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## Profile of Naturalistic Intelligence In Children 4-5 At Ra Al-Hikmah Jatisari Karawang

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**Abstract:** In essence, naturalist intelligence is a process of recognition related to nature and is the intelligence possessed by a person as a form of ability to recognize and classify flora, fauna and the surrounding environment. The purpose of this study was to determine the increase in naturalist intelligence in children aged 4-5 years in RA Al-Hikmah. The results of naturalist intelligence research in RA Al-Hikmah are very important to note and develop. This study used quantitative descriptive method. The results showed that the naturalist intelligence of children aged 4-5 years in RA AL-Hikmah was quite developed. With three aspects: (1) Knowledge of plants, (2) Knowledge of animals, (3) Protecting the environment and preserving it. The results of this study show that naturalist intelligence is very important to be developed at an early age. Because the child's naturalist intelligence has an effect on sensitivity to the environment, and care for the surrounding nature

**Keywords:** Profile of Naturalistic Intelligence, Children Aged 4-5 Years

### A. Introduction

Early childhood is the most important and fundamental initial stage of all growth and development in human life. This period is characterized by stages that are very important for the next life of the child until the final stage of development. The golden age is a feature of childhood. Early childhood is a time when adults must show their individuality. Young people have tremendous potential, and ministry must be diligent so that each potential becomes the basis of development to advance to the next stage. Every child is unique and different. This can help parents, adults, and teachers understand children's personalities (Suryana 2021). The development potential of children aged 0 to 6 years must be maximally stimulated, especially the potential intelligence of early childhood, in order to develop as expected. One of the important intelligences is naturalist intelligence, because naturalist intelligence in early childhood is one of the natural intelligences to be able to recognize plants, animals and be sensitive to their environment (Hanafi 2019). Naturalist intelligence is a potential that must be developed because with good naturalist intelligence, children are able to maintain and preserve nature as well as love plants and animals by taking good care of them. Naturalist intelligence is the ability of everyone, including children, to have sensitivity to their environment. Naturalist intelligence allows children to express their concern by getting to know plants and pets, caring for plants and animals by watering and feeding, and building knowledge to children that the environment is where humans live, so it is very important to cultivate naturalistic awareness in

children from an early age.

Over the years, only math and reading skills have been developed by society, while other abilities have been neglected or considered unimportant. However, naturalistic abilities are as important as all other abilities. This is because there is no knowledge about multiple intelligences, one of which is natural intelligence, although it is part of multiple intelligences, but it cannot be separated from everyday life. Naturalist intelligence is the ability to process information about plants and animals and the environmental conditions that affect them. Natural intelligence helps children identify and categorize animals, plants, and other elements of nature. He likes to be in direct contact with nature, observing, exploring, and experimenting outdoors (Setiawan 2015)

Naturalist intelligence is the ability to recognize and categorize species of flora and fauna, as well as the ability to create a hierarchy of states of organisms such as plants, animals, and nature. One of the characteristics of children with strong naturalist intelligence is that they delight in nature, animals, and plants, They dare to approach, hold, caress, and even have the instinct to care for them. (M. Yaumi & Nurdin, 2019). Howard Gardner explained naturalist intelligence as a person's ability to recognize and classify flora, fauna, and the surrounding environment. This naturalist intelligence can develop when stimulated by activities that can be stimulated through environmental observation, farming, including observing natural phenomena such as rain, and others. Teachers are required to stimulate naturalistic intelligence with appropriate learning methods and must prepare their learning activities. Because naturalistic intelligence has a great impact on sensitivity to the environment, especially in caring for plants and pets. Therefore, effective learning methods to improve intelligence in early childhood education play an important role. The learning method is a method of implementing plans made in the form of direct activities to achieve learning objectives (Mariyaningsih dan Hidayati 2018).

