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ENVIRONMENTAL AWARENESS OF CONSUMERS: A STUDY ON THE INTENTION TO PURCHASE BOTTLED DRINKING WATER IN THE CITY OF FORTALEZA/CE¹

CONSCIÊNCIA AMBIENTAL DOS CONSUMIDORES: UM ESTUDO SOBRE A INTENÇÃO DE COMPRA DE ÁGUA POTÁVEL ENGARRAFADA NO MUNICÍPIO DE FORTALEZA/CE

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ABSTRACT

Given the importance of environmental awareness in consumption today, this study aimed to analyze the effect of environmental awareness on the purchase intentions of consumers of bottled drinking water in the city of Fortaleza/CE. To this end, a descriptive, quantitative study was carried out, verifying data collected by means of a survey applied to 212 consumers living in the city of Fortaleza, using exploratory factor analysis as a method, as well as multiple linear regression. The results revealed that consumers' increased environmental awareness drives an increase in their intention to buy bottled drinking water from more sustainable sources, confirming the study's hypothesis. In addition, it was found that consumer income positively affects the level of environmental awareness of individuals.

Keywords: environmental awareness, buy intention, bottled drinking water.

RESUMO

Diante da importância da consciência ambiental de consumo nos dias de hoje, este estudo teve como objetivo analisar o efeito da consciência ambiental na intenção de compra dos consumidores de água potável engarrafada no município de Fortaleza/CE. Para tal, realizou-se uma pesquisa descritiva, quantitativa, em que se verificou dados coletados por meio de *survey* aplicada a

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RELISE

212 consumidores que residiam na cidade de Fortaleza, utilizando como método a análise fatorial exploratória, além de regressão linear múltipla. Os resultados revelaram que o aumento da consciência ambiental dos consumidores impulsiona um aumento na intenção de compra de água potável engarrafada de fontes mais sustentáveis, confirmando a hipótese do estudo. Ademais, verificou-se que a renda dos consumidores afeta positivamente o nível de consciência ambiental dos indivíduos.

Palavras-chave: consciência ambiental, intenção de compra, água potável engarrafada.

INTRODUCTION

The conditions of structural and social change in the economic and consumer system have been increasing, resulting in implications regarding the awareness demonstrated by consumers when facing the problems of modern society (FARIAS, 2019). One of the main challenges experienced is the preservation of water sources suitable for human consumption (potable water), considering that, over time, these sources have become increasingly scarce and of lower quality, becoming a frequent topic in environmental discussions in recent decades (MONDINI et al., 2018). Furthermore, the availability of potable water is essential to humans not only for their survival but also for their economic development, as many people use the commercialization of this product as a means of livelihood (LORENZO, 2016).

Considering the ease of handling and transportation, bottling water is part of a growing market worldwide. Some factors such as convenience, price, accessibility, and health protection may have contributed to the increase in the consumption of bottled water, as well as the reduced reliability regarding the quality of water supplied through public distribution systems, which may have been a determining factor in the growth of demand for this product (REIS; BEVILACQUA; CARMO, 2014).



RELISE

Brazil ranks fifth among the countries that consume the most bottled water in the world, according to data from the Beverage Marketing Corporation (BMC), and bottled water is also the fifth most consumed beverage in the country (ASSIRATI, 2014; RODWAN JR, 2018). The increase in demand occurred especially due to the improved distribution of this product in the market (GORINI, 2000), among other factors related to the distribution and availability of potable water, which has been treated in a simpler manner in the country.

Among the environmental issues discussed regarding bottled water are the use of packaging for storing the product, which will later be discarded or reused, and the origin of water sources: natural or artificial (BARÃO, 2011). Regarding packaging, which is generally made of plastic or glass, the greatest concern revolves around disposal after water consumption, since improper disposal can generate significant negative impacts on the environment (MONDINI et al., 2018).

Potable water marketed in the industry includes mineral water and water with added salts. Mineral water is obtained directly from natural sources or through the extraction of groundwater, with characteristics that confer medicinal properties (BRAZIL, 1945). Water with added salts is water suitable for human consumption that receives the addition of at least 30 mg/L of mineral salts (ANVISA - NATIONAL HEALTH SURVEILLANCE AGENCY, 2018). The main difference between these types of potable water is the source, since mineral water comes from more sustainable sources. Therefore, organizations that commercialize bottled potable water have an even greater responsibility regarding the preservation of environmental balance.

