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# Pro-Ecological Commitment in the Words of its Practitioners<sup>1</sup>

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**Abstract:** A pro-ecological commitment (PEC) is a positive relationship people establish with the environment and is manifested through environmental care practices. In order to deepen knowledge of this psychosocial and environmental phenomenon, we explored the definitions of PEC from the perspectives of people committed to the environment, taking into account the environmental conceptions underpinning this commitment. People who were nominated as being pro-ecologically committed (N = 29; aged between 23 and 79 years old) freely talked about their PECs and environment and also nominated other people they deemed to have the same commitment. The *corpus* was analyzed according to interpretive content analysis. We identified changes in their understandings concerning PEC and the environment, which was distinguished from the concept of nature, linked to socio-historical contexts and personal experiences. Practices related to daily choices, health, sensitization and pro-social relations, as well as barriers and habits that hinder environmental care, were also reported.

Keywords: environmental psychology, ecological behavior, qualitative research

# O Compromisso Pró-Ecológico nas Palavras de Seus Praticantes

Resumo: O compromisso pró-ecológico (CPE) compreende uma relação de caráter positivo que as pessoas estabelecem com o meio ambiente, manifestada por via de práticas de cuidado ambiental. Para aprofundar o conhecimento sobre esse fenômeno psicossocioambiental, o objetivo foi explorar as definições sobre o CPE a partir do ponto de vista de pessoas comprometidas pró-ecologicamente, e as concepções de meio ambiente que o embasam. Pessoas indicadas como comprometidas pró-ecologicamente (N = 29; idades entre 23 e 79 anos) discorreram livremente em entrevistas sobre seu CPE, sobre meio ambiente e indicaram outras pessoas avaliadas como sendo comprometidas. O *corpus* foi submetido à análise de conteúdo interpretativa. Identificamos mudanças nos entendimentos de meio ambiente, que se distinguiu do conceito de natureza, e de CPE atreladas aos contextos sócio-históricos e às experiências pessoais. Foram mencionadas práticas relativas às escolhas cotidianas, saúde, conscientização e relações de caráter pró-social, assim como barreiras e hábitos que dificultam o cuidado ambiental.

Palavras-chave: psicologia ambiental, comportamento ecológico, pesquisa qualitativa

# El Compromiso Pro-Ecológico en las Palabras de sus Practicantes

Resumen: El compromiso pro-ecológico (CPE) comprende una relación de carácter positivo que las personas tienen con el medio, manifiesta a través de las prácticas de cuidado del medio ambiente. Para profundizar el conocimiento de este fenómeno psicosocioambiental, nuestro objetivo fue explorar el CPE desde el punto de vista de las personas comprometidas y los conceptos de medio ambiente que le dan soporte. 29 personas pro-ambientalmente comprometidas (edades de 23 a 79 años) participaron en entrevistas en las que hablaron sobre su CPE, sobre medio ambiente e indicaron personas evaluadas como comprometidas; el *corpus* fue objeto de análisis de contenido interpretativa. Identificamos cambios en la comprensión del medio ambiente, diferente de la naturaleza, y del CPE vinculados a los contextos socio-históricos y a las experiencias personales. Fueron mencionadas las prácticas relacionadas con las opciones de todos los días, la salud, la concienciación y relaciones de carácter pro-social, así como barreras y hábitos que impiden el cuidado del medio ambiente.

Palabras clave: psicología ambiental, conservación (conducta ecológica), investigación cualitativa

This study is part of a common effort involving various fields of knowledge seeking to understand what leads people to care for the environment. It is inserted in an interdisciplinary field of people-environment studies, through Environmental Psychology in its "green" branch, the background of which is knowledge developed over the last decades in the context of the psychosociological sciences regarding environmental

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concern (Pol, 2007). Considering the social and historical contexts focused on the dimensions of everyday life, lifestyles, and behavioral choices, we seek to shed light on how people, experiencing the lifestyles of Western societies, appropriate this issue to the point of adopting environmentally friendly practices, incorporating them into their personal relationships and routines at home, school and workplace.

