

ECOCENTRISM AND BEHAVIOR: A BIBLIOGRAPHIC REVIEW ON ENVIRONMENTAL VALUES¹

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ABSTRACT. This study consists of a literary review on researches about Ecocentrism. The term was defined to specify a set of values and beliefs of human beings about their relationship with the environment. Since the 1970s, psychological science has been interested in these beliefs and values as object of study. For the literary review, national indexers (BVS-PSI and Scielo) and international indexers (ISI Web of Knowledge e Scopus) were consulted, compiling investigations on five major themes: (1) the role of information, (2) personality, (3) green consumption, (4) cultural aspects and social roles and (5) measurements in ecocentrism. With this review it was concluded that there is a need for a greater effort in national contributions in the field, whereas the international scenario faces a scarcity of studies about human development and concrete intervention strategies for the promotion of pro-environmental behaviors.

Keywords: Values; attitude; consumption.

ECOCENTRISMO E COMPORTAMENTO: REVISÃO DA LITERATURA EM VALORES AMBIENTAIS

RESUMO. O presente estudo consiste em uma revisão da literatura sobre a pesquisa em Ecocentrismo. O termo foi cunhado com o objetivo de especificar um conjunto de valores e crenças do ser humano sobre o seu relacionamento com o meio ambiente. Especialmente a partir da década de 1970, a ciência psicológica se interessou por essas crenças e valores como objeto de estudo. Com o fim de realizar a revisão da literatura, foram consultados indexadores nacionais (BVS-PSI e Scielo) e internacionais (ISI Web of Knowledge e Scopus), reunindo investigações em cinco temas centrais: 1- o papel da informação; 2- personalidade; 3- consumo verde; 4- aspectos culturais e papéis sociais; 5- a medida em ecocentrismo. A presente revisão conclui que é necessário um maior empenho em contribuições nacionais no campo, enquanto no cenário internacional há uma escassez de estudos sobre desenvolvimento humano e estratégias concretas de intervenção para a promoção de comportamentos pro-ambientais.

Palavras-chave: Valores; atitudes; consumo.

ECOCENTRISMO Y COMPORTAMIENTO: REVISIÓN DE LA LITERATURA SOBRE LOS VALORES AMBIENTALES

RESUMEN. Este estudio consiste en una revisión de la literatura sobre la investigación en Ecocentrismo. El término fue acuñado con el fin de especificar un conjunto de valores y creencias de los seres humanos en su relación con el medio ambiente. Sobre todo a partir de los años 1970, la ciencia psicológica se interesó en estas creencias y valores como un objeto de estudio. Con el fin de llevar a cabo la revisión de la

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literatura, se consultó a los índices brasileños (BVS-PSI y SciELO) e internacionales (ISI Web of Knowledge y Scopus), en vista de cinco temas centrales: (1) el papel de la información, (2) personalidad, (3) el consumo verde, (4) aspectos culturales y los roles sociales, y (5) la medida en ecocentrismo. Esta revisión concluye que es necesario un mayor compromiso en las contribuciones nacionales en el campo, mientras en el ámbito internacional hay una escasez de estudios sobre desarrollo humano y estrategias concretas de intervención para promover conductas pro-ambientales.

Palabras-clave: Valores; actitudes; consumo.

BEHAVIOR AND ENVIRONMENT

Especially from the 1970s, discussions on ecology gained a pronounced relevance in behavioral sciences. Maloney and Ward (1973) addressed the environmental question as an issue of psychological order. For them, the distinctive destruction caused by the presence of the man in the environment reveals a pathological behavior that impairs the survival of other forms of life, representing a threat even to his own self. Thus, the predatory action of humankind could not be solved with technological, but behavioral changes. Derived from this critical perspective, a vast area of contributions has emerged with the aim of explaining what environmental or ecocentric values are.

In spite of the large production of instruments and theories, between the 1970s and 1980s, Dunlap, Van Liere, Mertig and Jones (2000) affirm that questions related to the impact of humankind on ecology became geographically more spread out with time, observable in a less and less direct way, and of increasingly ambiguous origin (e.g. destruction of the ozone layer, forest areas, biodiversity, global warming). Along with the advance of the environmental impact, attitudinal objects have changed as well, generating a need for changes in the way we investigate this phenomenon.