Environmental issues have been debated internationally and continuously over recent decades. Consequently, there is pressure from consumers in the search for products that are produced in a more sustainable manner. From this perspective, the growth of what may be called “environmental awareness” has



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been transforming the consumption habits of the population (SILVA; LIMA FILHO; FREIRE, 2015), indicating the increasing popularization of sustainable consumption and various factors as influencers of consumer purchasing behavior (LOIOLA; DE SOUZA; HOFFMANN, 2021).

According to some previous studies (BEDANTE, 2004; BORGES et al., 2019; SILVA; LIMA FILHO; FREIRE, 2015), consumer environmental awareness is presented as a factor that enhances the consumption of more sustainable products and positively influences the behavioral intentions of the individuals studied. According to Silva, Lima Filho, and Freire (2015), the level of environmental awareness influences purchase intention and is associated with individuals' level of education.

Therefore, given the relevance of the topic in both organizational and environmental contexts, the following research question emerged: Does environmental awareness influence the purchase intention of consumers of bottled potable water from more sustainable sources? To answer this research question, the objective was established to analyze the effect of environmental awareness on the purchase intention of bottled potable water consumers in the municipality of Fortaleza, Ceará, Brazil.

The justification for this study is related to the importance of environmental awareness nowadays, as potable water is considered a natural resource originating from the environment and, for this reason, its availability and quality necessarily depend on the balance of ecosystems (VACCARI; COHEN; ROCHA, 2016). However, the intensive extraction of this resource is not always accompanied by sustainable practices on the part of companies, generating negative externalities for nature and various damages to future generations (MARTINS et al., 2018).

Furthermore, one of the ways to understand consumer behavior is through purchase intention (BARÃO, 2011; BORGES et al., 2019). However, there is a



RELISE

17

scarcity of studies investigating the influence of environmental awareness on the purchasing decisions of bottled potable water consumers, despite the fact that this product is consumed on a large scale worldwide. It is therefore assumed that associating environmental awareness with consumers' desire to purchase may produce important results and further expand discussions on the subject.

THEORETICAL FRAMEWORK

This section presents the theoretical positions that served as the basis for the development of the research reasoning. Initially, considerations regarding environmental awareness and consumer behavior are presented. Subsequently, information about sustainable consumption is discussed.

Environmental awareness and consumer behavior

The growing supply and demand for environmentally friendly products indicate that the environment has become an important driver of consumer and producer decisions (MICHAUD; LLERENA, 2011; MONT; PLEPYS, 2008). Thus, with the rapid dissemination of ecological issues through mass media worldwide, a greater contribution of society to environmental awareness can be observed (VELTER et al., 2009).

Given the various ecological impacts caused and the forecast of future damage, a large portion of consumers realized that their purchasing behavior had a direct effect on many ecological problems (FARIAS, 2019); consequently, people have demonstrated greater concern regarding their purchasing decisions. In this sense, studies indicate that individuals who are more concerned about the environment are also more likely to exhibit environmentally friendly behavior (ROBERTS; BACON, 1997), as well as environmentally conscious behavior (CZAP; CZAP, 2010).



RELISE

Bedante and Slongo (2004) define environmental awareness as an individual's tendency to position themselves in favor of or against issues related to the environment. From this perspective, individuals with higher levels of environmental awareness would make decisions while considering the environmental impact of their actions. According to Dias (2013), individuals who reach a certain level of environmental awareness begin to use environmental resources in a sustainable manner, that is, without harming the environment for future generations.

According to Schlegelmilch, Bohlen, and Diamantopoulos (1996), environmental awareness is a multidimensional construct composed of cognitive, attitudinal, and behavioral elements. According to the classical Theory of Reasoned Action developed by Fishbein and Ajzen (1975), behavior is explained through behavioral intention, its relationship with attitude toward the behavior, and subjective norm, with the latter two being the only psychological factors with direct influence on behavior.

