

# Swings, Slides and Seesaws: A Qualitative Analysis of What Children Want in School Playgrounds?

Zubeyde Zeynep Ozen, Arif Yılmaz

*Faculty of Education, Hacettepe University<sup>1</sup>, Faculty of Education, Hacettepe University<sup>2</sup>  
Turkey*

## Abstract

*There are a great number of research studies which support the idea that children's learning and an early childhood institution's environment are strongly connected. Past research studies have indicated that the environment's aesthetic, flexibility, and safety characteristics have a positive correlation with children's development levels and school readiness and as a result can positively impact their future learning. It has been observed that if the environment is lacking in a sufficient amount of stimuli, then the children's development and learning are negatively affected. When considering the early childhood learning environment, the outdoor areas are as important as indoor areas. An important aspect of outdoor areas is that they offer children a space where they can act freely which in turn supports their holistic development. Outdoor playgrounds which have been designed to support children's development can be considered a significant location and opportunity for improving children's creativity and physical development. This study aimed to better determine the expectations and opinions of early childhood students who would be utilizing renovated playgrounds in the outdoor space of their school; Beytepe Kindergarten. In order to achieve this goal, interviews were conducted with the participating children and they were asked to draw their ideal playgrounds. An analysis of collected data (i.e., the children's playground illustrations) was carried out through the content analysis method and during the analysis process an inductive approach was utilized.*

## 1. Introduction

During the early childhood period, the development and learning of children is intense, their fundamental habits are adopted, and their cognitive abilities are rapidly developed and shaped. Throughout this period, the learning of children is considered to be the "interiorizing information by adopting" which implies how active the children are in the learning process [2]. As a result, at the early childhood age the opportunities provided to children can contribute to their overall development and

learning. For this reason, considerations need to be made which allow children to receive the adequate and appropriate amount, as well as, correct type of learning opportunities.

Environment, which is considered a key factor in determining how children behave includes tangible factors, such as; the physical area which the children are in, the materials which the children are exposed to, the adults with whom they interact (i.e., teachers and parents), as well as, other children with whom they are involved [11]. In past research literature, the learning areas associated with pre-school education have been categorized into two groups; indoor places and outdoor places. When differing educational approaches implemented within pre-school education, such as; Waldorf Schools, High/Scope, Montessori, Reggio Emilia, and Head Start, were examined regarding places/spaces of learning, the generalizable results indicated the importance of children developing and learning in both indoor and outdoor areas. Also, it was determined that the materials which children interact with at the center of their learning environment should be of a suitable size for children (i.e., child-sized tables and chairs, child-sized playground equipment, etc.). In addition, it was determined that the classroom environment should be arranged and setup in a manner that supports the participation of the children [9], [12].

In most cases, educational activities such as instruction and learning occur in a structured classroom environment, and as a result, children have a limited number of opportunities to spend time outdoors. Interesting results were revealed in Oktay, et al., [12], that when comparing children who received pre-school education versus children who had not received pre-school education there was no distinguishable physical discrepancies. According to researchers, the reason for this finding might be a result of pre-school institutions not spending an adequate amount of time on movement education. In addition, the research of Erdoğan, Haktanır, Köksal Akyol and Çakır İlhan [8] regarding where children want to play and with whom they want to play, determined that a large majority of children (91.02 %) want to play in open areas.

The argument is that the experiences children have outdoors are much more effective for their development and learning than those that take place indoors. Outdoor spaces can provide a very good environment for learning that ultimately supports the theoretical learning which has already occurred in the indoor environment. According to Richardson [13], children require open spaces for the development of freedom, perception of space, interaction with nature, activities involving full body mobility, as well as, developing social interaction skills through relationships with their childhood peers and adults, and finally forming a sense of security in their surroundings. Nature and the experiences that are acquired in nature can have a great effect on both the physical and mental health of developing children. Furthermore, having direct experiences within nature can increase opportunities for children to develop their creativity, problem-solving skills, as well as, their physical and moral development. More importantly, according to Andrejewski [1], all of the benefits acquired through a child's experiences with the outdoors and nature, have long-lasting and positive effects.

