ENVIRONMENTAL PERCEPTION AND PUBLIC POLICIES — DICHOTOMY AND CHALLENGES TO THE DEVELOPMENT OF A SUSTAINABILITY CULTURE

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Introduction

The economic expansion lived in the last century was motivated by industrialization and by the conquest of new markets. Such development process, which was focused on economic gains, used to be managed by businessmen who strictly acted on the search for quantitative outcomes and profit at any cost. Consequently, discussions were raised about the aim and the socio-environmental impacts of the development model adopted at that time, since there was a scientific and technical progress that came in parallel to it. This progress was able to intensify the ethical questioning about the aggressive character of this economic growth to the detriment of natural systems (VIEIRA, 2007).

With regard to the public education scenario, it is possible stating that schools play, along with society, an important role in establishing the commitment with sustainability and an ethical behavior towards it, based on the understanding that themes such as sustainability, environmental management and social responsibility are concepts to be developed and encouraged within these institutions (MACEDO et al., 2013).

One of the measures adopted in order to encourage public institutions to cope with the environmental issues is called Public Management Environmental Agenda, which is also known as A3P. The main purpose of A3P is the implementation of a process to set a new institutional culture to public management as a way to make people aware of resource optimization, waste combat and of the search for better quality in the work environment.

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Accordingly, Siqueira (2008) warns that the implementation of programs involving public policies rarely meets the aspirations and interests of the involved population. Thus, they bring inefficiency as consequence, as well as the waste of time, human resources and money.

Another relevant factor to accomplish effective sustainable practices within the government management scope is highlighted by Barata et al. (2007), who state that the involvement of managers and servers is essential, since the institutional culture development process requires changing habits and behaviors due to environmental issues.

Once these perspectives are held, the present article presents the outcomes of a survey that assessed the environmental perception in a Brazilian federal university internal community, as well as addresses the relation between the culture identified through this community's habits and the public policies developed to encourage sustainability. The survey is part of a study conducted by the Master Degree Program of the herein referred university. The study approaches the challenges of integrating the actions and mobilizations of people towards the sustainability culture.

After the current introduction, the article describes the conceptual bases concerning environmental education, as well as perception as study object and the public policies on sustainability implemented in the last few years; thus, it sets the reference to the construct. The following section presents the research methods and results. Subsequently, discussions based on the herein found outcomes are set. Finally, the final considerations are expressed; they summarize the contributions given by the present article.

Environmental education and social transformation

Reflecting about the complexity of environmental education is the opportunity to understand the formation of new social actors who get mobilized to set an articulated educational process committed with sustainability in order to favor the dialogue among different knowledge fields. In the meantime, such reflection also helps questioning the values and premises that guide the social practices and it implies changing the ways of thinking, the knowledge and the educational practices (JACOBI, 2003).

Thus, Lima (2009) describes the environmental education in Brazil as a field of knowledge and political-pedagogical activity put in place in the 1970s and 80s, as a plural and differentiated field composed of many scientific subjects, philosophical matrices, political-pedagogical positions, actors and social movements.

However, it was back in 1999 that the National Environmental Education Policy (Política Nacional de Educação Ambiental – PNEA) became a legal provision supported by Law n. 9795, and it defined environmental education as a set of processes used by individuals and society to build values and competences applied to environment preservation.

Among many other definitions, Pedrini (1997) understands environmental education as a transforming educational process that leads to new attitudes, habits and conducts. Layrargues and Lima (2014), by observing the multiplicity of actors, conceptions, practices and political-pedagogical positons, identified three Brazilian environmental education macro-trends, namely: conservatism, pragmatism and critic. These trends

work as Weberian ideal types for didactic, analytical and political purposes. Their study highlights that it is difficult diagnosing the discourse hegemonies within the Environmental Education context due to lack of research in the field. Although the critical forces have gained significant space within this area, they are often eroded by the prevailing pragmatism that tends to turn the educational aim into the pragmatic sense of market. Therefore, the goal of promoting citizenship and political education is postponed because of the economic logic reproduction applied to workers' formation, to job creation and to the consumption dynamics.

The environmental educational policies state that any current education institution in Brazil must understand the environmental education as a permanent item in the teaching programs. Thus, the environmental education is a right to all, for its activities must be exercised in education as a whole, as well as in school education, through actions focused on empowering the human resources through the development of studies, researches and experiments, the production and broadcasting of educational, follow up and assessment material (BARBIERI and SILVA, 2011). However, Saito et al. (2011) address that the practices bond to environmental education point to the adoption of "palliative arrangements", since students are not mobilized to have a critical and changing attitude towards their matters of interest. Students must take effective actions in decision-making processes associated with their power to influence the quality of the environment they live in.

