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# Abstract

The aim of this article is to understand how children's relationship with nature mobilizes moral values, mainly linked to pro-social and pro-environmental relationships. In general, human beings are increasingly disconnected from nature. Families stopped enjoying outdoor activities and spent their time in front of screens. The dissociation between children and nature can be observed mainly at school, where children build relationships and knowledge and spend most of their time. In this work, we conducted research inspired by ethnography with a private kindergarten in São Paulo, Brazil. The data collected in the 90 hours of observation of children's routine by the researcher at school were analyzed using the methodology known as thematic analysis . Three themes were identified: Theme 1 - non-directed outdoor activities; Theme 2 - routine inside the classroom and Theme 3 - eco-activity class. We understand that each observed scenario enables and promotes different values and attitudes. Therefore, promoting a kindergarten that explores and puts forward the connection between children and nature seems to be fundamental for their full development and constructing a moral identity based on prosocial and pro-environmental actions.

Keywords: early childhood, moral development, outdoor education.

## Introduction

In general, human beings are increasingly disconnected from nature. According to Louv (2018), in the last decade, a few researchers began to investigate and document the disconnection between children and nature, and, according to the author, studies show that there has been a reduction in leisure time for modern families. Families stopped enjoying outdoor

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activities and increased their time in front of television, computer, tablet and cell phone screens, increasing obesity rates among adults and children.

According to Louv (2018, p.57), "As the nature deficit increases, another field of scientific evidence indicates that direct exposure to nature is essential for physical and emotional health." The term "nature deficit" was created by Louv to describe the costs of alienation about nature, which include the lack of use of the senses, decreased attention and increased incidence of physical and emotional illnesses related to anxiety and depression. The author emphasizes that this term is not an academic or scientific term, nor does it represent a medical diagnosis, and explains that a better definition may emerge as research advances (Louv, 2018, p.58).

By understanding the risks and losses that the dissociation between human beings and nature poses not only to humans but also to all forms of life on Earth, alternatives, solutions and new possibilities are being thought of and developed. Among these possibilities, we cannot fail to mention the concept of outdoor education (Priest, 1986, as cited in Gilbertson et al, 2022) and research in the field of biophilia (Wilson, 1984).

Tiriba inaugurated a term which emerged precisely as a counterpoint to the state of immobilization of school routines that is imposed on children, called "desemparedamento da educação"<sup>1</sup> (Tiriba, 2010). This term is linked to providing children with more significant contact with nature and natural resources during their school routine and the understanding that education must occur beyond the four walls surrounding the school institution, in environments like the beach, the park and the forest.

Furthermore, another critical point for this research is the relationship that contact with nature can provide for the ethical and integral development of the child, thinking precisely about the values that can be mobilized from this closer relationship between the child and nature. In this regard, Puig's (2007) perspective stands out on the four ethics necessary for the individual to learn to live: learning to be (auto-ethics), learning to live together (alter-ethics), learning to participate (socio-ethics) and learning to inhabit the world (ecoethics). It was interesting to note how these ethics were present in the observations made throughout the research.

In this way, we raise the hypothesis that outdoor education, in which the child has an ample space rich in nature and natural elements, can contribute to moral development by building a system of values focused on connection with nature and pro-social and proenvironmental values. The aim of this article is to understand how children's relationship with nature mobilizes moral values, mainly linked to pro-social and pro-environmental relationships. To this end, we seek to identify the moral values that appear in children's interactions with nature through games, conversations and the use of natural resources in a private kindergarten in the city of São Paulo, Brazil.

Multimethod research was chosen to carry out the necessary investigations. According to Valles as cited in Pátaro (2013), "qualitative research is inherently multi-method, combining different strategies, materials and perspectives in a single study". Although multi-method research was applied to this research, the central point of all the investigation carried out was the ethnographic inspiration, which, according to Corsaro:

(...) It is the method that anthropologists use most frequently to study exotic cultures. This method requires the researcher to enter, be accepted, and participate in the lives of those they study. In this sense, ethnography implies, so to speak, 'going native'. I am convinced that children have their own cultures, and I have always wanted to become part of documenting them. To do this, I need to enter the children's everyday lives - to be one of the children as best I can (Corsaro, 2005, p. 446)

