

ENVIRONMENTAL PERCEPTION IN A MUNICIPALITY IN WESTERN AMAZONIA



<https://doi.org/10.56238/arev6n4-398>

Submitted on: 11/24/2024

Publication date: 12/24/2024

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ABSTRACT

Environmental perception is the way individuals and social groups understand, feel, and interpret the environment around them. This process is influenced by cultural, social, historical, and psychological factors, which shape the way each person perceives and relates to space and natural elements. It is not limited to passive observation of the environment, but involves an active interaction, where memories, values, experiences and accumulated knowledge influence attitudes and behaviors towards the environment. Thus, two people can experience the same place very differently, depending on their experiences. Environmental education, on the other hand, is a crucial point for mitigating the problems that human beings have been causing to the environment in which they live, its understanding and applicability contributes to the formation of citizens aware of the preservation of the environment and able to make collective decisions on environmental issues necessary for the development of a sustainable society. This article aims to evaluate the level of knowledge and environmental perception of the citizens of Colorado do Oeste, both in urban and rural areas, about concepts, practices and perception of environmental problems. For this, a questionnaire was applied to 100 people with closed questions in a random way on the streets of the municipality. It is concluded that some environmental concepts are not clear to the research participants, as well as only 20% of the research participants are aware that their actions cause some environmental impact. From this perspective, the strengthening and expansion of actions that excel in raising awareness and environmental education both in school and non-school spaces are urgent.

Keywords: Environmental Education. Environment. Humans.

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INTRODUCTION

The environmental problem has become one of the most discussed issues of the moment, mainly due to climate change that, every day, becomes more real affecting all social strata. Braga (2003) has the conception that society suffers a deep crisis, which cannot be characterized as environmental, but rather as civilizing. This so-called civilizational crisis is defined as an ethical crisis, where consumerism, the overvaluation of the economy, the devaluation of life, the domination of selfishness and especially the antisocial behavior of society is what prevails.

Population growth, the production model and the unequal consumption of the planet's inhabitants become almost incompatible with the quality of life of humanity and the maintenance of physical environments and the integrity of organisms. As humanity increases its capacity to intervene in the environment, to satisfy its growing needs and desires, tensions and conflicts arise regarding the use of space and resources due to the available technology. Interacting with the elements of its environment, humanity causes types of modifications that are transformed with the passage of history and, by transforming the environment, man also changes his view of nature and the environment in which he lives.

Thus, it becomes increasingly necessary to include the theme of the Environment as a cross-cutting theme in school curricula, permeating all educational practice and raising awareness in society so that it stops thinking only about the accumulation of capital/profit that it can obtain from nature and begins to participate in a new movement in favor of what we know as sustainability. that is, the use of natural resources in a way that does not deplete them.

In short, it is undeniable that only through this awareness, where society considers the care/protection of the environment important, highlighting the conception that this care is of paramount importance to our survival, will we have a better future for humanity.

In this context, the objective of the research was to evaluate the level of knowledge and environmental perception of the citizens of Colorado do Oeste, both in the urban and rural areas, about concepts, practices and perception of environmental problems.

THEORETICAL FRAMEWORK

CONCEPT AND CONTEXT OF ENVIRONMENTAL EDUCATION

In Brazil, environmental education was done late, it began in the 70s, coinciding with the period of the beginning of environmental conferences worldwide. Environmental education was at an embryonic stage, because in a peripheral country, innovations tend to arrive late in relation to central countries.

Environmentalism gained an effective public and social character in Brazil only at the end of the 80s, when academic works addressing the theme began to emerge more intensely, parallel to the greater involvement of society in this issue, with a view to a process of political opening.

With the advent of Law No. 9,795 of April 27, 1999, came the legal conceptualization of the term environmental education, which, according to it, is "the processes through which the individual and the community build social values, knowledge, skills, attitudes and competencies aimed at the conservation of the environment and the healthy quality of life and its sustainability" (BRASIL, 1999).

According to Branco (1998), environmental education is defined as any cultural process that aims at the formation of individuals capable of coexisting in balance with the environment.

With the Conference for Development and the Environment of Rio de Janeiro, also known as Eco 92, environmental education was established before Brazilian society as an institutional demand, determining the development of many projects. The expression environmental education has become massive, however, its concept is still not very clear among educators and the population in general, and it is often confused with the teaching of ecology (Guimarães, 2004).

