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The Influence of Project-Based Outdoor Learning Activities on Children's Independence Development

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ABSTRACT

Outdoor Learning activities are essential to developing children's abilities. Children's independent development is essential to explore children's abilities. Growth and development are continuous processes from conception to adulthood influenced by intrinsic or environmental factors. Development is an increase in abilities in body structures and functions in a regular and predictable pattern as a result of the maturing process. The purpose of this study was to statistically analyze the effect of project-based outdoor learning activities on children's independent development. The method used in this research is pre-experiment. The types of design used in the research are pre-test-post-test. The population studied is kindergarten children influenced by project-based author learning activities on children's independence. The sampling technique used in this study is total sampling. Research showed that the t-test resulted in 0.000 < 0.05. It shows that using the outdoor learning method for children's developing independence is more significant than before when only using the method of conversing in class. Significantly, project-based outdoor learning affects the growth and development of children's independence aged 5-6 years.

Keywords: Children's Independence, Growth, Development, Outdoor Learning, Project-Based Learning

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1. INTRODUCTION

Growth and development are continuous processes from conception to adulthood affected by intrinsic or environmental factors (Goodway et al., 2019; Kuh, 2003). Development is an increase of abilities in complex body structures and functions in a regular and predictable pattern due to the maturing process (Suryanis & Faisal, 2022; Yanuarti, 2022). Here concerns the differentiation process of body cells, body tissues, and organ systems that develop so that each can fulfill its function. That includes emotional, intellectual, and behavioral development as an interaction with the environment (Afriani, 2021; Jolles & Jolles, 2021).

Early childhood is a child aged between 0-8 years (Bustos-Orosa, 2021; Iivonen et al., 2021). Early childhood is a child aged between 3-6 years (Kaur et al., 2022; Nielsen-Rodríguez et al., 2021). Early childhood is unique (Becker et al., 2022); it has a pattern of growth and development in the physical, cognitive, social-emotional aspects, creativity, language, and communication, explicitly following the child's stages (Ihmeideh & Alkhawaldeh, 2017; Johnson et al., 2019).

Early childhood is referred to as the "golden age" (Dasopang et al., 2022; Suryana et al., 2022). Almost all children experience a sensitive period to grow and develop rapidly and powerfully (Atiles et al., 2021; Urban, 2022). The development of each child is not the same (Sun et al., 2018) because everyone has a different development. Nutritious and balanced food and intensive stimulation are needed for this growth

and development (Norris et al., 2022; Savarino et al., 2021). If the child is given intensive stimulation from the environment, the child will be able to carry out his developmental tasks well.

Project-based learning (PBL) is a learning model that uses problems as the first step in collecting and integrating new knowledge based on experience in actual activities (Farrow et al., 2022; Tika & Agustiana, 2021; Yusri et al., 2021). Project-based learning is designed to be used on complex problems that students need to understand learning.

Outdoor learning creates an effective outdoor environment for young children's learning (Bilton, 2010; White et al., 2018). Learning outside the classroom is an activity that presents learning in an exciting and fun way (Aladağ et al., 2021; Peacock et al., 2021). It can be done anywhere by focusing on the process of children's learning behavior based on facts through learning materials that are experienced directly. In this learning activity, students will get long-term benefits from project-based learning. Improve students' ability in problem-solving projects (Suteja & Setiawan, 2022; Widada et al., 2019), make students more active (Thomas, 2019), and develop children's motor, social skills, and cognitive abilities (Agostini et al., 2018).

There are various forms of learning models used in outdoor learning. 1) Supercamp is a camping activity played by children and teachers (Pertiwi & Anwar, 2020). Students can follow these activities at one class level and across classes, depending on the teacher's ability to manage and prepare them. 2) Live in is an activity to develop personality towards oneself and others (Siahaan, 2020). The children will be asked to live with the community to learn about the environment. 3) Fieldwork is a learning method that introduces students to the world of work, where they apply all the knowledge they have gained to the world of work (France & Haigh, 2018). Fieldwork can provide opportunities for students to apply the knowledge and skills they have gained while at the same time getting to know the real world of work that they will face later. 4) The expedition is when students and teachers travel to a specific place to research, observe, and find facts in the field (Robinson, 2004). These facts are then synchronized with the material school lessons. This activity can motivate participants because they can learn the material according to the existing reality. 5) Outbound is an outdoor activity that is fun and full of challenges so that it can develop psychomotor, cognitive, and social-emotional aspects in children (Zaenab, 2018).