Such scenario stands out as a different frame from that set by the National Legislation about the conditions necessary to put the environmental education in place. However, there are fragilities in most Brazilian schools that decharacterize the environmental education practices and challenge teachers about the effective contributions to the awareness of people on socio-environmental issues. This reasoning meets the finding by Jacobi (2003), who sees the need of changing the environmental education process into a critical and innovative one, be it at the formal and non-formal levels, so that the challenge becomes, above all, a political act focused on promoting social transformation.

A research conducted by Lamosa and Loureiro (2011), who have studied the relation between educational policies and the insertion of environmental education in public schools, showed that the direction given to public policies for environmental education in schools does not help solving the main difficulties faced by the teachers. These scholars state that policies prioritizing the performance and mobilization concerning environmental education do not meet the real needs demanded by public schools in the country, since the development of such policies does not contemplate the broadest educational policy contexts and is not developed by education professionals.

By correlating the perspectives about the relevance given to the participation of actors involved in the educational process, Sorrentino et al. (2005) raise the discussion about other factors linked to social issues and point out that the social transformation based on environmental education aims at overcoming environmental injustices, social inequalities, capitalist and functionalist appropriation of nature and of humanity itself. These authors advocate for the idea that the aim of the environmental education is to encourage the majorities, which are deprived of their self-management skills, and to reinforce the resistance against the capitalist domination over their lives and spaces.

The environmental perception as study object

The studies by Brandalise et al. (2009) emphasize that distinct people may understand the same situation from different viewpoints, and that these individual reactions are based on the interpretation of a certain element. Thus, in order to understand why people have certain behaviors, it is necessary understanding how an individual responds to matters such as sensation and perception.

Accordingly, Siqueira (2008) highlights that environmental issues are perceived and interpreted by people in different manners, since the way people face these issues is affected by the peculiarities from individual perceptions. Such particularities have influence over the perception about certain aspects of the environment in detriment to other issues, which are actually under threat but that remain imperceptible to the sensory organs.

According to Pacheco and Silva (2006), "environmental perception is a scientific representation and, as such, its use is defined by purposes that boost the researcher's projects". Thus, conceptually discussing environmental perception is not just a matter of pointing out the representation that seem to better correspond to reality, but also to explain the scientific, political and social perspectives spread through the application of the aforementioned concept.

Due to the diversity of concepts and thoughts about environmental perception, most academic production on the herein addressed theme embodies a critical dimension, tries to change the multiple realities and is associated with a concrete educational experience, since change is its main axis (VASCO and ZAKRZEVSKI, 2010).

The same authors mentioned above address that studies focused on environmental perceptions become crucial to the understanding of the men-environment interrelations, their expectations, satisfactions, hopes, judgements and conducts within the space they are inserted in. These studies also subsidize the development of strategies aiming at minimizing socio-environmental issues and implementing education and communication programs to assure actors' participation in the environmental management process.

Hence, it is noticeable that the environmental perception (as study object) has been boosting knowledge production based on different theoretical currents, which try to elucidate the origin of humans' perception about the space they live in. Pinheiro et al. (2011) highlight, in their study on sustainability, that the participation of the involved actors improves planning efficiency, increases the possibility of being successful in implementing projects and spreads the knowledge on the subject.

Public Policies focused on sustainability

The Brazilian environmental management has been historically recording important legislations related to the sustainability principles. However, the Ministry of Environment pinpoints that the initiatives bond to sustainability are voluntary and demand personal and collective commitment, for habit changes result from personal commitment and from the willingness to embody the preconized concepts (MMA, 2014).

Accordingly, the greatest challenge consists on surmounting the merely theoretical discourse and on materializing the good intentions in a solid commitment, since the adoption of sustainable principles in the public management demands changing attitudes and practices. Thus, according to the Ministry of Environment, it is necessary achieving cooperation and joint efforts to minimize the social and environmental impacts from the daily actions taken by the Public Administration.

Briefly, by emphasizing the actions taken by the public institutions, there are three government initiatives that may objectively help the discussion about the present construct, namely: the Environmental Agenda – A3P, The Sustainable Esplanade Project (ProjetoEsplanadaSustentável – PES) and the Sustainable Logistics Management Plans (Planos de Gestão de LogísticaSustentável – PLS).

The Environmental Public Administration Agenda was launched in 1999. It is also known as A3P and is a project developed by the Ministry of Environment to fulfill the proposition of reviewing the production and consumption patterns, as well as to adopt new environmental sustainability references in the public sector. The Environmental Public Administration Agenda Program was implemented in 2001 aiming at sensitizing the public managers about these matters and at encouraging the reflection and the change in public workers' attitude towards the adoption of sustainable principles and criteria in their daily working activities.

The A3P is composed of five thematic axes (management of residues, sustainable biddings, quality of life in the work environment, sensitization and capacitation of public workers, and the rational use of resources) and was acknowledged by UNESCO due to its relevance and to the positive outcomes from the developed work. Thus, it became a reference of sustainability in public activities and one of the main actions to the proposition and establishment of the new commitment of the Federal Government with environmental, social and economic criteria in its activities (MMA, 2013).