For Braga Junior and Silva (2013), individuals build their acquisition intention, which may subsequently become an attitude and purchasing behavior. Currently, factors such as knowledge of environmental issues and environmental concern may serve as environmental influence elements that interfere with purchasing behavior for green products in retail and have been gaining importance in the information search and alternative evaluation process in Brazil.

Andrés and Salinas (2002) point out that individuals with higher levels of environmental awareness would have a more positive environmental attitude. Consequently, people with stronger ecological attitudes demonstrated that they behave in a more environmentally favorable manner.

Bedante's (2004) research revealed that sustainable consumption was directly related to the consumer's level of environmental awareness, as was also observed in the study by Aguiar et al. (2018), which showed that awareness of



RELISE

19

the relationship between the planet's sustainability and the lives of future generations influences consumers' preference for sustainable products.

Still regarding consumption, Yakita and Yamauchi (2011) state that an individual's environmental awareness is described by their sensitivity and respect for the environment when consuming products with good environmental quality, assuming that individuals recognize the environmental compatibility of goods when purchasing them.

In light of this scenario, the literature indicates that increasing levels of environmental awareness have a major impact on consumer behavior and, consequently, on purchase intention. Therefore, the following hypothesis was formulated: environmental awareness positively affects consumers' purchase intention for a type of bottled potable water from more sustainable sources.

Sustainable consumption

Accelerated economic development has resulted in the excessive consumption of natural resources and the disruption of ecological balance. Global warming, ozone depletion, water and air pollution, and species extinction have become central environmental issues (TANNER; KAST, 2003).

As a consequence, maintaining or restoring environmental quality is no longer the concern or task of only a few scholars and researchers. In this context, sustainability emerges as part of the reflection process aimed at balancing the numerous and serious environmental problems (GONÇALVES-DIAS; MOURA, 2007; LOIOLA; DE SOUZA; HOFFMANN, 2021; SOUSA; SILVEIRA; LA ROCCA, 2020).

Portilho (2005, p. 39) argues that the issue of sustainable consumption has become central to contemporary environmental policies due to the shift "from concern with environmental problems related to production to concern with environmental problems related to consumption and lifestyles themselves."



RELISE

20

According to Albuquerque Júnior et al. (2013), consumers have moved away from concerns centered on individualistic consumption actions toward more responsible consumption.

Rodríguez Arancibia (2012) argues that sustainable development will not be achieved merely through changes in production and consumption patterns if the same perspective of viewing and treating nature solely as a resource persists. Thus, there is a need for a sustainable approach to changing current consumption patterns, aiming to reduce and recover part of the environmental degradation present on our planet as an evident consequence of unsustainable production and consumption patterns.

Vermeir and Verbeke (2006) and Michaud and Llerena (2011) emphasize that consumers are increasingly aware of environmental issues and may express this concern through their consumption choices, refusing to purchase more polluting options, for example. From this perspective, Roberts (1996) argues that environmentally conscious consumers buy products and services that have a positive impact on the environment.

Sustainable consumption is presented as a new approach regarding public consumption strategies, new forms of corporate production, and changes in individual behavior in the marketplace. In other words, sustainable consumption results from the interrelationship among social actors, in which each one must assume distinct yet convergent responsibilities toward a common purpose: sustainable development (PORTILHO, 2005; SILVA; GÓMEZ, 2011).

According to Hansen and Schrader (1997), Loiola, De Souza and Hoffmann (2021), and Marchand and Walker (2008), sustainable consumption corresponds to respecting environmental resources in a manner that guarantees the needs of present generations without compromising the needs of future generations. In other words, sustainable consumption fulfills individuals' basic needs while improving quality of life, while at the same time reducing the use of



RELISE

natural resources, toxic substances, and pollutant emissions throughout the life cycle of consumed products or services, with the intention of not harming future generations (VERMEIR; VERBEKE, 2006).

METHODOLOGY

The research is quantitative in nature with a descriptive approach. The population selected for this study consists of bottled potable water consumers residing in the municipality of Fortaleza, Ceará, Brazil. The sample is non-probabilistic and based on convenience, composed of consumers who were willing to participate in the study. A total of 212 respondents participated.

