DINÂMICAS CULTURAIS E CONSUMO SUSTENTÁVEL: UMA PERCEPÇÃO DE ESTUDANTES BRASILEIROS NA ALEMANHA

Iveltyma Roosemalen Passos Ibiapina¹
Sérgio Henrique de Oliveira Lima²
Áurio Lúcio Leocádio³
Diego Sampaio Vasconcelos Ramalho Lima⁴

RESUMO

Este estudo analisou a influência dos determinantes culturais no comportamento de consumo sustentável de indivíduos temporariamente imersos em uma cultura estrangeira. Com base no *framework* proposto por Ceglia et al. (2015) para pesquisas transculturais sobre consumo sustentável, esse estudo investigou a influência da cultura material dos sistemas de comunicação e linguagem no comportamento de consumo sustentável de intercambistas brasileiros que viveram na Alemanha. A pesquisa adotou um desenho interpretativo qualitativo por meio de uma abordagem exploratória e descritiva. Os dados foram coletados por meio de observações participantes e não participantes e entrevistas em profundidade com dez estudantes da área de negócios (seis mulheres) com idades entre 22 e 26 anos. Os alunos deveriam ter estudado em universidades alemãs por, pelo menos, um semestre para participar do estudo. Os resultados mostram que os participantes percebem a influência das diferenças culturais em seu comportamento de consumo. Além disso, a cultura material (por exemplo, objetos, instituições e organizações) e os sistemas de linguagem e comunicação (por exemplo, comunicação verbal e não verbal) influenciam suas práticas de consumo sustentável. Em última análise, isso configura um processo dinâmico de adaptação ao novo contexto cultural em que vivem. Este estudo inova ao trazer uma análise empírica de componentes culturais ainda mal compreendidos. Esses esforços complementam a pesquisa atual e tentam consolidar uma agenda de pesquisa intercultural mais ampla sobre o consumo sustentável.

Palavras-chave: Cultura material. Comportamento do consumidor. Comunicação, Cross-cultural. Transcultural.

CULTURAL DYNAMICS AND SUSTAINABLE CONSUMPTION: A PERCEPTION OF BRAZILIAN STUDENTS IN GERMANY

ABSTRACT

The present study analyzed the influence of cultural determinants on the sustainable consumption behavior of individuals temporarily immersed in a foreign culture. Based on the framework proposed by Ceglia et al. (2015) for cross-cultural research on sustainable consumption, the study investigated the influence of material culture and communication and language systems on the sustainable consumption behavior of Brazilian exchange students living in Germany. The research adopted a qualitative interpretive design through an exploratory and descriptive approach. Data were collected through participant and non-participant observations and in-depth interviews with ten business students (six women) aged between 22 and 26. Students had to have studied at German universities for at least one semester to participate in the study. The results show that participants perceive the influence of cultural differences on their consumption behavior. In addition, both material culture (e.g., objects, institutions, and organizations) and language and communication systems (e.g., verbal and non-verbal communication) influence their sustainable consumption practices. Ultimately, this configures a dynamic process of adaptation to the new cultural context in which they live. The study innovates by bringing an empirical analysis of yet ill-understood cultural components. Such efforts complement current research and try to consolidate a broader cross-cultural research agenda on sustainable consumption.

Key words: Communication. Consumer behavior. Cross-cultural. Material culture. Transcultural.

¹ Doutorando em Administração na Universidade Estadual do Ceará (UECE), Ceará (Brasil). Pesquisador no Laboratório de Estudos para Sociedade Sustentável (LESS). <http://orcid.org/0000-0001-8062-8700> Email: iveltyma.ibiapina@gmail.com

² Doutor em Administração e Controladoria pela Universidade Federal do Ceará, Ceará (Brasil). Professor do Programa de Pós-Graduação em Administração da Universidade Estadual do Ceará, Ceará (Brasil). Pesquisador no Laboratório de Estudos para Sociedade Sustentável (LESS). <http://orcid.org/0000-0002-2738-4492> Email: shlima05@gmail.com

³ Pós-doutor em Gestão Internacional pela Escola Superior de propaganda e Marketing (ESPM-SP). Professor Adjunto da Faculdade de Economia, Administração, Atuárias e Contabilidade da Universidade Federal do Ceará, Ceará (Brasil). <http://orcid.org/0000-0003-3175-3382> Email: aurioleocadio42@gmail.com

⁴ Doutorando em Administração e Controladoria pela Universidade Federal do Ceará, Ceará (Brasil). Professor do Curso de Administração do Instituto Federal de Educação, Ciência e Tecnologia do Ceará (IFCE). <http://orcid.org/0000-0001-9222-8691> Email: diegolima_sampaio@hotmail.com

1 INTRODUCTION

Research on consumer behavior considers culture an important moderator of human behavior (Quezado et al., 2015; Romero et al., 2017), which is often addressed in international studies in this field (McCracken, 1986; Belk, 1988; Pons & Laroche, 2007).