Among the many definitions presented, it can be said that the Tbilisi Conference signified a milestone in the development of environmental education, as it presented it as:

a process of recognition of values and clarification of concepts, aiming at the development of skills and modifying attitudes towards the environment, to understand and appreciate the interrelations between humans, their cultures and their biophysical environments. Environmental education is also related to the practice of decision-making and ethics that lead to the improvement of the quality of life (Intergovernmental Conference of Tbilisi *apud* Sato, 2003, p.23).

This improvement in the quality of life is due to several actions, including basic sanitation, soil conservation, garbage collection, among others.

Humanity is responsible for many of the scientific advances that have occurred in recent years, there have never been so many changes, modifications and destructions in the complex environmental structure of the planet, whose reflections can be perceived in any part of the globe.

For Leff (2002), the transformations that determine the so-called environmental crisis were produced by the lack of knowledge of knowledge, when they produce the false certainty that all the modifications and consequences of this process on the environment can be solved with the help of technology. However, this is untrue, because if technology is not used coherently, it will cause numerous harms to the environment, since if, on the one hand, progress is important to society for economic growth, on the other hand, it generates misery and environmental degradation. Moreover, technology without man's wisdom and awareness, without environmental prevention and without environmental education is limited only to obtaining profit/money.

Human beings have become slaves of consumerism, selfish and insensitive to the environment, thinking about future generations is not a practice adopted by mere thought of sustainability, but because the legislation obliges, and because in some way it brings benefits, but still they only do it if they are forced or if they can take some advantage that, Generally, it is financial.

NEED FOR ENVIRONMENTAL AWARENESS

Today we live in a capitalist and extremely consumerist society, so that there is great use of natural resources, environmental degradation and little awareness about the importance of conserving a healthy environment in the present and for the future. Buying at all costs has become practically the purpose of a fully lived existence.

Lage (2010) says that consuming can, it is true, makes you feel good, but it has negative counterparts for the Environment. The goods and services we consume require the use of all kinds of planetary resources and the exponential increase in consumption is causing the unavailability of these resources for the future, that is, it is an unsustainable consumption.

Through this, it becomes necessary for society to have environmental awareness, as it intends to achieve a predisposition of the population for a change in attitudes. However, this change in attitude can only be verified if the population is educated, that is, if after being sensitized they are presented with the means of change that lead to a more

correct attitude towards the Environment. Often, environmental awareness is confused with environmental education. Awareness alone does not lead to lasting changes, but rather serves as a preparation for environmental education actions.

Fernandes (2011) states that Environmental Education arises as a response to the current difficulties related to the environmental problem, it is necessary, but it will not solve the problems of civilization alone. It is important to highlight the need to sensitize the population regarding the behavioral change that concerns today's society, its consumption patterns and well-being. He also adds that it is clear the need to change man's behavior in relation to nature, in order to promote a sustainable development model (a process that ensures responsible management of the planet's resources in order to preserve the interests of future generations and, at the same time, meet the needs of current generations), the compatibility of economic and conservationist practices, with evident positive effects on the quality of life of all.

Environmental education should be recognized, within a social responsibility, as a determining factor for the formation of an ecological consciousness, in order to equip it to face the challenges and overcome the complexities of the modern world, contributing to the solution of environmental conflict, which is often social.

Thus, it is extremely important that all schools introduce environmental education in their school curriculum, as it aims at the formation of the personality by awakening ecological awareness in children and young people, as well as adults, to value and preserve nature, because, according to commonly accepted principles, in order to be able to prevent it in an appropriate way, It is necessary to raise awareness and educate.

The environmental issue has been and needs to be considered as increasingly urgent and important for society, since the future of humanity depends on the relationship established between nature and the use, by man, of the available natural resources.

According to Carvalho, environmental education ends up being the answer found to environmental problems, of increasing extent and severity, which

... have led humanity to rethink its actions and its way of life, based on a relationship with predatory and unsustainable nature. Considering the contribution that the educational field can make to change this situation, in recent decades discussions and proposals regarding Environmental Education have spread throughout the country and the world. The basic premises for this work highlight the need for it not to be reduced to the dimension of knowledge, but also to involve values and political participation (Carvalho, 2000).

Among the areas of education, none has such an urgent and intensely globalizing call as environmental education, as it seeks communion with the fundamental principles of participation, citizenship, autonomy, familiarity with the local culture and sustainability, aiming at an education that prioritizes, in its epistemological and methodological bases, the formation of men able to face the socio-environmental challenges that in many cases are products of their own action. Dias stated that:

Environmental education is a permanent process in which individuals and the community become aware of their environment and acquire knowledge, values, skills, experiences and determination that make them able to act and solve present and future environmental problems. (Dias, 1994, p.59).

