is a document ("links to nature play and loose parts play short films") with some links to short videos on these themes. It is possible to use these videos but also others that may be found in the web.</p> <p>(10 minutes) Each group, using paper and colouring pens, is invited to create an advertisement to encourage parents to promote children's outdoor play, nature play and loose parts play. The advertisement has to have a main slogan, main message and 3 to 4 practical steps for outdoor play to happen, including a strategy/recommendation for parents to overcome their fears which constrict children's outdoor play.</p> <p>(10 minutes) Each group has to present to all participants its advertisement (2 minutes for each group).</p>
Slide 12- Slide 16	Powerpoint presentation (see Appendix 7)

**General Goal: Practical factors to make outdoor play easier**

### Activity 3: Clothing for outdoors

#### Description:

Have clothing for the 4 seasons (all weather conditions) and to get dirty at school (for children and staff)

#### Resources:

**Human:** children, teachers, caretakers, parents.

Availability of teachers and assistants to help children with clothing and footwear before and after the activity. Cleaning staff should also be involved when needed.

#### Material:

**Clothes:** Winter pack - water resistant clothes for wet weather (raincoat, rain trousers, water proof hat), wellies or other water-resistant footwear; Summer pack - swimming suit, slippers, towel, hat. Winter and Summer - a change of clothes for when children get dirty. **Structures:** closet with individual boxes, hangers, place to dry clothes and boots. The clothes are not only for children but also for adults.

#### Time:

Allow for time for children to change clothes.



#### Preliminary Steps:

Staff meeting - information about the benefits of outdoor play across all seasons and necessary steps to implement it

Prepare storage structures for clothes in the beginning of September

Parents meeting – September – information about the benefits of outdoor play across all seasons and list the necessary clothes which will be kept at school during the school year

Prepare notes, text with pictures and symbols about outdoor play in different kinds of weather (use different modes to disseminate information)

Create a routine for sending the clothes home and replacing them at the preschool

Define procedures with children

#### Benefits for children's development and learning:

Fresh air; health; different sensory experiences; experience the changes in the environment according to the weather and the seasons; appropriate clothing helps children to feel comfortable and enjoy the outdoor activity in more pleasant way; contribute to create a culture of outdoor use across all seasons among staff, parents and children; stimulates children's capacity to plan and make decisions and organize their clothes; stimulates children's autonomy and responsibility.

#### Adapting the activity to SEN children:

This would not require special accommodation, as long as the clothes / footwear is adapted to the child's needs. Other children and/ or adults may need to help children to get dressed / undressed.

#### Post-activity:

Teachers and caretakers should complete the assessment form provided (Assessment 2).

Assess if the children were comfortable with the clothes / footwear used and adapt accordingly.

**General Goal: Play environment design and affordances****Activity 4: Create new affordances****Description:**

Increase play value of existing play structures or elements (such as slides, multi-functional structures) by adding natural elements, or by implementing a pop up play with loose parts. The idea would be to create other affordances. The pop up play should be child-led and it doesn't have a determined goal such as building a den.

Things to be aware of in relation to this activity: amount of space used, larger space may encourage more movement; variety of loose parts materials; child directed activity; involvement of the children; adults in a facilitative rather than a directive role.

**Resources:**

**Human:** At least one educator and one assistant depending on the size of the group. Involve teachers, parents, local companies and sponsors in the stage of collecting the materials.

**Material:** A large number and variety of loose parts / materials both natural and recycled, such as logs, cardboard boxes, tyres, sticks, tubes/pipes, planks, milk crates, fabrics/textiles, ropes, hoses, pots and pans, cans, pine cones, water, sand, balls, etc. Also include toys to spark play.

**Time:** Allow for enough time for the children to be engaged in the play, in the range of 1-2 hours. Repeat the activity regularly, at least 3 times in the duration of the program.

**Preliminary Steps:**

Collect the loose parts materials (ask materials through parents information boards, newsletters, website, letters and contacts with sponsors). Meeting between the staff to discuss the organization and approach attitude to this activity, making sure that it remains child-centred. Organize the material making the loose parts accessible for children to use in their own way.

**Benefits for children's development and learning:**

Autonomy, creativity, imagination, cooperation, communication, problem solving, sensorial skills, motor skills, social skills, concentration, critical thinking, knowledge about different kind of materials, leadership, responsibility, special perception, emotional regulation, resilience.

**Adapting the activity to SEN children:**

Make sure all children are included in the activity taking into account issues such as: space accessibility, facilitation of social interaction, encourage for the child to interact with the materials, sensory characteristics of the environment. Other children can help.

**Post-activity:**

Teachers and caretakers should complete the assessment form provided (Assessment 2). Reflect upon the activity through discussing it and make appropriate adjustments for the next time.

## General Goal: Play environment design and affordances

### Activity 5: Low-cost “Permanent” Spaces

#### Description:

Creating low-cost “permanent” spaces in the playground with new affordances. It is important to be creative and take into account the existing and potential affordances of the spaces. For example, include spaces for:

- a) Spaces for moving, such as:
  - Moveable logs used for courses, walking, jumping, role playing, etc
  - Ropes – between trees for hanging and balance
  - Painting a target on the wall to encourage ball games
  - Rope with bucket for children to lift sand, water, etc.
- b) Sensory experiences, such as:
  - Make up a sandpit out of a large box or bucket
  - Water walls
  - Sound walls
  - Mud kitchen
  - Fixed loose parts board
- c) Social interaction, such as:
  - Hiding places developed by using cardboard boxes, trunks, bushes, flower boxes
  - Allowing children to use “hidden” spaces
  - Tepees made out of branches and fabric
  - Gathering-reading area (e.g., under a tree)
- d) Creative expression, such as:
  - A space with a variety of loose parts, natural materials for creative play and land art
  - Large chinks and paintbrushes for drawing on the floor or vertical surfaces
  - Drama outdoors
- e) Connecting to nature, such as:
  - Introduce “flower boxes”
  - Planting and growing vegetables, herbs and flowers
  - Watering the plants
  - Insect hotel
  - Worm farm
  - Bird boxes



#### Resources:

##### Human:

Teachers, staff, parents, local community, sponsors

Enlist the parents' and auxiliary staff's help and expertise on constructing and using materials

##### Material:

Material depends on the specific spaces to be created, some examples of material can be: bottles, sticks, wood, sand, storage boxes, wood pallets, ropes, pots and pans, keys, locks, switch, chains, pipes...

**Time:** It depends on the spaces to be created. About one month or less to gather the material, a week or less to build the structure. Permanent maintenance is required. Use it until it lasts or until the children show interest.

#### Preliminary Steps:

Communication with the parents; involve staff and children in the process of creating these spaces and collect materials; find strategies to involve the community and sponsorship.



**Benefits for children's development and learning:**

Beneficial for all areas of health, development and learning; improving of children's social, emotional and cognitive skills and fostering of children's creativity

**Adapting the activity to SEN children:**

Make sure that the space incorporates everybody; Physical accessibility; Sand boxes and water boxes not only on the ground but also accessible by wheelchair users.

**Post-activity:**

Teachers and caretakers should complete the assessment form provided (Assessment 2).

Constantly evaluate your space, reflect and adjust accordingly.

Involve staff and children in the reflection.

**General Goal: Practical activities****Activity 6: Construction Project****Description:**

Conduct a project with construction play where children build something; using wood, hammer, nails, cardboard, knives or other natural or recycled material. Start the project by asking the children what they want to build and involve them in the planning and implementation process. Focus on the process, not on the outcome.

**Resources:****Human:**

Teachers, staff, parents, community

**Material:**

It depends on the project, different materials can be used, such as: wood, hammer, nails, boxes, cardboard, natural materials, recycled materials...

**Time:**

Usually one week to prepare: discussion, planning, acquiring the materials, a week or more for working on the construction project. After that children will have the chance to play with it and change it, have new ideas.

**Preliminary Steps:**

Discussion within the staff about facilitative role rather than preconceived directive attitude. Focus on the process rather than the outcome. Informing parents and staff, collecting, preparing, organize the groups of children, exploring the materials.

**Benefits for children's development and learning:**

Problem solving, negotiation and task management. Improvement of fine motor skills. Development of social skills, handling of dangerous tools, promoting children's participation and citizenship as co-creators of the project.

**Adapting the activity to SEN children:**

Use appropriate tools and adapt task's participation according to children's needs and skills. Children should help each other and adults should be sensitive to children who require more attention.

**Post-activity:**

Teachers and caretakers should complete the assessment form provided (Assessment 3). Reflect on how the project went and think about adaptation.



## General Goal: Practical activities

### Activity 7: Contact with Natural Elements

#### Description:

Designated time for children to play with natural elements (e.g. sand, water, mud, plants, trees, leaves, flowers, etc.).

#### Resources:

##### Human:

Teachers, staff, children. Parents may be involved if children are asked to bring natural materials to school.

##### Material:

Sandpits, water walls, buckets, shovels, pans and pots, sticks, bottles, natural materials that children are asked to collect according to season.

##### Time:

Start with 1 day a week and increase this frequency along the year. The activity doesn't require an entire day to be implemented.



#### Preliminary Steps:

Inform parents about the activity

Discuss with the staff

Collect materials

Make sure children have appropriate clothing for the activity

Plan, manage and discuss the activity with children; designate roles for children (i.e.: attribute responsibilities such as bringing out and putting back the tools from storage room).

Commit teachers and staff to the idea that play is to be child-led.

#### Benefits for children's development and learning:

Contact with nature and biophilia, promotion of autonomy, development of emotional bonds between children and between children and the environment, fostering of creativity, promotion of shared social activity, development of fine motor skills.

#### Adapting the activity to SEN children:

The space should be physically accessible to every child. Adult and other children's support if required.

#### Post-activity:

Teachers and caretakers should complete the assessment form provided (Assessment 3). Reflection and assessment of the activity with children.

## General Goal: Practical activities

### Activity 8: Use the Environment Outside

#### Description:

Use the environment outside your preschool:

- Go to a natural environment (forest, woods, beach...) – one day activity (let children play freely with the environment, without adult interference).
- Explore the environment and follow children's interest

#### Resources:

##### Human:

Ideally one adult per 5-6 children.  
You might need to have other supports (e.g., city hall – transportation)

##### Material:

Depending on the environment you go to, collect and use found materials when possible (e.g., beach – sand, water, sticks, stones, shells, algae, mussels, clams...), camera, reflective vests

##### Time:

At least half a day. Try to repeat once a month



#### Preliminary Steps:

Choose the place you go (maybe have a plan B in case of changing weather)

Involve the children in the discussion before you go

Arrange for transportation if needed

Organize for food/drink with parents

Children should have food and extra pair of clothes in a small backpack

Planning materials to take (e.g., beach – buckets, shovels, blankets, towels, sunscreen and water)

#### Benefits for children's development and learning:

Contact with nature, exploring new environments, physical activity, motor development, autonomy, sensorial integration, social cooperative skills

#### Adapting the activity to SEN children:

Accessibility; allow for enough adults to support the children's needs

#### Post-activity:

Teachers and caretakers should complete the assessment form provided (Assessment 3). Reflect on the day with the children and make a visual representation of the day using photos, children's words, etc.

**General Goal: Practical activities****Activity 9: Have a Meal Outdoors****Description:**

Have a meal outdoors (either on the preschool playground or in a natural environment, prepare the meal outside with the children if possible).

Involve the children in setting up and cleaning the space.

**Resources:****Human:**

Teachers, staff, children, parents

**Material:**

Plastic table cloth (if needed) and wet wipes

Logs to sit on, finger food that can be easily eaten, water

If the idea is to cook outside, include gas stove or similar (wood to make fire), tools, cutlery, blankets

**Time:**

Enough time for a meal. If you cook allow time for that.

**Preliminary Steps:**

These steps will vary depending if children bring the food from their homes, if they are buying it in the local community with the teachers, or if they are going to cook it outside with the teachers. Discussion about the activity between the staff; inform parents and ask the m to bring food if necessary; discuss with children what kind of food to buy or to bring; if the school grows vegetables and fruits, these should be included on the meal.

**Benefits for children's development and learning:**

Healthy meals, better appetite, emotional connection with food that is grown in the school, which will encourage "picky eaters" to eat; contact with different textures, smells, tastes (sensory stimulation); fresh air; development of social skills; discovering new purposes for the outdoor environment.

**Adapting the activity to SEN children:**

The space should be physically accessible to every child. Adult and other children's support if required.

**Post-activity:**

Teachers and caretakers should complete the assessment form provided (Assessment 3). Involve the children in the cleaning up or packing their own bags.



## General Goal: Practical activities

### Activity 10: Map the Neighbourhood

#### Description:

Walk, explore and make a map of your preschool neighbourhood (with the children participating). Mark (and draw) different activities and features available in the neighbourhood. Focus on the process, not the outcome. This activity is more about the children's experience.

#### Resources:

##### Human:

One adult for 5-6 children depending on their age. The group should not be too big so that all the children get involved. Involvement of local community.

##### Material:

Different material might be used, such as: paper, camera, crayons, cardboard, white bond paper, paint, pencils, scissors, boxes, compass, stop sign, reflecting vests, bags or boxes for collecting material if necessary. Ipad and mobile phones can be used for example to take pictures or for children to recall their navigation in the neighbourhood, however these are not mandatory for the activity to happen.

##### Time:

Depending on the area covered, spend enough time outdoors, possibly in various sessions. About a week to create the map.

#### Preliminary Steps:

Map the outdoor area of the school, take pictures, make drawings, etc; Decide the area to be explored; Start to explore the neighbourhood involving the children; Explore google maps; Gather materials; Remind procedures in case children get lost; inform the parents about the importance of exploring the neighbourhood.

#### Benefits for children's development and learning:

Development of environmental knowledge; spatial perception, autonomy; sense of belonging, discovering potential affordances; motor, social and emotional skills; knowledge about the cultural and social dynamics of the neighbourhood; contact with IT technologies (if used in this activity); diverse ways to communicate with others.

#### Adapting the activity to SEN children:

Accessibility, check architectonic barriers; having for example adult support to cover children's needs (extra human resources); having enough time for the activity

#### Post-activity:

Teachers and caretakers should complete the assessment form provided (Assessment 3). The map should be displayed on the wall. It should also be used as a tool to prepare future trips.



**General Goal: Practical activities****Activity 11: Art Outside****Description:**

This activity is not focused on a specific outcome, rather on the process of creativity and self-expression. Art outside, examples:

- Drama outside (set up a small “play” with the children and use the outdoor environment to build a stage),
- Land art
- Use natural materials to make costumes, painting, animal figures, etc.
- Dance activities
- Music activities
- Storytelling

**Resources:****Human:**

Teachers, children, parents, staff

**Material:**

Natural elements, fabrics, paints, papers, glue, pebbles, etc. Depends on the activity, for example for drama outside: stage, costumes, music, instruments; For storytelling: book, puppets, logs, pillows, blankets

**Time:**

Duration depends on the activity. Frequency also depends on the activity. For example: preparing a play may take longer – about 1 month; storytelling takes about 1 or 2 hours, depending on the strategies implemented and the purposes (unidirectional, co-constructive, children finish the story, change the story, represent while listening...)

**Preliminary Steps:**

Discuss the project between the children and the staff; Collect materials and also be open to found materials; have a look at contemporary art books with the children; prepare the activity with children (e.g., for a play – costumes, story, instruments)

**Benefits for children’s development and learning:**

Creativity, imagination and fantasy, aesthetics, self-expression, self-confidence, fine motor skills, communication, social skills, development of divergent thinking, cultural transmission.

**Adapting the activity to SEN children:**

Accessibility, support all children as needed

**Post-activity:**

Teachers and caretakers should complete the assessment form provided (Assessment 3). Reflect and evaluate. Maybe exhibit children’s work. Documentation through photographs.

## General Goal: Practical activities

### Activity 12: Physical Activity Play

#### Description:

Encouraging physical activity should take place every time children are outdoors. Meaningful physical activity for children naturally occurs through free play, but also when children are engaged in fun games that are set by adults. These adult-led games work better if adults take an active role on the games and if children are allowed to adapt the game in their own way. Examples of games could include: tree hunt, treasure hunt, thematic games, traditional games, hopscotch, skipping rope, etc.

#### Resources:

##### Human:

Children, teachers and staff

##### Material:

It depends on the physical activity free play or specific game that was selected (examples of materials that might be used: hula-hoops, balls, bag, boxes, cloths, maps, drawings, toys, other loose parts...).

##### Time:

Physical activity play should happen every time children are out, but specific games preparation and implementation can take from one morning to one week.



#### Preliminary Steps:

Prepare the space and materials according to the activity. Include children in the planning of the activity. If required conduct internet or book research to define the theme of the activity.

#### Benefits for children's development and learning:

Development of gross motor skills, coordination, balance, strength, agility, spatial navigation skills and social skills.

#### Adapting the activity to SEN children:

Make sure that every child has a role. The space should be physically accessible to every child.

#### Post-activity:

Teachers and caretakers should complete the assessment form provided (Assessment 3).



## Assessments for the activities

The assessment proposals depend on the general goals of the activity. We present 4 assessment proposals for the group of 12 activities:

- Assessment should be completed after the activities that aim to enhance knowledge and changing attitudes (activities 1 and 2);
- Assessment 2 should be completed after the activities that aim to suggest practical factors to make outdoor play easier (activity 3) and the activities that aim to change the play environment design and affordances (activities 4 and 5);
- Assessment 3 should be completed after the practical activities (activities 6 to 12);
- Assessment 4 is a general assessment that should be completed after the whole group of activities has been implemented.

### Assessment 1: Enhancing knowledge and changing attitudes

To be completed by the target population (parents / staff)

**Activity:**

**Country:**

1. Do you think the ideas presented in this workshop were important? (1 – not at all; 2 – important; 3 – very important)
2. Did this workshop change your view on the benefits of outdoor play and the importance of risk? (1 – no; 2 – yes)
3. Do you consider outdoor play and risky play important for children's development? (1 – not at all; 2 – important; 3 – very important)
4. Are you willing to implement some of the ideas presented in this workshop with your kids (e.g., more opportunities to play outside and to engage in risky play)? (1 – no; 2 – yes)
5. Is there any suggestion you would like to make to improve this workshop in the future?

### Assessment 2: Practical factors to make outdoor play easier and Play environment design and affordances

To be completed by the teachers / caretakers

**Activity:**

**Country:**

1. After implementing this activity, did it become integrated in the daily routine of the preschool? (1 – No, 2 – Partly integrated, 3 – Yes)
2. How efficient do you think this activity was to promote children's outdoor play and learning? (1 – not at all, 2 – efficient, 3 – very efficient)
3. How efficient do you think this measure was to promote children's:
  - a. Motor development (1 – not at all, 2 – efficient, 3 – very efficient)
  - b. Social development (1 – not at all, 2 – efficient, 3 – very efficient)
  - c. Cognitive development (1 – not at all, 2 – efficient, 3 – very efficient)
  - d. Emotional development (1 – not at all, 2 – efficient, 3 – very efficient)
4. What were the main barriers that you found to implement and to carry out this activity?
5. Do you have any suggestions for improving this activity in the future?

**Assessment 3: Practical Activities**

To be completed by the teachers / caretakers

**Activity:****Country:**

1. Would you repeat this activity in the future? (yes or no)
2. How engaged were children when doing this activity (1 – not at all engaged; 2 – engaged; 3 – highly engaged)
3. How efficient do you think this activity was to promote children's:
  - a. Motor development (1 – not at all, 2 – efficient, 3 – very efficient)
  - b. Social development (1 – not at all, 2 – efficient, 3 – very efficient)
  - c. Cognitive development (1 – not at all, 2 – efficient, 3 – very efficient)
  - d. Emotional development (1 – not at all, 2 – efficient, 3 – very efficient)
4. What were the main barriers that you found to implement and to carry out this activity?

Do you have any suggestions for improving this activity in the future?

**Assessment 4: Global appreciation of the 12 activities**

To be completed by the target population (parents / staff)

**Country:****Type of participant:** (Teacher or staff/Parent)

1. After the implementation of these 12 activities, do you notice any changes in your perception about children's outdoor play? If yes, which ones?
2. After the implementation of these 12 activities, have you incorporated any new practices in your daily routine when you are with the children at your care? If yes, which ones?
3. Which obstacles do you see in the implementation of these new activities/ approaches you have got in touch with?

**Additional information**

Besides these assessments countries also provided additional information regarding:

Strengths of each activity. Partners were asked to include their own critical perspective and also some information that could have been included by participants when completing the assessment forms.

Barriers found in the implementation of each activity. Partners were asked to summon all of the barriers found in a small text, which should include not only a synthesis of the opinions that were collected, but also other aspects that they have witnessed as barriers, or that were told to them informally by participants. Please also include your own critical perspective.

Suggestions. Partners were asked to summon all of the suggestions in a small text. This should include not only a synthesis of the opinions that were collected, but also other aspects that they had witnessed as barriers, or that they were told informally by participants, as well as their critical perspective.

Finally, partners were asked to provide an overview of the whole project based on their own critical perception.

## Results of the assessments and feedback of the 12 activities

Next we will present the main results regarding the 12 activities, a more detailed analysis of the results by country can be found in appendix 8 but it should be interpreted with caution since the number of respondents by country for some activities is sometimes quite small.