One of the reasons we should develop this naturalistic intelligence is because many people don't care about their environment. Cutting down trees, littering, clearing forests, torturing animals, hunting endangered species, and trading protected animals. As a result, the existing ecosystem will eventually be destroyed. Taking into account that the environment is where humans live, it is very important to cultivate naturalistic awareness in children from an early age. This will teach them to pay attention to the natural environment around them. One of them is a recent incident in Nalo Tatan Village, Merangin Regency, Jambi Regency, where the village head cut down trees illegally within a protected forest (Kompas, 2022). Therefore, it is very important to instill naturalist intelligence early. In this way, in the future children can take care of the environment and stop cutting trees wildly.

In early childhood, namely the age of 4-5 years, the child's naturalist intelligence is characterized by children liking and getting along with various pets, really enjoying walks in the open, such as gardens, parks, forests, and so on, showing sensitivity to natural panoramas, such as landscapes, clouds, mountains, beaches, and so on, and liking gardening, or close to plants and raising animals (Rahman 2019). Armstrong (2010) argues that naturalist intelligence is the intelligence to love natural beauty through recognition of flora and fauna found in the surrounding environment and also observing natural phenomena and sensitivity / concern for

the surrounding environment (Susianti 2021). Sulistyono Ningsih (2019) stated that naturalist intelligence includes the expertise to recognize and categorize species, flora and fauna in the surrounding environment (Husamah, 2018). This naturalist intelligence is very important to support other intelligences. Children will be able to use their naturalness when they see plants and animals that are not well maintained. Naturalist intelligence provides benefits not only for children but benefits for nature and the surrounding environment, so that they are able to maintain the world's ecosystem that is maintained for the next successor.

Like Rika Purnamasari's and Mulyanti Indriyani *research with the title Development Of Naturalistic Intelligence Early Childhood In Bali Local Society* Explaining that naturalistic intelligence is one of several types of intelligence possessed by humans. Naturalist intelligence is not only the ability of a child to recognize and classify flora and fauna, but to nurture and love creatures in the surrounding environment by showing environmentally caring behavior, respecting nature by preserving natural resources and everything in them (Purnamasari's dan Indriyani 2023)

From how much this understanding can be said that naturalist intelligence for early childhood 4-5 years includes how children know plants and animals, how children love plants and animals that they maintain by watering and feeding on time, and how children are able to use written language. However, in the process of child development, there are still many undeveloped children's naturalist intelligence which is influenced by various factors, one of which is that teachers or parents still overthrow numeracy intelligence and reading intelligence only. Based on observations from several schools, it shows that there are still some children who have not shown naturalist intelligence that is not suitable for early childhood development tasks. Departing from this, researchers need to conduct research on " Profile Of Naturalistic Intelligence In Children 4-5 At Ra Al-Hikmah Jatisari Karawang"

## **B. Methods**

This type of research is descriptive research with a quantitative type of research. This study aims to describe an object or activity that is of concern to researchers. The method in this study uses quantitative methods using observations, treatment, and test containing three aspects of naturalist intelligence taken from expert theories. That is to know plants, to know animals, and to be sensitive to the environment. The objects used in this study were students aged 4-5 years at RA Al-Hikmah Jatisari totaling 30 students consisting of Class A1 15 students and Class A2 15 students. The sampling technique used is purposive sampling where sampling is carried out with the aim of being sampled (Arikunto 2016). says that in a population study with less than 100 subjects, all samples were taken. Meanwhile, 10 to 15% or 20 to 25% are taken for the study sample if the number of subjects is on a larger scale or exceeds 100.

## **C. Results and Discussion**

When children enter Early Childhood Education (ECCE) schools, they already have naturalist intelligence although not all children have been stimulated by parents at home. Nevertheless, during the kindergarten period, this intelligence must be further developed and refined. Children must learn to know the types of plants and animals, know how to care for

plants and animals, classify plants and animals and be able to take care of and preserve the surrounding nature. In order for naturalist intelligence to develop optimally, it is necessary to have supporting methods to be more effective, one of which is learning methods outside the classroom. Learning methods outside the classroom are learning activities carried out outside the classroom, where children concentrate and witness firsthand the situation outside the classroom, so that children can all improve relevant knowledge (Rosyid dan Yumnah 2019).