ENVIRONMENTAL PERCEPTION

Environmental perception is the process by which individuals and groups construct their interpretations of the environment and their relationship with it. This process involves cultural, social, and personal aspects, influencing the way people interact and understand the space where they live. According to Tuan (1980), the perception of the environment goes beyond a neutral observation, as it is influenced by individual and collective experiences, values and memories. In this way, each person experiences and interprets the environment in a unique way, which can result in different perceptions about the same space.

In Brazil, environmental perception has been discussed as an important tool in raising awareness about ecological issues and sustainability. As Souza (2015) points out, environmental perception allows individuals to better understand the impacts of their actions on the environment, promoting more responsible behaviors. This awareness is essential in a country with vast natural resources and rich biodiversity, where deforestation, pollution and the disorderly exploitation of resources represent major challenges. Thus, by promoting a more critical environmental perception, it is possible to encourage society to adopt more sustainable practices.

In addition, environmental perception is a relevant factor in environmental education, as it allows educators to address ecological issues in a way that engages students' experiences and values. According to Reigota (2009), environmental education should start from the perceptions of students to promote real awareness about the environment. This process facilitates the formation of an ecological awareness, as students are able to relate their personal experiences to the contents presented, strengthening the understanding of

the importance of preserving the environment and using natural resources in a balanced way.

Environmental perception also influences public policies, as society's demands for more sustainable and healthy spaces can guide government actions. Studies carried out by Carvalho (2010) indicate that environmental preservation and sustainable development policies tend to be more successful when they are aligned with the perceptions and needs of the local population. This understanding allows the creation of projects that meet the reality of each region, respecting the cultural and social characteristics of the residents and promoting an active participation of the community in the preservation of the environment.

Working on environmental perception is fundamental for building a more sustainable and balanced development. In a context of global environmental crisis, understanding how people perceive and relate to the environment is a way to promote significant changes in behavior. As Carvalho (2010) points out, developing a critical environmental perception is essential to face contemporary environmental challenges, as it allows society to understand the urgency of adopting ecologically correct attitudes. Thus, environmental perception is not just an individual construction, but an instrument of social transformation in favor of a sustainable future.

In addition, environmental awareness plays an important role in promoting sustainability and developing ecological awareness. When people better understand the impacts of their actions on the environment, they tend to adopt more sustainable behaviors, seeking to preserve and protect natural resources. In the context of environmental education, environmental perception is a fundamental element, as it allows individuals to see the importance of sustainable practices and respect for the environment. Thus, understanding and working on environmental perception contributes to behavioral changes in favor of a more balanced development and conservation of the ecosystem.

METHODOLOGY

The methodology used for the elaboration of this work was the application of a questionnaire containing nine questions, referring to the environmental issue in the Municipality of Colorado do Oeste - Rondônia, with 100 subjects, 64% from the urban area and 36% from the rural area with an age range between 17 and 55 years and schooling ranging from elementary school to higher education.

The questionnaire is an essential tool for data collection, allowing the researcher to obtain information directly from a specific target audience (Marconi; Lakatos, 2010). For Gil (2008), the questionnaire is a research technique widely used to collect information directly from the participants, allowing a detailed analysis of specific variables.

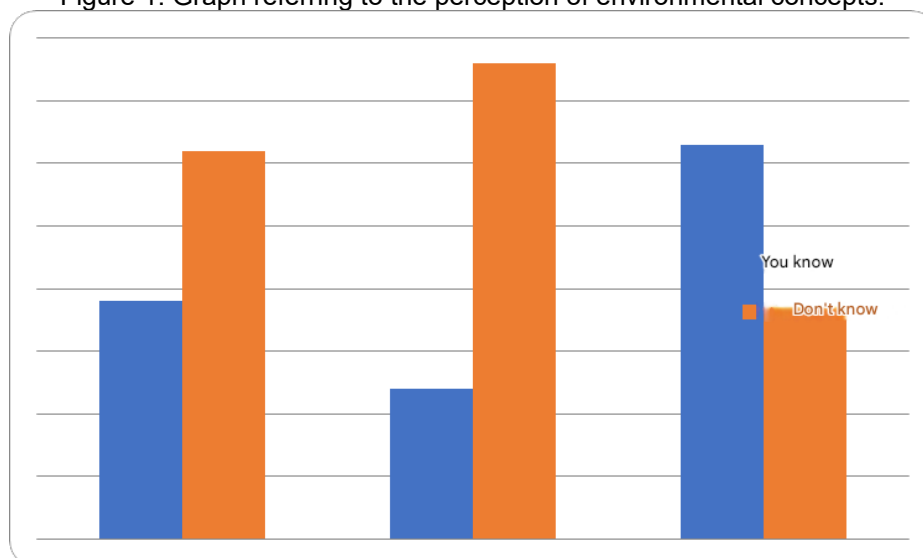
The questionnaire was applied on the streets of Colorado do Oeste at random with people who circulated on the streets in 2019.