### Activities that aim to enhance knowledge and changing attitudes (activities 1 and 2)

#### Activity 1 – Staff Workshop

Most of the teachers and caretakers that participated in the staff workshop in their countries considered:

1. That the ideas presented were very important (79.6%) or important (20.4%)
2. That the workshop changed their view on the benefits of outdoor play and the importance of risk (81.6%)
3. That outdoor play and risky play are very important (77.6%) or important (20.4%) for children's development
4. They are willing to implement some of the ideas presented in the workshop with the kids (98%)

Table 6. Strengths, barriers and suggestions of activity 1 (meeting with the staff) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	The ideas presented and the importance of risk play were found very important. Most of the staff changed their view on the benefits of outdoor play. Workshop was encouraging for staff in the point of changing perspective about outdoor play. Parents who came to the workshop were curious.	—	To organise this activity outdoors
<b>Estonia</b>	Joint team discussion about active outdoor games, increased overall team spirit and had a positive effect on the daily activities of the teachers, the teachers were very active and communicative in the workshop. Later we got feedback that we should use a similar workshop more as a tool at our meetings.	Too little time for holding the workshop, not all teachers wanted to participate.	The workshop could be longer.
<b>Greece</b>	Opportunity to explain the project to all teachers / felt more confident about the project/ their belief on the importance of outdoor play was strengthened.	—	Should do this presentation at the beginning of every school year
<b>Portugal</b>	Consolidate project ideals for further participation.	Still some resistance to new activities and methodologies.	Regular meetings that strengthen the purpose of these new practices.

## Activity 2 – Parents Workshop

Most of the parents that participated in the workshop in their countries considered:

1. That the ideas presented were very important (78.2%) or important (21.8%)
2. That the workshop changed their view on the benefits of outdoor play and the importance of risk (74.7%)
3. That outdoor play and risky play are very important (77%) or important (21.8%) for children's development
4. They are willing to implement some of the ideas presented in the workshop with the kids (96.6%)

Table 7. Strengths, barriers and suggestions of activity 2 (workshop for the parents) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	The ideas presented in this workshop and the importance of risk play was found very important and most of the parents changed their view on the benefits of outdoor play. Workshop was encouraging for parents in the point of changing perspective about outdoor play. Gathering around the common theme has brought to consciousness the significance of child's development.	—	To organise this activity outdoors
<b>Estonia</b>	The parents who took part in the workshop were interested in the subject and the workshop got positive feedback from the participants. The parents particularly liked the videos shown at the workshop.	There were few parents in the workshop. Time factor, difficult to organise in the daytime, low participation rate after workday.	We should think of a clever way to involve precisely those parents/teachers who are opposing. The people who came held relatively uniform opinions, but only those who are interested show up and there is nothing we can do about it. But an overall change will come when there is a shift in the opposition. More freedom, taking a creative approach to the study programme and daily schedule. Then we will have more freedom in doing the activities planned and prepared for outdoors.
<b>Greece</b>	Good structure of presentation/ enough information / the experiential part was very well received (made them very active and not passive)	low attendance	Should do this presentation at the beginning of every school year, so we can explain how we work / we should explain the benefits of outdoor play
<b>Portugal</b>	Great openness and enthusiasm towards the project. Some parents' choice of the school was made based on their knowledge of the work carried out in the Conquinha JI.	Too many parents in one meeting; it was not the most appropriate space.	Continue these meetings and reveal, as the teacher in the JI is already doing, the daily activities through a closed social media group; parents support new ideas better.

## Activities that aim to suggest practical factors to make outdoor play easier (activity 3) and the activities that aim to change the play environment design and affordances (activities 4 and 5)

### Activity 3 – Clothing for outdoors

Most of the teachers and caretakers that participated in this activity:

1. Reported that after implementing this activity, it become integrated (61.9%) or partly integrated (33.3%) in the daily routine of the preschool
2. Taught that this activity was efficient (57.1%) or very efficient (42.9%) to promote children's outdoor play and learning
3. Taught that this activity was efficient (52.4%) or very efficient (47.6%) to promote children's motor development
4. Taught that this activity was efficient (57.1%) or very efficient (42.9%) to promote children's social development
5. Taught that this activity was efficient (57.1%) or very efficient (42.9%) to promote children's cognitive development
6. Taught that this activity was very efficient (57.1%) or efficient (42.9%) to promote children's emotional development

Table 8. Strengths, barriers and suggestions of activity 3 (clothing for outdoors) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	This activity is efficient for the staff to promote children outdoor play and learning. It contributed in raising awareness about the importance of having the right clothing for outdoors.	The main barrier is to ensure appropriate equipment (hats, boots, rain overalls)	School/local community should provide right clothing for outdoor play
<b>Estonia</b>	Cooperation with the parents and daily feedback about the children's outdoor activities through photos and videos in a closed FB group for the parents that clearly demonstrate the strong need for outdoor clothing that matches the weather.	not all children always have the right clothes. The main barrier was that it takes time for parents to bring all clothes that are necessary for child. Parents who do not understand about the need to be outdoors with any weather. Not all families find it important to be outdoors in any weather. Only in "good weather". Money. If someone has no clothes, teachers have to find something.	Regular reminders for the parents, recognising the parents. Sharing photos and videos of outdoor activities.
<b>Greece</b>	—	—	—
<b>Portugal</b>	The children went to the beach and had appropriate clothing; the children showed such enthusiasm for the activity that their parents asked to repeat it. Parents have already bought rain gear for the children.	On a rainy day, the children were not prepared and only a few could enjoy the games outside. There is no way to transport the kids to the beach.	Negotiate with the City Council the possibility of providing transport once a month during spring and summer.



## Activity 4 – Create new affordances

Most of the teachers and caretakers that participated in this activity:

1. Reported that after implementing this activity, it become integrated (52.6%) or partly integrated (36.8%) in the daily routine of the preschool
2. Taught that this activity was very efficient (47.4%) or efficient (36.8%) to promote children's outdoor play and learning
3. Taught that this activity was efficient (42.1%) or very efficient (42.1%) to promote children's motor development
4. Taught that this activity was efficient (47.4%) or very efficient (36.1%) to promote children's social development
5. Taught that this activity was efficient (63.2%) or very efficient (31.6%) to promote children's cognitive development
6. Taught that this activity was efficient (42.1%) or very efficient (36.8%) to promote children's emotional development

Table 9. Strengths, barriers and suggestions of activity 4 (create new affordances) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	This activity is very efficient for the staff in promoting children outdoor play and learning, besides it is very efficient in promoting children development.	—	Support of the facility in the collecting of loose parts; continuous accessibility of materials
<b>Estonia</b>	This activity encouraged the children's creativity and initiative, outdoor activities became more exciting.	Safety, there are parents and teachers who think creating such affordances is not safe for children's play.	We should do more campaign work to make both the teachers and parents understand that real things that are not toys develop children's creativity and play skills. The agreed rules / good practices for how and on how big an area these things are played with are still also important.
<b>Greece</b>	Children were used to the specific function of the existing structures / was a bit difficult to change something / most ideas came from the teachers	children did not fully engage	—
<b>Portugal</b>	It was important to help us understand that children can play and create games without adult intervention; there was some initial apprehension that gradually faded away. Understand how creative children are in the games they play.	Some initial apprehension, while trying to control everything. This clearly proves that it's not a customary activity.	Let the children play freely, even though the temptation is to support, instruct, direct the play. Count to 10 before acting.

## Activity 5 – Low-cost “Permanent” Spaces

Most of the teachers and caretakers that participated in this activity:

1. Reported that after implementing this activity, it become integrated (50%) or partly integrated (50%) in the daily routine of the preschool
2. Taught that this activity was efficient (80%) or very efficient (20%) to promote children’s outdoor play and learning
3. Taught that this activity was very efficient (55%) or efficient (45%) to promote children’s motor development
4. Taught that this activity was efficient (50%) or very efficient (40%) to promote children’s social development
5. Taught that this activity was efficient (65%) or very efficient (35%) to promote children’s cognitive development
6. Taught that this activity was very efficient (50%) or efficient (35%) to promote children’s emotional development

Table 10. Strengths, barriers and suggestions of activity 3 (low-cost “permanent” spaces) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	Depending on the environment, it is implemented in the daily routine of each kindergarten facility, because it is very efficient in promoting children development.	—	According to child interests it should be reconstructed or improved (permanent spaces)
<b>Estonia</b>	Our kindergarten got a number of new exciting play spaces: waterplay that was directly connected to the plant bed area, water for watering was brought from there. The children’s play during outdoor activities became more diverse.	Comfort zone. It is enough to have one person who does not believe in the activity to affect already a larger group.	Before doing this activity, it would be a good idea to look at different pictures with the children on Pinterest for example, use it for making different galleries, so the children could choose the spaces they would like to create for their games.
<b>Greece</b>	easy to implement if you have loose parts/ children liked it / was fun and creative	we did not have a lot of loose parts	parents should help in gathering loose parts. This activity can be paired with others activities (when we go outside, we can collect loose parts from the neighbourhood)
<b>Portugal</b>	Provide experiences with water, mud, sticks, leaves... within the school space, which unleash students’ imagination and creativity.	Resistance to dirt; fear of the "dangers"; fear of too much exposure to sun.	Create shadows with rags and stakes

## Practical activities (activities 6 to 12)

### Activity 6 - Construction project

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were highly engaged (83.3%) or engaged (16.7%) when doing this activity
3. Taught that this activity was very efficient (75%) or efficient (25%) to promote children's motor development
4. Taught that this activity was very efficient (75%) or efficient (25%) to promote children's social development
5. Taught that this activity was very efficient (83.3%) or efficient (16.7%) to promote children's cognitive development
6. Taught that this activity was efficient (53.8%) or very efficient (41.7%) to promote children's emotional development

Table 11. Strengths, barriers and suggestions of activity 6 (construction project) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	Handling of dangerous tools; promoting children participation as co-creators of the project. Children were highly engaged in this activity.	parents and staff safety concern	the activity should be carried out more often because some children experienced nailing for the first time.
<b>Estonia</b>	The entire kindergarten was involved in this activity. The children directed this activity, the teachers were for support, guidance, help. The children came up with a lot of ideas, this activity encouraged the children to cooperate and resolve differences between them. The children learned to know their abilities. The children showed great interest in this activity because they got to do something entirely different.	Safety, the teachers themselves lack the skill or will to use the necessary tools. Sometimes also exchange of information.	Involving the families/parents, specialists in this activity. This activity should be a lengthier project linked to the study programme activities.
<b>Greece</b>	gave children the opportunity to discuss their ideas/ social skills development	takes a lot of time	—
<b>Portugal</b>	Increase self-confidence and self-esteem; understand the limits; contact with risk.	Children were not used to using certain materials and were not very comfortable with them.	Gradually introduce other "dangerous" materials such as hammers, nails, etc.

## Activity 7 - Contact with natural elements

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were engaged (64.3%) or highly engaged (35.7%) when doing this activity
3. Taught that this activity was very efficient (57.1%) or efficient (42.9%) to promote children's motor development
4. Taught that this activity was very efficient (50%) or efficient (42.9%) to promote children's social development
5. Taught that this activity was very efficient (64.3%) or efficient (35.7%) to promote children's cognitive development
6. Taught that this activity was efficient (57.1%) or very efficient (35.7%) to promote children's emotional development

Table 12. Strengths, barriers and suggestions of activity 7 (contact with natural elements) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	development of emotional bond between children and the environment	—	still working on the parent's awareness
<b>Estonia</b>	Our kindergarten is surrounded by nature, and the children can use different kinds of natural materials (cones, rocks, branches, chestnuts, acorns, leaves, insects, snails) in their play every day. For this activity, the teachers knowingly encouraged the children to play with natural materials and use them in games, also those children who are usually more interested in regular toys.	Risk of injury, the parents are scared that the children may get a tick or a disease. No suitable clothes.	Encouraging the children to use more natural materials in their play, going to the forest with the children to collect the materials, picking up all the fallen down branches and cones in the outdoor area. Involving the children, putting together boxes/baskets with natural materials that can be used for outdoor play.
<b>Greece</b>	Opportunity for children to get in touch with natural elements (the kindergarten is located in the very centre of Athens and children have very limited access to the natural environment)	the teachers organized this activity as a "lesson". They prepared boxes with different elements in them and asked children to walk on the different textures.	a small paragraph to explain that this activity is not a lesson and they should allow some degree of freedom
<b>Portugal</b>	Contact with nature and playing freely, running, climbing trees, freedom, overcoming small natural obstacles... made them feel confident and happy.	Transportation to locations outside the city.	Articulate transportation with the City Hall.

## Activity 8 - Use the environment outside

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were highly engaged (68.4%) or engaged (31.6%) when doing this activity
3. Taught that this activity was very efficient (89.5%) or efficient (10.5%) to promote children's motor development
4. Taught that this activity was very efficient (78.9%) or efficient (21.1%) to promote children's social development
5. Taught that this activity was very efficient (63.2%) or efficient (36.8%) to promote children's cognitive development
6. Taught that this activity was efficient (94.7%) or very efficient (5.3%) to promote children's emotional development

Table 13. Strengths, barriers and suggestions of activity 8 (use the environment outside) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	new experience in new environment	living in the city is a barrier for continuously exploring neighbourhood around	cooperation with the local community in providing better possibilities. It is important to ensure enough adults to support children's needs.
<b>Estonia</b>	The surroundings of the kindergarten support this activity, we have a beach, a river, a forest, nature trails, the botanic garden within a walk. We do this activity at our kindergarten every week, each group goes to the forest, beach or further away at least once a week. In case of field trip, also the families are involved.	Time planning. Will of the teachers.	Making a list of potential places where to go with the children, scheduling this activity for at least twice a month, whatever the season.
<b>Greece</b>	very good activity/ the children and the teachers loved it / opportunity to do something very different	dirty roads	—
<b>Portugal</b>	There were children who visited the beach for the first time, they had never seen the sea. Contact with nature and playing freely. The knowledge acquired.	Transportation to locations outside the city.	Articulate transportation with the City Hall.



## Activity 9 - Have a meal outdoors

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were highly engaged (50%) or engaged (50%) when doing this activity
3. Taught that this activity was efficient (55%) or very efficient (35%) to promote children's motor development
4. Taught that this activity was very efficient (60%) or efficient (40%) to promote children's social development
5. Taught that this activity was very efficient (60%) or very efficient (40%) to promote children's cognitive development
6. Taught that this activity was very efficient (75%) or efficient (25%) to promote children's emotional development

Table 14. Strengths, barriers and suggestions of activity 9 (have a meal outdoors) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	Development of social and emotional bond between children, food and the environment. Taking the meal outside caused better appetite for some children.	—	—
<b>Estonia</b>	We have meals in outdoor more in the spring and summer, since the weather is then more suited for this. We think that in case of this activity, our strength is that we have a kitchen at our kindergarten that was also involved in this activity. The children always have a very good appetite outdoors, and they always give very positive feedback on eating outside. Some children say that having meals outside is the best thing about kindergarten.	Convenience, hygiene. Extra work, communication.	Adding eating outdoors to the activity plan of the kindergarten so it would become a tradition. Purchasing for the kindergarten special very lightweight and shatterproof reusable dishes for eating outdoors.
<b>Greece</b>	Easy to organize / offers different levels of preparation (easy to difficult) / children liked it a lot	—	—
<b>Portugal</b>	Enjoy the outdoors. Some children said their food tasted better.	—	Repeat it more often.

## Activity 10 - Map the neighbourhood

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were highly engaged (58.8%) or engaged (41.2%) when doing this activity
3. Taught that this activity was very efficient (64.7%) or efficient (35.3%) to promote children's motor development
4. Taught that this activity was very efficient (82.4%) or efficient (17.6%) to promote children's social development
5. Taught that this activity was very efficient (70.6%) or efficient (29.4%) to promote children's cognitive development
6. Taught that this activity was very efficient (58.8%) or efficient (41.2%) to promote children's emotional development

Table 15. Strengths, barriers and suggestions of activity 10 (map the neighbourhood) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	Highly engaged children; development of space orientation and learning road safety rules	—	Provide this activity for different type of learning (subject). Use new technology (i.e., Google Maps) and traditional orientation tools (i.e., compass)
<b>Estonia</b>	This activity stimulated the children's and also the teachers' interest in getting to know the surroundings better. Using the GPS was exciting for the children.	Children of different ages in a group, difficult to walk in the street traffic. Will of the teachers, low motivation of the teacher.	This activity, too, could be used as a lengthier project, mapping the surroundings in different seasons, involving the parents, using a drone for taking photos / making videos, if possible.
<b>Greece</b>	Fun activity for the teachers, because they are outside the building / opportunity to get in touch with the neighbourhood	traffic and noise / children don't know how to follow traffic signs	Opportunity to offer education about road safety
<b>Portugal</b>	Awareness of the surrounding environment; knowledge of the services the city offers; group discussion; attention to detail.	Children's lack of concentration in such an unusual activity.	—

## Activity 11 - Art outside

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were engaged (56.3%) or highly engaged (43.8%) when doing this activity
3. Taught that this activity was very efficient (56.3%) or efficient (43.8%) to promote children's motor development
4. Taught that this activity was very efficient (81.3%) or efficient (18.8%) to promote children's social development
5. Taught that this activity was very efficient (75%) or efficient (25%) to promote children's cognitive development
6. Taught that this activity was very efficient (81.3%) or efficient (18.8%) to promote children's emotional development

Table 16. Strengths, barriers and suggestions of activity 11 (art outside) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	Very efficient development of creativity and divergent thinking. Children were very engaged, especially in dramatic plays	—	this activity would be a good example of connecting kindergarten with the local community. It should be done every season of the year.
<b>Estonia</b>	Our strength in this activity was cooperation, consideration for others, being creative. Our outdoor area was equipped with transparent canvases (large plastic films were pulled between the trees) on which you could draw, paint, and also wash the paint off with water. The children were very busy with this activity and a similar activity was used as an outdoor activity for several weeks because the children showed interest in it.	No ideas what to do. They had distractions such as toys, other kids, good weather, water activities - Kids wanted to play more with each other and run around. But the kids that were really interested of this activity, stayed and actively participated on the art activity that was offered to them.	In the summer period, creating permanent outdoor play spaces so the children could use different types of art in their play (drama, music, visual arts, etc.)
<b>Greece</b>	Easy to organize / can be adapted according to the interests of the children / can be linked to other activities / offers freedom and creativity	clothes for this activity	—
<b>Portugal</b>	Develop mental and physical dexterity; respect the rules in a game and in group work.	There was some confusion with the activity; the children were disorganized and did not quite grasp the essence of the game.	Repeat the activity and carry out different games; setting-up plays.

## Activity 12 - Physical activity play

Most of the teachers and caretakers that participated in this activity:

1. Reported that they would repeat this activity in the future (100%)
2. Children were highly engaged (61.9%) or engaged (38.1%) when doing this activity
3. Taught that this activity was very efficient (100%) to promote children's motor development
4. Taught that this activity was very efficient (90.5%) or efficient (9.5%) to promote children's social development
5. Taught that this activity was very efficient (66.7%) or efficient (33.3%) to promote children's cognitive development
6. Taught that this activity was very efficient (81%) or efficient (19%) to promote children's emotional development

Table 17. Strengths, barriers and suggestions of activity 12 (physical activity play) reported by the different countries.

	Strengths	Barriers	Suggestions
<b>Croatia</b>	very efficient motor development	—	include parents in this activity too
<b>Estonia</b>	Active sports activities that have a competitive aspect motivate children. In this activity, we had a so-called combined event where the children could run in a race, long jump, the children measured the results themselves, a teacher guided. Our outdoor area encourages playing various physically active games.	The children are physically lazy, get tired quickly and do not want to make an effort.	Every day should include a physically strenuous outdoor activity, playing and teaching the children more active games.
<b>Greece</b>	easy to organize / opportunity for group play/ natural for children	—	should do more often
<b>Portugal</b>	To be able to take risks. Climb trees. Walk by the river's edge, over the rocks. Feel the taste for adventure.	—	—

## General assessment of the 12 activities

After the implementation of the 12 activities:

- 74.5% of the teachers and caretakers and 57.6% of the parents reported they changed the perception about children's outdoor play;
- 80.4% of the teachers and caretakers and 52.5% of the parents reported to have incorporated some new practices in their daily routine when they were with the children at their care.

Overall, partners felt this project had a positive impact on the work of their kindergartens. It had diversified outdoor activities, and raised awareness of the importance of active outdoor activities among the teachers and parents.

In the workshops for the staff and parents the ideas presented and the importance of risk play were found very important and partners felt that most of the staff and parents changed their view on the benefits of outdoor play. Partners felt that talking about the benefits of outdoor play was important to understand its impact on child development. Partners felt this project was very important for the development of motor, social, cognitive and emotional development of the children, highlighting the benefits of creating connections between children and the environment, of developing creativity, divergent thinking and space orientation. Handling dangerous tools was also mentioned by the partners as an important way of promoting children freedom and joy in risk play and also promoting their participation as co-creators of the play environment. The barriers most partners found for when implementing the 12 activities were: parental and safety concerns, having appropriate clothing for outdoor play in all kinds of weather, and traffic as a barrier for continuous exploration of the neighborhood.

Overall the activities were all rated by the partners as very important or important for the 4 domains of development considered (motor, social, cognitive and emotional). Teachers were asked to rate activities 3 to

12 according to the impact they perceived in the different domains of development. In Figures 29 and 30 we present the percentage of answers characterizing each activity as “very important” (Fig. 29) or as “important” (Fig. 30) for each domain. Note that the activities that have lower percentages were also classified as “important” for the different domains of development.