The Escola Grupo Oficina was chosen because it adopts a pedagogical perspective that aims to reconcile constructivism with Waldorf pedagogy. In addition to the school's physical structure, which brings children closer to nature, the school also has specific classes that aim to promote the child's holistic development. Among these classes, the ecoactivity class stands out, which explores children's pro-environmental aspects and their relationship with nature, and the eurythmy class, which consists of an art created by Rudolf Steiner that transforms sounds into movements. Children's daily lives are marked by routines inside and outside the classroom, and the outdoor environment and parks are the places most frequented by children during their stay at school. Below are some images to help readers delve into the data and analyses already carried out.



**Photo 1**: view of the school entrance. source: the author

The school has a 3,000 square meter yard divided into six parks, each with a specific characteristic. The trail park has ample space for children to run. Leafy trees with large roots, a straw house, a swing, land, a sand tank, rocks and a slide can be found in this park, not to mention the nine-banded armadillos, birds and insects that live there. The tree house park is considered the school's reference park. It is the largest in the area and welcomes children of all ages, who often play together in this space. In this park, we found a "tree house", a bamboo house with a thatched roof, bamboo toys, trees, swings, adapted tires that became pogo sticks, tree trunks, wooden carts and watering cans. This park is an invitation to free play.



Photo 2: treehouse park source: the author



Photo 3: vegetable garden park source: the author

To develop the research, regular observations were made of children, between four and six years old, experiencing their routines, games, conversations, classes and interactions outdoors and inside the classroom. These observations occurred between May and December 2022, with a frequency of twice a week. Such observations were recorded in photos and in notes in the field diary and were essential to verify and analyze how children relate to nature in their daily lives.

The methodology chosen to analyze the data obtained from the observations carried out during the case study at Escola Grupo Oficina was thematic analysis (TA), which, according to Braun and Clarke as cited in (Souza, 2019), aims to identify, analyze, interpret and report patterns (themes) from qualitative data. For this research, we will use inductive and data-based analysis to identify the themes and categories we will investigate. TA is a method that is structured into six distinct phases: 1) Familiarization with data; 2) Generating initial codes; 3) Searching for themes; 4) Reviewing the themes; 5) Defining and naming the themes and 6) Producing the report.

After following the steps mentioned above, the codes were generated, as well as the three main thematic axes: 1) Non-directed activities carried outdoors; 2) Routine within the classroom and 3) Ecoactivity class.

## Results

In Theme 1 - Non-directed activities carried outdoors, It was observed which were the main activities, relationships, values and interactions carried out by children when they were outdoors, freedom to run and play in their own way.

A fascinating aspect that appeared in this theme is naturalistic intelligence, described as: "situations in which children knew how to reflect and name plants, insects, animals and other natural elements, and discovered how to deal with these natural elements." It was content that was present throughout the field research. Children name plants and insects in a particular way, and know how to use natural resources with knowledge. On this point, we highlight the following excerpts:

Many children are digging in the ground to find water; they know that if they dig hard enough, they can find water. During the digging process, they find roots. After a while, one of the children says: "Underground water, H<sub>2</sub>O", and soon after that same child says, "we will be refreshed" and another child responds: "we are already refreshed because we already have water in us. (Field diary, p. 36)

A child builds a bonfire to prepare for the June festival, picks up several pebbles, and tells me that it needs protection from the wind so that the wind doesn't put out the bonfire. She puts the fire under a tree while I look for a large leaf. I show it to her as soon as I find it, and she puts it on for protection. The child pretends that the bonfire is already lit and the fire has started spreading. She says she needs to throw sand on the fire to put out the fire, so she takes the sand in her little bag and throws it on the fire, putting it out. (Field diary, p.24)

Speeches and actions of children's affection towards nature were also observed in Tem 1. This content was described as "situations in which children demonstrated affection towards nature, such as demonstrations of physical affection, affectionate words and care". Here is one example: "Two children are playing with the car among the rocks in the park, one of them says - João, run your hand over that rock, look how nice it is, it's smooth." (Field diary, p. 2)

In addition to the aspects already mentioned, the use of natural elements in games, make-believe play, playing outdoors, dialogues about nature, degradation of natural elements, conflict between children, situations of collaboration between children and empathetic concern were other aspects that also appeared during the observations. It is interesting to note how conflicts between children were resolved. Below is an excerpt that elucidates this point.

