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# Consciência, comportamento e conhecimento ambiental: uma análise com universitários do curso de Direito

Environmental awareness, behavior, and knowledge: an analysis with Law school students

Conciencia, comportamiento y saber ambiental: un análisis con estudiantes de Derecho

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PALAVRAS-CHAVE Educação Ambiental Sustentabilidade ECCB Resumo: A consciência ambiental e a consequente busca por produtos ambientalmente menos impactantes ao meio ambiente, têm se consolidado nos últimos anos. Influências pessoais e do meio, motivam o comportamento ambiental das pessoas, dentre elas a Educação Ambiental. É fundamental identificar como o conhecimento acerca de questões ambientais pode ser considerado um indicador da ação consciente do consumidor. Para tanto, nada melhor do que focar estes estudos nos futuros formadores de opinião, os estudantes universitários. O objetivo desta pesquisa foi analisar a consciência e os hábitos de consumo dos alunos do curso de Direito, antes e após cursarem disciplina com conteúdo ambiental, por meio escala validada ao contexto brasileiro de Comportamento do Consumidor Ecologicamente Consciente (ECCB) desenvolvida por Roberts (1996). Assim, uma pesquisa quantitativa foi realizada por meio de uma *Survey* com universitários do curso de Direito. A amostra foi composta de 350 respondentes e as



análises foram realizadas por meio do software *RStudio Team* (2015). Os resultados indicam diferenças de comportamento ambiental entre os grupos de alunos que cursaram disciplina com conteúdo ambiental e aqueles que não cursaram, contudo não foram identificadas diferenças na consciência ambiental, sugerindo que existe influência positiva de disciplinas ambientais no comportamento de compra dos universitários.

#### KEYWORDS

Environmental Education Sustainability ECCB Abstract: Environmental awareness and the consequent search for environmentally fewer impacting products have been consolidated in recent years. Personal and environmental influences motivate people's environmental behavior, including environmental education. It is essential to identify how knowledge about environmental issues can be considered an indicator of conscious consumer action. Therefore, there is nothing better than focusing these studies on future opinion makers, university students. The objective of this research was to analyze the awareness and consumption habits of law students, before and after taking a course with environmental content, using a scale validated to the Brazilian context of Ecologically Conscious Consumer Behavior (ECCB) developed by Roberts (1996). ). Thus, quantitative research was carried out through a Survey with university students of the Law course. The sample consisted of 350 respondents and the analyzes were performed using the RStudio Team software (2015). The results indicate differences in environmental behavior between the groups of students who took a course with environmental content and those who did not, however differences in environmental awareness were not identified, suggesting that there is a positive influence of environmental courses on the purchasing behavior of university students.

PALAVRAS-CHAVE Educación Ambiental Sustentabilidad ECCB Resumen: La conciencia ambiental y la consecuente búsqueda de productos de menor impacto ambiental se han consolidado en los últimos años. Las influencias personales y ambientales motivan el comportamiento ambiental de las personas, incluida la educación ambiental. Es fundamental identificar cómo el conocimiento sobre temas ambientales puede ser considerado un indicador de la acción consciente del consumidor. Por ello, nada mejor que centrar estos estudios en los futuros formadores de opinión, los estudiantes universitarios. El objetivo de esta investigación fue analizar la conciencia y los hábitos de consumo de los estudiantes de derecho, antes y después de tomar un curso con contenido ambiental, utilizando una escala validada para el contexto brasileño de Comportamiento del Consumidor Ecológicamente Consciente (ECCB) desarrollada por Roberts (1996). Así, se realizó una investigación cuantitativa a través de una Encuesta con estudiantes universitarios de la carrera de Derecho. La muestra estuvo compuesta por 350 encuestados y los análisis se realizaron utilizando el software RStudio Team (2015). Los resultados indican diferencias en el comportamiento ambiental entre los grupos de estudiantes que tomaron un curso con contenido ambiental y los que no, sin embargo, no se identificaron diferencias en la conciencia ambiental, lo que sugiere que existe una influencia positiva de los cursos ambientales en el comportamiento de compra de la universidad. estudiantes.