Data collection was conducted between July 1 and July 28, 2023, through structured questionnaires (survey) hosted on the Google Forms platform. The instrument consisted of 15 questions related to respondent characterization and 11 items distributed across two scales.

To measure environmental awareness, seven items from the Environmental Concern (EC) scale were used, originally proposed by Straughan and Roberts (1999) and designed to study environmentally conscious consumer behavior. The scale was translated by Bedante (2004) and replicated in the Brazilian context. To measure purchase intention, a four-item scale was developed based on Silva, Lima Filho, and Freire (2015) to assess consumer purchase intention for bottled potable water.

All items were measured using five-point Likert agreement scales, ranging from (1) “strongly disagree” to (5) “strongly agree”.



RELISE

22

Chart 1 – Environmental awareness and purchase intention scale

Code	Variables
	Environmental awareness
CA1	Human beings must live in harmony with nature in order to survive better.
CA2	Plants and animals exist primarily to be used by human beings.
CA3	Planet Earth is like a spaceship, with limited space and resources.
CA4	Humanity is seriously abusing the environment.
CA5	Human beings do not need to adapt to the natural environment because they can adapt the environment to their needs.
CA6	We are approaching the limit of the number of inhabitants that Earth can support.
CA7	The balance of nature is very delicate and easily disturbed.
Code	Purchase intention
IC1	I would buy a type of bottled water because it is sustainable if it were available where I do my shopping.
IC2	I would switch the type of bottled water I currently consume if I found another type that is more sustainable.
IC3	I would be willing to pay more for a type of bottled water that is sustainable.
IC4	In the future, I will buy types of bottled drinking water if they are sustainable.

Source: Adapted from Straughan e Roberts (1999); Silva, Lima Filho e Freire (2015).

The questionnaires collected were subjected to a series of statistical analyses. Initially, a descriptive analysis was conducted in order to establish the respondents' profile with regard to gender, age, education level, family income, frequency of bottled water consumption, and place of bottled water purchase. Subsequently, using the Environmental Awareness and Purchase Intention scales, a factor analysis was performed with the objective of identifying the latent variables related to both constructs in the sample of this study. Factor analysis is a tool capable of reducing the dimensions of a problem, decreasing the number of variables to be studied while minimizing information loss as much as possible (TUFFÉRY, 2011). The factor analysis highlighted in this research is based on a principal component analysis with the varimax rotation method.

Finally, through the latent variables derived from the environmental awareness and purchase intention scales obtained through factor analysis, the dimensions were identified and the means of the items within each scale dimension were calculated for each construct. Thus, a multiple linear regression was applied in order to analyze the influence of environmental awareness on the purchase intention of bottled potable water. According to Hair Jr. et al. (2009), in



RELISE

23

simplified terms, multiple regression analysis is a technique intended to analyze the relationship between one dependent variable (criterion) and more than one independent variable (predictors), aiming to use the predictors to forecast the values of the criterion established in the research. Therefore, three models were estimated, using purchase intention as the dependent variable, the dimensions of environmental awareness and the combined level of these dimensions forming environmental awareness as the independent variables, and sociodemographic variables such as age, education, gender, and income as control variables.

It should be noted that demographic variables, which in this study are considered control variables, have already been validated as important constructs in studies of sustainable consumer behavior, as discussed in the research of Roberts (1996), Straughan and Roberts (1999), Getzner and Grabner-Kräuter (2004), and Solomon (2011).

RESULTS ANALYSIS

Respondent profile

The discussion of the results begins with an analysis of the respondents' profile regarding their sociodemographic characteristics, as highlighted in Table 1.