Naturalist intelligence is someone who has the ability to recognize plants, animals, and other elements of the natural environment and to see organizational patterns and structures found in nature. They are generally able to classify natural forms such as plant and animal species, as well as rock and mountain types (Sit 2021). In general, the characteristics of naturalist intelligence can be understood from the description as described earlier. However, specifically this intelligence can be identified through the following traits: Talk a lot about animals, vegetation, or natural conditions, Love visiting zoos, museums, or zoos, enjoy watering flowers or keeping plants and animals, love to see animal cages, birds, or aquariums, love to learn about nature, plants, and animals, talk a lot about animal rights, and enjoy doing nature-based lesson projects, such as seeing birds, butterflies, insects, plants, and animals (Yaumi dan Ibrahim 2013).

**1. Table**

The description of this data is the result of filling in checklist sheets from 30 children. Description of data from the results of filling out the assessment on naturalist intelligence of children aged 4-5 years in Ra Al-Hikmah, Jatisari District, can be seen in Table 1.1.

Table 1.1 Deskripsi Data

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Kelas A1	15	83	100	91.87	5.125
Kelas A2	15	69	87	76.13	5.208
Valid N (listwise)	15				

(Data sources SPSS Type 25,0)

Based on the results of the Descriptive test above, we can describe the distribution of data obtained by researchers is:

1. From class A1 data that the minimum value is 83 while the maximum value is 100, the average value is 91.87, and the Standard Deviation with a result of 5. 125.
2. From class A2 data that the minimum value is 69, while the maximum value is 87, the average value is 76.13, and the Standard Deviation with a result of 5.208

**Table 1.2 Independen sample test**

Independent Samples Test								
	Levene's Test for Equality of Variances		t-test for Equality of Means					
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference

									Lower	Upper
Hasil Belajar	Equal variances assumed	0,028	0,869	8,339	28	0,000	15,733	1,887	11,869	19,598
	Equal variances not assumed			8,339	27,993	0,000	15,733	1,887	11,869	19,598

(Data sources SPSS Type 25,0)

From the above calculations obtained figures from the experimental class hypothesis that the development of naturalist intelligence in children during the pre-test and post-test has differences. Based on the calculation results using SPSS Type 25.0 through an independent sample test, a class A1 t-test value of 8.339 was obtained with  $df = 28$ . The t-table price at  $t_{0.05} = 8.339$  with a value of Significant (P) = 0.000 >  $\alpha = 0.05$ . Thus the value of t is calculated > t table which means  $H_0$  is rejected and  $H_1$  is accepted. While the calculation from class A2 is obtained t-test value = 8.339 with  $df = 27.993$ . The price of t-table at  $t_{0.05} = 8.339$  with significant (P) = 0.000 >  $\alpha = 0.05$ . Thus, the value of t is calculated > t table, which means  $H_0$  is rejected and  $H_1$  is accepted. This means that there is a significant influence that occurs on research on the development of naturalist intelligence of children aged 4-5 years who are influenced by outing class learning methods.

## 2. Figures



**Figure 1. Outdoor Activity**

The photo above is an activity outside the classroom, to increase naturalist intelligence by providing opportunities for children to get to know directly the plants and animals around them.

## D. Conclusion

Judging from initial observations by interviewing principals and teachers, that the learning carried out did not use special learning methods to stimulate naturalist intelligence in children, but learning methods carried out only using story or lecture methods with media aids in the form of images. In experimental classroom learning, not only the teacher provides knowledge in the learning process, but the teacher provides many opportunities for children to develop other intelligences. In addition, when learning outside the classroom children can get to know various plants and animals that they meet directly. With the outing class learning method, children are bolder when close to pets, children want to feed and dare to stroke the cat's body. And when doing farming activities children are ready to take care of their plants by providing fertilizer and watering plants every morning, from the results of research indicates that children have high naturalist intelligence. Starting from the beginning of learning between the experimental class and the control class looks different, it can be seen from the results of obtaining initial test scores or also called the experimental class pre-test of 63.93 and the control class of 62.26. Then at the end of learning children are given back tests or called post-tests that show an increase in naturalist intelligence in children. By analyzing using data, then the data is tested using SPSS type 25.0. That way the experimental class got a result of 91.86, while the control class got a result of 76.13.

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