# Introduction

The environmental conscience and the consequent search for products with less the environment has impact to consolidated in the last years. After the 80's decade, currents in defense of the environment started to be disclosed in the mass communication means, making the concept green marketing popular (Straughan & Roberts, 1999). The broad disclosure of such concept brought environmental benefits, consolidating in the costumers the recognition of the environment's preservation, through a conscious consumption (Roberts, 1996). Such currents stimulate the consumer's preference by products with less environmental impacts, influencing the behavior and the consumer's attitudes (Aguiar et al., 2018; Finisterra do Paço & Raposo, 2010; Lange & Dewitte, 2019).

In face of such context, multiple studies determined, by validated scales, indicators of awareness and behavior of the individual regarding environmental issues linked to consumption. (Roberts, 1996; Straughan; Roberts, 1999; Zimmer, Stafford & Stafford, 1994). Among the scales used, the one by Roberts (1996) is highlighted, called Ecologically Conscious Consumer Behavior (ECCB), with dimensions associated to consciousness and ecologically conscious consumer behavior. Such scale analyzes the practices of sustainable consumption and has capture been used to the ecological consciousness or environmental concert, as precedents of consumption and environmental Quevedo-Silva, engagement (Freire, Frederico, Vils & Braga Junior, 2021).

The changes in the patterns of consumption, due to the lifestyle, consist in important factors, which influence the environmental degradation. In such sense, the environmental education (EA) has special importance in the process of chance to a sustainable society (Leef, 2005; Yang, Tang, Cheung & Zhang, 2021). The EA consists of

an essential element for an alteration the current environmental degradation pattern. This way, educational practices relevant to environmental issues may assume function, allowing transformation that individuals may become essential to the promotion of the sustainable development (Mondini, Rosa Borges, Mondini & Dreher, 2018; Segura, 2001). Therefore, the EA may be considered a strategic factor to the changes of perceptions and practices in the established relation between the society and the environment (Tzortis, Kniess, Lopes, Ferreira & Junior, 2017; Yang et al., 2021).

One of the important aspects of the formation of consumers is that the EA, which according to the Law no 9.795, of April 27th., 1999, should be present in all levels of formal education, including in college education (L9795, 1999). The university becomes a booster of reflection, development and spread of new environmental visions, with the purpose of stimulating the student to develop a critical sense and ability to understand and act in the society (Martins, 2011). The theme sustainability has been included in the academic environment specially in the college education due to the society's demands, with the purpose of capacitating the future professionals on how to deal with such new challenges in the most several areas (Kuzma, Doliveira, Gonzaga & Novak, 2016; Warner & Elser, 2015).

Practices of sustainability, including actions of EA, in public and private College Education Institutions (IES) were observed by Tzortis et al. (2017). For the authors, the IES have an essential role in the formation of the environmental perception of the students. In addition, Cortese (2003) e Sloan, Davila e Malbon (2013), suggest in their researches that the IES are essential in the formation of future generations, which is responsibility of these IES to promote changes in the contemporary society related to the issues of Sustainability.

It is worth highlighting that, in Brazil, the Federal Constitution (CF) through the article



207, guarantees that the universities have didactic-scientific autonomy (Brazil, 1988), and that, although the National Curriculum Guidelines (DCNs) trace the mandatory disciplines, the CF allows that the curricular structure of the Law Courses may not be identical, in a way that each course define its structure according to the profile of the student wishes to graduate, the particularities, among other elements (Leher, 2019). Therefore, environmental issues may be treated in an interdisciplinary form in the teaching activities in several disciplines of the Law Course including those related to research (Souza & Stohrer, 2020). and extension However, what was seen, based on the content of the analyzed course and that only in the discipline of Environmental Law it was possible to highlight directly the approach of environmental issues effectively in curriculum scope of the Law Course.

One of the possible strategies for the resolution of environmental problems, in order for the society to become more sustainable, is related to the people with conscious individual actions being informed and focused on environmental issues (Brandalise, Bertolini, Rojo, Lezana & Possamai, 2009). Simple and daily activities, such as going shopping, may already be noticed as behaviors and choices that affect the quality of the environment (Freire et al., 2021).