A child's self-development and independence go through a separation stage followed by a process of individualization (Neumann, 2018; Tanner, 2006). The separation stage is marked by a child moving away from his mother (Sheridan & Bain, 2020). While the individualization stage involves growth and self-restraint (Gabriel, 2021).

Outdoor Learning Activities are essential to developing children's abilities. Children's independent development is essential to explore children's abilities. The purpose of this study was to statistically analyze the effect of project-based outdoor learning activities on children's independent development.

2. METHOD

The method used in this research is pre-experiment (R Nur Abdurakhman et al., 2022). The types of design used in the research are pre-test-post-test (Agustin, 2022). Primary data collection researchers distributed observation sheets to children. The sampling technique used in this study is total sampling. In a preliminary study in Nurul Iman Kindergarten, there are 20 students, and 50% lack independence. There are 15% of children who have not dared to appear in public, 20% of them are also children who could not complete given tasks, and 15% could not dispose of their garbage in its place. Based on preliminary studies, it is interesting to do research in this kindergarten because 10 students lack independence; hence we could research the effect of project-based outdoor learning activities on the development of children's independence in Nurul Iman kindergarten, Majalengka, Indonesia in 2022.

Hypothesis test using t-test (Suteja & Setiawan, 2022). Null hypothesis: Significantly, project-based outdoor learning does not affect the growth and development of children's independence in Nurul Iman Kindergarten. Alternative hypothesis: Significantly, there is an effect of project-based outdoor learning on the growth and development of children's independence in Nurul Iman Kindergarten.

3. RESULTS AND DISCUSSION

Table 1 describes the increase and decreases in children's independence before and after the intervention with project-based outdoor learning activities.

Table 1. Children's independence before and after the intervention

Children's independence	intervention	
	Before (%)	After (%)
undeveloped	90	20
developed	10	80

Table 1 shows that 90% of children's independence before the intervention had not developed, and 10% were well developed. Children's independence after the intervention was 20% undeveloped and 80% well-developed. The results show that intervention with project-based outdoor learning activities can reduce

the number of "undeveloped" children's independence by 70% and increase the number of "well-developed" children's independence by 70%.

Learning done with a monotonous method makes it boring and uninteresting, causes children to be disorganized, and makes them not active in the learning process (Derakhshan et al., 2021; Kruk & Zawodniak, 2020). The boredom of learning which is only limited to four walls of the classroom, also makes children feel uncomfortable, seems stiff, and does not attract children's attention to be directly involved in activities.

The reality on the ground when conducting an outdoor learning intervention shows that children lacking independence are more cheerful and enthusiastic about participating in outdoor learning activities. The students who initially lacked independence became more excited and explored what they encountered outside the classroom.

Efforts to train students' learning independence through outdoor learning have a positive impact and can increase student learning activities (Thalib & Ahmad, 2020). Training children's independence through outdoor learning received a positive response from the teacher, who became an observer. The results of interviews with students showed that students positively welcomed the efforts to train students' independent learning through outdoor learning. Students are enthusiastic and happy to participate in learning by implementing outdoor learning. The results of interviews with teachers also show a positive response which will often be carried out on certain learning materials to make students more independent and innovative.

Table 2. T-test.

	Mean	SD	Paired t-test Sig (2-tailed)
Pre-test Post-test	1.65	0.587	0.000

significant level 5% (0.0%)

Table 2 shows the results of the t-test with an indicator of 0.000 <0.05, meaning that the null hypothesis is rejected. In other words, significantly, there is an effect of project-based outdoor learning on the growth and development of children's independence in Nurul Iman Kindergarten.

Learning activities outside the classroom can develop a child's attitude toward independence (Corwith, 2021). Learning outside the classroom can eliminate dependence on others, such as teachers. Because of this, learning requires them to be active while the teacher is passive.

In other words, outside the classroom, the teacher does not only talk or explain when teaching in the classroom but still does not get out of the essence and purpose of learning. For example, the teacher applies the assignment method outside the classroom. Hence, the child understands and seeks information and expresses his ideas without the help of the teacher or other people so that they are mentally strong. In learning in the classroom, the teacher functions as a facilitator in learning and talks more while the students listen more. As a result, children become spoiled, rigid and dependent on others.

4. CONCLUSION

In the outdoor learning method, children feel happier in the learning process. Because learning outside the classroom makes children know a lot about what is in their environment. Activities carried out outside the classroom can develop children's independence. Using the outdoor learning method for children's developing independence is more significant than before when only using the method of conversing in class. Significantly, project-based outdoor learning affects the growth and development of children's independence aged 5-6 years.

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