Table 1: Sociodemographic analysis of the respondents

Variables	Classes	Absolute Frequency	Relative frequency
Gender	Masculine	88	41,5%
	Feminine	124	58,5%
Age	From 18 - 29 years	76	35,84%
	From 30 - 45 years	107	50,47%
	From 46 - 60 years	24	11,33%
	Over 60 years	05	2,36%
Education Level	Completed Elementary School	08	3,8%
	Completed High School	64	30,2%
	Bachelor's Degree	93	43,9%
	Graduate Specialization	19	9%
	Master's Degree	17	8%
	Doctoral Degree	11	5,2%
Household Income	Up to R\$ 1.000	09	4,2%
	From R\$ 1.001 to R\$ 2.000	26	12,3%
	From R\$ 2.001 to R\$ 3.000	26	12,3%
	From R\$ 3.001 to R\$ 5.000	40	18,9%
	Over R\$ 5.000	111	52,4%
Bottled Water Consumption	Daily	17	8%
	Weekly	145	68,4%
	Biweekly	24	11,3%
	Monthly	01	0,5%
	Others	25	11,8%
Place of Purchase	Mini market	140	66%
	Supermarket	14	6,6%
	Others	58	27,4%

Source: Elaborated by authors.

Through Table 1, it can be inferred that the research sample consisted of 212 respondents, with the number of women (58.5%) exceeding that of men (41.5%), as also evidenced in the studies by Lima-Filho and Quevedo-Silva (2012) and Silva, Lima Filho and Freire (2015), which highlighted women as primarily responsible for their household's general purchases, as well as Santos and Conke (2014), who pointed out that women tend to be more inclined toward sustainable behavior.

Most respondents were between 30 and 45 years old (59.47%). Regarding educational level, 43.9% held a bachelor's degree, while only 22.2% reported having completed postgraduate education (9% with a graduate specialization, 8% with a master's degree, and 5.2% with a doctoral degree).



RELISE

Household income above R\$ 5,000.00 (52.4%) was the most frequently reported income category among respondents.

Regarding the frequency of bottled water consumption, 68.4% stated that they consume it weekly. Thus, the types of bottled water most frequently reported by respondents were mineral water (64.6%), followed by water with added salts (32.5%), while a minority reported consuming another type (2.9%). Concerning the place of purchase of bottled water, it is noteworthy that, unlike what has been reported in other studies (ALBUQUERQUE JÚNIOR et al., 2013; SILVA; LIMA FILHO; FREIRE, 2015), mini markets account for the largest share of sales.

Validity and reliability of the environmental awareness and purchase intention scales

In order to identify the predominant variables of the environmental awareness scale and its dimensions, an exploratory factor analysis (EFA) was conducted. It was found that, among the scale originally composed of seven items, all presented measures of adequacy or communalities greater than 0.5. The EFA results for the seven items are presented in Table 2.

Table 2: factor analysis and validation of the environmental awareness scale

	Factor Loadings		Communalities	Cronbach's Alpha
	"Balance of Nature"	"Domination of Nature"		
CA1	0,526	-0,423	0,556	0,653
CA3	0,690	-0,053	0,578	
CA4	0,545	-0,393	0,552	
CA6	0,773	0,163	0,624	
CA7	0,646	0,019	0,417	
CA2	0,016	0,792	0,627	0,600
CA5	0,017	0,795	0,632	

Source: Elaborated by authors.

Through Table 2, it can be observed that the EFA revealed the grouping of environmental awareness into two factors (dimensions), namely: "Balance of



RELISE

Nature” and “Domination of Nature.” The dataset, considering the seven items, presented a KMO test value of 0.662, which, according to Hutcheson and Sofroniou (1999), is considered good. Furthermore, Bartlett’s Test of Sphericity showed statistical significance below 1%. Thus, the results of both tests confirm the adequacy of the factor analysis, attesting to the statistical validity of the environmental awareness scale with two factor loadings.

Among all the solutions tested, the one in which two factors were formed was retained. Therefore, for each of the dimensions formed by the environmental awareness scale, Cronbach’s Alpha was calculated in order to test its reliability. Accordingly, as shown in Table 2, the alpha coefficient values were greater than 0.5, indicating that all questions have a high correlation with the dimension to which they belong, confirming their reliability, since George and Mallery (2003) emphasize that Cronbach’s Alpha values should be at least 0.5.

Therefore, environmental awareness was composed of questions 1, 3, 4, 6, and 7, belonging to the “Balance of Nature” dimension, while questions 2 and 5 comprise the “Domination of Nature” dimension.