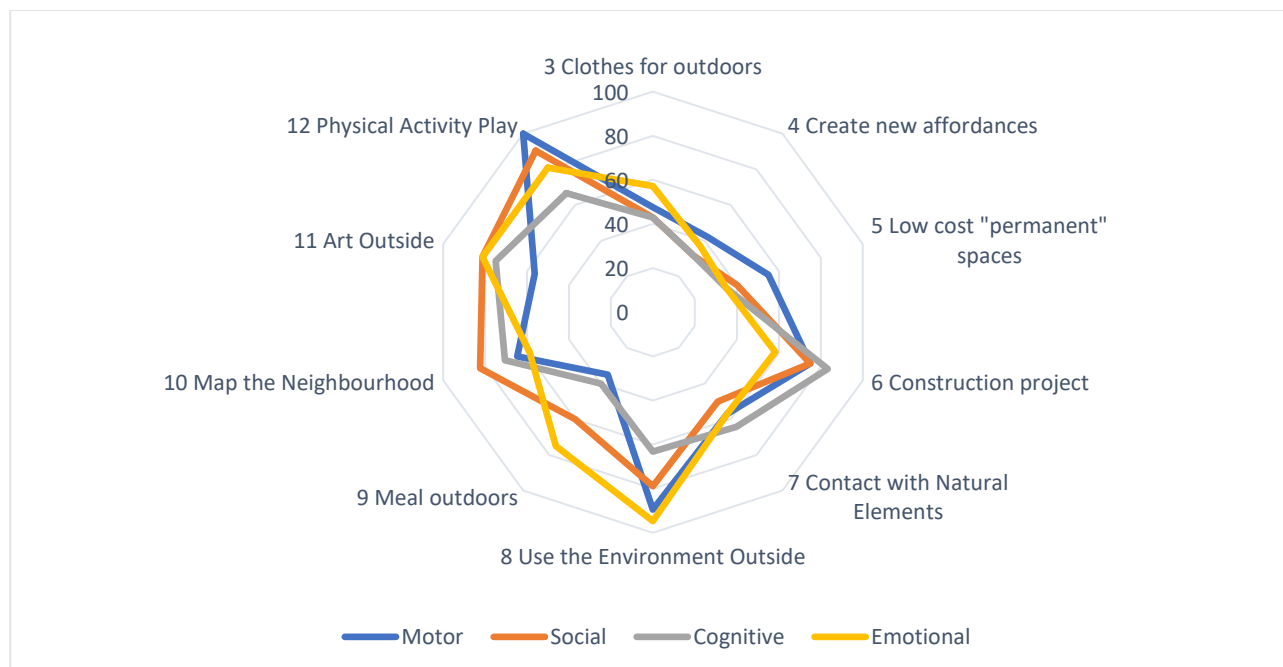


Figure 29. Percentage of answers characterizing each activity as “very important”.

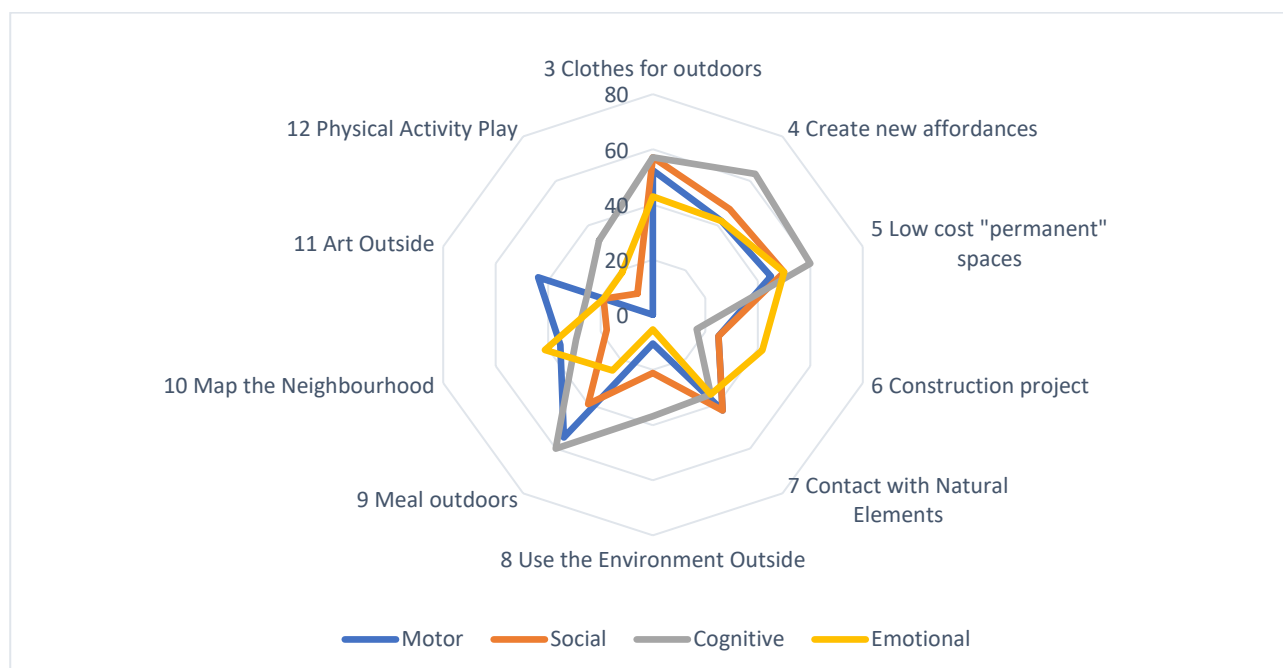


Figure 30. Percentage of answers characterizing each activity as “important”.

Besides the perceived benefits, all participating teachers and caretakers (100%) said they intend to repeat the practical activities in the future and that children were highly engaged or engaged in these activities.



## Chapter 4: Output 3. Outdoor activities guidelines and recommendations for preschool education

### Main project conclusions

As for the initial diagnosis of regarding the perception of the outdoor use by children for play and learning, it was found that:

- Parents played at streets, home, and at school (more than 50% everyday), whereas children play mostly at home and at school (more than 50% everyday);
- There were also some differences between countries regarding play spaces, namely: playing at wild nature / forest and at streets around local area was more frequent in Norway and playing at local parks less frequent in Estonia;
- Parental licenses of independent mobility are granted earlier in northern Europe than in southern Europe;
- Parents from Greece and Portugal identified more barriers for playing outside than parents from the other countries;
- There are more concerns about media alerts and stranger danger in Greece and Portugal and lack of playspaces and poor play facilities is frequently mentioned in Greece;
- Parents from all counties except from Norway considered that the society is less safe than when they were children and this is a barrier to let children play outside;
- Most parents and teachers/caretakers believe that by playing outside children become healthier; teachers/caretakers also believe that creativity is another benefit of playing outside;
- The most important features that parents identified for outdoor play were natural features, elements to climb and flat surfaces. Sand and elements to slide, to balance and to swing are also valued. Teachers/caretakers valued all these elements but also highlighted water, elements to jump down, hiding places, places for sitting and gathering, places for rough and tumble and graspable / detached objects;
- The use of risky tools with adult supervision was mostly valued by teachers/caretakers from Norway and Estonia;
- Norwegian teachers/caretakers don't point any barrier. Greek teachers/caretakers consider there are more barriers (even weather conditions);
- The existence of poor play facilities is frequently mentioned as a barrier to children's play outside by Portuguese and Greek preschool teachers/caretakers. Norwegian preschool teachers/caretakers did not identify any barrier;
- Most teachers/caretakers say there is no specific school policy concerning playing outside. In Greece and Portugal all the teachers/caretakers mentioned that such a policy did not exist.
- Children in Portugal and Greece did not have special clothing to play outside in bad weather conditions
- Teachers/caretakers' own beliefs and school conditions were the major influences on the decision of letting children play outside
- The use of the playspace grids, the viewing of the photos and the visits to the preschools showed that there are differences between the playgrounds in terms of physical features, as well as in the rules that children are subjected to in the use of outdoor space.
- The preschools in Norway, Estonia, Croatia and Portugal share a common trend in terms of diversity of outdoor environmental resources (fixed and moveable components) which are available for children to play. However, permission given to children by adults to engage in flexible, unpredictable, child-led play was greater in the Norwegian preschool, as it was in terms of allowing children to engage in risky play. In the Greek preschool, outdoor free play was very much limited by the lack of environmental resources, namely, moveable components and natural features, associated with existent rules and norms of outdoor use that constrict child-led play.
- Children's drawings and interviews revealed that children's perspectives about play are very subjective, depending on their interests and preferences but also on the availability of specific

features that enable them to play in certain ways. Therefore, play types were diverse, although physical activity play was very expressive for most children. As for the elements children would add to the playground, our results show that children are critical of their current play spaces and would like to introduce novelty, risk, loose parts and moveable toys in their play settings. Concerning, the most exciting places to play, generally, it was found that children refer to places where they afford risky play behaviors and where it is possible to contact with loose parts.

In terms of the project's outputs, it was possible to create the following working tools to promote children's outdoor play and outdoor learning in school and other educational grounds:

- A training plan for teachers/caretakers that work in preschools or early childhood education centers that will empower them to recognize the importance of outdoor play in children's development, health and well-being; and to promote outdoor active play, physical activity and active participation in their work with children.
- A set of 12 activities to be implemented with school community that enable children to spend more time in the outdoors in free play and adult-led activities, which promote children's motor, social, emotional and cognitive development. In addition, some of these activities enable practitioners to make low-cost temporary or more permanent physical changes to the preschool playgrounds, enriching the play environment and enhancing the quality of play. The impact of these activities in the participating preschools from Croatia, Estonia, Greece and Portugal was very positive since the activities were rated as "very important" or as "important", as being beneficial for different domains of child development, and also because all teachers/caretakers intend to repeat these activities in the future.

## 2. Recommendations and guidelines

Based on the Moving and Learning Outside Project, in order to increase children's opportunities for outdoor play and learning in preschools or in early child education centers it's important to act on 3 major dimensions:

### Enhance knowledge of outdoor play and learning

- Keep up to date with evidence-based information about the benefits of outdoor play
- Be aware of media alerts that create a culture of fear and risk aversion in childhood
- Remember your own memories of childhood and the pleasure of playing outside
- Watch children playing outside and try not to interfere
- Take photos or make videos of children playing out and send them to parents
- Invite families to come to school for outdoor activities with children
- Remember that play is usually messy, noisy, boisterous... but lots of fun!
- Trust children, they are much more capable than you might think!

### Guarantee prerequisites for outdoor play and learning

- Have appropriate clothing to play outdoors in all seasons (for children and adults)
- Find an appropriate space in school to keep these clothes and to dry them if necessary
- Have a transition area between indoors and outdoors that facilitates dressing and undressing
- Encourage your staff to allow children to play outside
- Adopt a friendly supervision when children are playing outside
- Consider the playground as a place which is crucial for playing but also for learning (include the outdoor as part of your classroom)

### Design play environments for outdoor play and learning

- Make sure the playground allows for diversity of play types, has a good balance between natural features and fixed equipment, and is prepared for the different seasons of the year

- Introduce new elements, such as loose parts and other moveable components, to the playground to keep play interesting and novel
- Get families involved in gathering loose parts, such as natural and recyclable materials to be used in children's outside play at school
- Develop projects with children to create new spaces and opportunities for playing in the playground
- Make opportunities to teach children how to handle dangerous tools with supervision
- Discover the neighborhood outside your preschool
- Take children recurrently to natural places such as forest, woods, beach and allow both for free play and adult led activities
- Prepare the outdoor space for different activities that usually take place inside, such as: having a meal, doing a play, reading... include children in this process.
- Include children in assessing the conditions of the playground and listen to their suggestions for improving the spaces.

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## Appendixes

## Appendix 1

### Declaration of consent

## Declaration of consent

**Moving and Learning Outside (MLO) is a K2+ Erasmus project (nº. 2017-1-PT01-KA201-035784)** involving Portugal, Greece, Estonia, Croatia and Norway, which targets the promotion of outdoor education through a play-based and physical activity approach in preschools. Inspired and supported by the kind of pedagogical approach widely spread in Norway, this project **aims** specifically at:

- Drawing changes on the perceptions of policy makers, teachers, caretakers and parents on the possibilities of the outdoor as a rich and valuable environment for preschool children's learning, development and well-being.
- Improving pedagogical competences of preschool teachers and caretakers working with children in the outdoor environment, adopting physical activity and play based strategies.

These objectives will be achieved through the implementation of different research stages that will involve the participation of children, preschool teachers and caretakers, and parents. All research participants will be kept anonymous and data confidentiality is assured. Parents, teachers and caretakers will be asked to complete a questionnaire to assess parental perception on children's use of the outdoor environment as a promoter of a physically active and playful learning. Children's play behavior at the preschool playground will be photographed and observed by his/her teacher and reported on a play observation grid. Also 5 year old children will be asked to draw their favourite place to play in the preschool's playground and asked by the teacher 4 questions related to the drawing. The conversation between the child and the teacher will be recorded on a notepad or using a mobile recording device. All data collected in this research will only be safely stored and only used for the purpose of the present investigation.

If you are willing to accept to participate in this research project, please fill in and tick the following statements accordingly:

Name of parent: \_\_\_\_\_

Signature: \_\_\_\_\_

I hereby consent my child to participate in this study:

yes\_\_\_; no\_\_\_

I hereby consent the use of pictures and voice recordings of my child participating in this study, including for the dissemination of the project (conferences, scientific articles):

yes\_\_\_; no\_\_\_

I hereby consent the use of pictures and voice recordings of my child participating in this study, including for the dissemination of the project (project website):

yes\_\_\_; no\_\_\_



## Appendix 2

### Parents questionnaire

# MLO – Parents

This survey is part of the Erasmus + project "Moving and Learning Outside" and it aims to assess parental perception on children's use of the outdoor environment.

This survey takes 7-10 minutes to complete. Thank you for taking the time to answer our questions. There are 25 questions in this survey.

## 1. About you and your child

### 1.1. Country

Choose one of the following answers

- |          |                          |
|----------|--------------------------|
| Croatia  | <input type="checkbox"/> |
| Estonia  | <input type="checkbox"/> |
| Greece   | <input type="checkbox"/> |
| Norway   | <input type="checkbox"/> |
| Portugal | <input type="checkbox"/> |

### 1.2. How old are you?

Only numbers may be entered in this field.

### 1.3. Your gender:

Choose one of the following answers

- |        |                          |
|--------|--------------------------|
| Male   | <input type="checkbox"/> |
| Female | <input type="checkbox"/> |

### 1.4. Where did you grow up as a child?

Choose one of the following answers

- |         |                          |
|---------|--------------------------|
| City    | <input type="checkbox"/> |
| Village | <input type="checkbox"/> |

### 1.5. Are you currently working?

Choose one of the following answers

- |               |                          |
|---------------|--------------------------|
| Full time     | <input type="checkbox"/> |
| Part time     | <input type="checkbox"/> |
| I do not work | <input type="checkbox"/> |

**1.6. What's your level of education?**

Choose one of the following answers

- Less than primary school
- Primary school completed
- Secondary school completed
- University degree


**1.7. How many children do you have in your parental care?**

Only numbers may be entered in this field.

**1.8. When answering this questionnaire, think of your oldest child in preschool age. The child this questionnaire relates to is:**

Choose one of the following answers

- Male
- Female


**1.9. How old is he or she?**

Only numbers may be entered in this field.

## 2. Personal experience (play when you were a preschooler vs own child)

### 2.1. When you were 4 to 5 five years old, you played:

	Never	Less than once a month	Once a month	Every week	Every day
At a local park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wild nature environment /forest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At streets around local area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At your home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At friends' home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In your own or your friends' garden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the school outside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the school inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.2. Your child plays:

	Never	Less than once a month	Once a month	Every week	Todos os dias
At a local park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wild nature environment /forest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At streets around local area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At your home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At friends' home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In your own or your friends' garden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the school outside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At the school inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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### 2.3. At what age would you allow your child (alone or with friends of the same age) to do the following?

Only numbers may be entered in this field.

Cross main roads  
Use the bus  
Go out in the neighborhood after dark  
Cycle on main roads  
Walk to school  
Walk to places other than school  
Play outside (not considering the backyard or frontyard)


## 3. Parental barriers to children's play outside

### 3.1. Which of the following, if any, are in your opinion barriers to your child's play outside?

Check all that apply

Lack of time  
Lack of playspaces  
Weather conditions  
Concern about children getting dirty  
Fear of getting injured  
Media alerts about children being injured, lost or kidnapped  
Traffic  
Stranger danger  
Poor play facilities  
My own concern/anxiety  
My child is too young  
Lack of other children to play with outside  
None of the above


### 3.2. Do you let your child play in the same ways/spaces as you did when you were his/her age?

Choose one of the following answers

Yes  
No




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**3.2.1. If no, because:**

Check all that apply

I feel my child is too young

I feel today's society is more dangerous or less safe than before

I feel I'm expected as a parent to be more protective

I feel that nowadays adults are less concerned in looking out for the safety of other people's children

None of the above


**3.3. Should children be allowed to play outside in rain?**

Choose one of the following answers

Yes

☐

No

☐**3.4. Should children be allowed to play outside in snow?**

Choose one of the following answers

Yes

☐

No

☐**3.5. Should children be allowed to play outside in cold weather?**

Choose one of the following answers

Yes

☐

No

☐**4. Parents' views on the importance of outdoor play.****4.1. How many hours (on average) does your child spend in preschool per day (use 0.5 for half an hour; 1 for one hour, etc)**

Only numbers may be entered in this field.

**4.2. In preschool, how many hours a day (on average) do you think your child should be allowed to play freely (use 0.5 for half an hour; 1 for one hour, etc):**

Only numbers may be entered in this field.

Indoors

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Outdoors

#### 4.3. In preschool, how many hours a day (on average) do you think your child should be doing activities led by na adult:

Only numbers may be entered in this field.

Indoors

Outdoors

#### 4.4. Would you like your child to spend more time playing outside in preschool?

Choose one of the following answers

Yes

No

#### 4.5. When your child is not in preschool, would you like him / her to spend more time playing outside?

Choose one of the following answers

Yes

No

#### 4.6. In your opinion by playing outside your child will become more

Please select at most 3 answers

Confident (by testing him / her abilities)

Courageous (by taking risks)

Resilient (by learning to face adversity)

Creative (by exploring different alternatives)

Independent (by trying out things for him/herself)

Sociable (by interacting more with other children)

Capable of making good decisions (by learning from mistakes)

Capable of learning (by testing problem solving situations)

Happy (by experiencing fun and thrilling activities)

Healthy (by being more active)

None of the above


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**4.7. Which of the below play features do you think is important for your child's outdoor play?**

Please choose all that apply:

- Toys
- Sand
- Water
- Fire
- Natural features (trees, bushes, etc)
- Playing structures or elements to climb
- Playing structures or elements to slide
- Playing structures or elements to jump down
- Playing structures or elements to swing
- Playing structures or elements to balance
- Hiding places
- Flat surfaces (cycling, running, skating...)
- Places for sitting and gathering
- Places for rough and tumble
- Risky tools with adult supervision (knives, hammers, saws)
- Graspable / detached objects
- None of the above

[illegible]

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## Appendix 3

### Teachers & Caretakers questionnaire

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# MLO – Teachers & Caretakers

This survey is part of the Erasmus + project "Moving and Learning Outside" and it aims to assess teachers' and caretakers' perception on children's use of the outdoor environment. This survey takes 7-10 minutes to complete. Thank you for taking the time to answer our questions.

There are 22 questions in this survey.

## 1. About you

### 1.1. Country

Please choose only one of the following:

Croatia	<input type="checkbox"/>
Estonia	<input type="checkbox"/>
Greece	<input type="checkbox"/>
Norway	<input type="checkbox"/>
Portugal	<input type="checkbox"/>

### 1.2. How old are you?

Please write your answer here:

### 1.3. How many years of experience do you have as a preschool teacher?

Please write your answer here:

### 1.4. Your gender:

Please choose only one of the following:

Male	<input type="checkbox"/>
Female	<input type="checkbox"/>



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### 1.5. How many children are there in your child group/department in your preschool? (that means children of whom you are responsible for)

Please write your answer here:

## 2. Preschool barriers to children's play outside

### 2.1. Which of the following, if any, are in your opinion barriers for children to play outside in the playground?

Please choose all that apply:

Lack of time

Lack of playspaces

Weather conditions

Concern about children getting dirty

Fear of getting injured

Poor play facilities

My own concern/anxiety

None of the above

Other:

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

### 2.2. Are there any rules in the preschool policy that do not allow children to play outside?

Please choose only one of the following:

Yes

<input type="checkbox"/>
<input type="checkbox"/>

No

#### 2.2.1. If yes, please specify:

Please write your answer here:

### 2.3. Should children be allowed to play outside in rain?

Please choose only one of the following:

Yes

<input type="checkbox"/>
<input type="checkbox"/>

No

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#### 2.4. Should children be allowed to play outside in snow?

Please choose only one of the following:

Yes

☐

No

#### 2.5. Should children be allowed to play outside in cold weather?

Please choose only one of the following:

Yes

☐

No

#### 2.6. Is there a specific school policy concerning playing outside?

Please choose only one of the following:

Yes

☐

No

#### 2.7. At your school, do children have special clothing to play outside in bad weather conditions (e.g., raincoats, rain boots)?

Please choose only one of the following:

Yes

☐

No

#### 2.8. Your decision of letting children play outside is mostly influenced by:

Please number each box in order of preference from 1 to 4.

##### Your choices

– Own beliefs; Parental expectations;  
School conditions; School curriculum

##### Your classification

Own beliefs  
Parental expectations  
School conditions  
School curriculum

☐  
☐  
☐  
☐

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### 3. Teachers' and caregivers' views on the importance of outdoor play.