The definition of ecocentrism received greater attention in contributions dated from the 1990s. Stern, Dietz and Guagnano (1998) provide an approach in which environmental concern attitudes are based on a set of general values of a person. These values would correspond to the relative importance attributed to each element (the person himself, other people, plants and animals).

Dunlap (2008) proposes the most commonly used definition of ecocentrism nowadays: is the degree to which people are aware about environmental issues and are

capable of making efforts toward contributing to a solution or, at least, to show a desire to be personally engaged in the environmental matter. Mayer and Frantz (2004) also discuss the concept of connection with nature, specifying the altruism that exists in the relationship between an individual with the environment. Schultz (2000) approaches the term considering to what extent people see themselves as a continuation or a part of the natural environment.

According to Coelho, Gouveia and Milfont (2006), studies on Social Psychology that seek to explain the connection between ecocentrism and pro-environmental behaviors have been especially using two main theoretical supports: the rational choice theory and the norm activation theory. The rational choice theory has as assumption that behavior is determined through the intention of expressing a pro-environmental behavior. Intention, in turn, would be determined by an attitude related to a behavior (attitudinal component), by the subjective norm (normative component) and by the subject's perceived control over a behavior.

The norm activation theory searches for an explanation in mechanisms that lead an individual to act in an altruist way. Said behavior would depend on the activation of personal norms (moral obligation), and this activation depends on an individual's values. According to Coelho et al. (2006), the rational choice theory has failed in predicting behaviors morally related in the field of environmentalism, whereas the norm activation theory has been allowing for a more adequate prediction of such behaviors, for contemplating, more efficiently, the morality domain. In this way, the concepts of ecocentrism were increasingly directed to the comprehension of environmental values.

The problem with the congruence between values and behaviors in ecocentrism that continued the discussion in the sphere of the

norm activation theory is known as motivated decision making in Verplanken and Holland (2002). The interaction between pro-environmental values and behaviors was investigated by the authors in six different studies, leading them to conclude that values attribute meaning, intensify, regulate congruent actions, but only when they are cognitively active or are central to the self.

In one of the studies by Verplanken and Holland (2002), the New Ecological Paradigm scale (Dunlap et al., 2000) was used as a measurement for environmental values, together with the Schwartz's Values Survey (Schwartz, 2009), to verify the centrality of values. The objective of the authors was to observe if the scales used would be able to predict the vote of participants that were members of parties with pro-environmental proposals. Both scores in the instruments proved to be strongly correlated to the voting intentions.

Due to the importance of environmental values to the promotion of eco-driven behaviors in aforementioned contributions, it is understood that the best comprehension of the questions can promote the development of strategies for the several segments of society. However, the objective of this literary review consists of presenting different perspectives of the field aiming to subsidize national contributions concerned about proposing the necessary interventions in the area.

METHOD

Four indexers were accessed and investigated from January to February 2013: (1) ISI Web of Knowledge, (2) Scopus, (3) BVS-PSI and (4) Scielo. Five words or key expressions in Brazilian Portuguese and English were used: ecocentrism, environmental values, environmental attitudes, ecological beliefs and environmental beliefs.

The first search on the ISI and Scopus database returned more than 130,000 contributions, which were refined by areas: psychology, social sciences and humanities; the filter articles published in journals was applied, reducing the number of publications to 9,034. The final value was filtered by quotation, ordering the contributions by their relevance in the field. On the BVS-PSI and

Scielo database, 549 full texts were found, but almost all of them refer to contributions in ecology, sustainability and biology, with no relation with the investigation on psychological attributes.

As a criterion for including the articles, the following factors were used: (1) chronological, (2) relevance in the field or amount of quotations and (3) historical importance. The chronological factor was defined by the prioritization of articles published during the last 10 years; the historical relevance was determined according to the impact of the contribution on the field as a key contribution, in agreement with other literary reviews or the presence of the contribution in the foundations as a milestone.

The final number of contributions selected in accordance with the parameters was 56 articles. The exclusion criterion was the chronological order of the contributions, prioritizing the most recent works, the presence of psychological variables studied, and the singularity in the contribution, without being a mere replication of previous studies.