The PES was launched in 2001 through a joint initiative among the Planning, Environment, Mines and Power, Social Development and Combat to Hunger Ministries. According to the Inter-Ministerial Ordinance n. 244, which established the Sustainable Esplanade Project, the aim of the project is to take integrated actions in order to improve the efficiency of the rational use of public resources and to insert the socio-environmental variable in the work environment. The legal disposition also refers to recommendations from the Government Accounts Court (Tribunal de Contas da União) to the Ministry of Planning, so this ministry may encourage the federal public institutions and organs to adopt an organizational management model based on implementing actions focused on the rational use of natural resources.

Therefore, the Ministry of Planning understands that PES implementation will spread and encourage the launching of the main sustainability programs developed by the Federal Government, among them, the A3P. The government expects that PES becomes a changing agent in themes related to a new sense of management, to a culture of spending and combating waste, to acknowledging the public organs and managers, as well as the good practices.

Another measure set by the Public Administration refers to the PLS, which consists on a planning instrument used to work on sustainability practices, on the rationalization of spending and on public institutions processes. The elaboration of this Plan meets article 16 from Decree n. 7746, from June 5th, 2012, which also establishes the Plan's implementation in the Federal Public Organs in order to assure the national sustainable development in all contracts set with the Federal Public Administration.

The rules adopted during the PLS' formulation were set by the Normative Instruction SLTI/MPOG n. 10, from November 12th, 2012, from the Logistics and Information Technology Department (Secretaria de Logística e Tecnologia da Informação – SLTI) of the Ministry of Planning, Budget and Management (Ministério do Planejamento, Orçamento e Gestão – MPOG). The aforementioned instruction defines the Plan as "planning instruments that have defined aims and responsibilities, actions, targets, execution time, as well as monitoring and assessment mechanisms".

According to article 5 of IN n. 10/2012, the PLSs must hold, at least: i) the updating of asset and material inventories in the department or entity, and the identification of smaller environmental impact similar stocks for replacement; ii) sustainability and rationalization practices about the use of materials and services; iii) responsibilities, plan implementation and assessment methodology and, iv) propagation, awareness and capacitation actions.

Studies by Araujo and Mendonça (2007), which were cited by Teixeira and Azevedo (2013), report that the search for environmental sustainability in the organizations results from the adequacy to acknowledged rules; however, without putting the specific local contexts aside. Therefore, the public polices guided by the legal disposition structure of the federal government corroborate the raise of dialogue between the literature and the government actions.

Methods

The present perception survey is categorized as a descriptive study that follows a quantitative approach. The university environment, which is the field of the present study, is composed of a management functional structure that holds, among other units, the rectory and the vice-rectory, seven pro-rectories, five academic institutes, a bond technical school and a university hospital. It offers 25 graduation courses, besides the *lato* and *stricto* sense post-graduation courses, the technical and professional education courses and the extension courses. As for the current study, the calculated population comprises the graduation students and contracted public workers, who totalized 6760 people in January 2014 – 4710 students (69.67%), 1600 office technician workers (23.67%), and 450 professors (6.66%).

Data collection was performed through a structured questionnaire, which was adapted by Brandalise (2006). The questionnaire was composed of questions that identified interviewees' features, of specific questions about the approached theme (seven of them used simple multiple-choice alternatives and nine used the Likert attitude scale, (1 to 5 score – Appendix I)). The present research was approved by the Research Ethics

Committee of the University (Protocol n. 23521513.0.0000.5154). A pre-test of the questions was conducted using a sample composed of 15 participants in order to check the instrument's semantic validation.

The questionnaire was diagrammed and applied through electronic form (see the supplementary material), which was sent to interviewees by e-mail (the e-mail addresses were supplied by the academic registration department and by the Human Resources Department of the institution). The minimum calculation of a sample size suitable for the current research was 386 people, at 0.05 sample error; 95%confidence interval (Z=1.96) and 50% P (Population Proportion). The proportional share of the sample, by taking into consideration the students, technicians and professors, resulted in a 387-participant sample, wherein 269 were students; 92 were technicians; and 26 were professors. The response follow-up was done weekly and a new batch of interviewees was set every time the response did not come back within 15 days. The new interviewees were chosen through randomized raffle until de expected number of participants was reached.

The variables resulting from the questionnaire were assessed through frequency distribution, mean and standard deviation. They were also organized in interviewee categories (scholars, professors and technicians) in order to enable the obtainment of the total values and the values for each variable.

Mean indicators were developed to treat the data, which were subjected to variance analysis (ANOVA) and to Tukey multiple-comparison test whenever the normality assumptions were met in the Kolmogorov-Smirnov test, the Lilliefors and homogeneous variance correction were performed through Levene test. The non-parametric analysis was applied to the assessments that have indicated criteria violation to ANOVA use; the Kruskall-Wallis test and the multiple comparison test were also used. The significance level at 5% was adopted in all the analyses.