According to Kroeber and Kluckhohn (1952), culture is a set of patterns of behavior, traditions, and values shared by a community. The literature regarding the value dimension of culture has already been consolidated. However, following the dimensions proposed by Craig and Douglas (2006), some issues related to material culture and artifacts as well as communication and language systems, which influence (and are influenced by) the behavior, are still little studied.

The study attempted to answer the following question: “How does the influence of communication and language systems as well as artifacts and material culture on sustainable consumption occur in different cultural contexts?” Thus, the study’s objective was to analyze the influence of these cultural determinants on sustainable consumption by comparing consumer behavior of Brazilian students in a foreign cultural and institutional context.

The foreign cultural and institutional context chosen for the study was Germany. In addition to being the fourth-largest economy, behind only the United States, China, and Japan, Germany is recognized worldwide for its concern with sustainability (Ibiapina et al., 2020).

As argued by Shove et al. (2012), as a social practice, consumption dynamics are subject to the determinants of the cultural context in which they are performed. The material aspect is observed, for instance, when one consumes more than is considered necessary according to the existing moral standards (Miller, 2007).

Communication, in turn, arises from the need to connect and interact with others, bringing together people who are isolated in some way (Hall, 1973). Such cultural influences are expected to be related to consumer behavior, reproducing a set of practices that are possibly different from those identified in the consumer’s culture of origin and revealing a dynamic process of cultural reconstruction (Warde, 2014).

Addressing university students becomes interesting because knowledge about sustainability influences their attitudes, behavior, and consumption (Faria et al., 2018). In addition, higher education plays an important role in society, as universities have a great responsibility in shaping consumption patterns. They contribute significantly to building the capacity of future generations to deal with consumption-related challenges (Barth et al., 2014).

This study was based on the framework proposed by Ceglia et al. (2015) and addressed sustainable consumption from the lenses of material culture and artifacts as well as language and communication systems. We focused on the cultural dynamics underlying the influence of material culture and artifacts and language and communication systems on behavior. More specifically, we analyzed how these components of culture influence sustainable consumption behavior.

The study is structured in four other sections besides this introduction: the second section presented the theoretical underpinning that supported the empirical effort; the third section addressed the research design and methodological procedures; results were analyzed and discussed in the fourth section; a section dedicated to the conclusions and contributions, contributions and implications of the research ends the paper, followed by the references.

2 THEORETICAL BACKGROUND

This section addresses the relationship between culture and consumer behavior; in addition, we discuss some studies investigating the specific cultural dimensions, namely, material culture and artifacts, and communication and language systems.

2.1 Cultural dynamics and sustainable consumption

Early discussions on sustainable development from the consumption perspective were seen at the United Nations Conference on the Human Environment (Unche) in Stockholm in June 1972. Another significant milestone was the 1992 Rio Summit (ECO 92), which also discussed the environmental impacts of consumption patterns in developing and developed economies.

In the following years, these reportedly unsustainable consumption patterns were identified as the leading cause of environmental degradation, so that the World Summit on Sustainable Development, which took place in 2002, put changing consumption patterns as one of its three main goals (Evans, 2011). Also, in 2002, the Rio +10 Conference in Johannesburg, South Africa, shifted the focus of sustainable consumption policy from technological solutions and efficiency gains in resource use to the role of individual consumers for sustainability (Evans, 2011).

In 2012, the Rio +20 Conference reinforced the term sustainable development as a development model "... that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland Commission, 1987) This definition is closely related to the sustainable consumption concept itself (Melo, 2013).

In September 2015, the 193 member countries of the United Nations adopted a new global policy: the 2030 Agenda for Sustainable Development. It listed 17 interrelated sustainable development goals (SDGs) that address the main challenges for improving the quality of life for all people and sustainable development and consumption (UN, 2015).

Authors define sustainable consumption in many different ways. For the purposes of this research, we consider the definition of Barth et al. (2014) to be the most appropriate one because it takes into account the environmental, social, and economic dimensions of sustainability. According to these authors, sustainable consumption optimizes environmental, social, and economic sustainability while mitigating the consequences of the acquisition, use, and disposal of resources to meet both present and future generations' needs.

Studying sustainable consumption requires understanding consumer behavior. Considered one of the most important research strands in marketing studies (Sheth et al., 1988), the consumer behavior school has been gaining prominence in the last decades. This notoriety stems from the importance of consumption in the contemporary world, a phenomenon studied by several disciplines ranging from the social sciences to the human sciences. This multidisciplinary nature has produced a very diverse research field (Warde, 2014).