In general, it can be stated that since outdoor places offer children a space in which they can act freely both physically and socially it ultimately results in the overall support of their development and learning. With this understanding in mind, in order to better support pre-school children's development, it is important that the design of outdoor playgrounds be considered a significant opportunity for providing a location for the improvement of children's creative and physical development. A significant contributor of outdoors spaces for children is that their natural surroundings (i.e., soil, vegetation, water, insects and other creatures) can foster the development of children's creativity. Another significant reason why outdoor areas are important for children's development is the fact that open spaces allow children to utilize their entire body in physical activities such as running, rolling, jumping and playing as well as engage their mind in activities and games which allow them to explore, think, pursue, and implement plans [3]. Furthermore, outdoor activities provide children with opportunities to increase their level of autonomy, decision-making skills, and organizational abilities through exploration and play within a safe environment.

The school playground can often provide a fantastic location for formal learning, as well as, provide a great space for children to take part in physical activities which should lead to better interaction with the natural environment, as well as, improved problem solving and socialization skills. Many of children's early life lessons may take place on the playground; for example, solving social interaction dynamics, learning to participate in a group through group/team play, verbal development

through peer communication, and psycho-motor skills development through physical play (i.e., running, jumping, etc.). As a result of the knowledge of outdoor places instrumental role in children's development and learning; the design, planning, and construction of outdoor places for children should be done so in a manner which provides an environment which is suitable for the age and development level of the children utilizing the area. The design considerations should also include but not be limited to the materials to be utilized as well as points of interest in the play area. Another important, if not the most paramount decision when designing outdoor playground areas, is minimizing the number of hazards and risks for children and to provide a safe environment for children to explore, learn, and play. When the relevant research literature about school playgrounds in Turkey was examined it was easily recognized that there was a dearth of research available regarding pre-school education institutions playground facilities. In the relevant research that was reviewed the most frequent observations which were mentioned included the inefficient use of open spaces, that the existing open spaces were not suitable for the nature of creative, developmental, and productive play, as well as, most often safety regulations in these open spaces were ignored [5]. When existing outdoor playgrounds were examined it was determined that in most cases the outdoor areas were deemed to be inadequate for a variety of reasons, for example; a lack of differing surfaces were utilized (i.e., grass, natural ground surfaces, etc.), the existing concrete surface posed hazards and risks, there were an insufficient number of natural materials for children to interact, and the areas failed to address not only all development levels of children but also all age groups. In addition, it was also observed that because of lack of sufficient funds and/or because of miscommunication between institutions, a majority of pre-schools which did have a garden had utilized synthetic toys that ultimately hindered the children's interactions [6].

Although there is a wealth of international research regarding how pre-schools gardens and/or playgrounds are managed, utilized, and regulated; unfortunately, the same can't be said for the amount of similar research conducted in Turkey. According to the researchers, conducting a needs analysis and creating research-based outdoor spaces which have a significant effect on children's development is of vital importance. In order to clearly understand what the participating children wanted in a playground space, the following research questions were queried.

1. What are the physical properties the children desire seeing in the school playgrounds?
2. What are the materials children desire having in the school playgrounds?

## 2. Method

In order to answer the research questions from this study, the researchers followed a methodology which was qualitative in nature and that employed a case study approach. According to Merriam [10], case studies are detail descriptions and/or investigations of bounded systems. Creswell [4] also pointed out that case studies are an approach utilized by researchers to describe the findings of one or more limited systems in a detailed way from information acquired through multiple data collection tools. One reason for utilizing the case study approach relates to the point posited by Yin [14], that when answering “how” or “why” questions, case studies provide more advantages than other methodologies. In this study, the children’s thinking was bounded to outdoor playgrounds and as a result the aim of the study was to explore how the participating children wanted their ideal outdoor area (i.e., playground) to be.

## 3. Participants

Purposeful sampling is one of the main sampling strategies utilized in qualitative studies [10], and as a result, the purposeful sampling strategy was employed in this research. The participants for this study consisted of 48 pre-school aged children enrolled in an early childhood educational setting in a large metropolitan city in the Republic of Turkey. The participating students came from a multi-age classroom with student ages ranging from 36 to 72 months. The preschool setting consisted of a two-floor school setting which had a total of six classrooms with two classrooms being on the entry level and remaining four classrooms on the upper floor. At the time of the study, there were a total of 151 students overall and each classroom consisted of 26 students.