In this sense, we identify elements that help us understand how, in contrast with most of the population, some people assume a commitment to the environment and become responsible for and interested in it. This commitment has a pro-ecological orientation; that is, it is focused on maintaining different forms of life and environmental balance. It is composed of a set of psychosocial dimensions – knowledge, attitudes, beliefs, norms, values, and views of the world – which, depending on situational factors, are concretized into practices to care for and maintain the environment (Gurgel & Pinheiro, 2011).

We understand that social phenomena are history laden as they change over time and are related to the period in which they are manifested. Additionally, a phenomenon has memory because it also results from the history of its production, from peculiarities in terms of culture, traditions and ways of life of the society in which it is produced. Thus, the ways phenomena are manifested in the present are intrinsically related to their genealogy, resulting from social practices and relationships, from which they were constituted (Gergen, 1985, 1996; Ibáñez, 2003).

Pro-ecological commitment (PEC) — which from this perspective is understood as a psychosocial phenomenon — results from practices and relationships circumscribed in a given culture and historical moment. There is another key factor that competes for its constitution: the environment, which can be seen in its multiple meanings, from being a physical space to symbolic aspects. Therefore, it is a "sychosocial-environmental" phenomenon that is formed in the heart of the ecological debate and *greening* of the public opinion for more than five decades. Its production has conditions, such as acknowledging the various negative effects of human action on the environment, and the emergence of a concern with the risks imposed by such an action.

The environmental issue has been increasingly discussed since the beginning of the 1960s, when scientists started warning the general population about increased pollution and environmental degradation linked to limited resources, which would threaten human life on the planet (Comissão Mundial sobre Meio Ambiente e Desenvolvimento, 1991). Such a discussion was disseminated largely due to the actions of environmental movements that started in Brazil beginning in the 1970s. The time was marked by condemnation of environmental degradation in campaigns that had minimal impact on public opinion, going through a time of politicization during the period or re-democratization, marked by a bi-sectorial nature (base groups and environmental state agencies) up to 1985 and, finally, evolving into a multisectoral and complex movement that started in the second half of the 1980s, followed by Rio-92 Summit (Viola & Leis, 1995). Even though the environmental agenda has not advanced as expected in the last two decades, there has been increased participation on the part of elements of civil society and governmental agencies (Cordeiro, 2014; Losekann, 2012). Note there has also been an emergence of new socioenvironmental movements such as permaculture, ecovillages, and movements focused on urban agendas such as mobility, occupation of the public space, and the right to the city.

It is worth highlighting the transformations that have taken place in the meanings and discourse regarding the environment, which have accompanied changes in social and historical contexts marking the development of environmental movements in Brazil and in the world since the middle of the last century and, more recently, in the first decades of the 21st century. Therefore, one of the specific characteristics of our time, in comparison with other historical periods, is the use of the words environment and environmentalism, which have a semantic intersection with other terms also currently associated with the term *nature*, such as: ecology, ecologism, naturalism, ecocentrism, anthropocentrism, biocentrism, ecofeminism, gaianism, sustainable development, green, and ecosystems, among others. According to Castro (2005), only recently did the term environment become "part of a new and turned enriched – semantic field where the predominant color is green." (p. 172). What the author calls "semantic explosion" lead us to reflect upon how these concepts have evolved and the importance they have assumed within and outside academia.

The greening of the public opinion regarding environmental topics is fundamental to devising and implementing interventions that favor transformations in the lifestyles of capitalist societies. environmental concern, as one of its expressions, has been the focus of a growing number of studies, including different nomenclatures (e.g., pro-environment behavior, conservation behavior, environmental attitudes, sustainable behavior), but with the common objective of understanding behaviors that have positive impacts regarding the environment and identify the determinants that are involved in promoting them. Such investigations traditionally resort to scales that address behavioral predispositions with a pro-ecological orientation, such as attitudes, beliefs, motivations and values. Such fragmentation imposes limits on the knowledge of the phenomenon itself, as has been noted by some studies (Gaspar de Carvalho, Palma-Oliveira & Corral-Verdugo, 2010; Hill, Figueredo & Jacobs, 2010; Vaccari, Cohen & Rocha, 2016).