A factor analysis was also conducted for the purchase intention scale, in which all questions presented measures of adequacy or communalities greater than 0.5. The results are presented in Table 3.

Table 3: Factor analysis and validation of the purchase intention scale

	Factor Loadings	Communalities	Cronbach’s Alpha
	Purchase intention		
IC1	0,749	0,561	0,800
IC2	0,831	0,691	
IC3	0,759	0,576	
IC4	0,835	0,698	

Source: Elaborated by authors.

As shown in Table 3, all items were grouped into a single factor. For this dataset, the KMO index was 0.768, while the p-value for Bartlett’s Test of Sphericity was less than 1%. These results confirm the adequacy of this dataset



RELISE

27

for EFA. Furthermore, the value of Cronbach's Alpha was greater than 0.5, indicating a high correlation between the questions and the dimension to which they belong.

Influence of environmental awareness on the purchase intention of bottled potable water

Using the factor loadings extracted from the environmental awareness and purchase intention scales, it was possible to identify the latent variables of the constructs that were used in the regression models. Thus, three models were estimated, using purchase intention as the dependent variable, the dimensions of environmental awareness, as well as the combined level of these dimensions forming environmental awareness as the independent variables, while sociodemographic variables such as age, education, gender, and income corresponded to the control variables. The results of the models are presented in Table 4.

Through Table 4, it can be inferred from the F-test that all models were significant at the 1% level. It can also be observed that the explanatory power of Models 1, 2, and 3 corresponds to 9.1%, 8.8%, and 12.4%, respectively. Furthermore, through the residual behavior test (Pesaran–Pesaran), it is confirmed that the assumption of homoscedasticity was not violated, just as there were no problems of serial autocorrelation (Durbin–Watson close to 2) or multicollinearity ($VIF < 5$). These tests validate the application of multiple regression.



Table 4: Multiple regression of the influence of environmental awareness on the purchase intention of bottled potable water

Variables	Model (1) “Purchase intention”	Model (2) “Purchase intention”	Model (3) “Purchase intention”
Balance of Nature	0,379*	-	-
Domination of Nature	-	0,260**	-
Environmental Awareness	-	-	0,437*
Age	0,001	0,012	0,002
Education Level	-0,003	-0,060	-,046
Gender	-0,025	0,145	-0,148
Income	0,030***	0,014***	0,117**
_Cons	2,485*	4,110*	2,034*
Sample	212	212	212
VIF	<5	<5	<5
Pesaran–Pesaran Test	1,51	1,53	1,62
Durbin–Watson Test	1,7156	1,564	1,984
Teste F	2,646	1,033	5,807
Sig.	0,000**	0,000***	0,000*
R ²	9,1%	8,8%	12,4%

Note: *significant at 1%. ** significant at 5%. ***significant at 10%.
Source: Elaborated by authors.

Also according to Table 4, it can be verified that the dimensions “Balance of Nature” and “Domination of Nature,” identified in Models 1 and 2, were statistically significant at the 1% and 5% levels, respectively. The positive effect of these dimensions on the purchase intention of the more sustainable type of bottled potable water demonstrates that people are concerned with sustainable behavior related to potable water consumption, considering that this is part of pro-environmental behavior (WALL; DEVINE-WRIGHT; MILL, 2004).

The level of environmental awareness also showed a positive and significant influence on the purchase intention of bottled potable water from more sustainable sources. Individuals with higher levels of environmental awareness tend to make decisions while considering the environmental impact of their actions. In other words, individuals with higher levels of environmental awareness tend to have a more positive environmental attitude, corroborating the findings of



RELISE

Dias (2013), Andrés and Salinas (2002), Bedante (2004), and Aguiar et al. (2018).

From an analytical perspective, it is assumed that the way water is extracted from the environment may generate an imbalance in nature, from the bottling and transportation processes onward, since the intensive extraction of this resource is not always accompanied by sustainable business practices, generating negative externalities for nature and various damages for future generations (MARTINS et al., 2018). In this sense, consumers' level of environmental awareness may contribute significantly to reducing the consumption of products with less sustainable characteristics, such as bottled potable water originating from non-natural or artificial sources. Therefore, it is essential to promote greater environmental awareness, since it affects consumer actions regarding the environmental impact of their decisions (BEDANTE; SLOGO, 2004).