Khan (2007) argues that external factors such as culture, subculture, values, demographic factors, social status, and reference groups (e.g., friends and family) influence consumer behavior. Intrinsic aspects such as emotions, motivations, attitudes, perception, and learning can also shape consumers' preferences and drive their decision-making process when buying. In this context, culture is considered an important moderating factor of human behavior (Masumoto & Yoo, 2006; Quezado et al., 2015).

It is often addressed in international studies on consumption (McCracken, 1986; Pons & Laroche, 2007; Romero et al., 2017).

Culture is widely studied in Anthropology, and its importance has been recognized in the Applied Social Sciences field. Conceptualizing culture is challenging due to the variety of meanings the term can express (Fischer, 2009). In addition, very comprehensive definitions can neglect the distinction between culture, institutions, and social structure, undermining the analytical utility of the concept (Polavieja, 2015).

One of the most important studies aimed at defining culture was carried out by Kroeber and Kluckhohn (1952) who performed a critical review of about 160 conceptions and definitions of culture to propose their comprehensive definition. For these authors, culture consists of practices, patterns, and behaviors transmitted in different ways, distinguishing groups from each other. In this sense, culture systems might be seen as both products of actions and conditioning elements for further action. For Craig and Douglas (2006), the most widely accepted definition amongst those analyzed by Kroeber and Kluckhohn (1952) is the one proposed by Tylor (1896), for whom culture is a complex social and institutional manifestation that includes knowledge, belief, art, morals, law, traditions, and any other capacities and habits that man acquires in society.

From these discussions, we can observe the relationship between culture and people's behavior. In this sense, two main approaches in cultural sociology investigate the role of culture as a driver of human action. The first one attributes to culture a causal role of human behavior, which would be a consequence of a set of shared beliefs, attitudes, and values. The second approach regards culture as a restrictive force shaping behavior, i.e., a set of symbols, tools, and skills by which people justify their actions (Polavieja, 2015).

Craig and Douglas (2006) grouped the studies on culture and consumption into three broad areas, defining them as components of culture, constituting a framework for addressing consumer behavior in cross-cultural (or transcultural) contexts. These components are (i) language and communication system, (ii) material culture and artifacts, and (iii) values and belief systems. Based on these three elements of culture, Ceglia et al. (2015, p. 419) proposed a framework for cross-cultural research on sustainable consumption. For purposes of alignment with the objectives of the present study, we adapted their framework, as shown in Figure 1.

Figure 1. Framework for cross-cultural research on sustainable consumption

Source: Adapted from Ceglia et al. (2015)

As can be seen, to the three components of the culture (Craig & Douglas, 2006), these authors linked two well-established theoretical-conceptual contributions from the behavioral approach of Psychology field: the Schwartz (1994) theory of basic values and the Ajzen (1991) theory of planned behavior (TPB). According to Ceglia et al. (2015), two fundamental values proposed by Schwartz (1994) – namely, benevolence and universalism – could be dominant in individuals who are supporters of sustainable consumption or are engaged in related practices (Dietz et al., 1998), such as the elimination of waste and the preservation of the environment. The authors further argue that subjective norms and attitudes influence the individual's sustainable consumption behavior.

From a cross-cultural perspective for sustainable consumption, Ceglia et al. (2015) argue that the value system of an individual, as well as the aspects that drive its intention to manifest a specific behavior – in this case, to consume sustainably – are not capable of explaining its action (behavior) of sustainable consumption. Since individuals are subject to cultural variables that influence their values, beliefs, and attitudes systems, their manifested behavior is assumed to be a consequence of the range of determinants discussed above.

In the context studied, Ibiapina et al. (2021) state that several institutional differences between Brazil and Germany make people in Germany consume more sustainably. Among the main cultural differences, the authors highlight the existence of a structure (material culture) that favors sustainable consumption in the European country. Other than that, laws and deeply rooted social norms act as forces that discourage unsustainable behavior. In addition, the cultural context in which an individual is can contribute to building attitudes towards purchase and consumption decisions, whose meaning is acquired and shared by the members of a group (Hofstede, 1991). Through consumption, consumers can express cultural principles and create, promote, or sustain ideas and lifestyles (McCracken, 1986). As Belk (1988) asserts, consumption and possession, in these cases, can be directly related to material culture, a topic that we will address in the following section.

2.2 Material culture and artifacts

Markus and Kitayama (2010) assert that culture is a set of material and symbolic concepts that give form and direction to behavior. According to these authors, the culture is embedded in patterns of ideas and practices, institutions, products, and artifacts. According to Shove et al. (2012), two more elements need to be observed in addition to the material dimension: meaning and knowledge. These three interconnected elements form the social practice. Social practice shapes what is right and what is wrong within the context in which it is practiced.

According to Wenzel and Süßbauer (2021), it is important to understand the practices because they enhance people's ability to define themselves as members of a group, settling their social identity. Practices can thus represent a powerful source for carrying out consistent behavior towards sustainable consumption.