Three children are playing with cars. One child carries the other two in the stroller, but one falls during the journey. The first reaction of the child who remained in the stroller was to wave goodbye and apologize to the child who fell, but the child who fell wanted to get back into the stroller. This way, the child who fell was pulling the stroller on one side, the child who was pulling the stroller was pulling on the other, and the child inside the stroller was screaming. This situation lasted a short time until the child in the stroller decided to get out and, together with the child who had fallen out of the stroller, they ran to the other side of the park and went to play. (Field diary, p. 41)

In Theme 2 - Routine within the classroom, children's routines and activities were observed. However, it is essential to highlight that the hours used for observation of theme 2 were shorter than the hours used for themes 1 and 3. This was primarily due to the objective of analyzing the relationship and interaction of children with nature and also because a large part of the children's school routine took place outdoors

The aspects observed in theme 2 were make-believe play, playing inside the room, music, eurythmy classes, conflict between children, empathic concern and nutrition. In cases of conflict between children within the classroom, it is interesting to note that most conflicts within the classroom were mediated by the teachers, unlike conflicts that occurred in parks and outdoors, which mainly did not require adult mediation to be resolved. Below is an example of a conflict within the classroom:

One of the children arrives at school, and a classmate says this child is boring. The class teacher hears the comment and asks him to give a good morning hug to the classmate who has just arrived. He approaches his colleague and makes a no sign with his finger. The teacher again asks him to hug his classmate, so he responds to the teacher's request, and the two play together with the other boys. (Field diary, p. 8)

In Theme 3 - Ecoactivity class, the ecoactivity classes were marked by a series of skills and competencies developed and explored. The aspects observed regarding theme 3 were naturalistic intelligence, concern for the environment, situations of affection with natural elements, dialogues about nature, mobilization of moral values, generosity and empathy and emotional socio-moral education.

The analysis described the mobilization of moral values, such as generosity and empathy, as: "speech and attitudes centered on moral values" were observed in several situations throughout the conversations and activities proposed by the ecoactivity teacher. Here are an example below:

After the activity proposed by the class teacher, the ecoactivity teacher starts talking to the G5 children about cycles. He asked for examples of cycles, and one child said that an example was the cycle of love. The teacher associated seeds and how we treat plants with how we feel. He explains that affection and care are related to good feelings and vice versa. He explains to children that nature is abundant and generous and that we can learn from it. The teacher shows the class sorghum (a type of wheat) and gives another example: "Does the cherry tree choose who will eat its fruits? No. She wants everyone to benefit from its fruits. The same thing goes for us; we don't need to save our love and respect just for our best friend. What we do at school is not just taking care of animals and plants; we also need to care for ourselves and each other." A child responds: "Taking care of ourselves, our friends, friendships and nature." (Field diary, p. 63)

Emotional sociomoral education was also present throughout the observations of

ecoactivity classes. We have the following excerpt about this:

When arriving at orchard's park to take the class with G4, the teacher saw a caterpillar. He stopped the conversation he was having with the children, picked up the caterpillar and explained that leaving the caterpillar where it was would be dangerous for the children, so he suggested that the class think of a safe place to put the caterpillar, both for her and for the humans. Before choosing the location, he asked the children if he could put it there, but the children said that it was a place they liked to play. After talking, they decided on a safe location for both sides. After that, the teacher starts talking about planting a feeling and saving and sharing love and kindness. He comments on plant communication and how plants demonstrate their feelings and needs. He began to interpret this relation, making some facial and body expressions. Based on this interpretation, he asked the children to guess what he was feeling and associated this exercise with plants, with what they felt and their state of health. (Field diary, p. 62)

During the ecoactivity classes, moral values were mobilized, based on the speeches and examples used by the teacher, such as valuing life, the importance of generosity, respect for all

living beings, without distinction, self-care, care for others and care for nature. In many moments of the classes, the teacher built a relationship between the children's feelings and the feelings of plants and animals. Furthermore, the first moment of the class was dedicated to self-analysis, contributing to the development of self-knowledge and self-regulation.