CONTRIBUTIONS: UNDERSTANDING ECOCENTRISM

With the aim of approaching different contributions in the investigation of determinants that interact with ecocentrism, the research scenarios were grouped into five specific domains, defined in the course of the bibliographic review by the proximity of the themes. The domains can be numbered as follows:

1. *The role of information in the promotion of ecocentrism* – it groups contributions that discuss information acquisition process, as well as the impact of the quality of means and of information itself;
2. *Personality and ecological values* – it consists of discussions on the importance of individual characteristics (personality) in the compliance with and understanding of the ecological paradigm;
3. *Green consumption* – it involves the perception of different types of resources and questions related to the consumer's behavior;
4. *Cultural aspects and social roles* – it comprises the impact of culture on the

perception on the environment, considering gender-related and transcultural studies;

5. *Psychometric contributions and instruments in ecocentrism* – it presents survey instruments used in investigations on ecocentrism.

The role of information in the promotion of ecocentrism

Information is a cognitive attitudinal component essential to the construction of environmental values, and has a variety of dissemination means that contribute to its promotion (e.g. TV, newspapers). Attitude is defined by Rodrigues, Assmar and Jablonski (2012) as a persistent organization, composed of a triad made of: (1) beliefs and cognitions in general; (2) an affective component for or against a certain social object; (3) a coherent action in relation to this object, that is, a behavioral component resulting from the set of such valences (cognition and affection). Specifically, the American Psychological Association defines environmental attitude as the perceptions or convictions regarding the physical environment, including factors that affect its quality (Coelho et al., 2006).

In the construction of this cognition about ecology, as for education, it is essential that educational institutions have educational programs that promote knowledge appropriately, which involves a structured and specific academic program for the sustainability subject (Shephard, Mann, Smith, & Deaker, 2009). The importance of educators' beliefs is also relevant, considering the school environment, as teachers are role models, pedagogical references, so that the values in question are disseminated (Yang, Lan & Wong, 2010).

Access to information in places other than educational institutions proved relevant too in investigation conducted by Rios, Martinez, Moreno and Soriano (2006). Said research points that media plays an important role in the dissemination process of information to raise awareness about environmental questions. This allows for some reinforcement to the engagement in green consumption, creating a bond between these two aspects (attitude and behavior), and can influence consumers to adopt a posture that is coherent with their just acquired or already present awareness about the environmental question.

Information about the environment does not reach people necessarily through direct communication only, but also through indirect means. In experiment, Cialdini, Kallgren and Reno (1991) distributed fliers, placing them on the windshield of cars parked in garages. Drivers that passed with their cars close to the elevators of the garages noticed one of these conditions: either the garage had fliers all over the floor, or it was clean. The experience by Cialdini et al (1991) presented as a result that drivers were more likely to throw the flier on the floor in places that were already dirty. Said experiment shows that it is possible to communicate behavioral norms through a change in environmental hints effectively.

Personality and ecological values

In the field of contributions in ecocentrism, personality emerges as a relevant factor for the compliance of individuals with environmental values. In one of the investigations conducted in Brazil, Monteiro, Plínio, Veiga and Gonçalves (2008) came up with a satisfactory model that suggests that personality traits have an explanatory power on an ecologically conscious consumption. In this scenario, proactive individuals would be more inclined to perceive that human activities over the last centuries might represent a threat to survival in the ecosystem. Monteiro et al. (2008) analyzed the results aiming at the potential for new pedagogical proposals, and point towards the importance of recognizing these dimensions, with the goal of defining efficient educational interventions. The big challenge, according to Monteiro et al. (2008), is the fact that less active consumers are those with the lowest level of awareness about the importance of nature. Moreover, in recent study, Markowitz, Goldberg, Ashton and Lee (2012) observed, in a similar way, that openness to the experience is a characteristic that contributes to the compliance with "green" values.

Pauw, Donche and Petegem (2011) obtained similar results. The authors assessed the impact of personality on the worldview of adolescents and children. The result Pauw et al. (2011) obtained consists of the importance of the autonomy and responsibility sense of adolescents, which, when present, lead them to an ecocentric worldview. The study indicates that there is a contraposition

between ecocentrism and anthropocentrism (egocentrism). Arnocky and Stroink (2011) verified that the narcissism trait prevents people from expressing empathy and, thus, preserving resources.

Green consumption

A series of studies was dedicated to the investigation about the impact of the perception on resources and consumption. It is important to understand that one of the requirements for a sustainable behavior is the availability of means so that people can adopt behaviors that are more adequate or so that they feel impelled to consume in a sustainable way. In this context, one of the problems discussed is the attribution of responsibility for the environment (Bullard, 1994). The central assumption of this research approach is the importance of the existence of enough resources for people to do something about environmental impact efficiently.