**3.1. On an average day, how long do children spend playing outside (use 0.5 for half an hour; 1 for one hour, etc)?**

Please write your answer(s) here:

At spring:	<input type="text"/>
At summer:	<input type="text"/>
At autumn:	<input type="text"/>
At winter:	<input type="text"/>

**3.2. In your opinion, do children at your preschool spend enough time playing outside?**

Please choose only one of the following:

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

**3.3. In preschool, how many hours a day (on average) do you think children should be allowed to play freely (use 0.5 for half an hour; 1 for one hour, etc):**

Please write your answer(s) here:

Indoors:	<input type="text"/>
Outdoors:	<input type="text"/>

**3.4. In preschool, how many hours a day (on average) do you think children should be doing activities led by an adult:**

Please write your answer(s) here:

Indoors:	<input type="text"/>
Outdoors:	<input type="text"/>

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### 3.5. In your opinion, by playing outside children become more:

Select 3 answers:

- Confident (by testing him / her abilities)
- Courageous (by taking risks)
- Resilient (by learning to face adversity)
- Creative (by exploring different alternatives)
- Independent (by trying out things for him/herself)
- Sociable (by interacting more with other children)
- Capable of making good decisions (by learning from mistakes)
- Capable of learning (by testing problem solving situations)
- Happy (by experiencing fun and thrilling activities)
- Healthy (by being more active)
- None of the above


### 3.6. Which of the below play features do you think is important for children's outdoor play?

Please choose all that apply:

- Toys
- Sand
- Water
- Fire
- Natural features (trees, bushes, etc)
- Playing structures or elements to climb
- Playing structures or elements to slide
- Playing structures or elements to jump down
- Playing structures or elements to swing
- Playing structures or elements to balance
- Hiding places
- Flat surfaces (cycling, running, skating...)
- Places for sitting and gathering
- Places for rough and tumble
- Risky tools with adult supervision (knives, hammers, saws)
- Graspable / detached objects
- None of the above


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**3.7. Please describe your attitude when supervising children while they are playing outside?  
(Supportive, restrictive, participant, risk encouraging, etc.)**

Please write your answer here:

**Please insert the last 3 digits of your cell phone**

Please write your answer here:



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## Appendix 4

### Guidelines for data collection

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## Guidelines

### Play Observations (to be completed by teachers)

1. Draw a map of the playground and take photos of the different play areas of the school playground where children play.
2. Attribute one letter (A, B, C, D...) to each play area and present a brief description of that area. Brief description of main features including access points (such as slopes, trees, shrubbery, areas to hide, things to climb up or clamber over, seating and gathering points, areas with different height levels; as well as places for sport activities and any manufactured play equipment features that may have been installed).
3. Share the information of the photos and brief description of each play area in a word document that should be uploaded in the Devise and Assess folder of the MLO project (please create a folder with your country's name).
4. Fill in the play observation grid accordingly:
  - a. Remember that each play area must be observed 3 times (on different days or on the same day but at different time periods that children spend outdoors), each time corresponding to a period of 5 minutes. A total of 15 minutes in each play area.
  - b. Use one play observation for each play area (if you consider your preschool to have 4 areas you will need to return 4 play observation grids in the end).
  - c. Fill in accordingly.
  - d. Take at least one photo of each 5 minutes observation for the photo diary.
5. Upload the Play observation grids and the photo diary to the same folder (Devise and Assess folder / Your country's folder) and please let us know that you have uploaded your files by sending us an email.

### Children's drawings:

1. Ask a five year old child to draw their favourite place to play in the preschool's playground.
2. Afterwards ask the child 4 questions related to the drawing. Explain to the child that you are going to record the conversation so that you can do the transcription afterwards, or if you prefer instead take notes. Use the procedure you think is more appropriate. Although you have 4 questions, try to engage in a conversation with the child. Questions:
  - a. Why is this your favourite place to play?
  - b. Which places don't you like to play in the playground and why?
  - c. If you could add something to this playground what would it be?
  - d. What is the most exciting place to play in the playground?
3. Please scan the drawings and upload them along with the children's answers

### Photo diary (or video diary optional):

Upload the photos/videos of each play area in your country's folder, saved as:

AreaA1st, AreaA2nd, AreaA3rd, AreaB1st, AreaB2nd, AreaB3rd...

1<sup>st</sup> corresponds to the 1<sup>st</sup> 5 minutes observation, 2<sup>nd</sup> corresponds to the 2<sup>nd</sup> 5 minutes observation, and 3<sup>rd</sup> corresponds to the 3<sup>rd</sup> 5 minutes observation.

If you have more than one photo for one observation use: AreaA1st\_1; AreaA1st\_2...

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## Appendix 5

### Observation grid

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Name of country:

**Play space grid: Play Area\_\_** (fill in with the corresponding letter):

1st 5 minutes

Observations:	Observation day and date:		Weather:	
Usage by children (numbers)	Male:	Female:	Approximate mean age (e.g., 3-4; 4-5):	Total of children:

2nd 5 minutes

Observations:	Observation day and date:		Weather:	
Usage by children (numbers)	Male:	Female:	Approximate mean age (e.g., 3-4; 4-5):	Total:

3rd 5 minutes

Observations:	Observation day and date:		Weather:	
Usage by children (numbers)	Male:	Female:	Approximate mean age (e.g., 3-4; 4-5):	Total:

Activity observed by presence of children:	1 <sup>st</sup> 5 minutes	2 <sup>nd</sup> 5 minutes	3 <sup>rd</sup> 5 minutes
Walking, travelling through the space:			
Sitting and gathering:			
Riding bikes, scooters, skateboards:			
Use of natural features (e.g. trees, bushes, mounds, hills):			
Playing with elements (water, earth [mud], sand...):			
Use of senses (taste, smell, sight, sound, texture):			
Movement (e.g. running, jumping, climbing, balancing, rolling):			
Rough and tumble:			
Risk and challenge (physical):			
Playing with props/loose parts:			
Pretend Play:			
Playing alone			
Playing together			

Adapted from "Use of school grounds for playing out of teaching hours – Tools to assist", Play Wales, retrieved from <http://www.playwales.org.uk/eng/schoolstoolkit>

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## Appendix 6

### Power point presentation for the staff workshop



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## Properties of Play



- Apparently purposeless (done for its own sake)
- Voluntary
- Inherent attraction
- Freedom from time
- Diminished consciousness of self
- Improvisational potential
- Continuation desire

Brown & Vaughan (p. 17, 2010)

3

## Play is...



**A behaviour which is freely chosen, personally directed and intrinsically motivated** (Playwork Principles Scrutiny Group, 2005)

- Open
- Spontaneous
- Unpredictable



4

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## Benefits of play



- Play is important for children's development, learning, health (both physical and mental) and quality of life (Cheng & Johnson, 2010; Gleave & Cole-Hamilton, 2012).

5

## Benefits of outdoor play



- Increased physical activity
- Positive health effects and quality of life.
- Better cognitive and learning skills.
- Increased social competence.
- Better inclusion in school life.
- Reduction of antisocial behaviour and vandalism.

[Brussoni et al., 2012; Burriss & Burriss, 2011; Cheng & Johnson, 2010; GEE, 2014; Gleave & Cole-Hamilton, 2012; Moss, 2012].

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## EXERCISE 2

### TYPES OF PLAY AND ADVOCACY FOR FREE PLAY

7

## Outdoor risky play



- Risky play can generally be defined as thrilling and exciting forms of play that involve a risk of physical injury (Sandseter 2007).
- Children love to play in risky ways—ways that combine the joy of freedom with just the right measure of fear to produce the exhilarating blend known as *thrill* (Grey, 2014).
- Risky play primarily takes place outdoors in children's free adventurous physical activities (Stephensen, 2003 & Sandseter, 2007)

8

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## Outdoor risky play



"Because you can do lots of strange-wierd things, and you can learn acrobatics, also you can walk high on the crossbars of the train" (5 year old child)"

### Six categories of risky play:

1. Play at great heights.
2. Play with high speed.
3. Play with dangerous tools.
4. Play near dangerous elements.
5. Rough-and-tumble play.
6. Play where children can disappear/get lost.

(Sandsetter, 2009).

9

## EXERCISE 3

**Assessing priorities for action towards more and better quality of children's outdoor time**

10



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## The importance of promoting outdoor free play



- In the last 50 years, there has been an abrupt decrease of the outdoor free play in most industrialized countries (Gray, 2011), mostly due to concerns related with safety and fears (accidents, injuries, traffic, cold or rainy weather, bullying, strangers); changes in the urbanization; use of technology for recreation ; increasing pressure in learning goals ( since preschool); more time in adult-organized leisure activities; poor or lacking of play environments.

11

## The importance of promoting outdoor free play



- Encounters with certain types of risk are said to help children learn how to manage those risks;
- Children have an appetite for risk taking, that, if not fed somehow, will lead them to seek out situations in which they may be exposed to greater risks;
- Active outdoor play always involves some risk, but that the risks are greatly outweighed by the health and developmental benefits and because they provide self-directed learning opportunities;
- Overcoming challenging situations is an essential part of living a meaningful and satisfying life .

(Gill, 2007)

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## Play...in the widest possible sense

### When children play, they are...

- 1 using first-hand experiences
- 2 making up rules
- 3 making props
- 4 choosing to play
- 5 rehearsing the future
- 6 pretending
- 7 playing alone
- 8 playing together
- 9 having a personal agenda
- 10 being deeply involved
- 11 trying out recent learning
- 12 coordinating ideas, feelings and relationships for free flow play.

### When children play, they show...

- what they know about (to the limits of their knowledge)
- what they are interested in
- what they want to know more about
- what they want to understand
- what they are anxious, concerned or worried about
- what they feel
- their many possible future roles.

Tina Bruce (1991, 1996)

13

## Play...in the widest possible sense

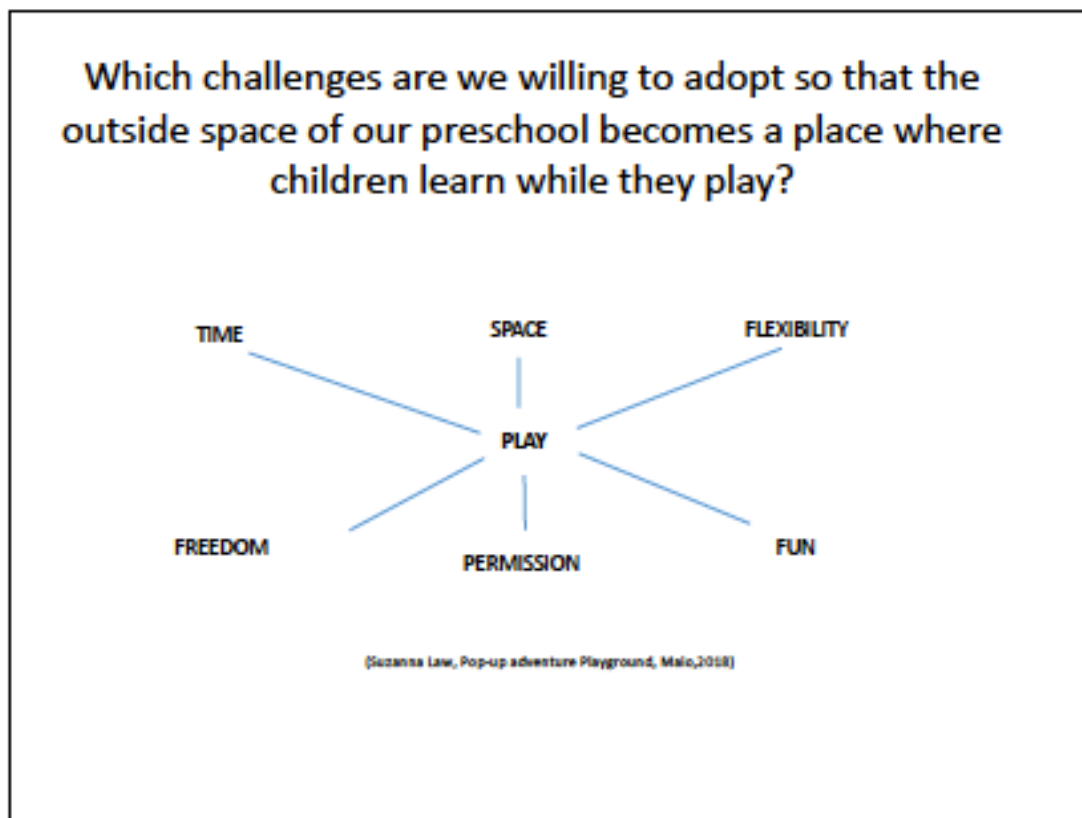


"We aim to provide a play environment in which children will laugh and cry; where they can explore and experiment; where they can create and destroy; where they can achieve; where they can feel excited and elated; where they may sometimes be bored and frustrated, and may sometimes hurt themselves; where they can get help, support, and encouragement from others when they require it; where they can grow to be independent and self-reliant; where they can learn—in the widest possible sense—about themselves, about others, and about the world."

Stuart Lester in "The Playwork Primer"  
by Penny Wilson, 2010

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## Appendix 7

### Power point presentation for the parents' workshop

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Brown & Vaughan (p. 17, 2010)

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## EXERCISE 2

**Play experiences as a child enabled me to become...**

5

## Benefits of play



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6



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## Benefits of outdoor play

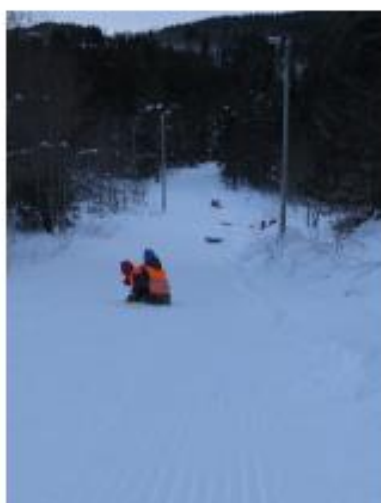


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[Brussoni et al., 2012; Burris & Burris, 2011; Cheng & Johnson, 2010; Gill, 2014; Gleave & Cole-Hamilton, 2012; Moss, 2012].

7

## Outdoor risky play



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### Outdoor risky play



"Because you can do lots of strange-wierd things, and you can learn acrobatics, also you can walk high on the crossbars of the train" (5 year old child)"

Six categories of risky play:

1. Play at great heights.
2. Play with high speed.
3. Play with dangerous tools.
4. Play near dangerous elements.
5. Rough-and-tumble play.
6. Play where children can disappear/get lost.

(Sandsetter, 2009).

9

### EXERCISE 3

## OUTDOOR PLAY ADVOCACY IN PRESCHOOLS:

### Screening of a short film and creating an advertisement

10

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## The importance of promoting outdoor free play



- In the last 50 years, there has been an abrupt decrease of the outdoor free play in most industrialized countries (Gray, 2011), mostly due to concerns related with safety and fears (accidents, injuries, traffic, cold or rainy weather, bullying, strangers); changes in the urbanization; use of technology for recreation ; increasing pressure in learning goals ( since preschool); more time in adult-organized leisure activities; poor or lacking of play environments.

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## The importance of promoting outdoor free play



- Encounters with certain types of risk are said to help children learn how to manage those risks;
- Children have an appetite for risk taking, that, if not fed somehow, will lead them to seek out situations in which they may be exposed to greater risks;
- Active outdoor play always involves some risk, but that the risks are greatly outweighed by the health and developmental benefits and because they provide self-directed learning opportunities;
- Overcoming challenging situations is an essential part of living a meaningful and satisfying life .

(Gill, 2007)

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## Play...in the widest possible sense

### When children play, they are...

- 1 using first-hand experiences
- 2 making up rules
- 3 making props
- 4 choosing to play
- 5 rehearsing the future
- 6 pretending
- 7 playing alone
- 8 playing together
- 9 having a personal agenda
- 10 being deeply involved
- 11 trying out recent learning
- 12 coordinating ideas, feelings and relationships for free flow play.


### When children play, they show...

- what they know about (to the limits of their knowledge)
- what they are interested in
- what they want to know more about
- what they want to understand
- what they are anxious, concerned or worried about
- what they feel
- their many possible future roles.

Tina Bruce (1991, 1996)

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## Play...in the widest possible sense



"We aim to provide a play environment in which children will laugh and cry; where they can explore and experiment; where they can create and destroy; where they can achieve; where they can feel excited and elated; where they may sometimes be bored and frustrated, and may sometimes hurt themselves; where they can get help, support, and encouragement from others when they require it; where they can grow to be independent and self-reliant; where they can learn—in the widest possible sense—about themselves, about others, and about the world."

Stuart Lester in "The Playwork Primer"  
by Penny Wilson, 2010

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Which challenges are we willing to adopt so that the outside space of our preschool becomes a place where children learn while they play?



(Suzanna Law, Pop-up adventure Playground, Malo, 2018)

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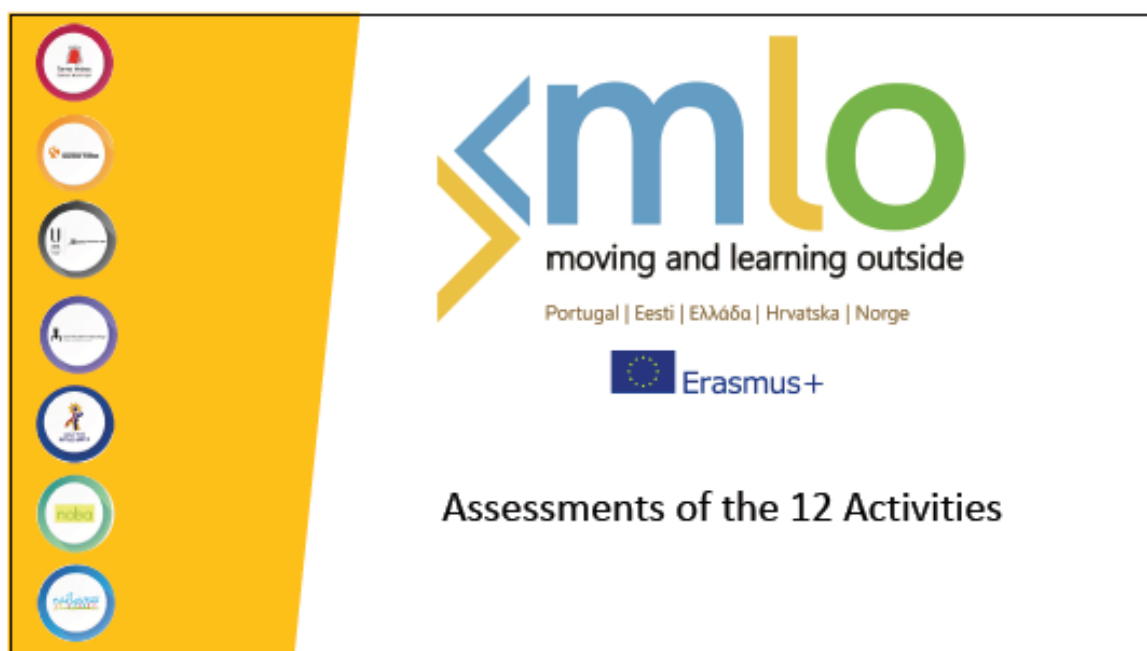
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## Appendix 8