Personal and environmental influences where the individual lives may motive the environmental behavior of people. In such perspective, studies highlight that since the knowledge and environmental perception, the consumer's behavior may be modified (Brandalise et al., 2009; Tzortis et al., 2017; Yang et al., 2021). It is aimed, therefore, at knowing how the knowledge environmental issues may be considered an indicator of the possibility of a conscious action of the consumer. This way, the question that guided this research was: "Is there a difference in regarding to the consciousness and the environmental behavior of college students from the Law Course who are enrolled in the discipline of Environmental Law and those who are not enrolled yet?" The purpose was to analyze the consciousness and the consumption habits of students from the Law Course, before and after being enrolled in the discipline of Environmental Law. For such, a *survey* was conducted, based on the scale of validation of the Ecologically Conscious Consumer Behavior (ECCB) developed by Roberts (1996), with a sample of 350 students from the Law Course of a university from the city of São Paulo.

It is hoped, with this study, to be able to contribute to the understanding of the consciousness and environmental behavior from the knowledge, through the discussion of the theoretical concepts and flows of actions of such students, as well as providing empiric evidence to the development of public policies of incentive to the inclusion of disciplines with environmental content in the course's framework in all levels, specially in higher education. In addition to the already quoted contributions, the present research may open paths to the relation university-company so that both may work in a holistic way the issues of consciousness and behavior environmental consumption of the college students, fomenting the sustainability and the social-environmental responsibility in both contexts (organizations and IES), such actions may promote the sustainable development of both organizations.

The study is structured in the following way, this first introductory section, the next section presents a general view on the of consciousness fundamentals and environmental behavior as well sustainability. Followed by a section on methodology, which describes the process of gathering, organization and analysis of data. The fourth section presents the empiric findings and a critical analysis of those. The subsequent session suggests practical and management implications and the last section of the article presents the final considerations, limitations and suggestions for future studies.

### Theoretical elements of the research

# Environmental consciousness and sustainability

The environmental consciousness is developed along the life based on beliefs, knowledge and values of each individual. It consist in the cognitive part of the attitude and it is related to the level of knowledge received, added to the memories, and to the information that the consumer receives on brands and ecologic products. This way, at the moment of purchase of environmentally correct products, the knowledge and experiences may be decisive. Therefore, when acquiring such type of product, the consumer ratifies that one's values are in agreement with environmental issues and that one worries about the environment (Gomes, Gorni & Dreher, 2011; Silva et al., 2022; Tambosi, Mondini, da Rosa Borges & Hein, 2014).

The environmental consciousness is highlighted by Butzke, Pereira e Noebauer (2001) as a group of concepts obtained by people through the information perceived in the environment. Therefore, the environmental behavior and the answers to the environment suffer influence of the concepts acquired from them. The environmental consciousness is an essential condition for the consumers to be aware of the more relevant environmental attributes of the products (Costa, Ramos, Vils & Cunha, 2021).

A conscious consumer is the one who, aware to one's habits of consumption and how they may impact the relations between the economy, the society and the nature, aims at disclosing the concept and the practice of conscious consumption, disseminating that the small gestures of consumption performed by a large number of people may promote big transformations (Yang et al., 2021). The conscious consumer is the one who searches

for parity between one's personal satisfaction and the sustainability of the planet, in which, sustainability is an environmentally correct model, socially fair and economically viable (Instituto Akatu, 2010).

The conscious consumer worries about the impact of the production and the consumption on the environment, in addition to searching for balance in the relation between quality, price and social attitude in products and services offered in the market (Mourão, 2005). For Coltro (2006), consume consciously is a matter of citizenship, once the consumption of a large number of people, even for a short period of time, causes environmental impacts Song, Qin e Yuan (2019) highlighted, in their research, that the environmental consciousness plays a mediator role in the relation between the environmental concern and the acquisition of products considered environmentally appropriate.

To understand the conscious consumer, it is necessary to understand the context of products with environmental advantages and the possible definitions involved. For example, Araújo (2010) defines as "ecologically correct products" every product that is artisanal, manufactured or industrialized, of personal food, residential, agricultural industrial, which is not: pollutant or toxic, and which is totally beneficial to the environment and to the health of people, cooperating to the economy development and socially sustainable. Waldman e Schneider (2000) add that ecological products are the ones that generate little or no pollution or are generated from recycling, without significantly impacting the environment.