RESULTS AND DISCUSSION

The investigative questions were related to the knowledge of concepts, practices and causes of environmental impacts.

Regarding the concepts, they were asked if they knew what environmental impact is, what conservation units are and what environmental education is (Figure 1).

Figure 1. Graph referring to the perception of environmental concepts.



Source: Prepared by the authors.

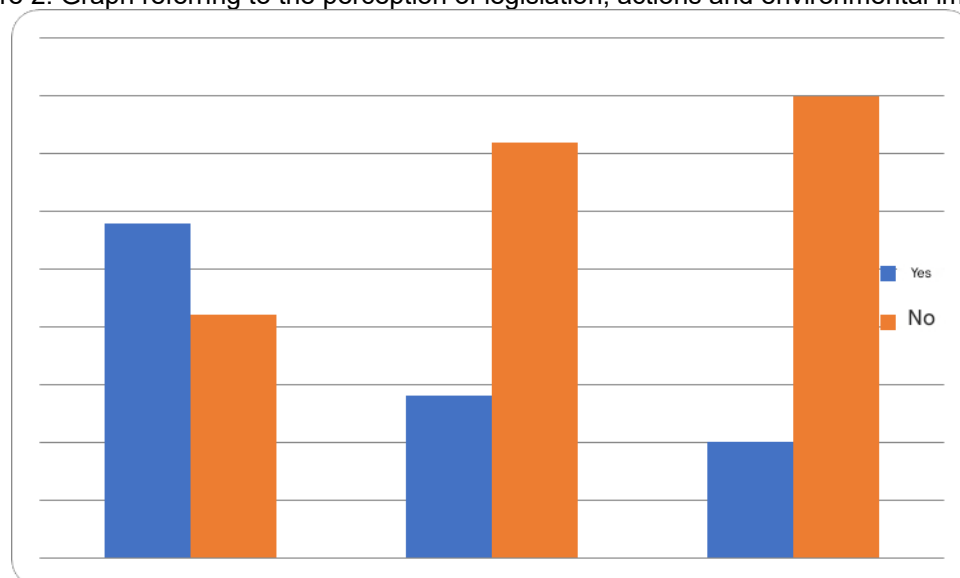
Regarding knowledge of environmental impacts, only 38% said they knew the term, while 62% said they did not know it. When asked what a conservation unit is, only 24% said they know what it is, while 76% do not know what it is. Regarding the knowledge of what environmental education is, 63% said they know what it is, while 37% do not know it.

In this sense, Jacobi (2003) states that the lack of knowledge about environmental terms is one of the factors that hinder awareness and social mobilization for the preservation of the environment. Many people are unaware of fundamental concepts, such as sustainability, ecosystem, environmental impacts, and environmental education, which

limits their understanding of the relationships between their actions and the impacts on the environment, preventing the construction of an environmental culture.

Another investigation carried out was in relation to the opinion on environmental laws, actions that minimize environmental impacts and whether they have the perception of causing impacts (Figure 2).

Figure 2. Graph referring to the perception of legislation, actions and environmental impacts.