In this sense, the notion of Pro-Ecological Commitment (PEC) represents a relationship with the environment that synthesizes various indicators investigated separately, approximating the idea of concern, such as translated from the current English term "environmental concern", however, with a positive nature, considering its relationship with the notion of care as something that should be sought rather than avoided (Pinheiro, 2002). It also represents an interest in language that is more accessible to different fields of knowledge, such as environmental education, as it is a clearer nomenclature and closer to common sense view (Gurgel & Pinheiro, 2011). Note that, in addition to intention, PEC expresses a commitment assumed with the effective practice

of environmental care accruing from a bond established with the environment(s). Something that is socially perceived or manifested in different spheres of social interaction in the form of different environmental care practices (Pinheiro & Diniz, 2013).

Considering the previous discussion, this study's interest was to deepen knowledge regarding PEC as a "psychosocial environmental" phenomenon, socially, culturally and historically circumscribed. To deepen knowledge regarding this "psychosocial environmental" phenomenon, this study's objective was to explore the definitions of PEC from the perspective of pro-ecologically committed people, taking into account their conceptions of environment. Therefore, the construction of knowledge based on the perspectives of people themselves can provide the basis for developing strategies for environmental education and interventions more pertinent and closer to different contexts and contemporary ways of life.

#### Method

In order to explore the conceptions of environment and PEC among people who manifest such a commitment, a qualitative approach was used. Guided by an interpretative paradigm, such an approach enabled accessing the points of view of people who experience the phenomenon, contributing to more deeply understanding the processes in which patterns of meanings and their structural characteristics are formed (Willig, 2013). From an emic perspective, a close relationship was established with the participants, valuing their opinions concerning the study's questions and using them to give meaning to the analysis.

## **Participants**

The strategy of the social perception of PEC was used in order to ensure the participation of pro-ecologically committed people. This indicator is based on peer-review in a context of interactions and knowledge among people who are able to assess the pro-ecological commitments of their peers. Assessments were spontaneous and did not employ previously established categories, taking into account behaviors, considering that people witness the actions of other people and use such actions as criteria for their assessments (Pinheiro & Diniz, 2013).

The first group of participants was identified in a previous study through the social perception of PEC (Diniz, 2010). These people were asked to nominate other people they considered to be pro-ecologically committed. Based on convergent nominations (characterizing social perceptions), the participants were selected for subsequent data collections. Along with this strategy, in order to assess people in other regions of Brazil, some assessments were performed by experts (scholars and technicians working in the environmental field) and some people were selected because they worked as leaders in non-governmental organizations via the National Register of Environmental Entities (CNEA/Ministério do Meio Ambiente).

Therefore, 29 people took part in the study and were from

Brasília (DF), João Pessoa (PB), Natal (RN), Recife (PE), Rio de Janeiro (RJ), Salvador (BA), and São Paulo (SP); 17 of these were men. Two age groups with distinct characteristics were identified at the time of analysis: 16 participants, aged from 23 to 33 years old, were students attending the last year of an undergraduate program or were attending a graduate program; and 13 participants, aged between 39 and 79 years old, had already established professional careers or were retired.

#### **Instruments**

Intensive, individual interviews using focused, semistructured questions were held with the participants to develop the *corpus* (Charmaz, 2014). The interview's script was composed of questions addressing: what the individual understood by environment; why did s/he think they had been nominated to participate in the interviews; and what were his/her environmental care practices on an individual and/ or collective level. At the end, they were asked to nominate other people, whom they considered to be pro-ecologically committed, to also take part in the study, which characterizes social perceptions of PEC. The justifications for nominations also composed the study's *corpus*.

#### **Procedure**

**Data collection.** All the interviews were conducted in places and times previously scheduled with the interviewees and lasted from 25 to 179 minutes. The interviews were audio recorded and transcribed with the participants' permission. Note that the transcription is an analysis in itself and aids in the process later on.