The consciousness of people regarding environmental problems is decisive to the sensibilization and, consequently, the ecological behavior, making them choose ecologically correct products and making them into ecological consumers (Aguirre, Aldamiz-Echevarría, Charterina & Vicente, 2003; Mondini et al., 2018; Nguyen & Johnson, 2020; Paul, Modi & Patel, 2016; Yang et al.,



2021). This way, Fraj e Martinez (2006) relate that the consumer's behavior, conscious of the environmental problems, has been evaluated not only by the conduct during the purchase, recycling by eliminating a product properly, but also through the observation of the positive and active attitudes, which show the positioning of the conscious consumer.

Some researches highlight that once the consumers become aware of how much of their consumption influence the environment, they tend to change their attitudes and behaviors for the benefit of the future generations (Costa et al., 2021; Paço, Shiel & Alves, 2019; Paul et al., 2016). In this sense, the EA seems to be an important tool for the formation of sustainable consumption attitudes. Researchers suggest that the EA is capable of positively influencing in the environmental consciousness (Aguirre et al., 2003; Mondini et al., 2018; Nguyen & Johnson, 2020; Paul, Modi & Patel, 2016; Yang et al., 2021), on the other hand Olsson, Gericke, Boeve-de Pauw, Berglund e Chang (2019) in their research, identified that there was no improvement in the sustainability consciousness of students from the project Green School Partnership Project in Taiwan (GPPT), promoted by the Ministry of Education from Taiwan. Based on such evidence, this study proposes the following hypothesis:

H1. Environmental Education through the Environmental Law Discipline positively influences the environmental consciousness of the students of Law Course.

## Consumer's behavior and sustainability

To understand the consumer's profile is vital to follow any strategy directed to sustainable consumption. However, it is not that simple, once the human behavior is complex, being influenced by the lifestyle, by social conditions, by the values of society, personal beliefs, culture, among others (Paço et al., 2019). In this logic, the study of the

consumer's behavior involves many areas of knowledge, mainly the social sciences and psychology (Capelini, 2007).

According to Churchill Jr. (2000) the behavior consumer's understands the thoughts, feelings and actions of the consumers and also the influences regarding such behaviors that cause changes. Solomon (2016) completes such concepts and states that the consumer's behavior is an act of individuals or groups selecting, purchasing, using or discarding products, services, ideas or experiences to satisfy the needs and desires. In this sense, Kotler e Armstrong (2007), highlight that the consumer's behavior suffer influence of distinct factors, among them, social, personal, cultural and psychological factors. For this, the study of the consumer's behavior, especially among college students, is important to elaborate the more effective marketing strategies, aiming at attending and satisfying the needs of its target-public, especially to understand how the decision making process of purchasing something occurs to this public (Schinaider, Fagundes & Schinaider, 2016; Solomon, Dahl, White, Zaichkowsky & Polegato, 2014), as well as to promote beliefs and pro-environmental behaviors of college students (Nguyen & Johnson, 2020).

For Brandalise et al. (2009) from the knowledge and from the environmental perception, the consumer's behavior may also be modified. Given that the processing of the information defines a cycle of learning. For Solomon (2016) it is according to the cognitive approach, which the learning is reflected by changes in knowledge, and the focus is centered in the understanding of mental processes, which determine the way that people learn information.

Therefore, it is understood that the environmental behavior and the answers to the environment are also influenced by the concepts acquired in the environment itself (Butzke, Pereira & Noebauer, 2001). The sustainable consumption is defined as being



the consumption of goods and services that respect the natural resources, in a way to ensure the supply of needs from the current generations, without compromising the attendance of the future generations (Matharu, Jain & Kamboj, 2020). The sustainable consumption is highlighted as the type of consumption that involves the reduction of adverse environmental impacts, such as: the increase of renewable sources of energy, the minimization of waste production, from a perspective of the cycle of life that takes into consideration the equal dimension, etc., (Joshi & Rahman, 2019; Paavola, 2001).

According to Efing e Resende (2015), for the conscious consumer to be able to contribute to the sustainable developed, it is essential that there are programs of education which allows people the knowledge around negative environmental impacts that their consumption decision may provoke in society and in the environment. Only the education focused on the conscious consumption is capable of promoting an effective change in the consumer's behavior (Mattia & Becker, 2021).