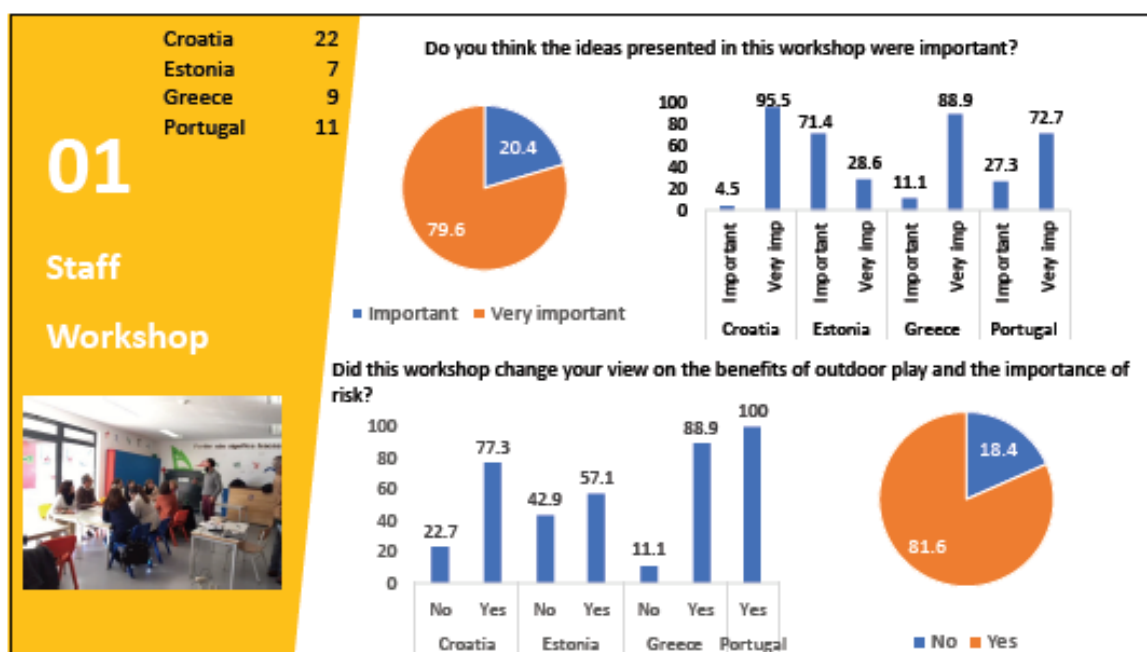
### Assessments of the 12 activities



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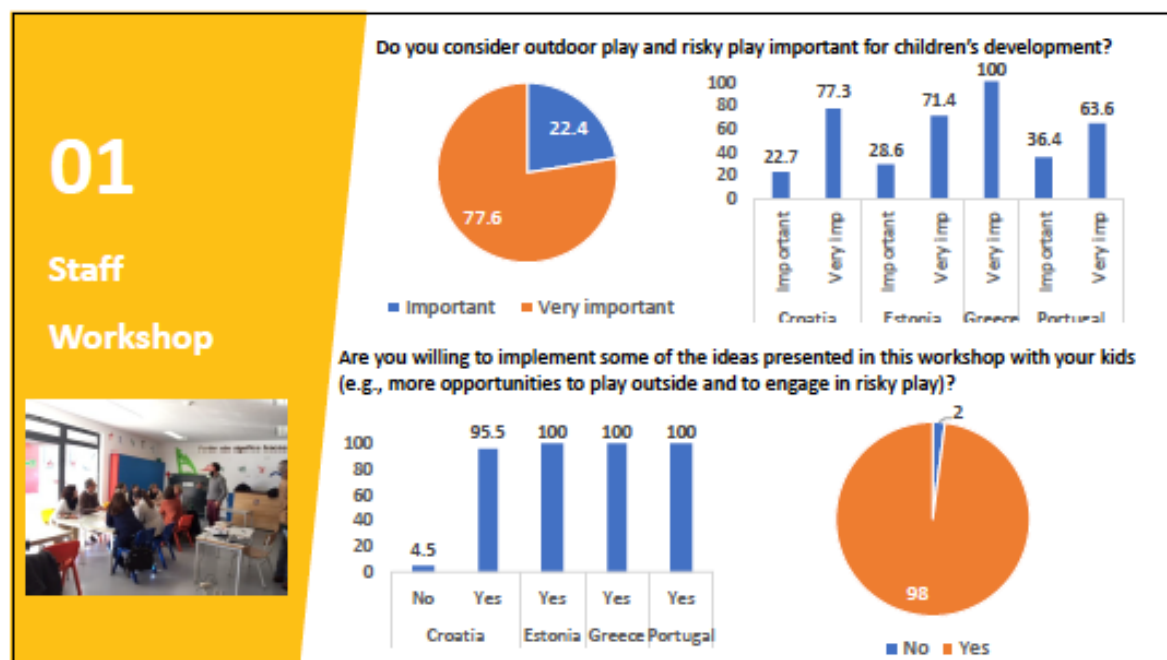


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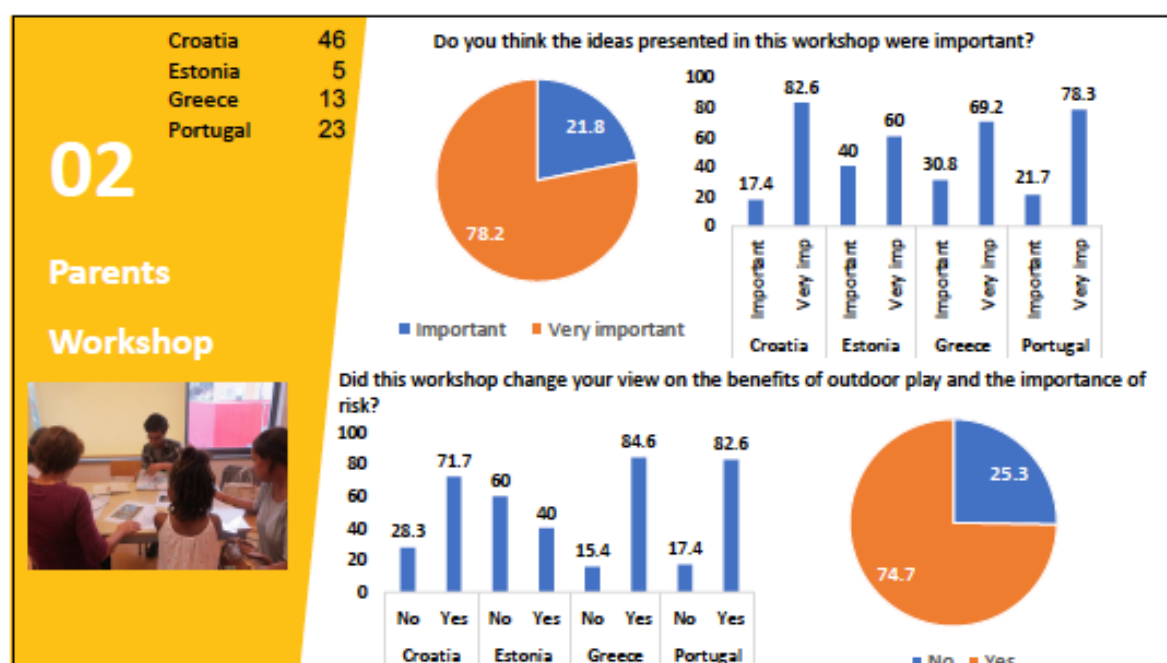


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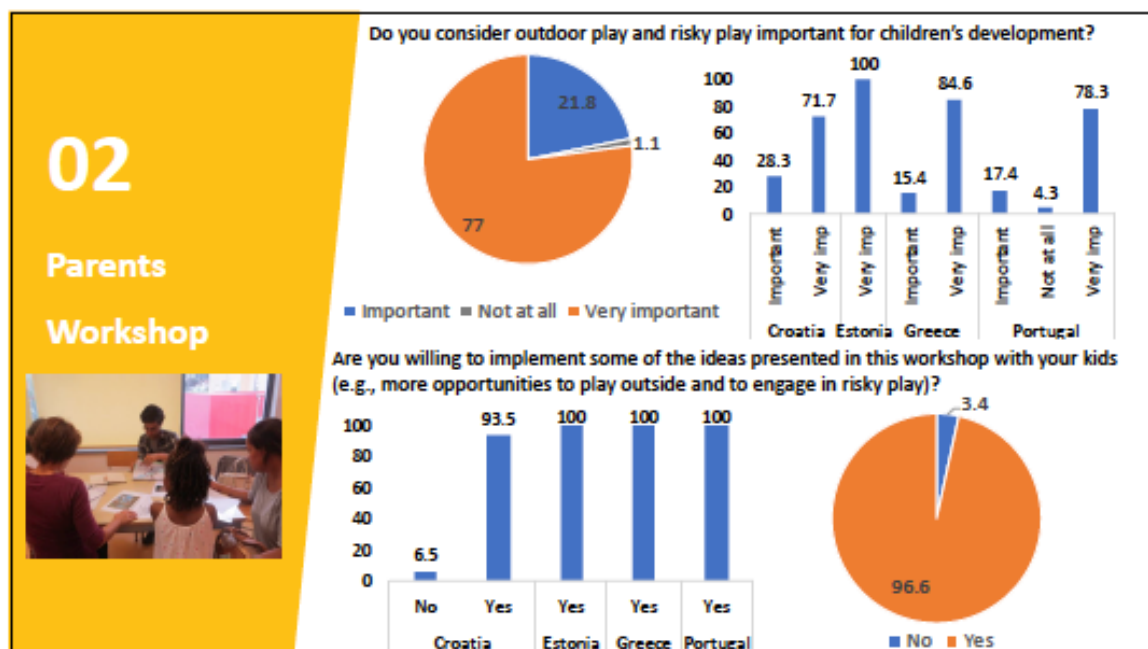


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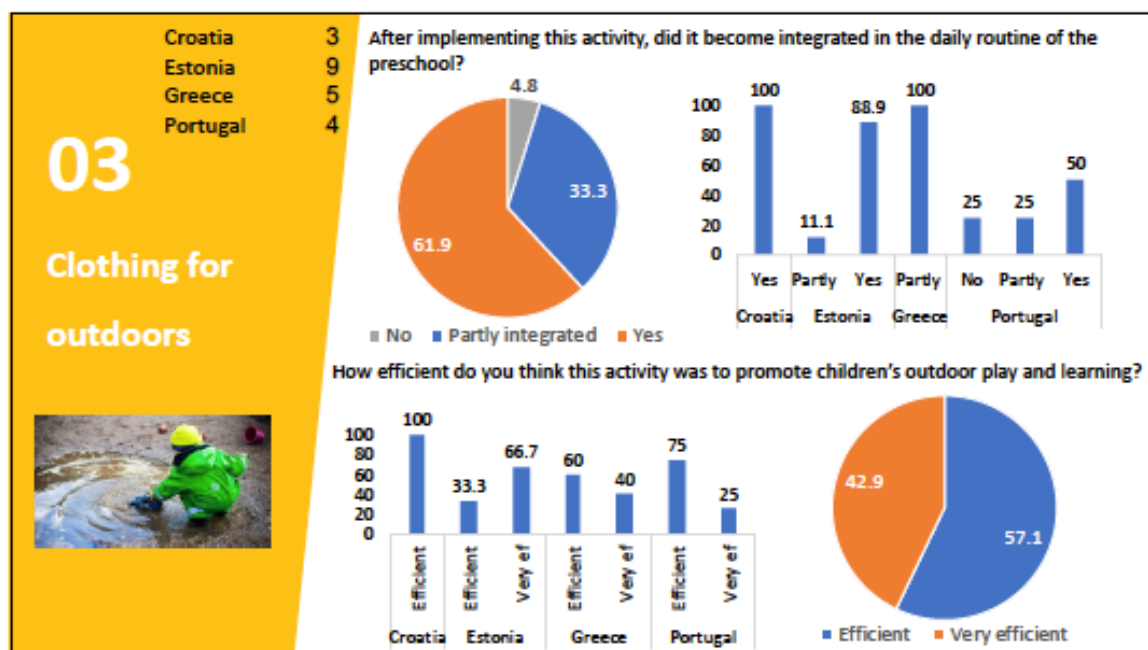


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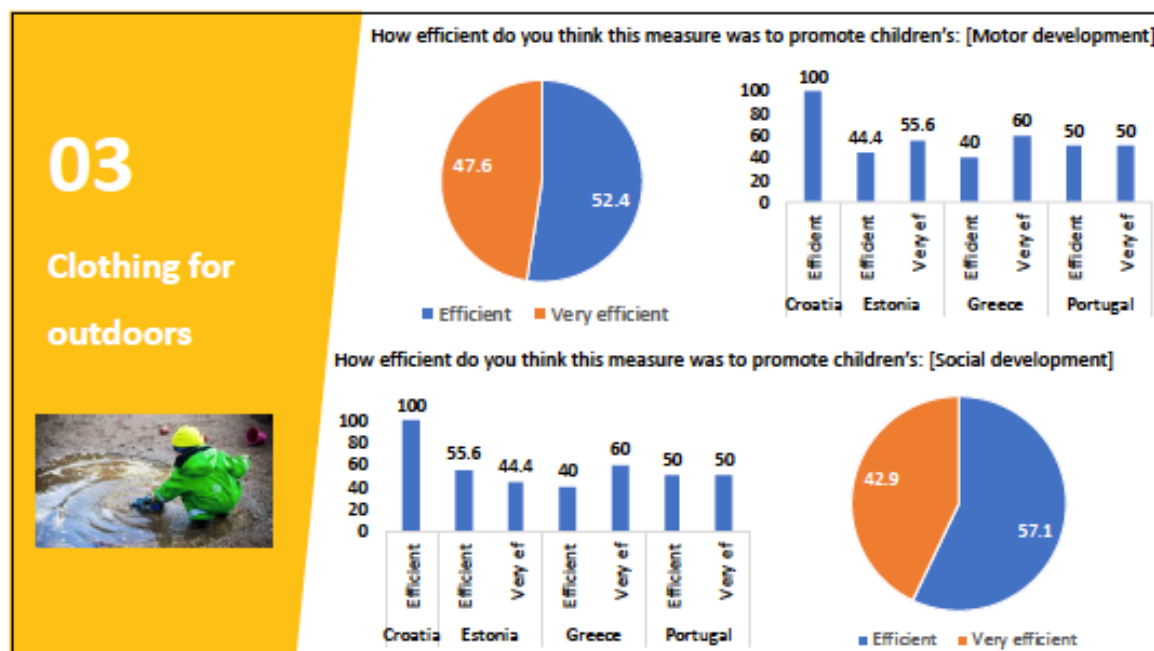


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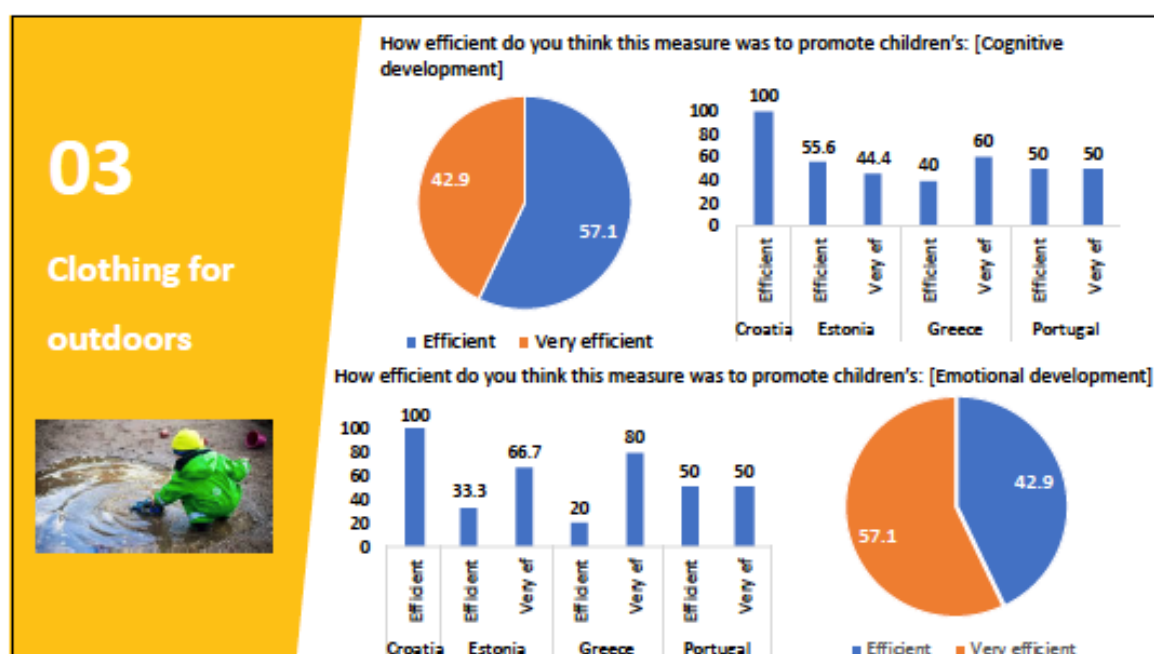


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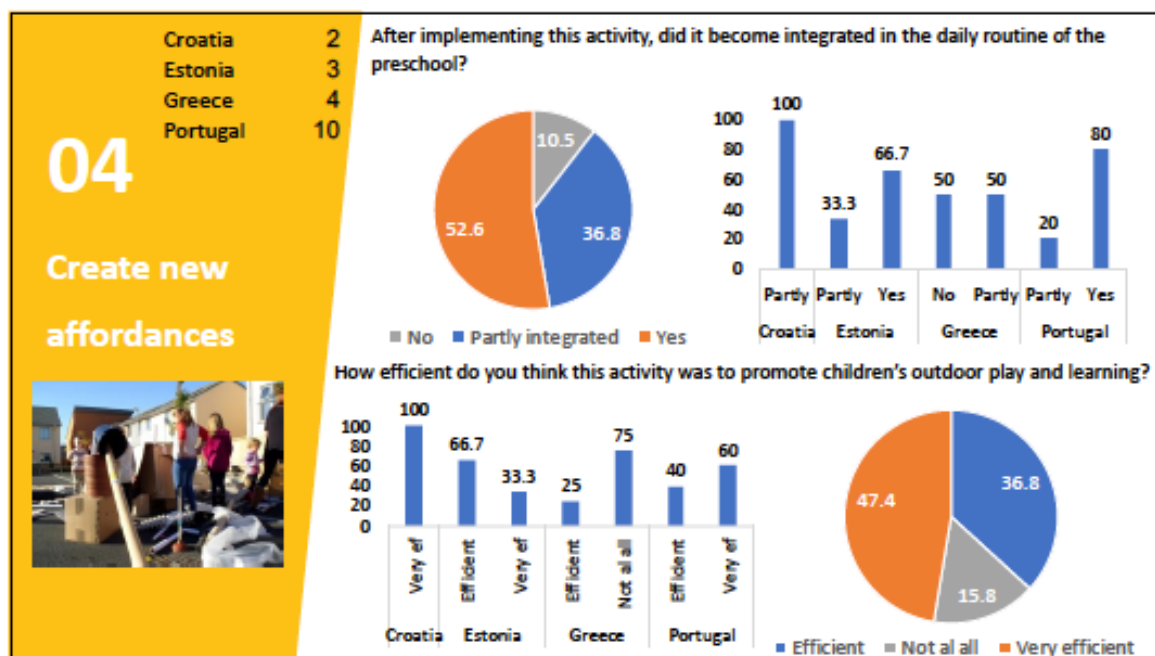


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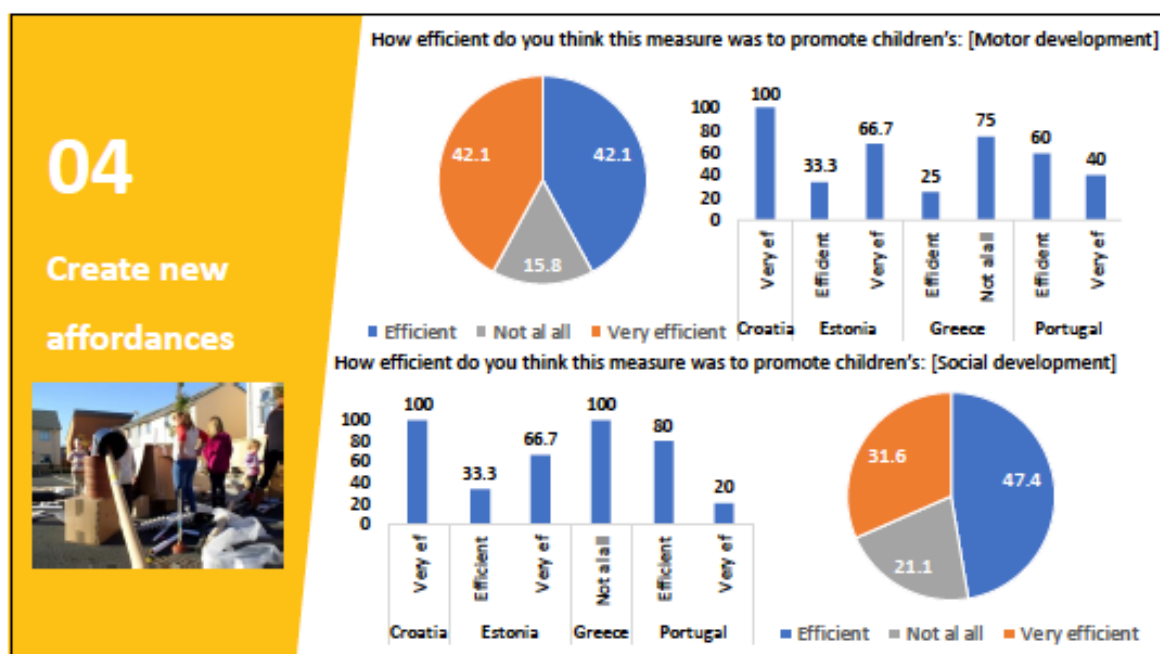