Contemporary thought in Anthropology defines material culture as an “event” or “effect” that emerges from the performance of things, bodies, artifacts, and material spaces (Hicks, 2010; Mitchell, 2013). According to Craig and Douglas (2006), material culture incorporates rituals, artifacts, institutions, and symbols of a given society, establishing rules and norms for general behavior and specific occasions, such as weddings, funerals, and festivals. In a sentence, material culture directly affects the

behavior of individuals who share such culture, and its symbols are one of the characteristics that distinguish it from other cultures (Luna & Gupta, 2001).

The meaning attributed to possessions is another integral component of material culture. Favorite objects, for instance, can be resignified to reflect local cultures (Craig & Douglas, 2006). Belk (1988) argued that objects could be important elements for the identity construction of individuals and groups since they can express their interests and preferences and shape consumption practices and behavior. Thus, people can come together through objects in favor of sustainable consumption. On that subject, Becchetti et al. (2021) cite the case of cash mobs, a practice in which groups of people gather in local stores to buy a specific product – usually with a sustainability characteristic – and make their decisions visible to the general public.

Consumption patterns, in turn, express lifestyles (Wahlen & Laamanen, 2015) and social classes in society (Holt, 1998), giving rise to subcultures. Such patterns thus discriminate the differences between participants and non-participants of specific subcultures. Veblen (1974) emphasizes this social stratification: he suggests the existence of a higher class that, in order to express power and domination, consumes differently from the differentiated class, a phenomenon called conspicuous consumption. On the other side, the study by Kanga et al. (2021) brings minimalism as a deliberate paradigm shift in consumer behavior based on the principle of a sustainable lifestyle.

Rituals and institutions are also essential elements of cultural ties and collective programming shared throughout society. Gift-giving, for example, is one of the most studied social rituals (Teixeira & Freitas, 2011; Ladeira et al., 2016; Ássimos et al., 2017). In general, each culture develops its own gift-giving practices by combining bonds of obligation and reciprocity consistent with the network of social relations (Craig & Douglas, 2006).

Organizations like consumer goods companies, in turn, are directly associated with individuals' consumption. They can influence consumption in opposite ways, either through advertising campaigns to disseminate more conscious consumption practices (Scharf et al., 2017) or encouraging compulsory purchase (Felipe et al., 2017).

Government is another institution influencing consumer behavior. Such an influence occurs through initiatives such as regulation (Dernbach & Mintz, 2011), awareness campaigns, and public policies that promote the well-being of society (ECO, 92; Koontz, 2006). Bradley (2021) highlights that many governments worldwide are taking political actions on sustainable development, but they are still not effective actions. According to the author, a cultural shift towards more sustainable consumption is still needed. This change can take place through innovation in governance structures (for markets and companies) towards sustainable production and consumption, alongside changes in the institutional environment (including legislation) to create an environment where sustainable production and consumption can flourish (Byers & Gilmer, 2021).

As institutions (Meyer & Laschever, 2016), social movements also influence the behavior of people impacted by them, as happened with the environmental movement in the 1970s (Coglianese, 2001). Kim (2017) argues that research on material culture and artifacts does not give due importance to the role of these elements within social movements. However, one recognizes the relevance of such movements in influencing those who share the same set of values and principles.

With the advancement of technology and social networks, these movements have gone digital. Today, several movements seek to make people aware of the impact of consumption on the environment showing the importance of sustainable

consumption. Thus, social movements ultimately influence markets and consumption practices (Hilton, 2007; Holt, 2012; Wahlen & Laamanen, 2015).

2.3 Language and communication systems

Communication studies examine the use of objects and language as culture vectors. Communication is a critical element of culture as it provides a mechanism for transmitting and interpreting messages related to the world around an individual (Babcock & Du-Babcock, 2001).

It occurs in a physical and social context, in which factors such as time, location, and intensity of social relations among its participants, in addition to the influence of competing messages, should be considered (Ihtiyar, 2018). Members of a culture share a common key to interpret their social environment and establish rules to govern interactions (Craig & Douglas, 2006). In communications among members of different cultures (i.e., intercultural or cross-cultural contexts), difficulties in interpreting these rules and context are the norm, leading to a lack of understanding (Spencer-Rodgers & McGovern, 2002). Modes of communication are an integral part of the culture (Hall, 1973). They provide links within and between cultural units. Nonverbal forms of communication, for instance, have been studied in the field of organizational studies (Bonaccio et al., 2016). Addressing the communicational aspects of sustainable consumption, Tseng et al. (2021) argue that the companies' communication (verbal) and product packaging (nonverbal) directly affect consumer perception and behavior. Therefore, they are important aspects for the improvement of sustainable consumption.