The use of interviews is a common practice utilized in qualitative research studies and the three types of interviews most often conducted are structured, semi-structured and unstructured. In this research the data was collected through both the structured individual interviews and review of the drawings from the participating children. Since the participants were young children and their attention spans were limited in comparison to adults, the interview questions for this research were clear, concrete, and short questions. The structured interviews utilized in this research included three questions; a) How do you want your school playground to be? b) What do you want to have in the playground area? and c) What other things do you want in the playground area?

## 4. Setting and procedures

The data collection process was conducted in two separate phases with the first phase being carried out before the pre-school playground redesign and the second set of data was gathered following the redesign and restructuring of the pre-school’s outdoor space. Before conducting the student interviews the appropriate human subject approval was obtained from the university ethical board, and following this approval the first phase of interviews were conducted with each participating child individually at the beginning of the fall 2016 school semester. To conduct the interviews, the children were taken to a quiet area within the classroom and queried regarding the interview questions. Following the question queries, each child was asked to draw an imaginary playground area that s/he thought was their ideal playground. The entirety of each interview and playground drawing session lasted a duration of 15 to 20 minutes. The second phase of the data collection process occurred at the end of the spring 2017 semester when the redesign and renovation of the outdoor playground space had been completed. The second phase of the interviewing data collection process was carried out in the same manner as the first phase of question inquires.

## 5. Analysis

An inductive data analysis approach was used to analyze the data collected in this research, and through this type of data analysis the collected data was first grouped, then a relationship was sought. In addition, descriptive data analysis was employed and an inter-rater approach was followed with two researchers separately coding the student interviews. Following the independent coding of the data, the researchers met to discuss any differences and/or similarities in their codes and then ultimately agreed upon a set of accepted codes. Next, after the second order of analysis, specific recurring themes were identified and the relationship among themes was established.

## 6. Results

Through analysis of the data the frequency values were revealed and the most fundamentally desired type of outdoor school playground environment was determined. It is important to point out that in the results of the data analysis the total numbers and examined values did not completely correspond with the total number of the children participating in the interviews. The reason for these inconsistencies occurred because the children failed to fully complete all sections of each category and/or they included too much information in one section of the same category. Also important is that while providing examples from

the children's answers, in order to avoid ethics violations, the real names of the participating children were excluded and instead the children were referred to solely as "participants".

Table 1. Findings for research question 1

Themes	Categories	Codes	1 <sup>st</sup> Interview Frequency	2 <sup>nd</sup> Interview Frequency
Physical Features	Size	Big	12	10
		Sandy	3	13
	Structure	Stony	1	3
		Flowering	13	11
		Grassy	5	17

When children are asked the question "How do you want your school playground to be?" there is a distinct difference between the answers they gave before the renovations and the answers they gave after (see Table 1). When the surface type they want was grouped; 5 children wanted grass, 3 children wanted sand and one child wanted stone. However, in the second interview 17 children wanted grass, 13 children wanted sand and 3 children wanted stone. When their requests grouped in terms of size in the first interview 12 children wanted a big schoolyard but in the last interview, 10 children wanted a big schoolyard. In both first and last the last interview 1 children wanted a small schoolyard. When the grouping was made in terms of shape in the first interview 1 child wanted a triangle shape and in the second interview, 1 child wanted a rectangular shape. When the grouping was made in terms of aesthetics in the first interview 6 children used the word "beautiful" and in the last interview 1 child used the word "beautiful".

When we examined the results of how children answered the question "How" in the first interview; funny (n=2), pretty good (n=2) were the most popular answers. In the second interview when the same question examined high (n=2), sunny (n=2) were the most popular answers. We can conclude that the reason children gave the answer grass and sand in the second interview more than the first interview is they did not have a chance to play in schoolyards with a surface regulation. Therefore, we can say environment affect the children and provided opportunities may alter their knowledge level and desires.