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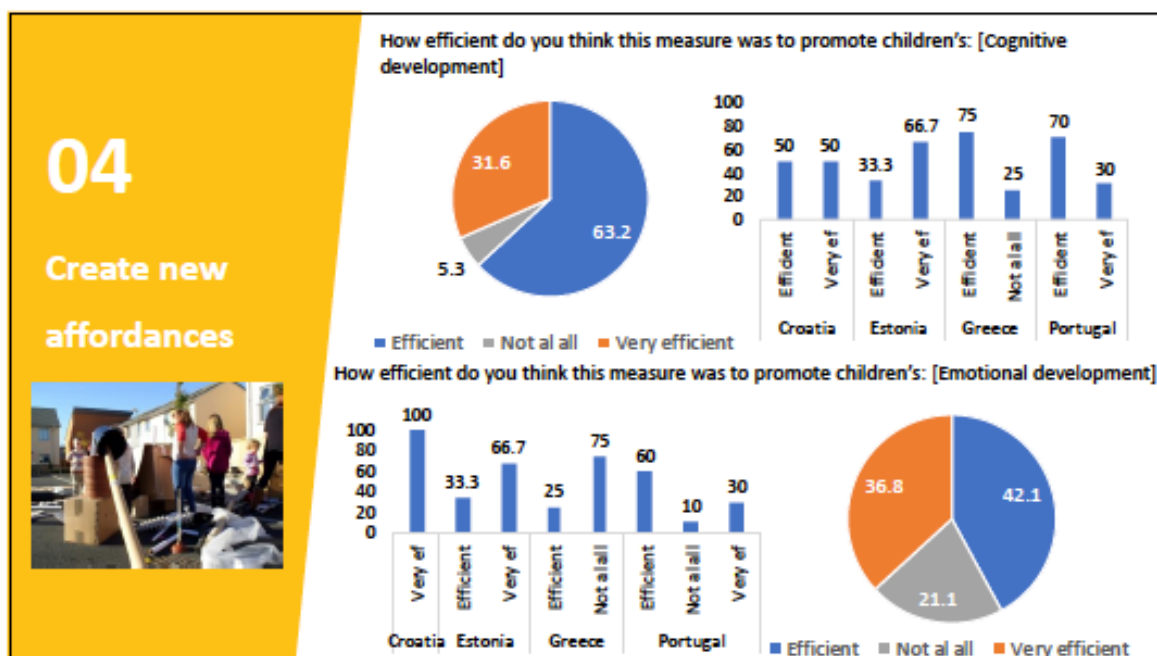
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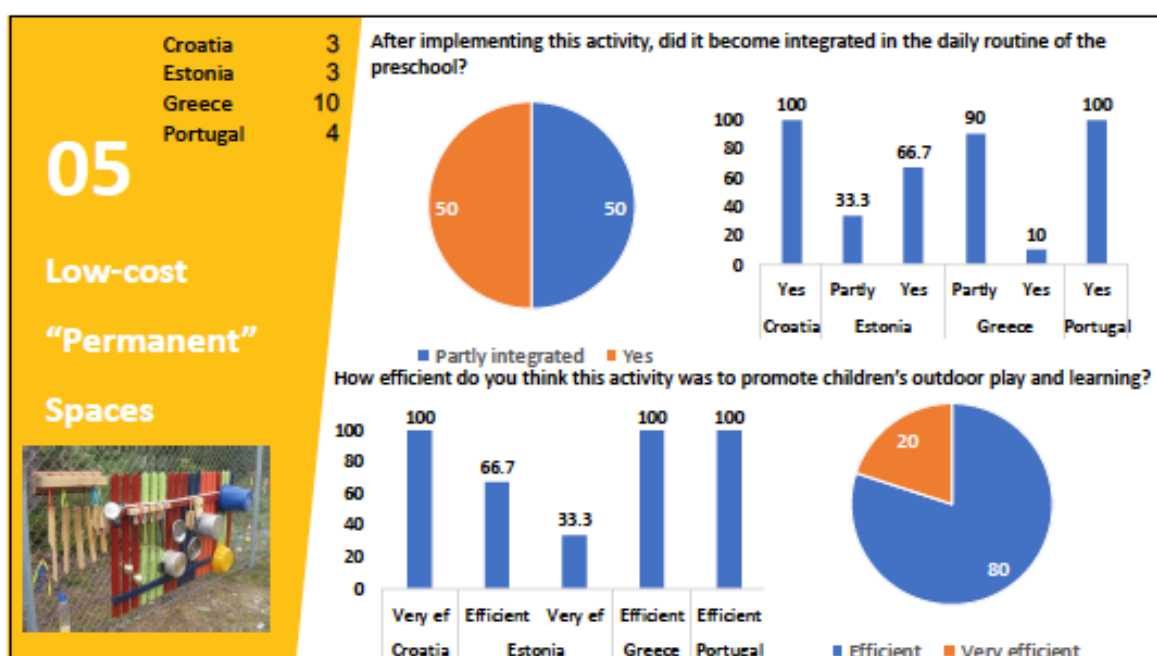
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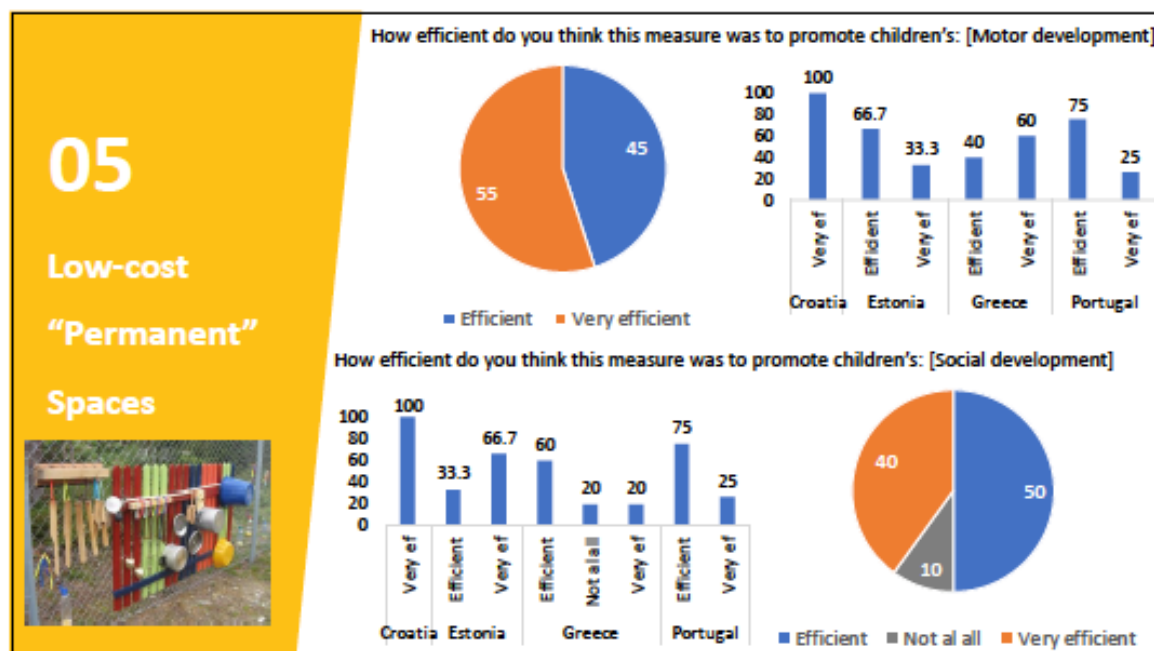
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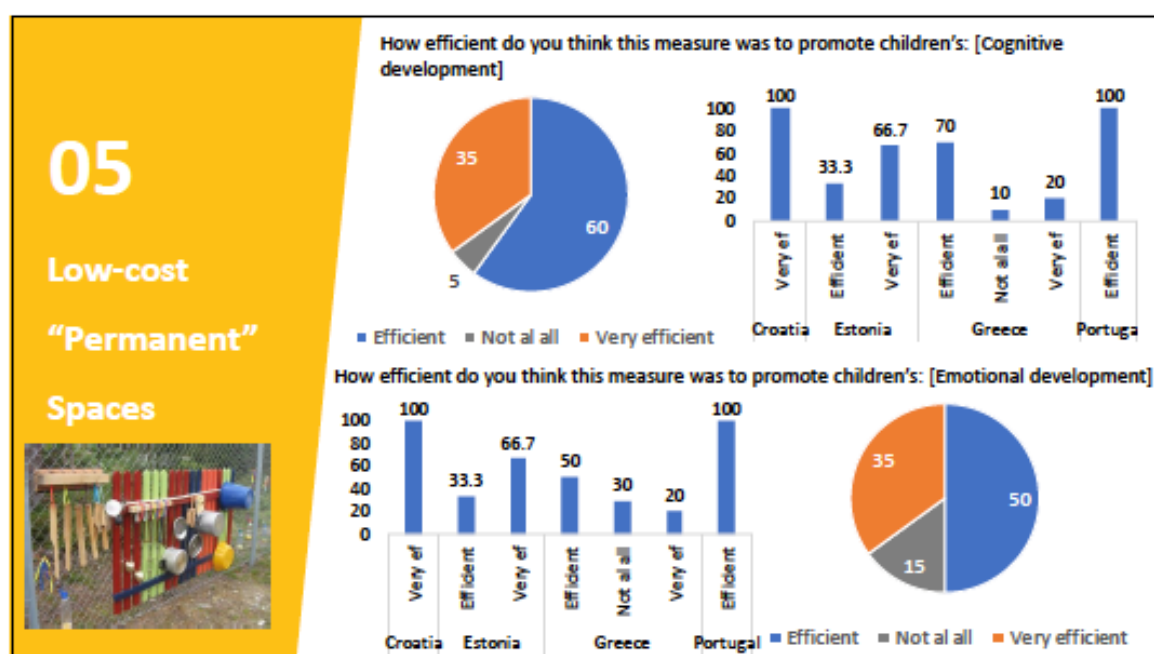
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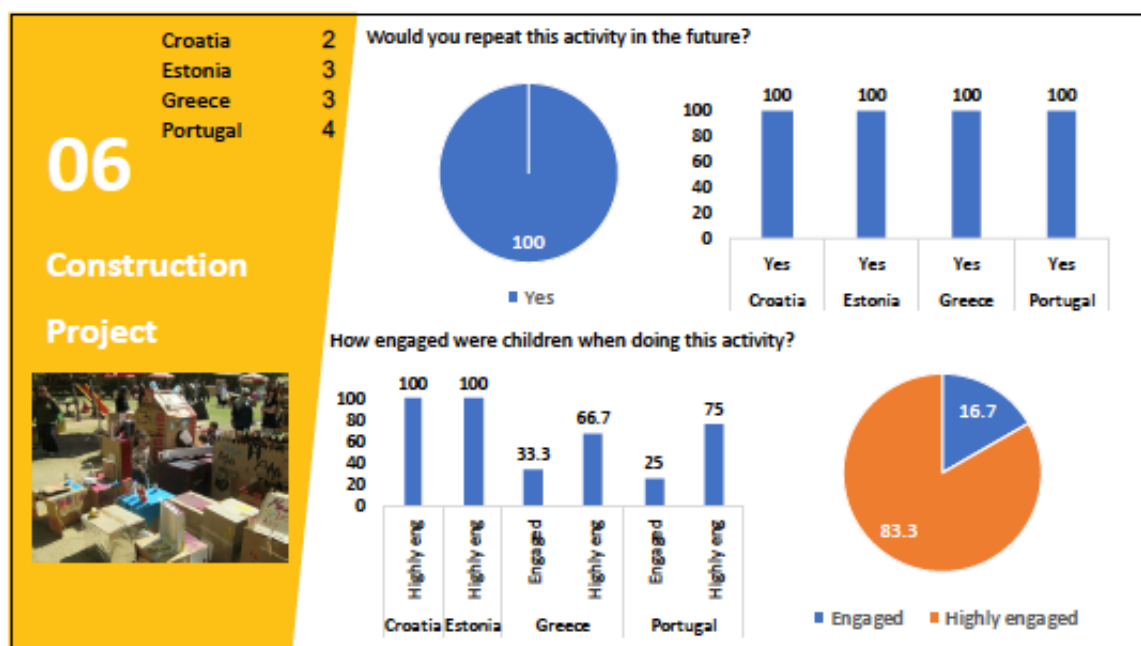


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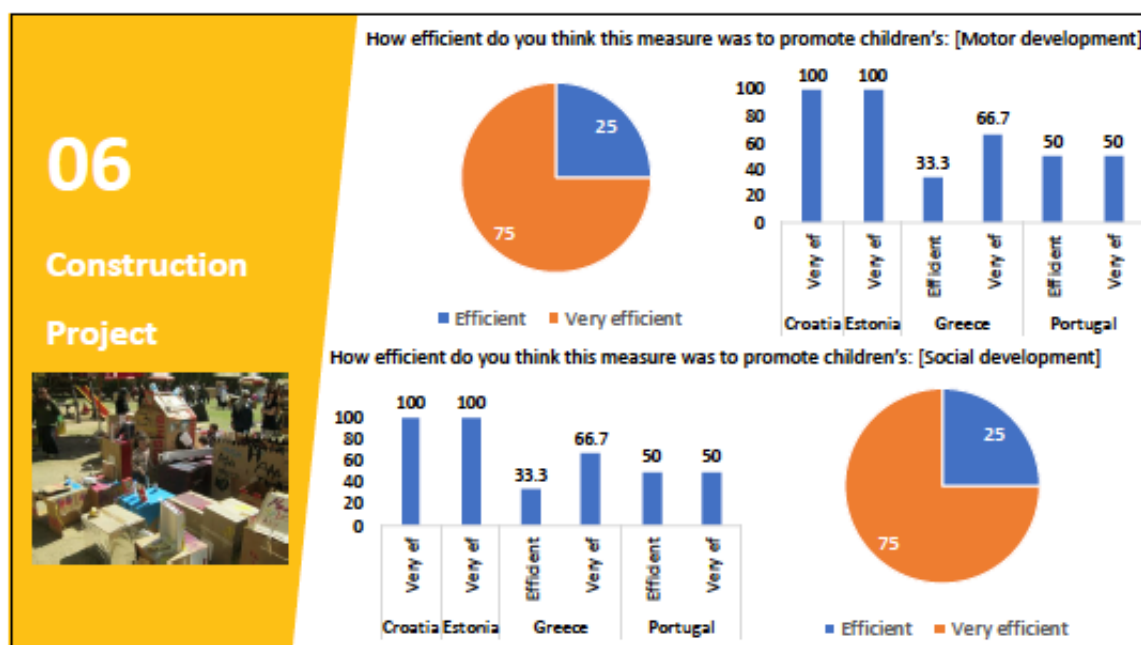


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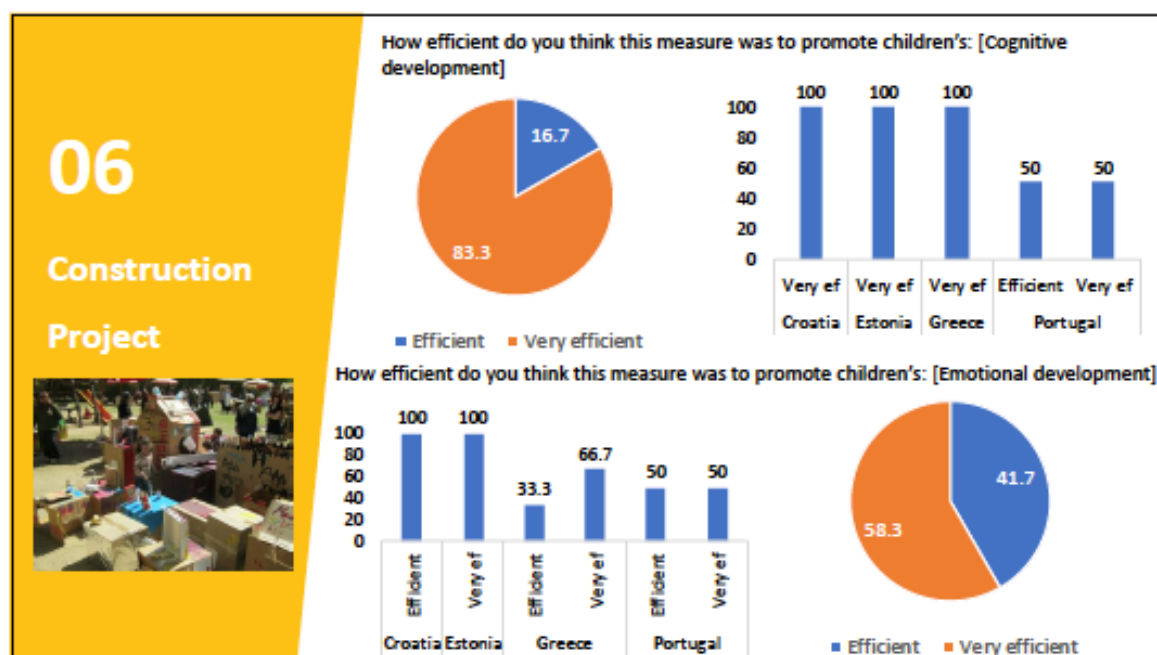


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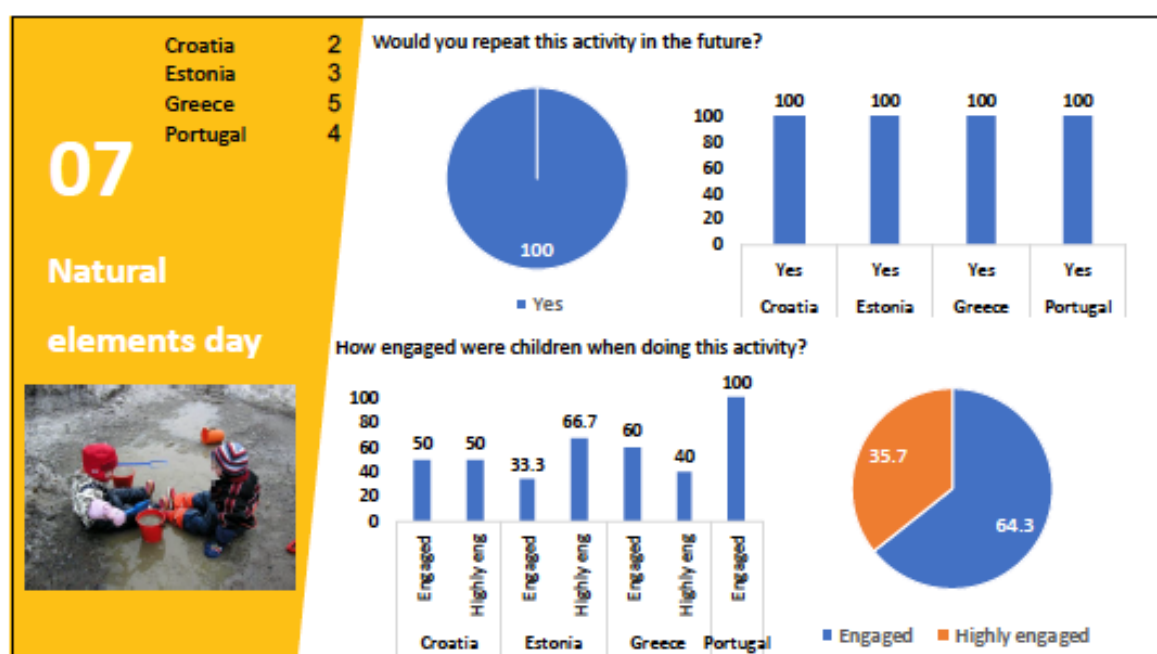


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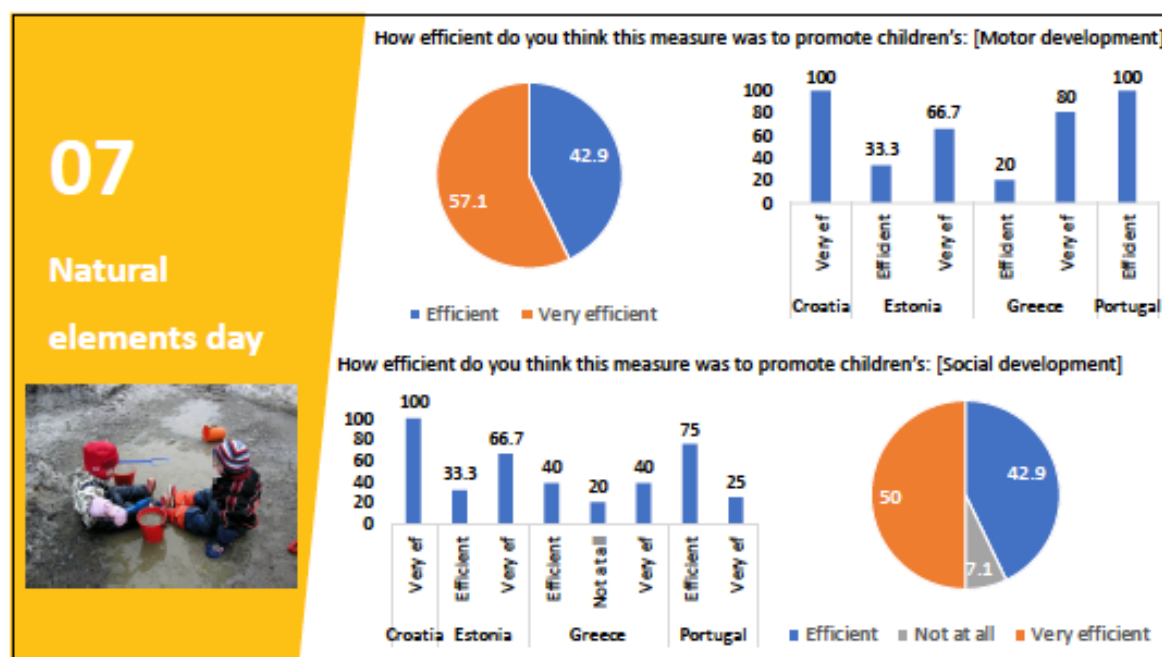