Language, in turn, is another key component of communication as it supports the processes of (and the mechanisms for) encoding and decoding messages within a given culture. For that reason, language is a cultural symbol capable of distinguishing cultures from one another (Luna & Gupta, 2001). Thus, a shared language is a significant factor in unifying members of the same culture and providing them with the meanings for cultural artifacts and symbols. Through language, culture is perpetuated, passed from the past to the present (Caune, 2008).

Language plays an essential role in the development of thought patterns and behavioral responses as well as in the intergenerational transmission of cultural norms, shared practices, and behavior patterns. In this way, language can connect members of a specific society and foster intragroup interaction while hindering interaction with members from other societies or cultures (Babcock & Du-Babcock, 2001; Spencer-Rodgers & McGovern, 2002).

One can observe this within the sustainable consumption field. Policymakers, for instance, face the challenge of finding out the appropriate language to use with each generation in order to encourage and sustain appropriate levels of individual behavior change to manage consumption in a changing environment (Byers & Gilmer, 2021).

The linguistic structure influences the formation of cognitive processes, such as perception, judgment, and decision-making (Schmitt & Zang, 1998), brand recognition (Schmitt et al., 1994), and coding and retrieval of information (Tavassoli, 1999). Thus, language and communication systems contribute to constructing products' meanings (Luna & Gupta, 2001). In the same way, foreign language and loanwords can help to establish a local product's identity (Craig & Douglas, 2006).

In the cross-cultural context, differences in norms, beliefs, values, traditions, and self-identification can act as barriers to effective communication. The ways of expressing emotions and perceptions of oneself, other people, and phenomena are often different, resulting in a poor understanding of communication. Nevertheless, even

within a given culture, different groups and communities (i.e., subcultures) may have their particular modes of communication, linking and aggregating themselves internally insofar as segregating others (Gazzola, 2016).

After examining the components of culture, their interrelatedness, and their influences on human behavior and interactions, we discuss the study's design in the following section. We address the methodological procedures employed to empirically analyze the influence of these elements on consumer behavior among different cultural contexts.

3 METHOD

In line with the study's objective, we adopted a qualitative interpretive (Burrell & Morgan, 1979) design with an exploratory and descriptive approach to analyze how the subjects perceive, interpret and understand the phenomenon under investigation (Gil, 2008). According to Merriam (2002), social actors build their own representations of reality when interacting with their social environment, and such representations may help to understand the phenomenon.

We investigate Brazilian students living temporarily in another country and how they behave concerning sustainable consumption under a different cultural context, specifically, Germany. The information obtained in the research was about the students' daily life and their consumption behavior and practices, and experiences in that country.

The study was carried out with students who had just arrived from Germany as they had fresh memories about the experiences of the period. By studying these students' perceptions, we could better understand how the cultural context influences their consumption behavior and practices.

Students had to have studied at German universities for at least one semester to participate in the study. This criterion is due to the ease of access to Brazilian students who have exchanged to that country and Germany's well-known sustainable consumption and production tradition. In addition, we claim that one semester in the destination country is the minimum period for the student to elapse the enchantment phase with the new socio-political, economic and cultural context and incorporate into daily life a more realistic, bias-free view, increasing the ability to analyze and contribute to the study. We adopted codenames to preserve the identity of the participants.

In the data collection, thirty students were initially contacted by e-mail and messaging applications. Of these, sixteen responded, but only ten accepted to participate in the study. Data were collected through in-depth interviews with six women and four men aged between 22 and 26 years. The interviews took place between July and December 2019. Table 1 presents the research participants' profiles.

Table 1. Participants' profiles

#	Codename	Age (years)	Period of stay in Germany	Course	Interview location	Duration (min.)
1	Amanda	24	1 year	Administration	University	44
2	Beatriz	22	1 year	Administration	University	39
3	Daiane	23	6 months	Administration	University	41
4	Jorge	24	1 year	Accounting	University	40
5	Lorena	24	6 months	Administration	Her house	35
6	Lucas	25	7 months	Administration	University	36
7	Maria	25	6 months	Administration	University	37
8	Mariana	24	1 year	Administration	Her house	40
9	Pedro	26	1 year	Accounting	His house	46
10	Victor	25	1 year	Administration	University	41

Source: Research data.

The semi-structured interview script followed the grand tour model (McCracken, 1988), in which more general questions are asked that relate to the analytical categories that emerged from the theoretical review. Firstly, we attempted to obtain a general survey of the students' experience. From their speeches, we then introduced other questions regarding those categories. The interviews produced about 6.5 hours of recording, which we transcribed for upcoming content analysis. One of the researchers engaged in participant and non-participant observations in order to strengthen the body of evidence.

The data were analyzed through a three-stage content analysis, as follows: (i) pre-analysis; (ii) exploitation of the material; and (iii) treatment of results, inference, and interpretation (Bardin, 2010). Figure 01 summarizes the study's methodological procedures.