The use of parametric and non-parametric tests in the application of the assessment scales composed of non-directly observable variables (ordinal format measure) has been discussed in the literature. Some simulation studies have been empirically justifying that these scales' analyses must consider the variables as interval ones, when the additional items or their determined mean value is used, since it enables applying the parametric tests if the variance normality and homogeneity assumptions are met; otherwise, the non-parametric tests are conducted (Carifio, 2008).

Results

The group of interviewees was predominantly composed of women in the age group 21-30 years and family income from 5 to 7 minimum wages. Table 1.

Table 1 – Frequency distribution of interviewees' features

Variable	N(%)
Link withtheinstitution	
Student	268 (69.4)
Professor	26 (6.7)
Office-technician	92 (23.8)
Gender	
Female	239 (61.92)
Male	147 (38.08)
Age	
upto 20 yearsold	69 (17.88)
between 21 and 30 yearsold	221 (57.25)
between 31 and 40 yearsold	47 (12.18)
over 40 yearsold	49 (12.69)
Family income (mw – minimum wage)	
from 1 to 4 mw	62 (16.06)
from 5 to 7 mw	141 (36.53)
from 8 to10 mw	56 (14.51)
above 10 mw	127 (32.90)

Source: elaborated by the authors

The survey has shown that 368 (95.09%) interviewees do not know university's environmental performance indicators such as water consumption, power consumption, telephony and the volume of generated residues. Out of this total, 282 (73.06%) have indicated the access to information as a negative factor; 83 (21.45%) see no need in having access to information; and 3 (0.77%) believed that it is not important to be aware of the institution's environmental performance. Only 18 (4.65%) interviewees said to be aware of the institution's environmental performance due to their duties at work or because, at some point, they accessed this information, Chart 1.

Chart 1 – Access to the university's environmental indicators
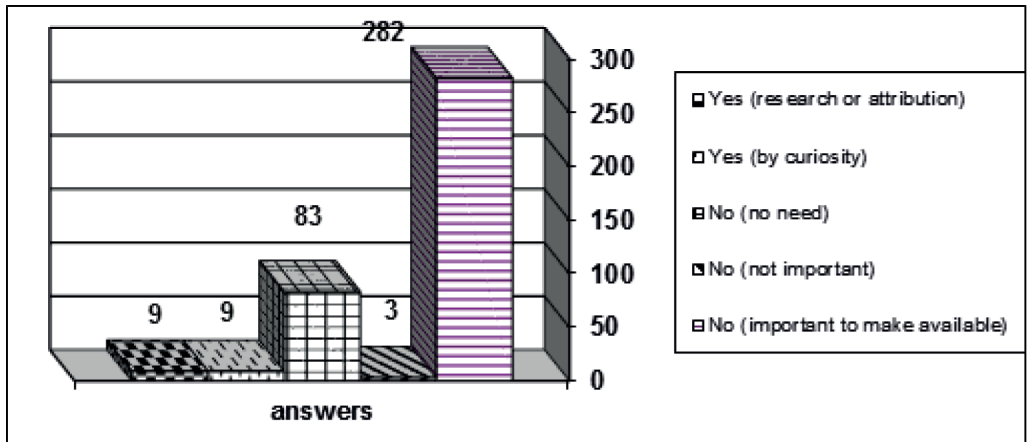
Source: elaborated by the authors

The study has also shown that 267 (69%) internal community members do not take part of or do not know the availability of programs associated with residue management in the institution; and other 29 (7.49%) stated that they do not take part in the programs, although they are aware of the availability of such activities. Just 91 interviewees (23.51%) have declared to be more involved with the residue management actions taken by the institution, Chart 2.

Chart 2 – Participation in residue management activities
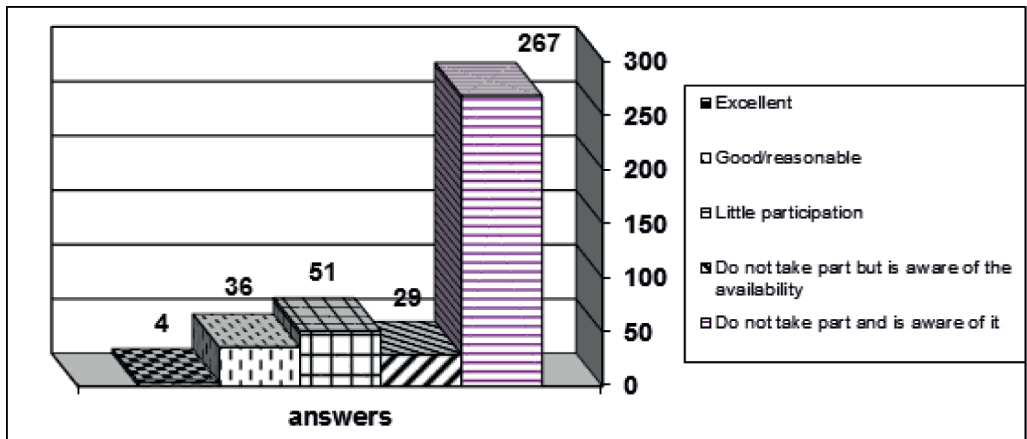
Source: elaborated by the authors