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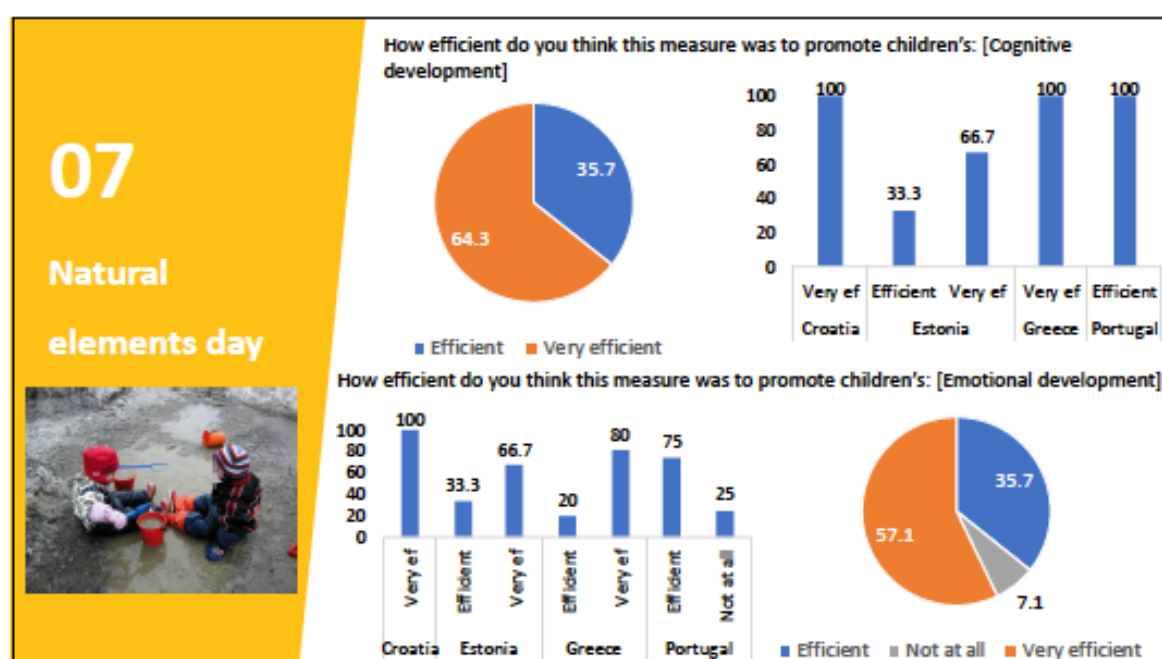


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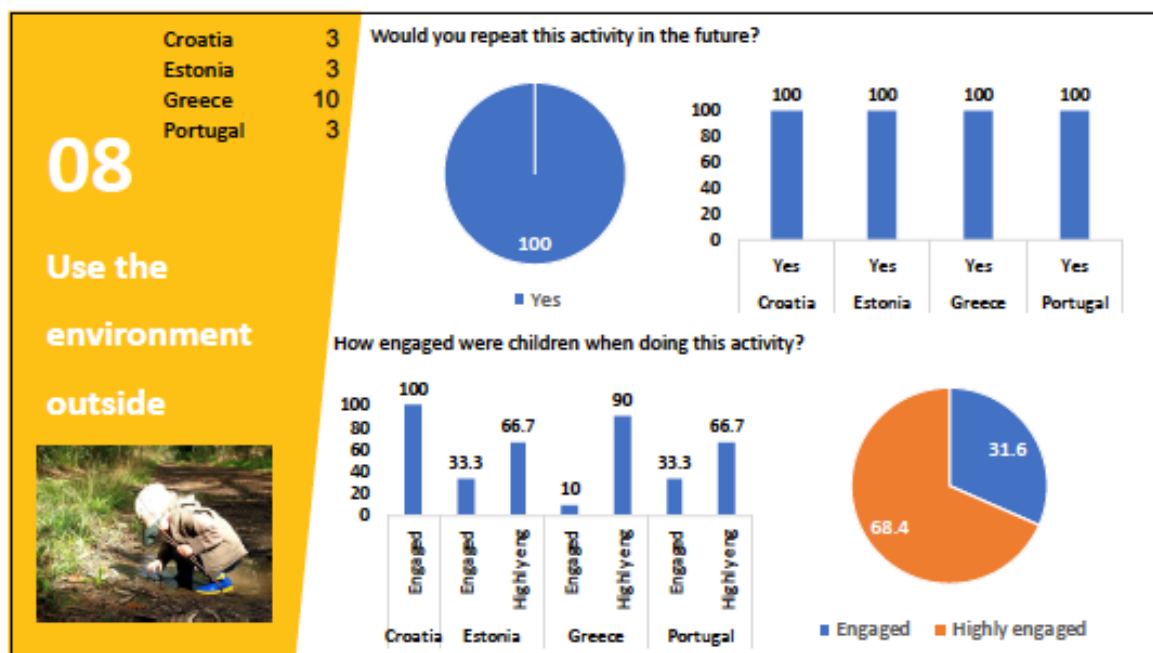


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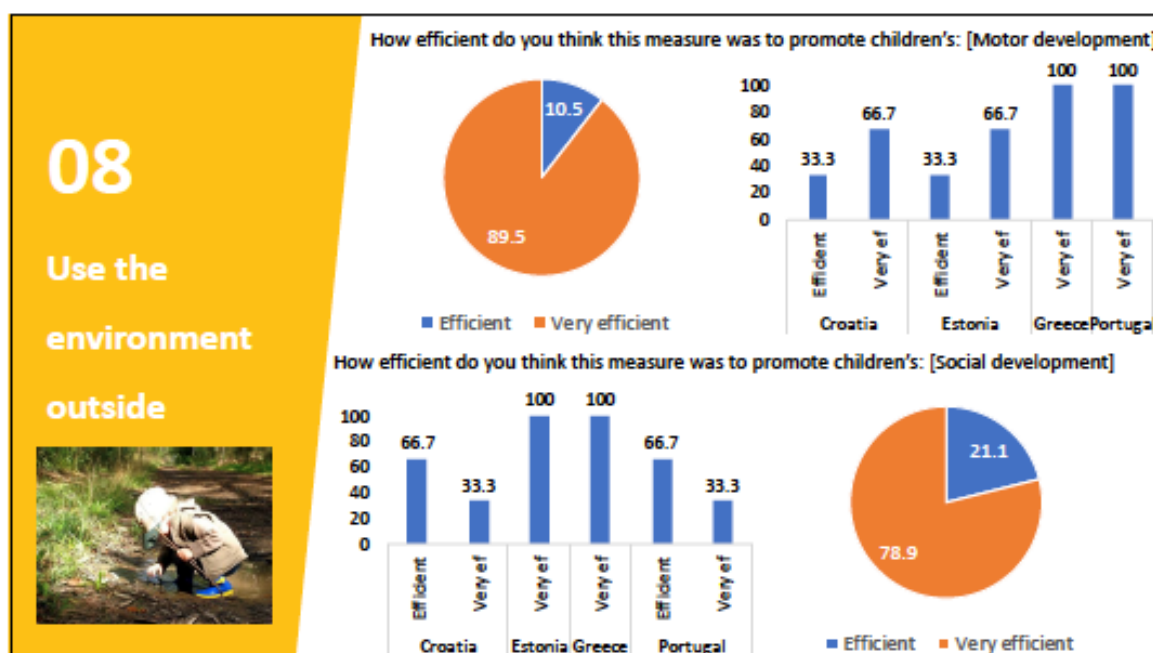


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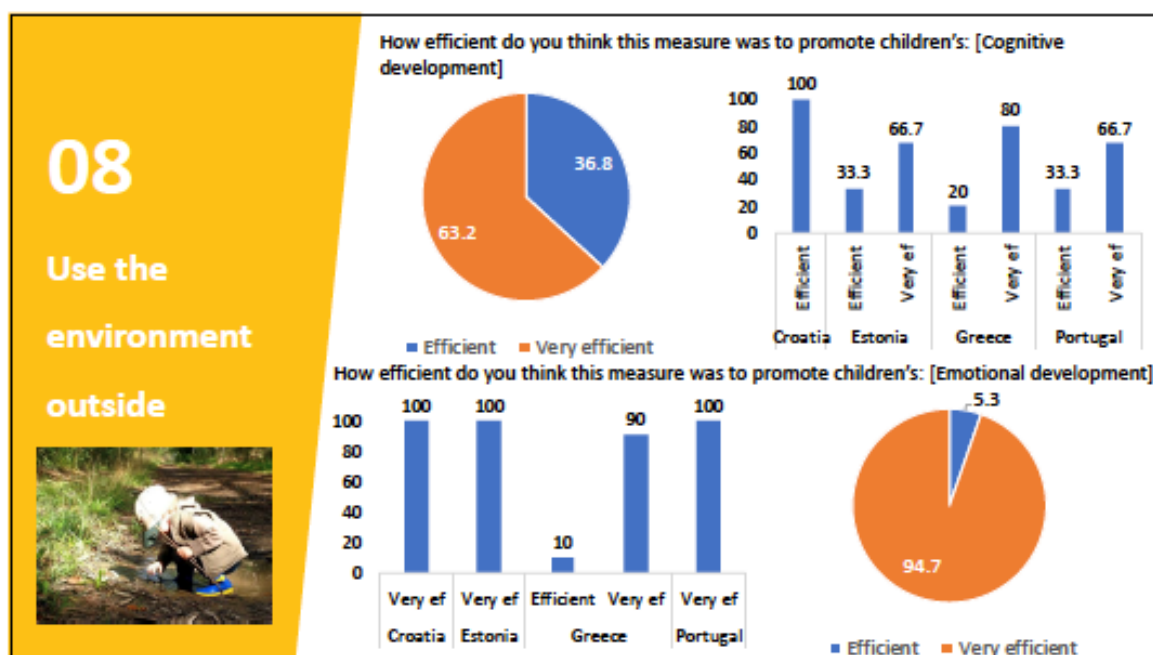
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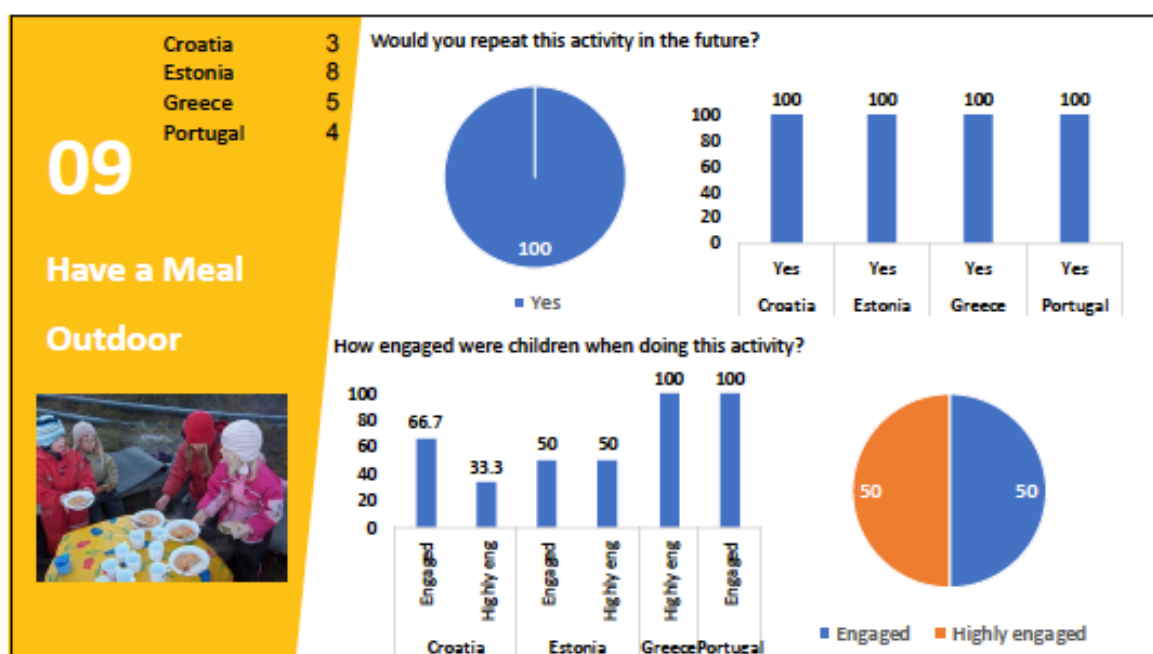
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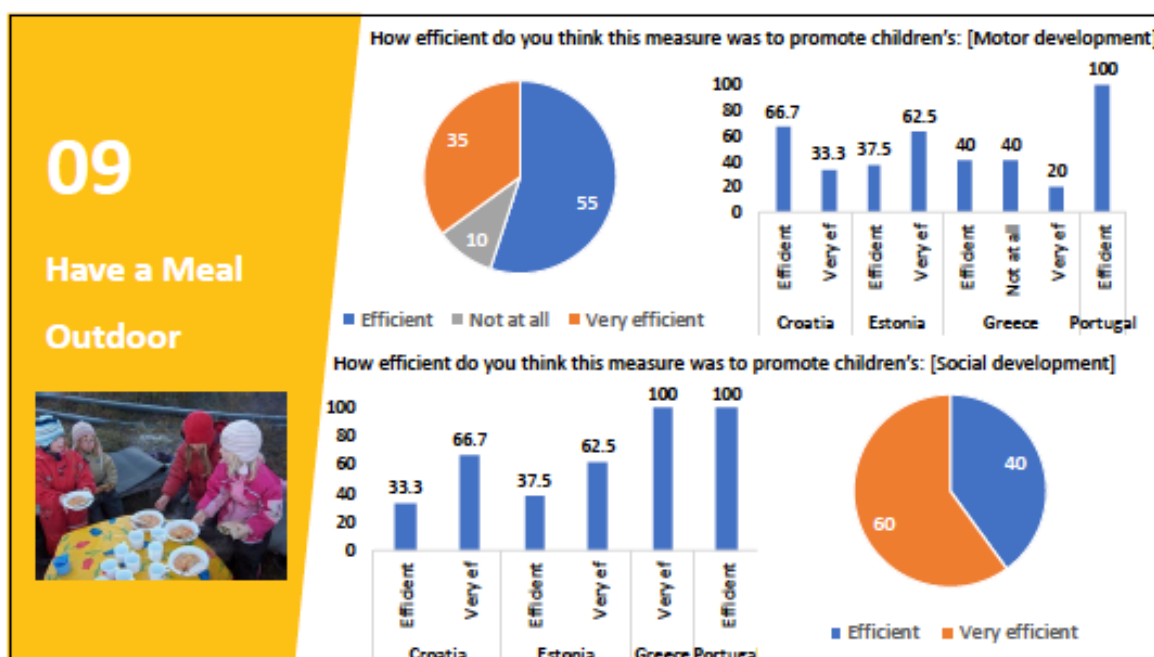
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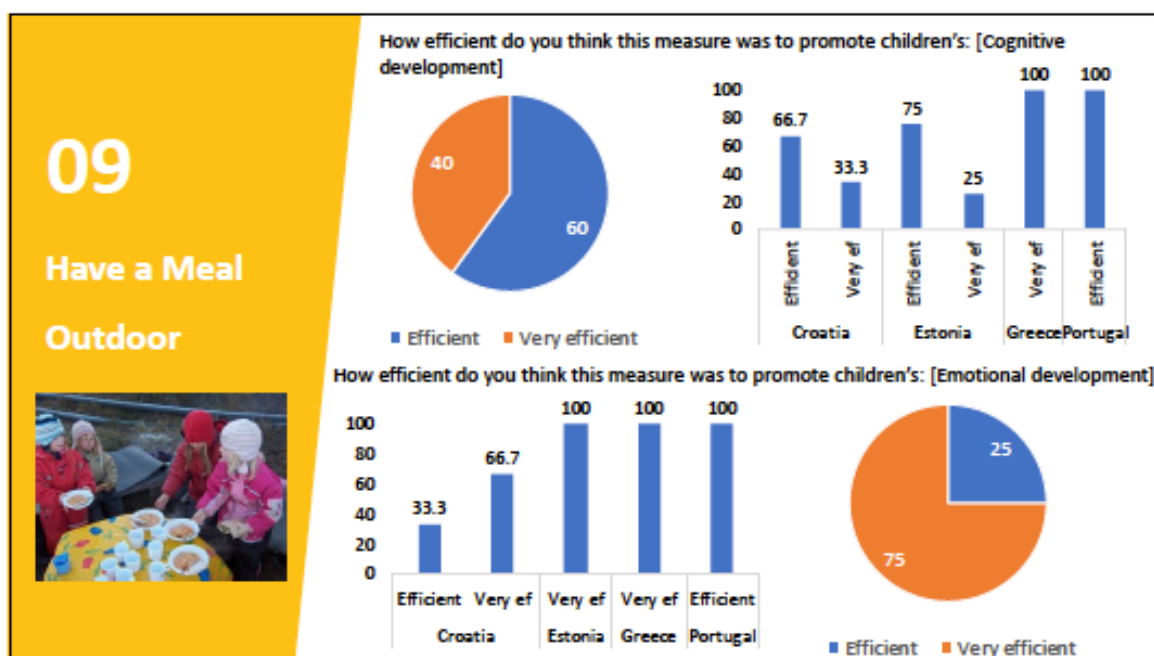
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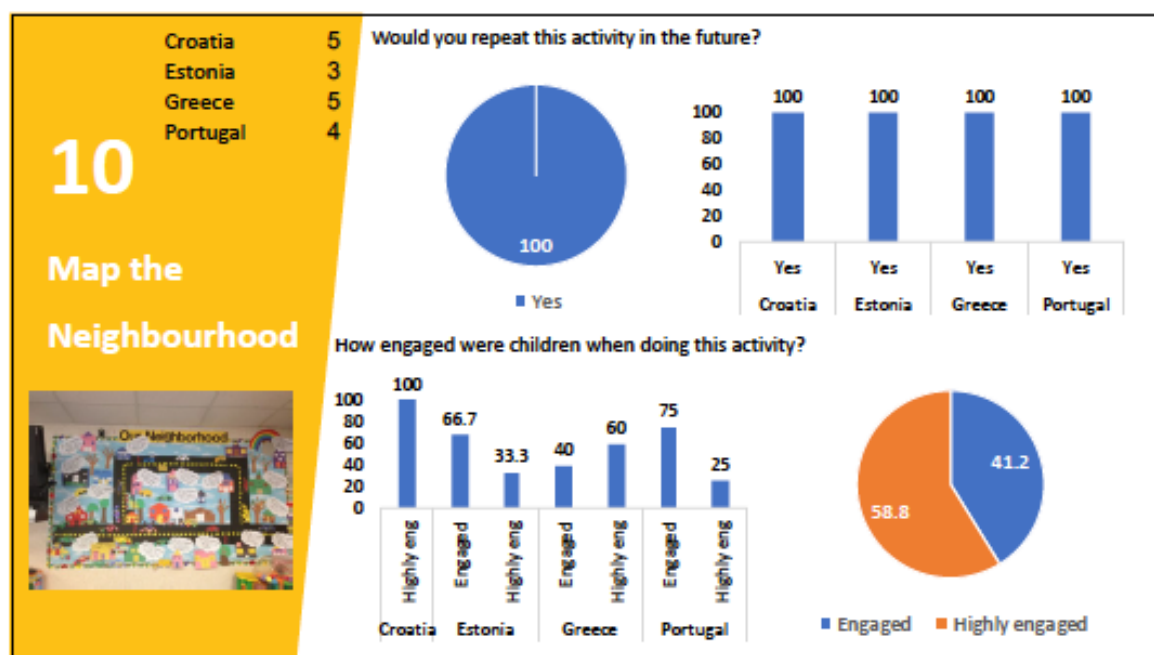


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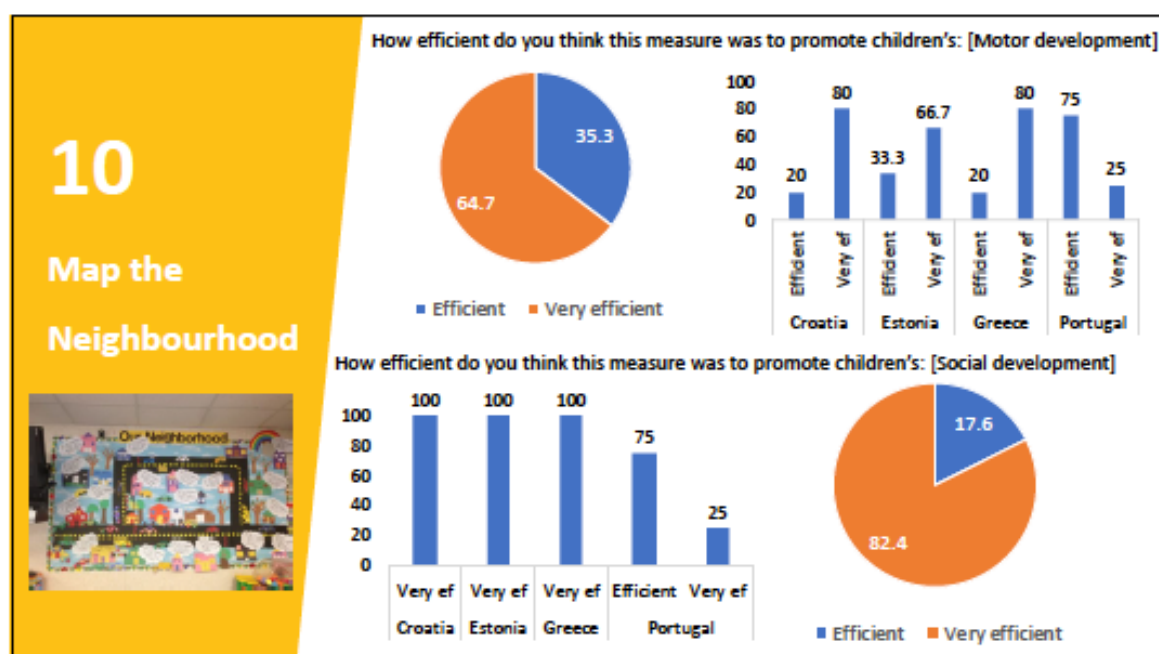