**Data analysis.** The study's *corpus* was analyzed using interpretive content analysis, which is intended to identify, analyze and report significant and/or recurrent themes, serving the interpretation of various aspects related to the study's questions. Instead of exclusively focusing on the individuals' idiosyncratic aspects, the analysis gave priority to the theorization of sociocultural and environmental contexts and the conditions that structure such contexts. In addition to the semantic context of data, at a latent level, the underlying ideas, assumptions and concepts that give shape to what was reported, were also examined (Braun & Clarke, 2013).

As for the procedures of analysis, a sequence of steps were followed: (1) organization of data and preparation of memoranda; (2) initial codes were generated with software to aid the analysis of qualitative data (QDA Miner); (3) themes were identified at broader levels of abstraction; (4) themes were reviewed using criteria of internal homogeneity (harmony among codes) and external heterogeneity (themes were distinct from each other); (5) description and establishment of themes focusing on aspects of interest and innovative aspects; (6) report and discussion of results by selecting illustrative excerpts for comparison with the literature and empirical knowledge already established around the pro-ecological phenomenon (Braun & Clarke, 2013).

In summary, the analysis reached three levels, namely: the synthesizing level, which refers to the summary of ideas contained in the set of data with a descriptive nature; the explanatory level, concerning the deepening of ideas using the text itself or other sources, such as the literature, focusing on understanding; and the structuring level, which refers to the connection established among ideas based on theoretical elements and conceptual abstractions (Flick, 2014).

Two large categories emerged from the analysis. The first category refers to conceptions of the environment, named according to a recurrent discourse that appeared in different interviews "Environment is everything!". The second category was named "Pro-Ecological Commitments" and encompasses the definitions of PEC adopted by the interviewees.

### **Ethical Considerations**

All ethical recommendations concerning research conducted with human subjects were complied with. Confidentiality was ensured to the participants who signed free and informed consent forms and authorizations to record their voices. This study was approved by the Institutional Review Board at the *Universidade Federal do Rio Grande do Norte* (Report No. 147,523).

#### Results

The conceptions on environment are related to an understanding of pro-ecological commitment, considering that both are socially constructed and circumscribed by socio-environmental and historical contexts. As previously mentioned in the methods section, in order to favor a greater understanding of details, this presentation is separated into two categories.

## **Environment** is everything

At the beginning of the interviews, the participants were asked to talk freely about what they understood to be *environment* and later to explain how they had reached this conception. In general, the answers refer to an interaction and integration common to the people-environment pair, closer to an ecosystemic notion of interdependence and the personal construction of this definition based on a change from a naïve understanding to a broader and more reflective understanding. Some participants spontaneously discussed the contrasts between their understanding and views regarding the environment and the common sense sphere.

Initially, people addressed the differences between notions of nature and environment. In this sense, nature is usually seen as something distinct from human, something humans are not part of, and this view is related to a preservationist view, which understands nature as something that needs to be fully protected or something that should be simply contemplated. The conception of environment, on the other hand, comprises interactions and integration, associated with the idea of habitat, of which human interference and actions are parts. Hence, the environment characterizes a broader and inclusive view, involving both natural elements and those that are built or made.

This distinction between the concepts of nature and environment is directly related to another point of contrast evoked in the interviews: the current view of common sense versus a more complex understanding. In the common sense view, as previously mentioned, the notion of environment is frequently associated with and restricted to the concept of nature, something that is outside of people and of which humans are not part, which would be an excluding conception. Such a view, therefore, is opposed to a complex and grounded view, a result of knowledge (formally or informed acquired) regarding the topic and personal and collective reflections. In this sense, the concept is more broadly and inclusively considered, integrating the relations of people with and in the environment. Some people discussed the complexity of this conception in terms of levels or scales. They considered from the most elementary environment, the body, the organism, moving to the direct environment, the house, and other environments of interaction:

"Let's take care of the environment!" sounds like taking care of trees, right? Let's take care of the forests. No! Understanding of environment is the environment where we live, it's here, it's the concrete, it's the streets, the city, work, the environment were we live (Participant 1, male, 29 years old).