1st phase	2nd phase	3rd phase
i) First contact with thirty participants explaining about the research; ii) Ten agreed to participate in the research.	i) Data collection through semi-structured interviews.	i) Pre-analysis; ii) exploitation of the material; iii) treatment of results, inference, and interpretation.

Figure 2. Methodological procedures

Source: Prepared by the authors

By adopting this design, we were able to identify and relate theoretical categories that emerged from the data. We used the ATLAS.ti software, version 7.5.4, to perform this content analysis and evaluate our qualitative data.

4 RESULTS AND DISCUSSIONS

Each section below presents the results related to one of the two components of the culture studied here, following the study's objectives

4.1 Artifacts and material culture as antecedents of sustainable consumption

Our findings have evidenced the relationship between material culture and sustainable consumption. Ceglia et al. (2015) argued that an object (artifact) could represent or be part of a sustainable culture, and the research results show that the bicycle emerged as one of these artifacts. In the perception of Brazilian students, German students prefer to adopt the bicycle as the primary means of transport despite having easy access to quality public transportation. In addition, their environmental awareness is also a contributing factor, as can be observed in the interviewees' statements.

[...] a lot of people stop using cars there to use their bicycles, it's absurd. Of course, once again, the city is thought to use a bicycle, you have bike lanes, for example, and they are on the sidewalk, not in the middle of the street [...]. (Jorge)

[...]people there use the bicycle a lot, but I think it's because of a health concern, really, they take care of their health very much [...] but I think that this use of the bicycle also reaches the sustainable perspective, we're avoiding emitting CO₂ when using bicycles. In college, the students can use the *tran*, but they prefer to use the bicycle. I think it's a way to contribute to the environment. (Maria)

The massive use of bicycles is due to several factors: (i) legal and environmental issues: automobiles may be banned in some city regions depending on power and old age because they are responsible for a large amount of CO₂ emission; (ii) habits towards a healthy life: the bicycle is a means of transportation and a way to practice physical activities as well; and (iii) the public infrastructure makes this habit viable.

Some rituals that influence sustainable consumption were observed, like the separation of waste for recycling. In a country historically concerned with solid waste management, recycling is one of the public policies that the government prioritizes, as noted in the interviewee speech.

They are very keen to teach kids to recycle garbage, and they have the day of the week to collect plastic, glass, white glass, dark glass. That is, for the government to collect garbage, the population must dispose of it in the right days, you know? So they know the right days to put the right type of garbage in the right place to collect and we have to learn this. (Lucas)

As one can notice, there is a ritual of separation and collection of household garbage. This finding corroborates the study by Ibiapina et al. (2021). The authors point out different waste disposal practices in the two countries due to cultural and structural factors. Each type of waste has its appropriate destination, one of up to four different dumpsters. The collection of the four types of garbage is also done on specific days. If people do not respect these proper separation and collection days, the government can fine them.

Here, another aspect of material culture is observed, namely, institutions. Germany is one of the most efficient countries in waste treatment among all the European Union (EU) member states. According to Eurostat, the EU statistics body, in 2018, Germany managed to recycle almost 70% of all the municipal waste, while the EU average was about 50%. This result aligns with the country's commitment to achieving the 17 SDGs (Eurostat, 2018).

As reported by Ibiapina et al. (2020), these statistics may be linked to a past of war. Germany was heavily punished with the end of the first and second world wars. As a result, German society developed in an environment of scarcity and constraints, where people had to make the most of each resource.

The government is one of the main institutions of national culture, governing social norms through law and regulations. The German government is an important agent inducing sustainable consumption since its influence can occur through punishments and fines, a state monopoly.

[...] Then you had to put the garbage in the right dumpster, because otherwise the government can fine you, if you put a glass in the wrong trash can, the fine equals 100 euros, for example. [...]. (Amanda)

This result is in line with the study by Byers and Gilmer (2021), where the authors report the government as a key institution in the development of sustainable practices. In addition to the government, which coercively stimulates sustainable consumption through fines and punishments, another institution emerged as encouraging sustainable consumption. We refer to the family. The family is the first social environment of an individual, where the early relationships are built and the development of the *self* begins (Belk, 1988). German families that host Brazilian students convey the beliefs, traditions, and habits that underlie their household trash separation rituals. Students learn what – and how – to do with each type of garbage, doing and learning until it becomes a daily practice.

[...] They learn from a small age at home to separate the garbage, so, there they have a great sense of responsibility in relation to the garbage [...] (Pedro)

Another institution exerting influence on sustainable consumption is networks of supermarket retailers. However, unlike the coercive character employed by the government, retailers encouraged sustainable consumption in two ways: first, they encourage the adoption of returnable bags by charging for the plastic bags, thereby reducing the consumption of an offending item of the environment.