Alterations in the behavior need social and institutional changes that encourage correct environmental consumption behaviors. For such, it is essential that cultural policies that stimulate sustainable consumption be placed both at the academic as well as the political level (Mondini et al., 2018). Such evidence anchored the proposal of the following hypothesis:

H2. Environmental Education through the Discipline of Environmental Law positively influences the behavior of sustainable consumption by Law students.

# Methodological elements of the research

To answer the proposed question of this study, a Survey research was performed in a sample population of 350 students belonging to the Law course of the Higher Education Institution (IES) in the city of São Paulo. It is

a private institution with several campus spread throughout the State of São Paulo, being over 60 years in the educations market. The IES has more than 150 thousand students in courses of several areas at graduation and Latu and Strictu Sensu post-graduation levels.

The choice for such type of sample (college students) was intentional and by convenience. According to Creswell (2010) in such type of sampling, the researcher has only the data with more easy access, gathering effectively that those may represent the studied population appropriately. Also, due to the argument by Straughan e Roberts (1999) about the importance of measuring the future of conscientious consumption, and, for such, nothing better than to focus these studies on future opinion makers.

Among the 350 students from the sample, 128 are at the 9th. semester, enrolled in the discipline of Collective and Diffuse Law, in which the Environmental Law is part of the programmed content, period in which the students study the concepts related to the environment, environmental responsibility, zoning and environmental license, among others. The other 222 respondents are between the 1st. and 8th semester in which, the referred discipline has not yet been given, since it is part of the 9th semester.

For the construction of the research tool, the already validated scale *Ecologically* Conscious Consumer Behavior (ECCB), as presented by Roberts (1996), which aims at analyzing the consciousness and environmental behavior of the consumers. The scale was structured into 26 items, 15 of consciousness and 11 of behavior, in addition to the questions: gender, age, schooling, income and semester which is enrolled at. The scale of *Likert* type from 0 to 10 was used as an option of answer, in which zero represents fully disagree and ten represents fully agree. Since it is an already validated scale, there was not pre-testing.

An electronic questionnaire was applied during the months of October and November



of 2017, period in which the discipline of Collective and Diffuse Law was offered to the students of the 9th semester for the first time in Law School. With the due authorization of the university's coordination, the researchers transited through the classrooms asking the students to answer the questionnaire remotely.

The *software* used for the data analysis was the package RStudio (Team, 2015). After the imputation of the data from the accepted questionnaires, the first step was to separate the data from the samples into two groups: 1) students who are in the discipline of Collective and Diffuse Law, in which Environmental Law is part of the programmed content and; 2) students who have not yet started the respective discipline. The second separated the assertive into two groups: 1a) related to consciousness and; 2a) behavior. The following step was the data analysis, with the performance of crossing of two groups, which means, from the sample of students and from the assertive.

The comparisons between the groups were based on the t test, with average differences and the sample resulted in normal distribution, as a result of the non-parametric Mann-Whitey test. As for the result of the Kolmogorov-Smirnov test (Spiegel & Stephens, 2000), the result was not normal. The level of significance was of 5%.

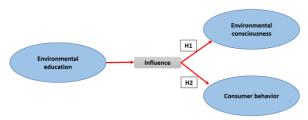
### Presentation and discussion of the results

# **Analysis of the Results**

Based on the bibliographic review, it was possible to highlight researches that suggest pertinent educational practices to environmental questions that may assume a transformation function, allowing the individuals to become essential for the promotion of the sustainable development (Mondini et al., 2018; Segura, 2001). Such research suggest that the EA may be considered as a strategic factor for the change

of perceptions in the established relation between the society and the environment.

The EA is capable of positively influence both the environmental consciousness (Aguirre et al., 2003; Mondini et al., 2018; Nguyen & Johnson, 2020; Paul et al., 2016; Yang et al., 2021) as well as the correct environmental behavior (Mattia & Becker, 2021; Mondini et al., 2018). Based on this, the hypothesis of this research were defined, which established the EA as independent variable and the environmental consciousness and the consumer's behavior as dependent variables, the Figure 1 illustrate such relation.