Bullard (1994) also points out that the sensation of inability or the high cost of a sustainable behavior may distance people from the attempt to reduce the individual impact on the environment. However, studies by Kempen, Muradian, Sandóval and Castañeda (2009), already commented, about residents of the rural area of Guatemala, showed that this is not always true, and that many people choose to make material sacrifices in order to stop affecting the environment.

Findings by Young, Hwang, McDonald and Oates (2008) also corroborate those by Bullard (1994). Young et al. (2008) assessed the answers of 81 consumers in a rigorous interview process, in which 30% reported having difficulties in concretizing the consumption ideology, considering technology as a product. Young et al. (2008) numbered at least six factors that proved more relevant in the process of translating the ecocentric attitude in green consumption behavior: (1) the strength of green consumption value; (2) the consumer's experience with purchases; (3) enough time for the buyer to research and make a decision; (4) relevant knowledge about environmental questions; (5) reasonable availability of green products; (6) the consumer's purchase power for him/her to be financially prepared for the expense. Young et al. (2008) state that the consumer's degree of

sensitivity is increased to the point that, in case some of these criteria are not strong enough or negatively influence the decision-making process, the attitude is hardly translated into behavior and follows the usual standard.

The availability of financial resources also affects significantly the expression of pro-environmental behaviors. On the other hand, study conducted by Wergin (2009) addresses the relationship between rationing (frugality) and environmentalism, since both are supported by similar behaviors a priori.

Wergin (2009) observed that frugality behavior, which involved the preservation of goods, shares characteristics of environmentally friendly behaviors, especially if considering the recycling and reuse of items. However, this relationship weakened with the comparison of behaviors related to the consumption of green-labeled products. When the latter tended to be more expensive, frugal people chose cheaper products, without paying attention to their environmental qualities. The author says that such behavior was even stronger moments before or after the consolidation of the American economic crisis.

The way advertisements and announcements are promoted also proved able to mediate, in a significant way, the impact, depending on the emotions and feelings that emerge from the communication. Kaplan (2000) suggests that there is a relevant problem in environmentalist messages, in which the pro-environmental action is seen as a sacrifice value, communicating a sensation of discomfort in the environmental engagement. This type of message would cause a helplessness state and feeling of vain effort that does not contribute to the maintenance of pro-environmental behaviors (Kaplan, 2000).

Cultural aspects and social roles

Studies on ecocentrism point that cultural aspects play an important role for the compliance with values. In these contributions, culture is usually considered a system of beliefs shared in a certain national or community context (Dunlap, 2008). Contributions in researches about gender-related differences also indicate that the variable is generally responsible for different forms of representation, whether for a matter

of social orientation, social movements and even human development itself.

When it comes to national culture, Harris (2006) observed that, in China, the representation of the environment is highly instrumental, as something that exists for the benefit of the population. In this case, Chinese people seemed to be less inclined to change their attitude about the environment, except in case of a direct impact on their routine, families and lifestyle. Milfont, Duckitt and Cameron (2006) observed similar evidences when comparing New Zealanders of European origins and Asian New Zealanders. The study shows that the participants of Asian ethnicity usually have a more egocentric concern about the environment, whereas the European New Zealanders have a biospheric concern.

Not only transcultural differences, but also the role of gender and social orientations show some influence on environmental engagement and its expression in daily life. Arnocky and Stroink (2011) verified that female participants were more open to environmental attitudes and values than the male ones. The authors found similar evidences linked to the expression of emotional empathy.

Different from the empathy as a cognitive phenomenon (perspective taking among peers), the emotional empathy would be motivated by basic processes. Arnocky and Stroink (2011) studied the phenomenon while investigating the common dilemma paradigm, in which participants compete or cooperate with each other to obtain the maximum of resources. When all participants compete with each other, resources are depleted and the experiment ends. In this type of experiment, women showed a greater tendency to cooperation than men did.

Finally, a greater comprehension about the construction process of environmental values in a culture can allow for the adaptation of successful environmental public measures for different contexts, more efficiently, considering local aspects. The question of social orientation can also be included in the environmental education, especially when it comes to learning more about which factors of human development enable a greater expression of emotional empathy, as a subjacent process essential to the environmentalist perspective taking.