The answers to the question "What do you want to have in the playground area?" were categorized into two categories such as living and non-living things. In the domestic animals' category, at the first interview cat (n=3), dog (n=8), bird, rabbit (n=3), fish (n=3), cow (n=2) horse (n=2) answers were given. In the second interview cat (n=8), dog (n=7), bird (n=3), rabbit (n=2), fish, cow, chicken (n=2), goat (n=2) answers were given. Moreover, in the drawings taken from the second data collection stage, there is a distinct increase in the number of pet animals (see Picture 1).



Picture 1. Pets

The animals that were mentioned by students which were not domesticated animals occurred differently with only a few exceptions between the first and second interview. The responses by the students regarding animals which corresponded between interview one and interview two were as follows; elephant (n=3), tiger, lion (n=2), squirrel, octopus, and dinosaur (n=1) from interview one, and from the second interview; elephant, tiger (n=2), lion (n=2), squirrel (n=3), octopus, dinosaur (n=2). Instead, the animals mentioned in the first interview (i.e., butterfly, duck, monkey, kangaroo, panda, fox, and octopus), and in the second interview; zebra (n=2), cheetah, worm (n=2), giraffe (n=3), mouse (n=3), snail (n=2) as well as bear, dragon, gazelle, cicada, grasshopper, and snake were the animals that the children stated that they wanted to see in their ideal school playground. According to the responses from the students, the researchers gained the impression that the teachers must have previously mentioned these animals during classroom activities, and as a result, the children provided these responses regarding their animal choices.

Other interesting responses provided by the children included them wanting their friends to be in the playground with them, as well as, some children drew a table and desk for their parents to sit at in the playground while they played (see Picture 2).

In the first interview, when children provided responses to the materials that they wanted in their ideal playground they stated; swing (n=22), slide (n=25), pool (n=6), see-saw (n=3), Ferris wheel (n=4), bridge, carousel, and yo-yo (n=1). While in the second interview, the responses provided by the children were; swing (n=20), slide (n=26), pool (n=8) see-saw (n=10), Ferris wheel, bridge, carousel and yo-yo (n=4).



Picture 2. Table and family

In other responses, although no children mentioned these items in the first interview (i.e., climbing rope and tree house), in the second interview eight children stated wanting a climbing rope and 12 children stated wanting a tree house in their ideal playground. Furthermore, the children reflected through their drawings the interest in having these items in their ideal playground (see Picture 3).



Picture 3. Tree houses and climbing ropes

In the first interview, the play items which the children mentioned wanting were; bicycle (n=8), scooter (n=3), bike (n=2), car (n=17), truck (n=9), train (n=2), plane (n=2), ball (n=4), pen & paper (n=3), balloon (n=3), Legos (n=3) and sand toys (n=2). The responses repeated in the second interview were; bicycle (n=4), car (n=13), truck (n=2), train, plane (n=5), ball, balloon, Legos (n=3), and sand toys (n=2). Some items which were considered in another category but were not mentioned in the second interview were books, musical instruments, puppets, wood blocks, and stars. One other surprising detail is that only one child mentioned having gardening and/or growing crops as a part of their ideal outdoor playground area. The researchers in this study believe the reason for almost all of the children not mentioning gardening and so forth as part of their outdoor space was related to the children living in a large-scale urban environment and not having a lot of

exposure to these types of more rural agriculturally based activities.

## 7. Discussion and Suggestions

During the literature review process, it is determined that there were only a few studies that had been carried out in Turkey regarding pre-school education institutions playground facilities, as well as, students interest in this outdoor spaces. As a result, a clear need existed for the pursuit of further inquiry into the most appropriate and effective manner of the design, execution, and utilization of outdoor spaces at pre-school institutions in order to provide the best opportunities for early childhood development and learning among children. Also, important is better understanding the interests and needs of all relevant parties involved, for example, the children, educators, parents, and school officials. As a result, this research has made it clear that not only do students have an interest in how their outdoor playground spaces are designed but also what items are in these outdoor spaces. In addition, there are an infinite number of opportunities in natural and manufactured outdoor spaces for children to explore, learn, and mature during their early childhood developmental period not only cognitively but also psychologically, socially, and so forth. Furthermore, because of the significance outdoor spaces play in children's learning and development, it is also important that future research into this topic not only focus on children but also incorporate inquiries regarding the role in this situation of educators and parents.