Source: Prepared by the authors

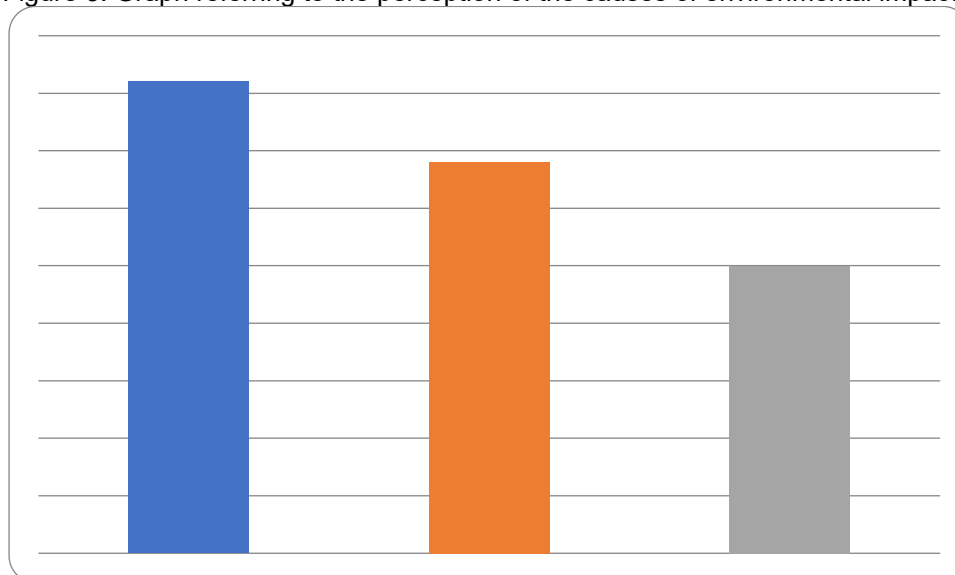
As can be seen in figure 2, when asked if they thought that environmental laws are sufficient, 58% think they are insufficient, while 42% believe that they are sufficient. Carvalho (2015) states that environmental laws, although they have advanced in recent decades, are still insufficient to ensure effective protection of natural resources and biodiversity. Many experts point out that, despite the existence of a relatively robust legal framework, the practical application of these laws faces significant obstacles. The same author also says that the lack of adequate inspection, combined with lenient assessments, makes many companies and individuals continue to practice degrading activities, which compromises environmental preservation.

Regarding actions that minimize environmental impacts, only 28% adopt habits thinking about minimizing environmental impacts, while 72% develop their actions without thinking about environmental issues. Regarding the perception of causing environmental impacts, only 20% realized that they had already taken some action that caused environmental impact, while 80% understood that they had never developed actions that caused environmental impacts. Reigota (2009) states that the lack of perception about the

environmental impacts of human actions is one of the great challenges for the promotion of sustainable and conscious behavior. This "environmental blindness" prevents individuals from relating their habits to larger problems, such as pollution, global warming, and biodiversity loss, thus resulting in the continuation of actions that impact our environment.

Finally, it was investigated about the perception of the subjects in relation to the causes of the environmental impacts caused. To do so, they were asked whether the causes were more related to water waste, garbage generation or deforestation/fires (Figure 3).

Figure 3. Graph referring to the perception of the causes of environmental impacts.



Source: Prepared by the authors

As observed, the majority of the subjects, 41%, stated that the main cause of environmental impacts is deforestation/burning, followed by water waste, 34% and garbage generation, 25%. Barbosa (2013) is in line with what the research pointed out, because according to him, environmental impacts result mainly from human activities, directly or indirectly, degrade the environment and affect the quality of people's lives. Among the main causes, deforestation, water pollution, disorderly urbanization, agricultural expansion and excessive exploitation of natural resources stand out, activities that alter entire ecosystems, affecting biodiversity and environmental balance.

CONCLUSION

Environmental issues become increasingly urgent in the face of climate change, which has become more real and affects all layers of society. Population growth and the

consumerist model that has been installed from capitalism have contributed to humanity exploiting natural resources in an unbridled way.

Considering that environmental impacts will affect everyone, without any distinction of social class, measures that can mitigate the catastrophic effects of climate change as a result of human actions are urgent.

From this perspective, environmental education emerges as an instrument capable of promoting awareness and changing habits that are so necessary and urgent. From the knowledge about how human actions, from the most complex to the most routine, impact the environment, it is possible for humanity to recognize itself as the main agent of changes, whether negative – as a result of irrational exploitation, or positive – through awareness and behavior change in relation to the environment and the actions that impact it.

Thus, one of the strategies for promoting environmental education is the understanding of society's perceptions in relation to the theme of the environment. Concepts such as environmental impacts, mitigation measures, and our daily contribution to reach the scenario we have arrived at are fundamental for environmental education to be promoted based on awareness and a change in attitude towards consumption habits.

The field research carried out in the municipality of Colorado do Oeste - RO, with the application of a questionnaire to the population in a random way, demonstrated that much needs to be worked on with regard to basic environmental concepts. The survey showed that only 20% of the research subjects are aware that their actions cause some environmental impact, while 80% believe that they do not cause these impacts. This data highlights the importance and urgency of expanding and strengthening environmental education both in school curricula and in non-school spaces.

ACKNOWLEDGMENTS

To the Dean of Research, Innovation and Graduate Studies (PROPESP) of the Federal Institute of Education, Science and Technology of Rondônia for the support.

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