Psychometric contributions and instruments in ecocentrism

As already put, the concept of ecocentrism is a big challenge, just as the production of measurements in the field. This section will especially discuss measurements, such as the instruments proposed by the Environmental Attitudes and Knowledge Scale (Maloney & Ward 1973), the Environmental Concern Scale (Weigel & Weigel, 1978), the New Ecological Paradigm (Dunlap et al., 2000) – one of the most popular instruments nowadays, – and, finally, the proposal by Milfont and Duckitt (2010), called Environmental Attitudes Inventory, which was a milestone in the consolidation of measurements of environmental attitudes.

It is important to observe that the history of the preparation of instruments within the environment theme coincides with the commented movement of the 1970s about the topic. The instruments that served as a basis for the measurement of ecological beliefs, values and attitudes date from the same decade. It is possible to state that the instruments constituted throughout the psychometric contributions compose an important facet of the definition of concepts, especially due to studies on construct validity.

As examples of different proposed operationalizations, it is possible to highlight: (1) the ecological worldview (Thompson & Barton, 1994; Stern, Dietz & Guagnano, 1998; Dunlap et al., 2000), (2) connection with nature (Mayer & Frantz, 2004), (3) environmental beliefs and attitudes (Maloney & Ward, 1973, Weigel & Weigel, 1978; Thompson & Barton, 1994; Stern et al., 1998), (4) knowledge of the environmental question (Maloney & Ward, 1973), (5) apathy for environmental issues (Thompson & Barton, 1994); and (6) environmental responsibility and the consumer's behavior (Stone, Barnes & Montgomery, 2006).

The Environmental Attitudes and Knowledge Scale by Maloney and Ward (1973) was the first multidimensional proposal, involving four factors: (1) verbal commitment; (2) actual commitment – how much a person has been actually engaged; (3) affection; and (4) knowledge. The Environmental Concern Scale by Weigel and Weigel (1978), in turn, although multidimensional, shared a similarity with the previous instruments regarding the

attitudinal investigation basis, consisting of the level of commotion and the extent to which one would be willing to engage in environmental causes.

Finally, the New Environmental Paradigm scale of 1978 (Dunlap et al., 2000) had a distinct proposal about the investigation of ecocentric values, with the aim of characterizing primary beliefs about the nature of the environment and the relationship of the human being with the latter. The New Environmental Paradigm addressed three aspects: (1) beliefs about the human capacity of impairing nature's balance; (2) the existence of limits to the growth of human civilization; and (3) the men's right to dominance over nature.

The first phase of production of instruments in ecocentrism was also followed by a series of methodological and conceptual questions. The instruments of the 1970s had problems related to the content of items, for approaching issues of local order (e.g., item of the actual commitment subscale of the Environmental Attitudes and Knowledge Scale: "I have never attended a conference on environment."). In addition, knowledge about ecological problems grew fast, resulting in the need for a review of these instruments (Dunlap, 2008). In Table 1, it is possible to observe the transition from the first instruments to the most recent measurements in ecocentrism.

Table 1 - Ecological Values and Attitudes Scale published between 1978 and 2000

Author	Year	Scale Name	Construct(s)
Dunlap and Van Liere	1978	New Environmental Paradigm	(1) nature balance, (2) growth limits, (3) men's dominance over nature
Thompson and Barton	1994	Ecocentric and Anthropocentric Attitudes Toward the Environment Scale	(1) ecocentrism, (2) anthropocentrism, (3) environmental apathy
Kaiser	1998	General Ecological Behavior	(1) pro-social behavior, (2) rubbish removal, (3) preservation, (4) consumer behavior, (5) waste reduction, (6) volunteer work, (7) use of ecological vehicles
Stern, Dietz and Guagnano	1998	Brief Inventory of Values	(1) self-transcendence, (2) self-accomplishment, (3) openness to changes, (4) conservatism
Schultz	2000	Environmental Motives Scale	(1) selfish values, (2) altruist values, (3) biospheric values
Dunlap, Van Liere, Mertig and Jones	2000	New Ecological Paradigm	(1) growth limits, (2) anti-anthropocentrism, (3) nature balance, (4) human anti-exemption, (5) ecological crisis

Note: Measurement scales and instruments in chronological order informing: authors, year of publication, name of the scale and the set of constructs assessed.