With regard to the level of knowledge about sustainability, 3.88% of the interviewees stated to have total awareness of the subject; 22.28% said to have broad awareness of it; and 36.53% declared to have little awareness of the theme. A little more than 40% of them informed they do not understand or do not know how to define their level of knowledge about sustainability, Table 2. On the other hand, the outcomes have pointed out that more than 80% of them say that it is extremely important investing in capacitating the internal community on themes related to sustainability.

From a public policy perspective, the participants in the research were asked about the federal government program A3P. The outcomes have indicated that just 1.55% of them knew or have heard about the Environmental Agenda; 19.17% have heard about it, but do not know the program; and 73.32% said that they know nothing about this federal government initiative, Table 2. Subsequently, they were asked about who is responsible for separating the recyclable trash, and 90% of the interviewees understand that society is the main responsible for such task; they were followed by the 5.70% who believe that such task belongs to the State; and less than 5% pointed out that the manufacturers and cooperatives are responsible for it.

Table 2 – The percentage of interviewees with level of knowledge about the sustainability theme and the federal government programs

Variable	(%)
Level of knowledge about sustainability	
Considers to have total knowledge about the theme	3.88
Knows a lot about the subject	22.28
Has little knowledge about the theme	36.53
Does not know how to define his/her level of knowledge	36.27
about the theme	3.89
Knows nothing about the subject	
Level of knowledge about A3P and PES	
Knows the programs or at least one of them	1.55
Heard about it or knows a little about it	4.66
Has heard about it, but does not know about it	19.17
Still has no interest about the theme	1.29
Is totally unaware of these programs	73.32

Source: elaborated by the authors

Regarding the data about the sustainable habits daily practiced by the community (Table 3), 4 out of the 9 studied items have presented statistical significance ($p < 0.05$) indicating different habits among students, professors and office-technicians.

As for the habits concerning the daily produced residues, the present research has shown that the internal community pays little attention to the possibility of reusing these residues before their disposal. The difference highlighted in this item indicates lower awareness features in the students and greater ones among professors.

Questions about the habit of separating and disposing the common residues for collection pointed out that students and office-technicians sometimes have such habit, whereas professors state to use to do it every day. There were some differences between interviewee categories; the students population tended to show lower means.

Regarding the practices to recycle the produced trash, the research has shown that the internal community has little sustainable practices. The mean indicators of this item represent the lower indices in the comparison analysis, which indicates the negative trend of this practice, mainly in the students' category (2.12).

On the other hand, with respect to the habits referring to water and power consumption, the present study has shown positive results from a sustainability viewpoint (4.66), since the common practice of turning off the light and the electronic devices before leaving the room has prevailed, as well as the good practice of closing the tap while brushing the teeth. However, the interviewees, regardless of their category, have stated that they rarely close the shower while they soap up in bath. This aspect stood out in the professors' category, it was the second lower index in the research (2.19).

As for paper consumption, two daily situations were approached, one of them referred to the use of paper-towel in the restrooms and, the other, to the use of paper sheets for printing purposes. The outcomes did not show behavior discrepancies between respondents and evidenced that the internal community, by often using paper-towel, follows the recommendations of using such material. Similarly, they avoid unnecessary costs with paper by not printing messages and/or e-mail attachments and stated that they often print in both sides of the sheet and use the remaining parts of them as scratch paper, Table 3.

Table 3 – Mean and Standard Deviation of the dimension of the daily habits, according to interviewees' link category

Questions*	Office-technician		Student		Professor		Kruskall-Wallis Test	Total	
	μ	±Sd	μ	±Sd	μ	±Sd	P Value	μ	±dp
11	342	± 1.06[a]	3.04	± 1.01[b]	3.85	± 0.83[a]	<0.0001	3.18	± 1,04
12	3.26	± 1.33[ab]	2.89	± 1.29[b]	3.85	± 1.38[a]	0.0004	3.05	± 1,33
13	2.59	± 1.33[a]	2.12	± 1.16[b]	2.61	± 1.33[a]	0.0041	2.26	± 1,23
14	4.60	± 0.70[a]	4.68	± 0.59[a]	4.69	± 0.55[a]	0.5596	4.66	± 0,62
15	4.72	± 0.62[a]	4.62	± 0.84[a]	4.42	± 0.94[a]	0.3033	4.63	± 0,80
16	2.70	± 1,50[a]	2.33	± 1.36[a]	2.19	± 1.50[a]	0.0876	2.41	± 1,41
17	3.85	± 1.13[a]	3.50	± 1.22[a]	4.08	± 0.98[a]	0.0076	3.62	± 1,19
18	4.34	± 0.80[a]	4.39	± 0.88[a]	4.38	± 0.98[a]	0.5151	4.38	± 0,87
19	4.02	± 1.04[a]	4.01	± 1.03[a]	4.46	± 0.76[a]	0.0876	4.04	± 1,02

*Questions

11 – Do you think on how the object could be reused, before throwing it in the garbage?