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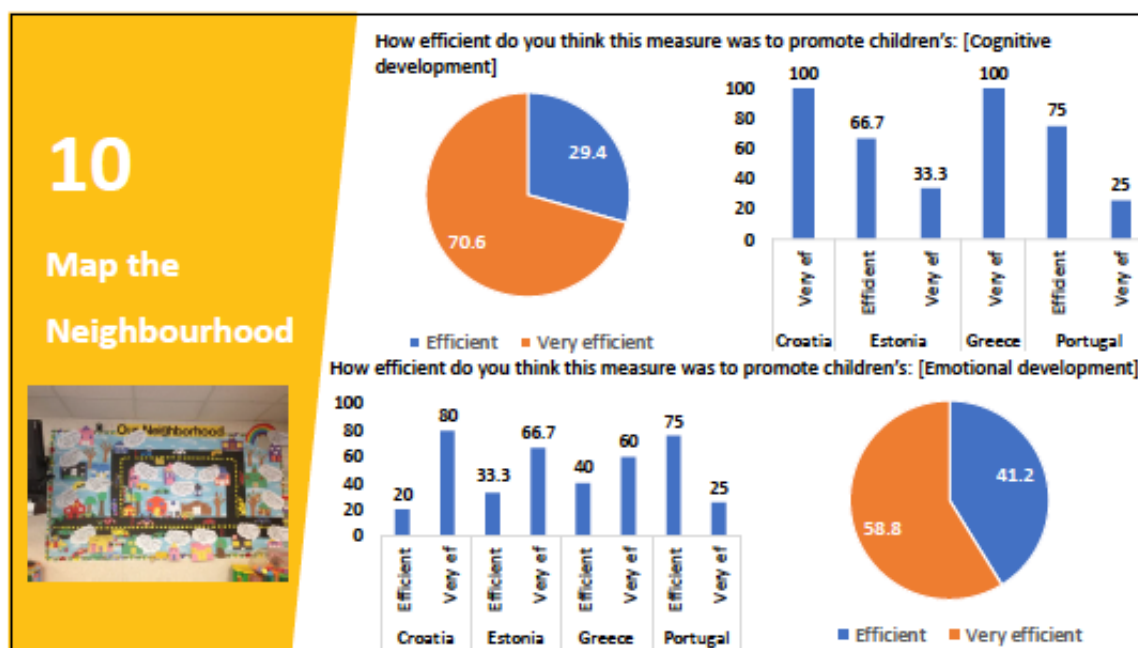


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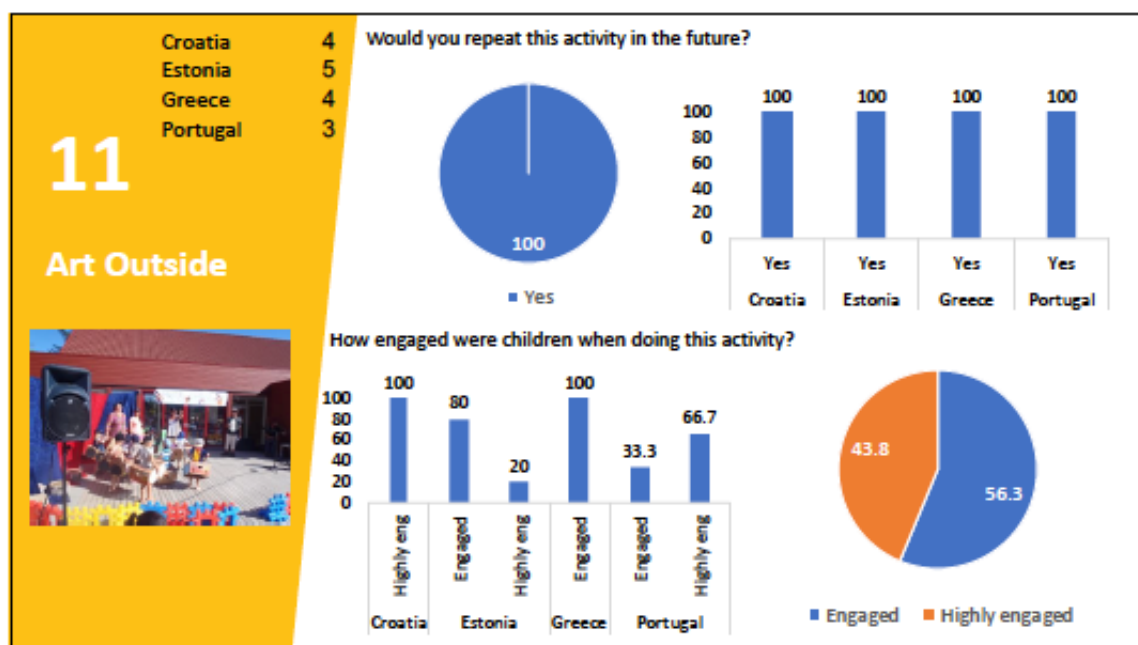


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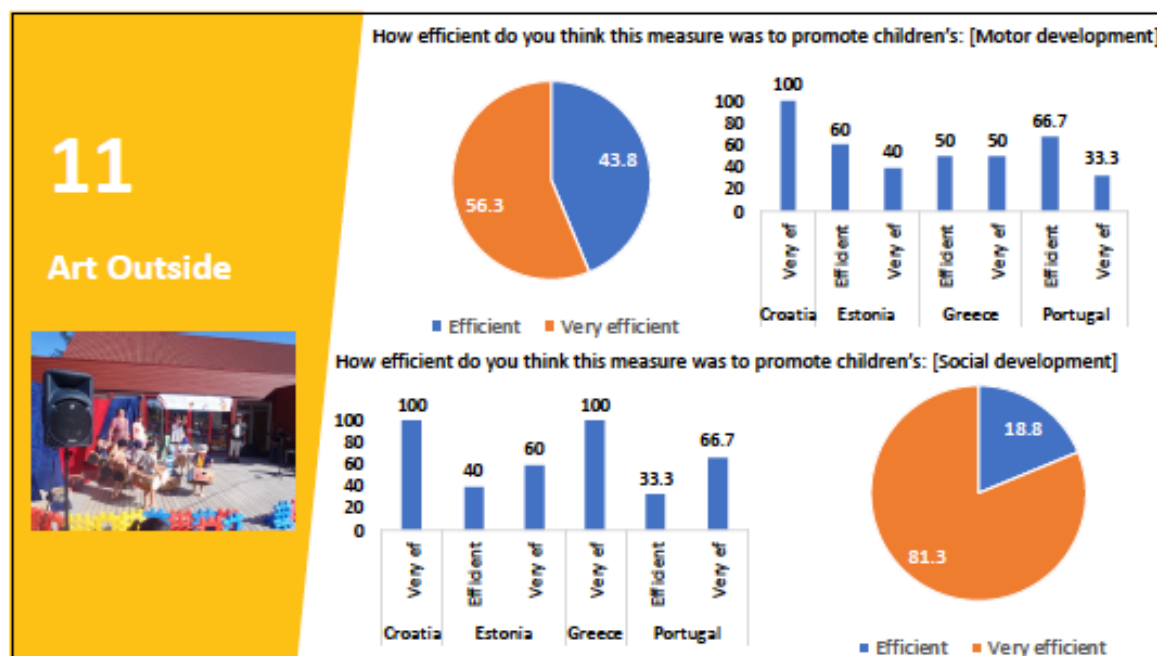


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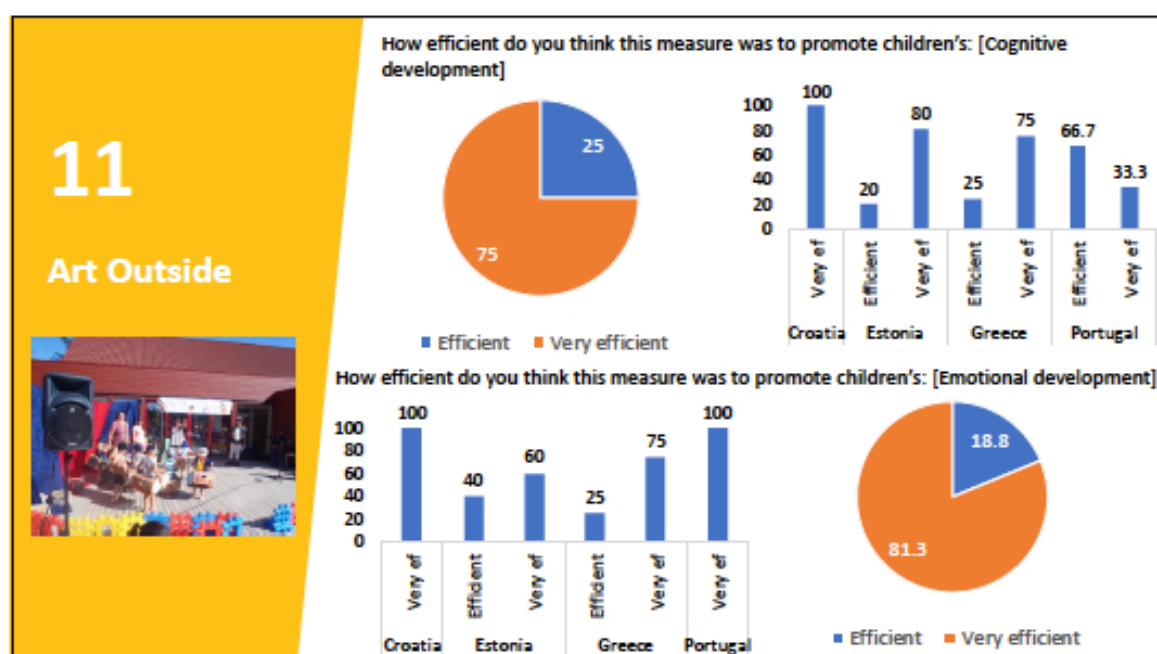


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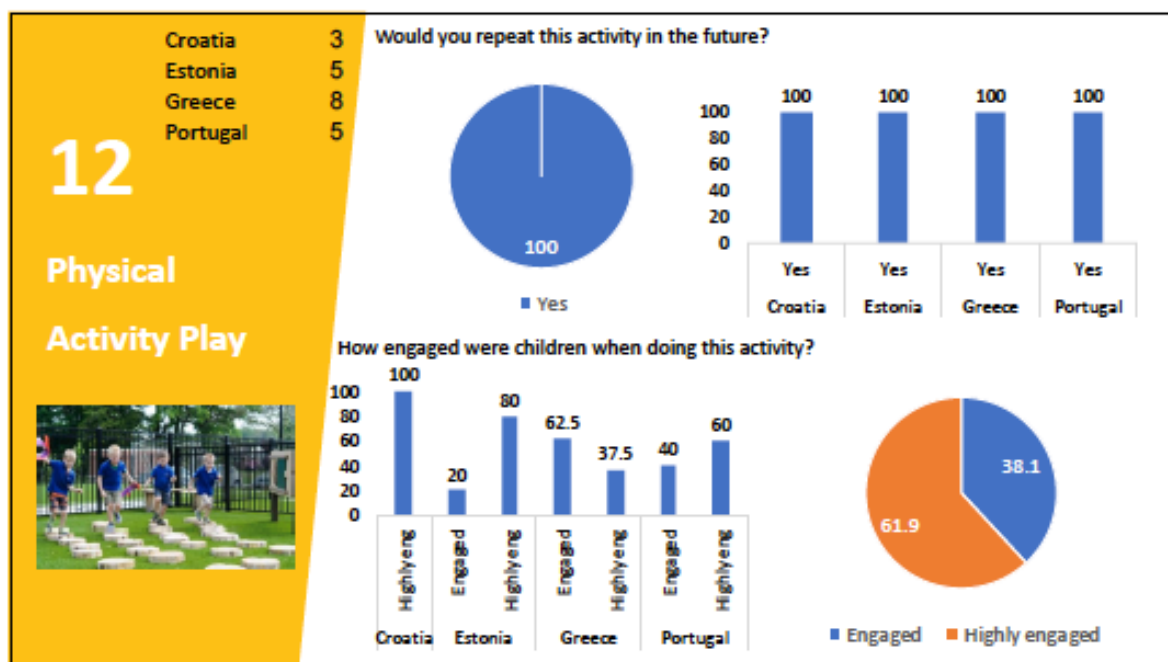


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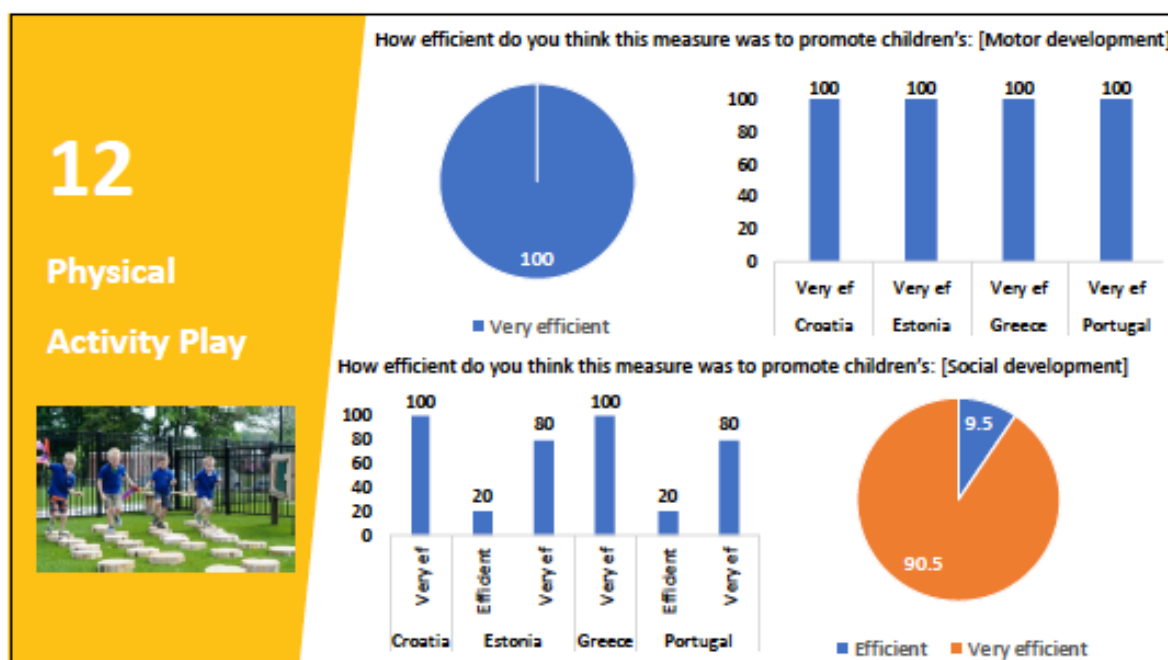


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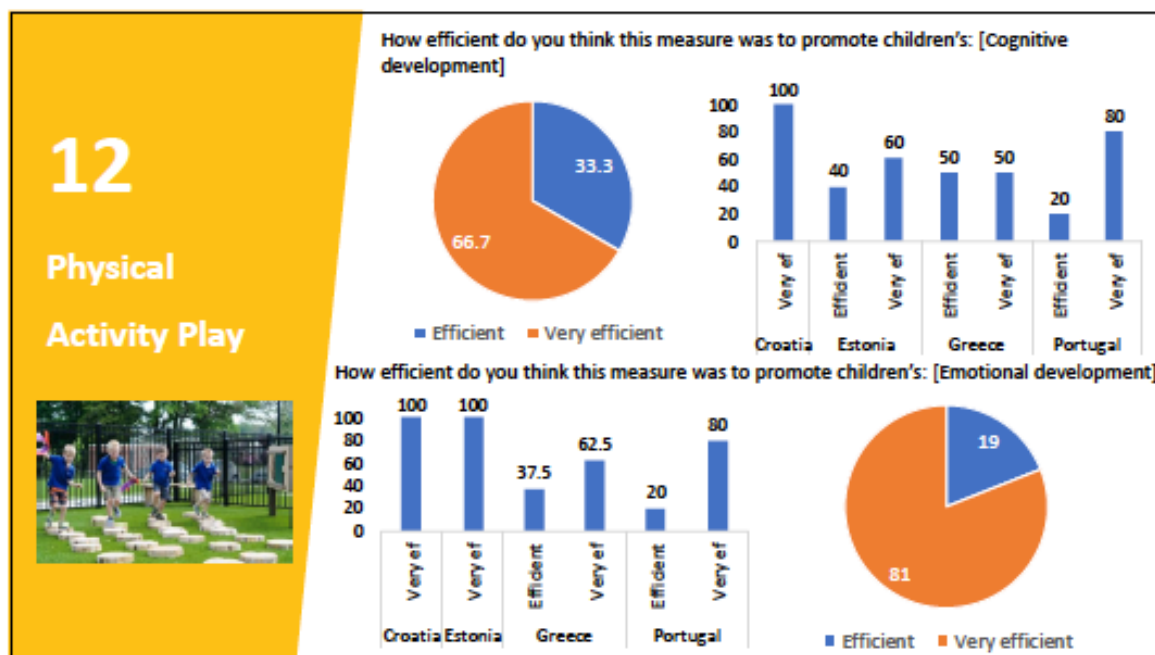
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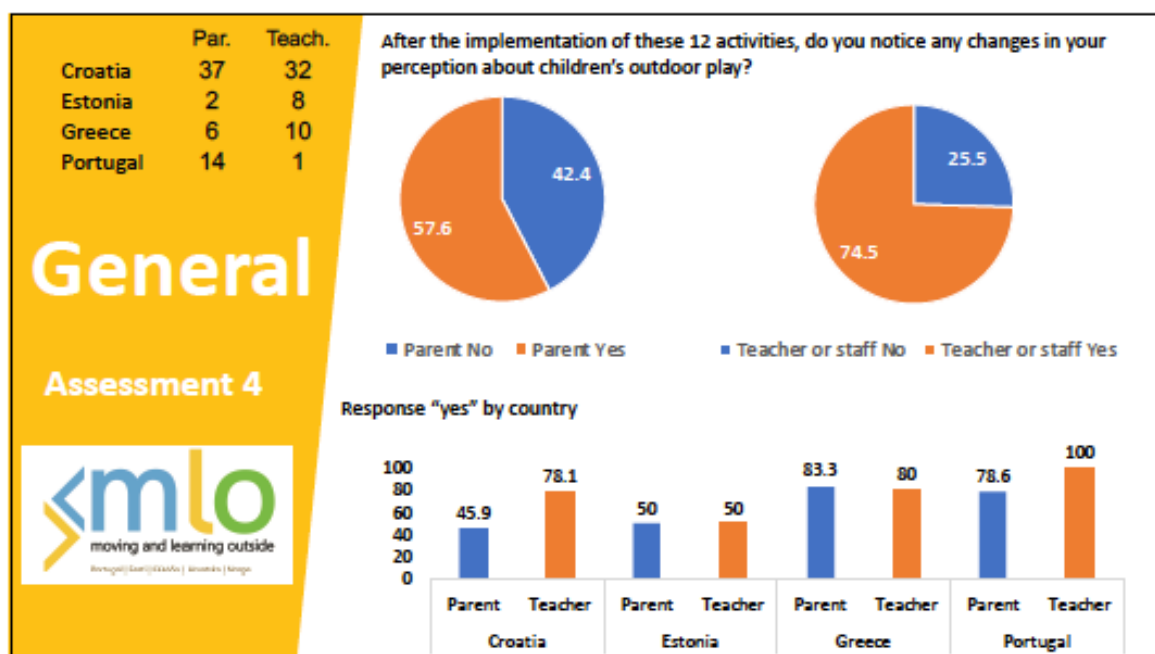
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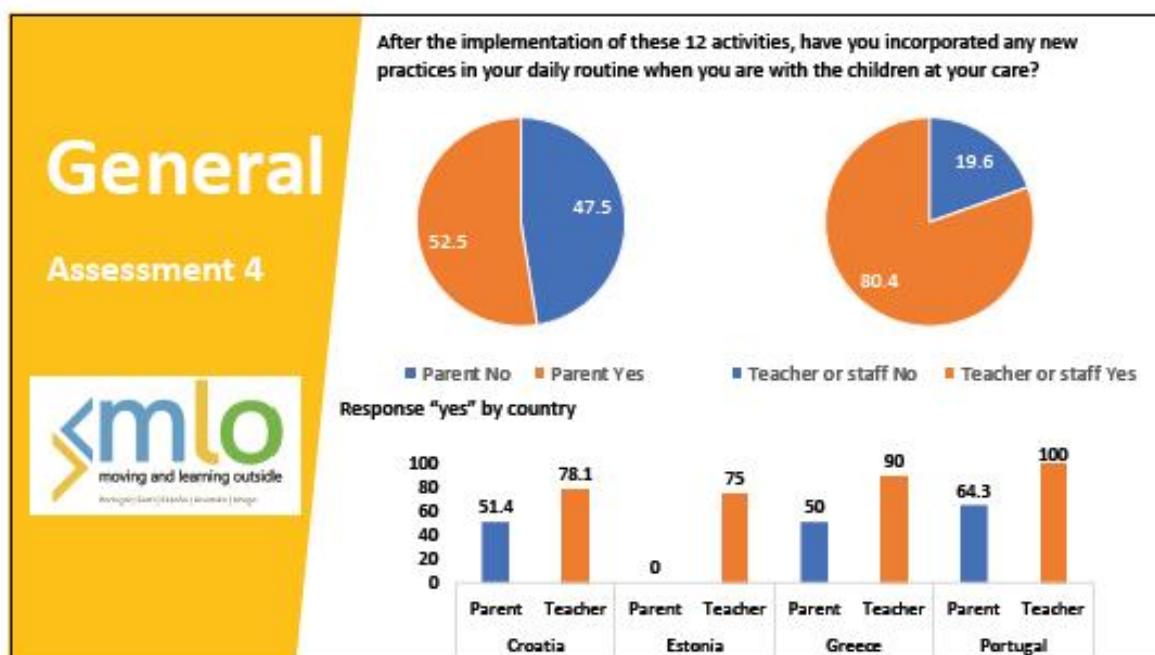
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