Dunlap et al. (2000) performed a large reformulation of the 1978 instrument, which culminated in the change of its name to New Ecological Paradigm. Through this reformulation, the authors sought to meet the changes in the attitudinal object with the new impacts on the environment. The review also intended to address methodological problems, as inserting an anti-new paradigm direction into the scale, with inverted items, aiming to balance the measurement, instead of inverting only four items, as in the 1978 form – which led to a dimension-artifact of measurement error. The content of the scale included a broader range of themes in order to

comprehend the most recent discussions in ecology. The review carried out by Dunlap et al. (2000) provided a psychometric structure equally more consistent (Dunlap, 2008).

Finally, in the scenario of intense proliferation of instruments in ecocentrism, considered "anarchy of measurements", Milfont and Duckitt (2010) prepared the Environmental Attitudes Inventory. The argument of the authors consists of the fact that, currently, the efforts remain in the creation of new instruments, and an organization of measurements in ecocentrism is necessary. Aiming to fulfill this purpose, Milfont and Duckitt (2010) carried out an

extensive review of measurements of environmental attitudes, and organized the Environmental Attitudes Inventory, which compiles the main constructs approached in

the field. In Table 2, it is possible to observe the production of measurements in ecocentrism during the last decade.

Table 2 - Ecological Values and Attitudes Scales Published in the Last 10 Years

Author	Year	Scale Name	Construct(s)
Mayer and Frantz	2004	Connectedness to Nature Scale	(1) continuity between the human being and nature
Stone, Barnes and Montgomery	2006	Ecoscale	(1) relationship with the environment, (2) awareness about impacts, (3) willingness to act toward protecting the environment, (4) attitudes toward remedying environmental problems, (5) responsible consumption actions, (6) environment defense, (7) knowledge
Schwartz	2009	Value Survey	(1) compliance, (2) tradition, (3) benevolence, (4) universalism, (5) self-direction, (6) stimulation, (7) hedonism, (8) achievements, (9) power and (10) security
Milfont and Duckitt	2010	Environmental Attitudes Inventory	(1) trust in science and technology, (2) environmental threat, (3) changes in nature, (4) preservation behavior, (5) men's dominance over nature, (6) use of nature, (7) environmental concern, (8) support to norms for population growth control

Note: Measurement scales and instruments in chronological order informing: authors, year of publication, name of the scale and the set of constructs assessed.

In face of this picture, it is possible to contemplate remarkable aspects of the development of instruments for measurements in ecocentrism. A specific review on the instruments would be necessary to encompass deeper questions, as the techniques and criteria used for the psychometric assessment. As commented, part of this review can be seen in Milfont and Duckitt (2010), although this was not the ultimate goal of the authors, but the construction of an instrument that organized the attributes commonly used for investigation in the field.

CONCLUSION

The series of contributions presented so far provides a solid basis to the several social intervention needs, whether in the educational sphere, consumption and social norms that serves as a measure for regulating the impact of society on the environment. It is understood that information has a pronounced contribution to the awareness about ecological values. However, not only information, but also its format and effective load have serious implications on how people will represent this attitudinal object.

Current knowledge allows for the preparation of more specific behavioral protocols –

personality factors, for instance. Nevertheless, cultural implications are present and should be considered for a greater efficacy of these protocols. The field also lacks efforts toward developing proposals within this scope.

It is still necessary to learn more about the possibility of promoting emotional empathy, or about how it is constituted throughout the human development path, a key mechanism to pro-environmental behavior. This review observes a scarcity of contributions related to the promotion of sustainable behaviors and child development, which would be a key field for the stimulation of changes in the sustainable behavior.

The measurement in ecocentrism observed, during the last 30 years, an expressive production of instruments, but, as pointed by Milfont and Duckitt (2010), theorists lack a greater concern about the discussion of conceptions and aspects of behavior theorization. The excessive plurality of instruments, according to the authors, may have created a dispersion atmosphere in the theoretical field, preventing the maturation of these concepts.

The research on ecocentrism still counts with just a few Brazilian publications in this specific theme – considering indexed contributions. The continuation of the national investigation in the

field for the comprehension of conceptions and characteristics of the Brazilian culture is necessary, taking into account the impact of culture on such aspects. The dialogue between national and international contribution also fulfills the role of cooperating with a better comprehension of the variables observed from a transcultural perspective.

This work was able to provide an overview of an area in full development and that will certainly attract the attention of Brazilian researchers. Currently, the authors of this study are developing researches on the preparation, adaptation and validation of instruments in Brazilian Portuguese, for future national studies.

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