12 – Do you separate the recyclable trash (paper, plastic, glass, metal) and discard it to garbage collection?

13 – Do you recycle any of the trash you produce?

14 – Do you turn off the lights, the TV, the sound system, the fen/heater when you leave a room?

15 – Do you close the tap while brushing the teeth?

16 – Do you close the shower while soaping up in bath?

17 – Do you use the paper-towel as recommended (two sheets at the time)?

18 – Do you avoid printing unnecessary files (ex: e-mail contents and attachments)?

19 – Do you use both sides of the sheet to print or reuse the sheets as scratch paper?

Caption: μ: means

Sd: standard deviation

a, b: Different letters mean different means (p<0.05) in the multiple comparison test

Source: elaborated by the authors

Discussion

Based on the results of the questionnaire, it was possible getting to know the individuals' statements about their behavior concerning the environmental variables; it was possible identifying positive habit trends regarding the concern with environmental issues in the university's internal community. However, some aspects demand closer attention and stand out as opportunities to develop a local sustainability culture.

The scenario shown by the present perception survey evidences that the internal community is unaware of the institutions' environmental performance, which characterizes the low internal communication level for these indicators. Similarly, the community has little participation in the socio-environmental activities offered by the organization. Some studies state that factors such as transparency and access to information are a relevant part of the mobilization and commitment process of people towards actions concerning sustainability. Buarque (2008) addresses that the local sustainable development depends on the mobilization capacity of the involved actors, along with an innovation environment, which encourages the search for alternatives and generates the community's capacity to adapt to changes.

Another observed aspect shows that, although the community behaves favorably to the sustainable development context, it remains having low knowledge level about the sustainability issue and about the government programs implemented in the last few years in order to encourage public organs to act in the socio-environmental context. Such peculiarities appear as gaps between this group's environmental perception and the insertion of sustainability public policies.

This sustainability dichotomy is supported by some studies, which show that this subject is often isolated and addressed by individual initiatives. Besides, the lack of knowledge or consensus about the sustainability theme are factors that impair the implementation of joint and interdisciplinary actions within the herein addressed context (PALMA; ALVES; SILVA, 2013). Other studies point towards the need of taking the manager to lead the discussions on sustainability by highlighting that the managerial development within the organizations results in potential benefits and promotes critical reasoning in order to achieve this aim (CLOSS and ANTONELLO, 2014).

The mismatch in the relation between perception and sustainability policies enlarges as the Government implements socio-environmental guidelines, without promoting actions to mobilize the involved actors, especially when one assesses the institutional culture and the collective perception in order to develop strategies that lead to the more effective implementation of policies, as well as to the effectiveness of the environmental education process among the participating population.

Therefore, both the actors' mobilization process and the political and collective aspiration connections must consider that the environmental impacts are differently perceived and interpreted by people, since the individual perception affects the way environmental issues are faced. It means saying that the whole community can perceive certain impacts as more important than others, which are real threats (SIQUEIRA, 2008).

Accordingly, the perception assessment shows that the internal community believes that society is responsible for the destination given to the trash it produces; however, the community understands itself as little active in residues selection and recycling practices. Moreover, it is possible assessing that the trash disposal attitude is dominated by the consciousness of cleaning and undoing rather than by the care to properly select and allocate the different types of residues.

Another highlight in the perception regards the results that show a low involvement level of the internal community with recycling practices. Such situation, on the

one hand, depicts a certain lack of interest from this population on the theme or, on the other hand, it depicts lack of encouragement to exercise these practices within the institution. It is worth highlighting that this item has shown the lowest mean indicator in the survey, which demonstrates that the students' category is the one that mostly reproduces this behavior. It can be seen as an opportunity that opens space for these practices to be implemented in the university.

With regard to the use of natural resources, it was found that the internal community tends to have healthy habits from a sustainability viewpoint. The survey has revealed good environmental behavior and perception level among all the interviewees, except for the consumption of water and electric power during the bath. The item ranked low awareness rate regarding the use of these resources.

Finally, according to the identified scenario, it is possible noticing that the university's internal community tends to have a positive perception. However, it presents features of a group that still pays little attention to the environmental impacts resulting from its daily habits, most specifically from the habits that, in order to achieve changes, will demand the individual efforts and dispositions of the involved actors.

Final considerations

The information gathered through the perception survey allowed better knowing the institutional panorama and the behavioral profile of the university community regarding the socio-environmental actions. Thus, the literature synthesized within the present article helped assessing the relation between the government expectations and the degree of environmental awareness in the studied group.