I thought it's hilarious. There is no disposable bag as we have here in Brazil, there you have to buy them. And each plastic bag costs around 10, 20, 50 cents! Then, you will not buy one all time you go to the supermarket, so you bought a returnable bag and reused it several times... So, you did not throw a bag out because you paid for that, I know that here (in Brazil) you are paying too (embedded in the price), but there you saw it came out of your pocket directly, you paid 50 cents for that bag. (Beatriz)

Furthermore, retailers in Germany also collect both glass and plastic bottles for reuse. Customers can dispose of their bottles at a specific machine that gives them credit vouchers in exchange, according to the quantity and type of bottle deposited in the machine, as depicted in Figure 3.

[...] you buy a bottle, some beer, anything... and there, it says it costs 50 cents, but when you go to the cashier, you have to pay 75, because 50 cents were just the content, then you have to pay the 25 for the bottle. Then you can dispose of the bottle in the machine and get the 25 cents back, all inside the supermarket. (Beatriz)

Figure 3. Bottle disposal machine

Source: Research data

This return system for bottles and cans supports the study by Bradley (2021), who emphasizes the need for alliances and advances through innovation in the structures of markets and companies towards sustainable production and consumption.

Regarding material culture, Holt (1998) posits that consumption patterns themselves demarcate the lifestyles and social classes of a given culture. Such patterns were observed mainly in food consumption. Food is different from the usual Brazilian practice: they started to care most for health and eat more healthfully. This consumption

pattern ultimately influences people from another culture, as can be observed in the words of an interviewee.

[...] Everything around you in the environment influences. For example, once I got there at the university restaurant, then I opened a fat hamburger, and then they said “you are going to eat this [obscurity] hamburger!?” Then I felt so bad, and I said “it’s just because I don’t have time now...” “Even then... you’re going to eat this crap that will kill you... this is not even real meat!” Several times they said “what [obscurity]!”, or “what crap!”, so with these impulses, you start to think that it’s really crap. (Jorge)

Accepted norms and social rules are also part of material culture. They are not institutionalized in laws and regulations but are followed by society because they are rooted in morals, values, and traditions. The research data showed some rules and norms oriented to sustainable consumption, as we can see in this quote of an interviewee.

[...] if you say that you are Brazilian and take two baths a day in Brazil, then they say that this is not very good for skin, that it does not need to, that it’s a totally unnecessary waste of water.... (Pedro)

This finding is in line with the study by Wenzel and Süßbauer (2021), as students start to reproduce the practices imposed to acquire a social identity in the foreign country. Another interesting aspect that emerged from the interviews was the social responsibility related to sustainable consumption. Brazilian students assert that their German counterparts stop buying certain brands or products when they know they have practices that go against their morals, even if it is a legitimate aspect in another country.

Many Germans avoid buying clothes at Zara, H&M, C&A stores because they end up seeing the news that factories use ‘almost slave’ labor. But for Germans, it is slave labor. This year there was an accident at a store that makes products for Nike, Zara, and so on. So, I saw here (Brazil) people continued to buy from these stores, from those brands, but not there in Germany. If a store sells a particular product at a certain price, and another store that has the same product sells it for half the price, they will investigate why it is so cheap... and if they notice any problem, they avoid buying at that store. I brought this to my life too. (Daiane)

A behavior that changed and caught the interviewees’ attention during their stay in Germany was the habit of leaving plastic bottles on the floor near the trash cans. In this way, street dwellers could collect them without handling the trash and then exchange them for discounts on purchases at the supermarkets. In other words, leaving “trash” on the ground, in this case, is an acceptable, even commendable practice, as it demonstrates social concern and awareness, rather than environmental, towards the most vulnerable.

4.2 Language and communication systems as antecedents of sustainable consumption

Ceglia et al. (2015) asserted that language and communication are cultural factors directly related to sustainable consumption. Differences in language can work as barriers to understanding messages during face-to-face communication between people from different national cultures.

In the present study, the language was observed to be a limiting factor since the students interviewed had no fluency in the German language (the courses they took

during the exchange were taught in English). The participants' testimony pointed to this barrier.

[...] but for a long time, I did not understand much because I did not speak, I mean, I do not speak German. (Victor)

[...] since I did not understand much of German, it was a bit difficult. (Lorena)

[...] the part of the bureaucracy to stay in the country, this only was resolved in the German language, and I was not fluent in German... so my buddy from there helped me. (Mariana)

The language was only partly a barrier because the exchange students had more time with German students inside the university, and almost all of them spoke fluent English. In addition, even in everyday life, people generally knew how to speak English, as reported by a participant.