**Figure 1: Configuration of the Hypothesis** Source: Elaborated by the authors.

To contextualize the findings of this research, the next chapter presents the analysis of the profile of the students, followed by the evaluations of the consciousness and the environmental behavior of the students.

# **Analysis of the profile of the students**

The first part of the questionnaire presented the profile of the sample of students, and with the gathered data it was possible a comparison between the students. According to the data in Table 1, it is observed that 128 (36.6%) of the respondents were in the ninth semester and 222 (63.4%) were on previous semesters, totaling 350 respondents.



**Table 1** – Profile of the Students

Students from the 9th semester			Students previous to the 9th semester		
128 students: 36,6%			222 students: 63,4%		
Average age		32,7	Average Age		32,41
Gender	Male	39,84 %	Gender	Male	37,38 %
	Female	60,15 %		Female	62,62 %
	2° year of high school	39,06 %	Schooling	2° year of high school	51,35 %
ling	Higher education	53,13 %		Higher education	40,54 %
Schooling	Post- Graduatio n	5,47%		Post- Graduatio n	5,86%
	Master	1,56%		Master	0,9%
	PhD	1%		PhD	1%
Income	Up to 1 minimum wage	5%	Income	Up to 1 minimum wage	5%
	Between 1 and 2 minimum wages	21%		Between 1 and 2 minimum wages	23%
	Between 2 and 3 minimum wages	20%		Between 2 and 3 minimum wages	24%
	Between 3 and 5 minimum wages	21%		Between 3 and 5 minimum wages	16%
	Above 5 minimum wages	20%		Above 5 minimum wages	21%
	Rather not answer	13%		Rather not answer	11%

**Source:** Elaborated by the authors.

Regarding the age of the students in the 9th semester, the average is of 32,7 years and of the students from the previous semesters the average is of 32,41 years. As for the gender, the students of the 9th semesters, over 60% were female. As for the college students of the previous semesters, it is noticed that the percentage are very similar, which means, also more than 60% were female. Such results, however, do not represent, significant difference.

As for the level of schooling, the two groups of students also presented similar results, which means, more than 90% are only

in two of the five groups: Complete High School and Higher Education. However, it is assumed that this survey led to an error, since there was not present among the answers the choice of complete higher education or incomplete higher education. Resulting into an elevated percentage of students that answered complete higher education.

Regarding the students' income, both college students from the 9th semester as well as from the students in previous semesters, it is observed the resemblance of the percentage of each income option as well as a certain balance of the answers regarding the profile of the students, it is suggested that there is no significant difference in the profile of the two groups of college students analyzed.

# 1.1. Evaluation of the environmental consciousness

The second part of the questionnaire described the environmental consciousness and had 15 assertive related to the preference of consumption of sustainable products or considered environmentally correct products, as a way to minimize the negative impacts to the environment. Some questions dealt with the consumption of organic food or without pesticides and their contribution to the environment and to the health, as it is highlighted by Gonçalves, Lamano-Ferreira & Ribeiro (2017), according to what is highlighted in Table 2.

**Table 2.** Assertive ECCB – Environmental consciousness

Item	Assertive		
	I prefer products and foods without		
1	pesticides since they respect the		
	environment.		
2	I buy organic products since they are		
2	healthier.		
	I am willing to pay a little bit more for		
3	products and food that are free of chemical		
	elements and that harm the environment.		
	When I buy products and food the		
4	preoccupations with the environment		
	interfere in my purchase decision.		



5	I don't buy products and food that may cause the extinction of some species of animals and vegetables.				
6	I avoid buying products with wraps that are not biodegradable.				
7	Whenever possible, I search for products with reused packing.				
8	I always make an effort to reduce the use of products made with scarce natural resources.				
9	I search to buy household items that consume less energy.				
10	I always try to use household items (for example, washing machine, electric showers and dryers) outside the peak consumption hours, which occur between 6h30 a.m. and 9h30 p.m.				
11	I look to buy products with great amount of wrapping.				
12	When possible, I always choose products that cause less pollution.				
13	I search, insistently, for reducing the consumption of electric energy.				
14	When I am aware of the possible damage that a product may cause to the environment, I do not purchase such product.				
15	I have already changed or left products for ecological reasons.				