I understand environment at various levels, there's my level, there's my environment which is me, my body is part of the environment; there's the world's physical environment and how I relate to this natural world of the physical environment, which is not distinguishable (Participant 2, man, 27 years old).

This definition of environment is related to other points of contrast, which marked their own elaborations: one conceptualization of a scientific point of view (formal) and the subjective elaboration of this concept. Both views coexist and are related, since the participants work with the environment; therefore, even though some do not have a specific formal academic background related to the theme of environment, they have mastered the rhetoric of the environmental field.

In regard to the scientific view, as it emerges in the participants' reports, environment comprises biotic factors (living beings including humans) and abiotic (inorganic substances, weather, oxygen, soil, etc.). According to this view, environment fits one of the three dimensions of sustainability (the other two being social and economic dimensions). Environment can be seen as habitat, the place we inhabit and that which circumscribes our interactions both with other humans and other living and non-living beings. In contrast with the common sense view, the role of human interference is acknowledged, that of culture and urban life, which are also elements considered to be parts that form the environment:

It involves physical aspects, biotic aspects and biotic includes human. It also involves meanings, which have to do with culture and with the landscape, culture, with what you see (Participant 3, female, 53 years old).

For me, environment is precisely the place, the place all beings interact. The fauna, men, and to not offend the feminists, women (laugh). The issue of this quality of life, well-being, so all this reference to quality of life, well-being, for me this is environment (Participant 4, woman, 48 years old).

The ideas of well-being and quality of life, mentioned by Participant 4, also integrate a subjective point of view, which comprises experiential and affective aspects, without necessarily resorting to technical definitions and delimitations of the term. In this sense, there is not only the presence of ecocentric views, focused on the valorization of nature itself, but these coexist with a view of interdependence between the preservation of nature and the maintenance of human life, which characterizes an anthropocentric view.

It is worth noting that, in many cases, the spontaneous response evoked by the question/cue regarding the conception of environment was: "- Everything!". This idea of wholeness expresses a view of the planet as a living organism (Gaia), an integrated macro-context that encompasses various types of interactions and inter-relationships, addressed by the participants considering the meanings of interdependence and equity. The following excepts exemplify it: "I guess it's everything. Environment is the place and the inter-relations of these places, all the relations that take place in a space" (Participant 5, woman, 42 years old); "Everything! I can't see environment as a set of isolated things. I see a set of things and situations" (Participant 6, woman, 26 years old); "Everything! Really everything. I define it as being the relationships, in fact it's everything, from the air to what we eat, the relationships we establish with people, bodily matter, for me, environment is basically everything" (Participant 7, woman, 30 years old).

Some people stated that their understanding regarding the theme was developed based on their own experiences that led them to change from a more naïve view to a more complex understanding. Such an understanding resulted from a personal interest, readings, reflections and exchange of ideas with other people and, from a cognitive perspective, is related to the acquisition of new beliefs. This change, however, was based not only on readings and technical formation (cognitive aspect), but also on personal experiences that involved affective dimensions (e.g., well-being, happiness), contact with diversity, the establishment of new relationships, etc.

I realized a certain influence in this sense at home, of understanding this... wholeness of things, this interdependence, this interconnection also... Travelling also contributed to this idea, conversations and readings, and reflections, all this I guess that... that is why I say, we are always reading, we are always thinking, we are always talking to people, so I guess it's in constant construction (Participant 8, man, 27 years old).

The conceptions of environment are part of the very construction of the pro-ecological commitment, both at a cognitive level and in affective terms. Such beliefs change over the course of life and go beyond scientific knowledge, incorporating experiences of life as factors that trigger or provide opportunities for reflections and transformations of the concept. This understanding also manifests in the way individuals perceive and establish this pro-ecological commitment.