It is clear that outdoor places can provide a fantastic location for children's development and learning, both formally and informally, by allowing kids to take part in physical activities, problem solve and improve socialization skills, as well as, interact with the natural environment. Often children's early life lessons can be experienced and learned outdoors and on the playground. As a result of the knowledge that outdoor places are instrumental in children's development and learning it is important not only to take children's interests and needs into consideration when designing and constructing outdoor spaces which they will likely use on a daily basis but also to be sure the outdoor playground areas set up in early childhood settings are age-appropriate as well as serve the development level of the children utilizing the space. In addition, it is of paramount importance that the outdoor playground areas are as hazard and risk free as possible in order to provide the children with a safe environment to explore, learn, and play. This research was conducted in order to gain pre-school children's opinions and suggestions regarding their outdoor places/spaces, and as a result, it is important to keep children's ideas and wishes in mind when creating a school playground area. Finally, a final important point to stress is that all stakeholders

involved with the design, implementation, and/or utilization of outdoor playground spaces at schools and/or in the community should provide equal access to and quality in all facilities regardless of the socioeconomic status of the school students and/or community members and in doing so provide all children with an equal access and an equal opportunity to outdoor environments as they deserve.

## 8. References

[1] Andrejewski, R. G. (2011). Nature connection, outdoor play, and environmental stewardship in residential environmental education. Unpublished doctoral dissertation. The Pennsylvania State University, Pennsylvania.

[2] Bodrova, E., & Leong, D. (2010). Curriculum and play in early child development. Encyclopedia on Early Childhood Development.

[3] Chakravarthi, S. (2009). Preschool teachers' beliefs and practices of outdoor play and outdoor environments. Unpublished doctoral dissertation. The University of North Carolina, Greensboro, North Carolina.

[4] Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The counseling psychologist*, 35(2), 236-264.

[5] Çelik, A. (2012). Okul öncesi eğitim kurumlarında açık alan kullanımı: Kocaeli örneği. *Atatürk Üniversitesi Ziraat Fakültesi Dergisi*, 43(1), 79-88.

[6] Duman, G., & Koçak, N. (2013). Çocuk oyun alanlarının biçimsel özellikleri açısından değerlendirilmesi (Konya İli Örneği). *Türk Eğitim Bilimleri Dergisi*, 11(1), 64-81

[7] Easton, F. (1997). Educating the whole child "head, heart and hands" learning from the waldorf experience. *Theory into Practice*. 36, 87-94.

[8] Erdoğan, S., Haktanır, G., Köksal, A. "The Place which I Wish to Play. An Analyses of Six Years Old Children's Drawings: Turkey Sample" OMEP Council and Conference. 5-11 October, Turkey. p:159.

[9] Hohmann, M., Weikart, D. P., & Epstein, A. S. (1995). Educating young children: Active learning practices for preschool and child care programs. Ypsilanti, MI: High/Scope Press.

[10] Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education. Revised and Expanded from " Case Study Research in Education."* Jossey-Bass Publishers, 350 Sansome St, San Francisco, CA 94104.

[11] McAfee, O., & Leong, D. (2012). Erken çocukluk döneminde gelişim ve öğrenmenin değerlendirilmesi ve desteklenmesi. Nobel Akademik Yayıncılık.

[12] Oktay, A. & Araştırma Grupları. (2006). Okul öncesi eğitimden ilköğretime geçiş projesi. Avrupa Birliği

Sürecinde Okul Öncesi Eğitimin Geleceği Sempozyumu Bildiri Kitabı, (s.75-95).

[13] Richardson, G. R. (2006). *Creating a Space to Grow Developing Your Outdoor Learning Environment*. London: David Fulton Publishers.

[14] Roopnarine, J., & Johnson, J. (2012). *Approaches to early childhood education*. Pearson Higher Ed.