**Source:** Elaborated by the authors based on the ECCB (Roberts, 1996)

When performed the test of normality, Kolmogorov-Smirnov, the data showed to be adherent to a normal curve, soon, the test of average differences to be performed is parametric. It was stated that there is no significant difference between those students, once the p-valor was above 0.05 (Table 3).

Table 3- Data of the environmental consciousness

Average of those who were enrolled	6.66
Average of those who were not enrolled	6.38
Student t	1.3761
p-value	0.1699

Source: Data of the research.

Medeiros, Ribeiro e Ferreira (2011) point out that it is important to occur a permanent participating process, which not only become informative, it is essential the practice in a way to develop and to establish a critical consciousness on environmental problems. The EA may be contemplated in Law Course in the transversal components of the

disciplines Criminal Law, Management Law, Work Law, Business Law, Political Science, Law Update and Constitutional Law.

Based on the results of the performed statistical tests, the H1 of the research, in which the Environmental Law Discipline positively influences the environmental consciousness of the students of Law School was refuted. The findings of this research suggest that the practice of interdisciplinary regarding the environmental issues in higher education, specifically in the Law course is still incipient, corroborating with the finding of the research of e Souza e Stohrer (2020), which suggest the lack and commitment of the IES in the creation of the new paradigm of prospective and transforming law teaching, committed to the future generations, with the preservation of natural resources and improvement of the quality of life. Although there is an effort by part of the IES the purpose of the research to include the debate of environmental issues in disciplines related to environmental issues, such findings are congruent with the findings of the research of Olsson et al. (2019), in Taiwan, which did improvement highlighted environmental consciousness of students after participating in green schools in the country. According to Tauchen e Brandli (2006) the practices observed in the higher education with the purpose of qualifying and making the opinion making citizens conscious, specially in Law courses (Souza & Stohrer, 2020).

According to some researches, the awareness of people regarding environmental problems is decisive to the sensibilization and consequently positive environmental behavior, contributing to those choosing ecologically correct products and becoming ecologically conscious consumers (Aguirre et al., 2003; Mondini et al., 2018; Nguyen & Johnson, 2020; Paul et al., 2016; Yang et al., 2021). In this sense, there is the possibility of a pedagogic project that encourages the formation of citizens aware of their social-environmental reality through the obtention of



several types of knowledge about it (Zitzke, 2002).

#### Evaluation of the environmental behavior

The third part of the questionnaire highlighted in Table 4, described the environmental behavior and had 11 assertive. Such steps had the pretension of measuring the consumption behavior of the respondents, represented by their consumption actions by selecting, buying, using or discarding products or services to satisfy their needs and wishes (Peter & Churchill Jr, 2000; Solomon, 2016).

<b>Table 4.</b> ECCB Assertive – Environmental Behavior					
Item	Assertive				
1	In my residence, I separate the dry garbage from the organic garbage.				
2	I search for products made with recycled paper.				
3	I have already convinced friends or relatives not to buy products that harm the environment.				
4	I have switched the lamps of my house for lamps with less power to reduce the consumption of electric energy.				
5	Whenever possible, I buy products made with recycled material.				
6	When I have to choose between two equal products, I always choose the one less harmful to other people and to the environment.				
7	I do not buy products manufactured or sold by companies that harm or disrespect the environment.				
8	I buy more expensive lamps, but that save more electric energy.				
9	I try to buy only products that may be recycled.				
10	I normally buy the product with the lowest price, even knowing that it harms the environment.				
11	I do not buy products to my home that harm the environment.				

**Source:** Elaborated by the authors, based on the ECCB (Roberts, 1996)

The results of the test for normality, Kolmogorov-Smirnov, concluded that the data are not adherent to normality, therefore, the

test of averages performed is non-parametric (p-value = 0.004262). Through the result of the non-parametric test, Kruskal-Wallis, it was concluded that there is significant difference between the students of the ninth semester and from the other semesters regarding the environmental behavior, once the p-value was below 0.05 (Hair et al., 2009), highlighted in Table 5.

The result is consistent with the literature which sustains that the environmental behavior is not always associated, necessarily, to environmental behavior. For example, in a research performed by Gorni, Gomes, Wojahn e Padilha (2016), the results also provided empiric evidence that the environmental consciousness did not present significant relation with the behavior of purchase in a group of college students.