It can therefore be observed that environmental awareness and its dimensions positively influence the purchase intention of bottled potable water from more sustainable sources, confirming the general hypothesis of this study. This result is supported by Kahle (1996), Marchand and Walker (2008), Menon and Menon (1997), Motta and Rossi (2001), Priewasser (1998), Vermeir and Verbeke (2006), Peattie (2010), and Webster Jr. (1975). In fact, Menon and Menon (1997), Priewasser (1998), and Peattie (2010) pointed out that environmental awareness is considered the main driver of more sustainable purchasing decisions.

Furthermore, it was found that income showed a significant and positive relationship with the purchase intention of more sustainable bottled potable water in all models. Thus, for each additional unit of income, the greater the purchase intention for the more sustainable type of bottled potable water, *ceteris paribus*. It should be noted that the variables gender, age, and education level did not



RELISE

show statistical significance in any of the models, diverging from Roberts (1996), Straughan and Roberts (1999), Getzner and Grabner-Kräuter (2004), and Solomon (2011), who argue that these are relevant factors for understanding behavior.

It should be emphasized that studies dealing with demographic variables may present considerable variation in their results, and in all cases there are studies that contradict theoretical expectations (DACIÊ et al., 2015; NEWELL; GREEN, 1997; RIBEIRO; VEIGA, 2011; STRAUGHAN; ROBERTS, 1999), especially regarding water consumption, which, according to Martins et al. (2018), remains a relatively underexplored topic, considering that most studies focus on green consumption and ecological behavior.

FINAL CONSIDERATIONS

This study analyzed the effect of environmental awareness on the purchase intention of bottled potable water consumers in the municipality of Fortaleza, Ceará, Brazil. To this end, a quantitative-descriptive study was conducted with a sample of 212 consumers residing in Fortaleza, Ceará.

The study results indicated that the dimensions of environmental awareness and their respective levels positively affect consumers' purchase intention for the more sustainable type of bottled potable water, confirming the hypothesis of this research. The positive effect of the dimensions of environmental awareness on the purchase intention of more sustainable bottled potable water among the consumers surveyed demonstrates the existence of a concern for sustainable consumption, as also revealed in the studies by Bedante (2004) and Silva, Lima Filho, and Freire (2015). On the other hand, this effect was contrary to that observed by Borges et al. (2019), who identified a weak relationship between environmental awareness and the purchase intention of organic product consumers.



RELISE

31

Moreover, it was identified that consumers' income may contribute to an increase in the purchase of more sustainable bottled potable water, whereas gender, age, and education level did not show any influence on the consumption of this product. Overall, the results indicated that the consumption of the more sustainable type of bottled potable water may be greater or lower depending on the level of environmental awareness of consumers. It is assumed that the main reasons may stem from the imbalance in nature generated by the inadequate extraction and transportation of this product, with environmental awareness being an important determinant in reducing consumers' purchase intention for the less sustainable type of product.

The findings of this research may contribute both to academic discussions and to the market. Regarding academic production, there has been a growing number of studies published on this topic; however, there is also a notable lack of consensus regarding the effects of environmental awareness on consumer behavior. Thus, this study contributes to the literature by demonstrating that consumers with higher levels of environmental awareness tend to consume more natural products or products originating from more sustainable sources, such as bottled potable water. With respect to the market, the results of this study may provide relevant information for a better understanding of consumer profiles in terms of purchase intention for bottled potable water, serving as a basis for companies that market this product to expand their investments in the development of sustainable projects.

The context of water supply challenges experienced by regions of Brazil has made water consumption a topic constantly debated by society, whether through the media or academia. This allows the present study to contribute new perspectives regarding water consumption and the use of other scarce natural resources.



RELISE

32

Among the limitations of this study is the restriction of the sample, which included only consumers from Fortaleza, Ceará. Therefore, it is suggested that the research model used in this study be applied to a more diverse population, seeking to reach consumers with lower levels of education and income in a more representative manner. In addition, future research in other locations is recommended, allowing comparative results among different regions.



RELISE

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