### **Pro-ecological commitments**

In order to explore how the interviewees understand PEC, we asked them to assess their own commitment, reporting their practices within an environmental care perspective, that is, those things they considered having a positive impact on the environment. In the cases in which people had been nominated (via social perception of PEC), they were also asked to discuss the reasons they believed they had been nominated. At the end of the interview, each participant was asked to nominate other people they considered to be pro-ecologically committed, justifying these nominations according to the environmental care practices they observed.

Therefore, data on conceptions concerning PEC accrued from the people's assessments of their own commitments, as well as the assessment they performed regarding the commitments of other people. Both assessments converged. Even though self-assessment most frequently was based on domestic practices and everyday choices, the social perception more broadly encompassed similar dimensions, focusing on personal characteristics, everyday and professional choices, and actions performed in the collective sphere.

Various activities were listed, from individual actions that impact an individual's immediate environment to collective actions with a broader impact. First, some people mentioned practices related to everyday choices, domestic context and personal practices, such as: taking care of waste (recycling, reuse, and waste reduction); cultivation of domestic plants and vegetable gardens; economy of resources (water, electricity); conscious consumption (e.g., making choices at the grocery store); reduced car use, instead opting to walk, ride a bike or use collective transportation.

Another class of individual practices, understood as part of or resulting from PEC, was related to body and health care, such as yoga, meditation, dietary habits and the consumption of healthy foods, paying attention to the origin of foods, preferably consuming organic, whole and less-processed foods, and local produce. Even though this list of practices is not common to all the participants, each listed at least some of them. A "simple lifestyle" was stressed, that is, a deliberately cooperative and austere lifestyle (Corral-Verdugo, 2010). This conception is close to the notion of frugality, relative to voluntary restriction and creative use of resources (Muiños, Suárez, Hess & Hernández, 2015).

My choice of travel, or choice of consumption, takes into account the environmental issue, in an attempt to avoid excess, not that I'm different from most, but I try to avoid excessive consumption, buy in places where there is more income

distribution, small grocery stores, or organic farmers' markets. Instead of buying from a candy shop, I buy from a friend who produces cakes at home, or things that improve the situation a bit and income distribution (Participant 3, woman, 53 years old).

So, I take care of myself, of my food, understanding that my eating habits will ... I'll end up passing, my health will improve or my habits won't affect the environment, and the food I put inside me, it comes from some place, it has a source, what source is this? What is this that I choose to put inside myself? ... I try minimizing industrialized or very refined foods, I like more whole, alive foods, in the first place (Participant 9, woman, 27 years old).

Other practices are related to the context of work. The professional occupation of these people is marked by the attention they pay to environmental issues, whether in their work in non-governmental organizations (NGOs), public service (e.g., Environmental Secretaries, surveillance agencies), or privately, such as in the case of consulting. Those in an academic context (professor or student) reported teaching, research and university extension, which favor access to new theoretical references, practices in supervised training programs and/or research, and the influence of this knowledge on the personal practices previously mentioned. The reports illustrated the issue: "As a public employee, I've always used my background, as a geographer, I always felt responsible for the planet" (Participant 10, woman, 51 years old); "I've worked in the school vegetable garden project, research base, with restoration, projects (...), I've worked with stuff in the CEFET, environment secretary, also in another project. I haven't stop since 2005" (Participant 11, man, 26 years old).

Sensitizing actions, such as transmitting information on environmental issues and changes in everyday practices, were also reported as actions related to PEC. These actions may take place in formal contexts, environmental education programs or projects, in workplaces, and also through informal contact, in dialogues established with people (relatives or friends) or even in daily situations (e.g., while in the line at the grocery store).

In this direction, the way these people relate with each other in different contexts also stood out, something that was also mentioned as part of a PEC. The participants stressed the establishment of democratic, horizontal relationships, of respectful relationships established with people as something that expresses and is coherent with this commitment. As the following excerpts illustrate: "Good morning, good evening, and good night. I guess this is basic. You will establish a good relationship with people" (Participant 8, man, 27 years old); "Look, in my entire life, I've been always very careful with people" (Participant 12, woman, 61 years old). Or further:

Kindness and respect toward people, in an independent fashion. So, really respect people, diversity, what I say, try to live in a more democratic way, really, democracy in the most profound meaning of the word and everything else. So I guess it's essential. It is a practice that I think is part of it (Participant 2, man, 27 years old).