Based on this construct, it was concluded that it is in the theory/practice dichotomy that the challenge of articulating the propositions of the legal dictates and the arrangement of potentialities and deficiencies identified in the studied community is set.

Spreading information about sustainability becomes essential and a priority within the studied context, since the absence of it frustrates the hope of the government to enlarge the collective participation and the exchange of knowledge encouraged by the rules through the replacement of a scenario based on ideas; however, without consolidating actions and meeting targets. Accordingly, it is worth understanding that the environment wherein this information is available to people tend to be more effective in promoting perception, value and behavior changes. Above all, they are more promising to the development of a sustainability culture.

The current study also showed that students present the lowest indices of awareness and adhesion to sustainable practices, an example of it are the practices concerning the reuse and recycling of residues. It means saying that, once education is the pillar of the university business, the herein referred category composes the target audience and, therefore, it must be prepared to play the main role in coping with socio-environmental issues, either in the labor market or in the society itself.

Finally, it is demanding to institutions to take actions aiming at mobilizing the internal community towards the socio-environmental issues by implementing and enhan-

cing the discussion about the subject in order to reinforce the individual and collective participation in sustainable practices and to ratify the government's commitment, which is legitimatized by the public policies implement by it.

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APPENDIX I

Research instrument

The present questionnaire is part of a Master Degree research instrument (UFTM), which has the aim to help understanding UFTM's internal community perception about environmental issues. You were select to participate in the study and, though, we emphasize that your help is substantial. We ask you to answer the questions according to your perception and sense, that you give sincere and personal answers, without the concern with being politically correct, friendly or nice. Please just mark one alternative in each question. You do not have to identify yourself.

1 – Gender: (   ) Female   (   ) Male

2 – Age: (   ) up to 20 years   (   ) between 21 and 30 years

(   ) between 31 and 40 years   (   ) over 41 years old

3 – Identify the category of your link with UFTM:

(   ) student   (   ) professor   (   ) office-technician

4- Family income in minimum wage (m.w.):

(   ) from 1 to 4 m.w.   (   ) from 5 to 7 m.w.   (   ) from 8 to 10 m.w.

(   ) over 10 m.w.

5 – Do you have any knowledge about the UFTM's environmental performance indicators?

(water and power consumption, telephony expenses, generated residues, etc.)

(   ) Yes, due to some research or because it is one of my attributions in the institution.
(   ) Yes, because I already had the curiosity to know it and I believe it is a relevant information.
(   ) No, because I never thought about it or needed to get this sort of information.
(   ) No, because I do not think this information is important.
(   ) No, but I think it is worth having access to this information.

6 – How do you evaluate your participation in residue management programs within the university scope?

(   ) Excellent. Constant and active participation.
(   ) Good. Reasonable participation.
(   ) Regular. Little participation.
(   ) I do not participate, although I know that these activities are available.
(   ) I do not participate, because I do not know the availability of these activities.

7 – Which of the following statements better describes your degree of knowledge about the sustainability theme?

(   ) I have total knowledge about this theme.
(   ) I have a lot of knowledge about this theme.
(   ) I cannot define my degree of knowledge about it.
(   ) I have little knowledge about this theme.
(   ) I know nothing about this theme.

8 – What is the degree of importance you give to the act of capacitating UFTM's employees on sustainability-related subjects?

(   ) Extremely important.
(   ) Very important.
(   ) Important.
(   ) Little important.
(   ) Not important.

9 – Do you know or have ever heard about the Environmental Public Administration Agenda (A3P) or about the Sustainable Esplanade Project (PES)?

(   ) Yes, I know A3P and/or PES.
(   ) Yes, but just a little.
(   ) I have heard about it, but I do not know it.
(   ) I know nothing about it.
(   ) I did not feel like getting to know this subject yet.

10 – In your opinion, who is responsible for separating the recyclable trash?
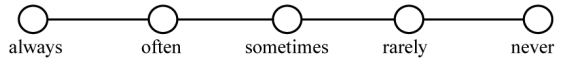
(   ) manufacturers   (   ) society   (   ) government   (   ) cooperatives

Daily habits

11 - Before throwing something away, do you think about how you could reuse it?

always often sometimes rarely never
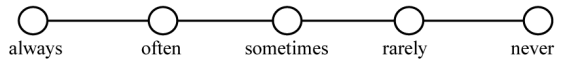
12 – Do you separate the trash able to be recycled (paper, plastic, glass, metals) and dispose them for collection?

always often sometimes rarely never
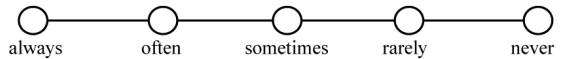
13 – Do you recycle any of the trash you produce?

always often sometimes rarely never
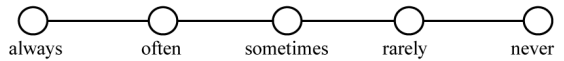
14 – Do you turn off the light, the TV, the sound system, the fen/heater when you leave a room?