**Table 5** – Data of Environmental Behavior.

Average of the answers of students who are enrolled in the discipline	6.42
Average of the students who are not enrolled in the discipline	5.99
Kruskal-Wallis statistics	5.9038
p-value	0.01511

**Source:** Data of the research

Therefore, the results of this study highlight that possibly the students who are enrolled in the discipline of Environmental Law with the content: Classification of the environment, rules of cooperation environmental matter and environmental management responsibility (civil, criminal), were positively influenced in their environmental behavior. This way, it was possible to confirm the H2 of this study, that EA through the discipline Environmental Law positively influences the behavior of sustainable consumption from Law Course students. The literature suggests that from the knowledge and environmental perception, the consumer's behavior may also be modified. (Brandalise et al., 2009; Joshi & Rahman, 2019; Matharu et al., 2020; Solomon, 2016).



# **Practical and management implications**

The results above reinforce the importance of implementing the National Policy of EA in the environment of formal education, including the higher education, for the formation of citizens with a more acting consistent with sustainable development (Leef, 2005; Segura, 2001; Tzortis et al., 2017), stimulating the sustainable consumption, with the purpose of contributing in the mitigation of adverse environmental impacts (Joshi & Rahman, 2019; Paavola, 2001).

In this sense, some effective actions may be adopted by the IES in the Law course as a way to contribute to the development of the environmental consciousness of the students, as well as involving them in other issues related to the sustainability questions such as the economy of resources, management and minimization of residues, among them, are highlighted:

- To promote programs of Environmental Education for the students, as well as for the teaching, functional staff and to the community external to the IES.
- To reduce the production of solid residues, through programs of segregation, recycling of residues produced in the IES.
- To develop policies and actions that aim at the rational use of water and energy.
- To perform, from the initiatives presented in the previous items, research that allow the evaluation of the effectiveness of the actions and that enable foment to academic publication.
- To develop strategic partnerships with non-governmental organizations and other organisms (public and private) to broaden the scope of the program.

This way, in addition to the effective actions described, it is suggested that it may be included in the disciplines guidelines to the development of consciousness in students through the example of campaigns and educational programs that may contribute to the increase of the environmental consciousness, so that in a posterior moment, influence positively the habits of intention and purchase behavior for students and professors of the IES (Nguyen & Johnson, 2020; Paul et al., 2016).

#### **Final considerations**

This research fulfills its goal of comparing the consciousness and the environmental behavior of students from the Law course that were enrolled in the discipline of Environmental Law with students who were not enrolled yet.

When analyzed the data of the research, it observed that the environmental consciousness of students did not present significant differences between the semesters, even considering the programmed content of the school program. As a consequent of such analysis, it was raised the hypothesis that it is necessary a process of sensibilisation and awareness of college students as to the importance of the environment preservation. Since great part of the literature indicates that the higher the consciousness the higher the environmental consumption behavior may be.

The EA may be contemplated in the transversal components of the disciplines of Criminal Law, Management Law, Work Law, Business Law, Political Science, Law Update and Constitutional Law. Therefore, it is suggested that in those disciplines, it may be included guidelines for the development of consciousness of students, through campaigns and educational programs, which may contribute to the increase of environmental consciousness of students from IES (Nguyen & Johnson, 2020).

Regarding the environmental issue, the research points out that there is significant different between the groups. The students from the ninth semester who were enrolled in the discipline with content related to environmental issues have a superior



environmental behavior when compared to the students from previous semesters, who were not enrolled in such discipline. This way, it is possible to highlight that the university is on the right track and that one of the main factors that may influence the purchase behavior of the college students of Law course is related to information.

Although this research presents theoretical and management contributions, it has limitations. One of them is the fact that the study was performed with college students from a single IES. Therefore, due to its limitation, this research portraits a bias from a complex problem, which given its importance requires new studies that may broaden its knowledge. Once this study provides empiric evidence that the environmental disciplines of the Law course may exert positive influence in performance of the environmental behavior of the students participating in this study, and future studies may investigate the factors that influence the development of the environmental behavior, as well as, to provide new looks over the relation between the EA and sustainable consumption.

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