The way relationships are established with people seems to contribute to collective actions, which are marked by engaging in activities of social mobilization and participation in socioenvironmental movements (e.g., in defense of parks, protests) and working in the political sphere (e.g., participating in public audiences, committees, councils). Such actions are characterized by the visibility they achieve and because they are impact-oriented in a broader context (social and environmental). With the exception of people who have a paid job in these contexts, engagement is voluntary:

And considering pro-active actions, man, I'm a guy who's done a lot. So I take part in public audiences, I take part in the municipal environment council in my city, I take part in various pro-environment movements. I founded a NGO when I was 16 years old and spent more than a decade developing campaigns (Participant 13, man, 33 years old).

The emphasis given to personal characteristics more frequently emerged in the social perception of PEC. As mentioned by Participant 13, proactivity was a prominent feature in the reports, concerning a sense of responsibility and initiative, such as promoting actions, inviting other people to develop projects and transmitting information on mobilizations. Other characteristics were associated with sensitivity, perseverance, persistence and a sense of justice:

He [person nominated] inspired me because of his resilience; he's tireless, I'm a person who gets tired easily, sleeps a lot, he hardly sleeps, he's tireless, he's always very lively, even after a defeat, he always believes he'll manage to do something (Participant 7, woman, 30 years old).

Another aspect also identified in the reports was barriers imposed on the practice of environmental care. Situational factors like inefficacy and the insufficiency of the urban transportation network and lack of selective waste collection were indicated as situations that discourage alternative practices concerning mobility and waste treatment. The crystallization of routines already established in the domestic and work contexts, related to habits and difficulty changing them, were also reported. When addressing the difficulty in implementing practices and change of behaviors, acknowledged as important and necessary, the participants both criticize others and themselves. The following excerpts exemplify this idea: "I do wrong stuff too; there're things that became a habit" (Participant 7, woman, 30 years old); "Well, now it's difficult to maintain a behavior, like, how they say, I don't like this expression much, 100% ecologically correct, because the capitalist system impedes you, it's a contradiction" (Participant 14, man, 79 years old). The results presented so far regarding social indicators perceived as an expression of PEC reveal practices already reported in the literature concerning daily choices made in the domestic context and personal practices

(e.g., waste disposal, plant cultivation, resource saving, conscious consumption, reduced care use, using bicycles and collective transportation). Self-care practices were also reported from a holistic perspective (e.g., the practice of yoga, meditation, consumption of healthy foods). In regard to sensitization practices conducted in collective environments and in the occupational sphere, the participants reported the establishment of democratic, horizontal relationships, in which kind and respectful treatment of people is expressed and is coherent with such a commitment, emphasizing its pro-social nature. The participants also mentioned barriers that hinder environmentally friendly practices, which involve situational factors (e.g., inefficacy and insufficiency of urban transportation and a lack of a structure for selective waste collection), and criticized habits.

Considering that ecological awareness is a phenomenon that is increasingly consolidated in the history of humanity, the way people appropriate and construct it varies, even in the way they conceive the relationships of pro-ecological points of view with systems already established in the history of our societies.

### **Discussion**

Considering a broader view of conceptions concerning environment and PEC analyzed here, some aspects deserve to be highlighted. First, we highlight the critical view of knowledge that has been produced in the pro-environment sphere. Having taken as a basis the reference of the participants to understand more deeply the elements that the literature in the field has systematically reported, often out of context, has enabled expanding such knowledge. Focusing on the construction of conceptions and views concerning environment, as well as the commitment itself, we could establish points of convergence and distinction between different profiles. We could also identify the influence of contexts in which such constructions take place.