always often sometimes rarely never
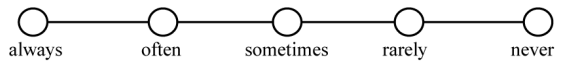
15 – Do you turn off the tap while you brush your teeth?

always often sometimes rarely never

16 – Do you close the shower while you soap up in the bath?

always often sometimes rarely never

17 – Do you use the paper-towel as recommended?

always often sometimes rarely never
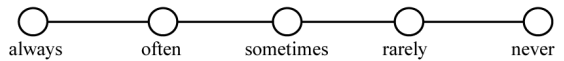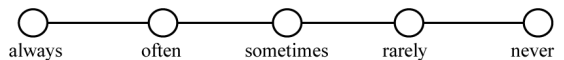
18 – Do you avoid printing unnecessary copies (for example, e-mails and e-mail attachments)?

always often sometimes rarely never
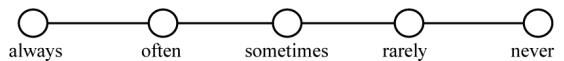
19 – Do you use both sides of the paper sheet when you print something, or use used sheet as scrap paper?
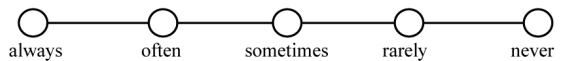
always often sometimes rarely never

ENVIRONMENTAL PERCEPTION AND PUBLIC POLICIES — DICHOTOMY AND CHALLENGES TO THE DEVELOPMENT OF A SUSTAINABILITY CULTURE

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Abstract: The present article presents the outcomes of an environmental perception survey conducted in a Brazilian Federal University, as well as addresses the relation between the culture identified in the studied community and the public policies developed to encourage sustainability. It is a descriptive study based on a quantitative approach wherein a structured instrument was applied to assess the daily habits of 387 individuals from the institution's internal community. The outcomes have shown that this community tends to have a positive environmental perception, although it does not pay much attention to the environmental impacts resulting from its own habits. Based on this construct, the discussion about the government expectations intrinsic to the implemented public policies was addressed, as well as the degree of environmental awareness in the studied group. It was concluded that the socio-environmental scenario in the university is featured by the theory/practice dichotomy, which is a barrier to the local sustainability culture development dynamics and also a challenge to the articulation of legal dictate purposes and the potential arrangements identified in this internal community.

Keywords: Environmental Perception. Public Policies. Socio-environmental management.

Resumo: Este artigo apresenta resultados de uma pesquisa de percepção ambiental, realizada em uma universidade federal brasileira, e discute a relação entre a cultura identificada na comunidade estudada e as políticas públicas de estímulo à sustentabilidade. Trata-se de estudo descritivo com abordagem quantitativa, no qual foi utilizado instrumento estruturado para analisar os hábitos cotidianos de 387 sujeitos da comunidade interna da instituição. Os resultados mostraram que a comunidade interna tende à percepção ambiental positiva, porém percebe pouco os impactos ambientais resultantes de seus hábitos. A partir desse construto, teceu-se uma discussão sobre as expectativas governamentais, intrínsecas nas políticas públicas instituídas, e o grau de consciência ambiental do grupo estudado.

Concluiu-se que o cenário socioambiental da universidade caracteriza-se pela dicotomia teoria/prática, que atua como barreira na dinâmica do desenvolvimento da cultura de sustentabilidade local e desafia que sejam articulados os propósitos dos ditames legais com o arranjo de potenciais identificado na comunidade interna.

Palavras-chave: Percepção Ambiental. Políticas Públicas. Gestão Socioambiental.

Resumen: Este artículo presenta los resultados de una encuesta de percepción ambiental, realizada en una universidad federal brasileña y discute larelación entre lós aspectos culturales identificados enlacomunidadestudiada y las políticas públicas para fomentar lasostenibilidad. Este estudiodescriptivocon enfoque cuantitativoutilizó instrumento estructurado para analizarlos hábitos cotidianos de 387 individuos de lacomunidad universitária. Los resultados muestran que lapoblaciónevaluadatienetendencia para lapercepción ambiental positiva, pero conocepoco sobre el impacto sobre el ambiente resultante de sus hábitos. A partir de esta construcción, se discutenlas expectativas delgobierno, insertadas enlas políticas públicas y el grado de conciencia ambiental del grupo estudiado. Se concluye que elescenariosócio-ambiental de laUniversidad se caracteriza por ladicotomíateoría/práctica, que actúa como una barrera para ladinámicadeldesarrollo de la cultura de lasostenibilidad local y creael reto para que sean articulados lós propósitos de lós dictameneslegales considerando el potencial identificado entre lós indivíduos entrevistados.

Palabras clave: percepcióndelmedio ambiente. Políticas públicas. Manejo social y ambiental.