#### Discussion

Based on the results obtained through this research, it is interesting to draw a parallel with the four ethics necessary to learn to live, proposed by Puig (2007). According to the author (Puig, 2007), auto-ethics is related to learning to be and involves five fundamental aspects: formation of autonomous thinking, development of moral sensitivity, self-regulation, self-observation and self-awareness.

Alter-ethics is related to learning to live together and presupposes the establishment of bonds and mutual collaboration. On this point, Puig (2007) highlights that an excellent way to promote recognition of others is to develop common activities. Socio-ethics, in turn, refers to learning to participate and implies learning about life in common, creating a sense of collectivity. And finally, we have ecoethics, which is closely related to this research and refers to learning to inhabit the world. Puig (2007) explains that ecoethics is an ethics of concern and care for humanity and nature that refers to a universal responsibility for the present and future of man and the planet.

It is understood that each thematic sphere explored in this research plays a fundamental role in constructing a holistic pedagogy, mainly focused on building prosocial and proenvironmental values. At the park, where children play freely, they form relationships of empathy, collaboration, body movement and resolve conflicts. Furthermore, in theme 1, situations that led to the development of ecoethics and alter-ethics were very evident in the moments in which children demonstrated actions and words of care for nature and during games, obstacles and activities that were being explored collaboratively, often with the participation of large groups of children. Nature demands this team spirit in children to carry out activities such as digging wells, building castles, running away from spiders and alligators and hanging from vines.

In theme 2, routine within the classroom, children enjoy a quieter time with less stimuli. They could deepen relationships with themselves and other people around them, thus providing an interesting space for developing socio-ethics and self-ethics. It is interesting to note that according to Puig (2007), the fifth aspect that makes up self-ethics is precisely the harmonious relationship between oneself and the world, which is provided by artistic contemplation, relaxation and meditation, and such elements were present in the observations carried out within the classroom, mainly during eurythmy classes and music circles.

Theme 3, which refers to ecoactivity classes, proved to be extremely valuable for the construction of education based on dialogue, values and awareness of self, others and all of us as a society and as nature, providing, thus, the development of auto-ethics, alter-ethics, ecoethics and socio-ethics. theme 3 stands out for having been particularly important for the research. Ecoactivity classes encompassed two of the most relevant contents for the objective of this research. From ecoactivity class observations, it was possible to notice that through interventions, dialogues and activities proposed by the ecoactivity teacher, children were able to develop aspects, speeches and attitudes that mobilized moral values, such as generosity and empathy, and, among values that appeared most in the children's statements, we highlight friendship and affection.

In this way, we would like to highlight the observations made that align with the initial objective of the research of understanding how the child's relationship with nature mobilizes moral values and what these values are and emphasize that the construction of a pro-social and pro-environmental value system is a complex process that depends on multiple factors and, although we understand that exposing the child to an environment rich in nature can promote this development, we know that other aspects also need to be worked on.

# Notes

**1.** Term in Portuguese that refers to the education process that takes place outside the school walls or the four walls of the classroom

# References

Corsaro, W. (2005). Entrada no Campo, Aceitação e Natureza da Participação nos Estudos Etnográficos com Crianças Pequenas. Educação e Sociedade. Campinas, v. 26.

Gilbertson, K.; Ewert, A.; Siklander, P.; Bateset, T. (2022). *Outdoor education: methods and strategies*. Champaign: Human Kinetics.

Louv, R. (2018). A Última Criança na Natureza: Resgatando nossas crianças do transtorno do deficit de natureza. São Paulo: Aquariana.

Puig, J. M. (2007). *Aprender a viver*. In: ARAÚJO, Ulisses; PUIG, Josep Maria; ARANTES, Valéria Amorim (org). Educação e valores: pontos e contrapontos. São Paulo: Summus.

Tiriba, L. (2010). *Crianças da Natureza. Ministério da Educação e do Desporto*. Coordenadoria de Educação Infantil. Brasília: MEC/SEF.

Wilson, E. O. (1984). Biophilia. Cambridge: Harvard University Press.

Valles, M. (1999). *Técnicas cualitativas de investigación social: refl exión metodológica y práctica profesional*. Barcelona, Editorial Síntesis Sociología, 334 p.