Some of the participants had a technical background and/or a college degree in environmental fields (e.g., Biology, Ecology, Engineering, Geography), while others had been trained in or were receiving training in Human Sciences or Health Sciences. Despite these differences, the reports concerning the environment followed a similar direction. Thus, sometimes technical knowledge aided and justified the use of some terms, but this was not the emphasis of the definitions. Through reports concerning changes in the concept over the course of their trajectories, the participants reveal the relevance of a set of life experiences that contributed to the construction of their understanding.

In this sense, we need to problematize the cognitivist inclination that in general goes through environmental education and socioenvironmental interventions. As reported in the literature, exclusively focusing on knowledge and information does not reflect the complexity inherent to environmental subjects (Gaspar de Carvalho, Palma-Oliveira & Corral-Verdugo, 2010; Hill, Figueredo & Jacobs, 2010). The diversity of experiences with socioenvironmental interactions, which were not restricted to the sphere of formal

education and involved personal and collective reflections, favored the development of more critical, integrative and complex conceptions in regard to the environment. As this analysis makes apparent, the cognitive dimension, when exclusively considered in formal contexts and contexts of an informative nature, seems to be distanced from the affective dimension, while it is more associated with informality and experiences. Therefore, we suggest that both dimensions be taken into account when planning educational actions.

As indicated by Polli and Camargo (2016) in a study addressing the social representations of environment, we did not identify differences between the definitions of the two groups of participants with different ages, information that was unintentionally accessed while constructing the *corpus*. Despite a convergence of views regarding environment related to pro-ecological commitment, differences between the constructions of these two groups became apparent. Even though there are common actions, some practices were more emphasized by one group in comparison to the other.

The younger group (ages between 23 and 33 years old) has recently developed their PEC in a context in which the environment field was constituted in Brazil and amid the opening and expansion of technical education, undergraduate and graduate programs specifically focused on the environment. Considering the richness of descriptive details and justifications given in concern to nominations, these young individuals more frequently emphasized personal daily practices, personal characteristics and relationships with people. PEC was also characterized by engagement in new movements of a socioenvironmental nature, such as permaculture, ecovilles, as well as movements with agendas concerning the urban environment, such as mobility and occupation of public spaces and right to the city.

The remaining participants (aged between 39 and 79 years old) on the other hand, wakened to environmental issues when the thinking of the Brazilian public more generally started greening, that is, in a context in which these issues started to be included in the sphere of common sense. One's militancy trajectory and engagement in collective, political actions and actions in the government sphere were more important in the understanding of PEC. Hence, as the case previously mentioned, these definitions present a direct and essential relationship to the social and historical contexts in which they develop, so that they are a result of the history of its production, culture peculiarities, and ways of life of the society in which they are produced (Gergen, 1996; Ibañez, 2003).

In this sense, transformations that took place over the years following the concepts of environment and nature and also expectations that emerged around environmental care and from what can be considered a pro-ecological commitment, stood out. The differences found here suggest a relationship with the generational context of the individuals interviewed, situated in different moments in which environmental movements and ecological thinking were developed in Brazil, with a greater emphasis on the time that followed Rio-92 and the dissemination of the notion of sustainability (Viola & Leis, 1995).

Another relevant aspect involves the fact that actions that compose the various PECs are not perceived or seen as a negative aspect, something that is restrictive or demands sacrifices. Rather the participants see these actions as something positive that, in general, brings you well-being and quality of life, something that has already been indicated in other studies (Corral-Verdugo 2010; 2012). Such a finding has an impact on the training of individuals who assume a proecological commitment, considering that changes in lifestyle may positively impact not only the environment, but also the people and the groups in which these actions take place.

Finally, the homogeneous profile of the group of participants is seen as a factor that restricts this study. In this sense, future studies should include people with characteristics that differ from those addressed here. Mainly, individuals should be included who have developed their conceptions of environment and who have established their commitment in different contexts. Specifically, rural populations, those with low incomes, with different levels of formal education should be included. Such investigations may favor a broader view of PEC, highlighting the diversity that is inherent to this phenomenon.

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