I find it annoying when, for example, an American comes (to Brazil) and does not know how to speak Portuguese... and we improvise to speak English. Because for me, I think it's wrong. I think when the person goes to a country, she has to know at least the language. So, in this sense, in Germany, I think it's cool because I could go out on the streets and speak English with people, even their language was German. (Maria)

In addition to this, there was also the social barrier by German culture itself. Unlike Brazil, where people are admittedly receptive, people in Germany are more introverted and reserved. This characteristic has made it difficult for the exchange students to experience this cultural trait. According to an interviewee:

There were days I spent the whole day literally without speaking. I only spoke when I got home. (...) I explored the Brazilians who lived with me to talk to them. (...) I woke up at 8 o'clock in the morning, I went to university and spent all day there, then I went to the gym, and went back home about 23 o'clock, and I had not yet spoken a single word to a single human being. Just "excuse me", "please", "thank you"... but as I said, I did not have a dialogue with anyone. (Jorge)

Aspects of nonverbal communication were also proven to be influencing sustainable consumption behavior. Social coercion through gaze was one of these factors of nonverbal communication, which could be extracted from the speech of two interviewees.

[...] if someone throws trash on the floor, they get disapproving gaze [...]. (Jorge)

[...] The ugly look is what I called "German look". The reproachful gaze that makes you feel a nobody! You're throwing trash on the floor, and the guy will look to you in a terrible way [...]. (Pedro)

Another aspect of nonverbal communication was the example German students transmitted, even without communicating directly, through the very behavior that they manifest within their culture, working as a role model, albeit involuntarily.

I created a greater consciousness, but I think it was much due to what I was able to observe in the people, in the Germans themselves, so what people

used to consume, what they chose in everyday life... sometimes I observed a lot, so, I started to consume in a more sustainable way. (Daiane)

We also identified the influence of verbal communication on Brazilian students' behavior. For instance, during direct conversations, Germans guided how garbage separation should be done following the regulations. Another example of verbal communication influencing Brazilians' behavior was direct complaints whenever a Brazilian did something inappropriate, such as throwing the trash to the ground. As we can see in the fragment of an interview,

There (in Germany) I saw an exchange student throwing some trash on the floor, and soon someone came and said, "Hey, get that on the floor!". It is very different from here (Brazil)... if someone throws some trash on the floor here nobody says anything. I started to do that too. (Mariana)

Our findings suggest that through both disapproval gaze and direct complaints, the Germans have created their means of social coercion so that people behave more sustainably. Thus, communication acts as a tool of social pressure for the person to adopt environmentally correct behaviors.

Other actors, such as non-governmental organizations (NGOs), adopt art to communicate their actions and seek support from society for their causes. An artistic manifestation of an NGO called Sky Ocean Rescue placed a plastic whale in front of the German Parliament, with a plaque on which it was written: "The Plastic Whale is made of the same amount of plastic that gets into the ocean every second." Figure 4 depicts the Plastic Whale artwork.

Figure 4. Plastic whale

Source: Research data

Despite not being promoted by a company, the plastic whale corroborates the findings by Tseng et al. (2021), who report that corporate communication directly affects consumer perception and behavior. In the case of the NGO's intervention, it comes to alert the consumer about the consumption of plastic and the environmental impact of incorrect disposal.

One can highlight an important aspect here: this NGO is part of a broader web of pro-environmental social movements that seek to reduce the human footprint and its impacts on the environment. Actions like that aim to raise public awareness about the incorrect use and disposal of plastic objects, a very effective way to attract attention to the problem, joining art and pro-environmental appeal.

Another important finding emerged from the content analysis was the relationship between material culture and the language and communication system. As previously discussed, the components of culture are intrinsically connected (Craig & Douglas, 2006; Ceglia et al., 2015).

In the Sociology and Anthropology fields, there is an approach where discourses on culture and communication interlace and hybridize. Such an approach addresses the experience of the speaking subjects and the connection they establish with the social world. Discourses, interactions, influences, and cultural mediations are considered modes of transmission from the past to the present (Caune, 2008), in the phenomenon under investigation, the transmission of knowledge about sustainable consumption.

When we discussed the main institutions and organizations influencing sustainable consumption in Germany, it was clear that each of them has its way of communicating with people. Government, NGOs, retailers, and the family, as discussed above, are largely responsible for communicating with people and passing the guidelines for sustainable consumption to present and future generations.

Table 2 summarizes the primary evidence identified for each culture component and how it influenced the consumption behavior of the exchange students when entering for a prolonged period in German culture.

Table 2 – Perception of cultural factors influencing the sustainable consumption behavior

Dimension Material culture and artifacts	Dimension Language and communication systems
<ul style="list-style-type: none"> • Environmental and healthy life awareness; • Use of bicycles; • Infrastructure; • Food consumption standard; • Rituals: • Separation of waste for recycling; • Social norms: - Regulations and punishments (government); - Incentives to use returnable bags and pick up bottles (retail chains); • Awareness and social responsibility. 	<ul style="list-style-type: none"> • Local language: <ul style="list-style-type: none"> - Difficulty in understanding messages and adapting to local norms and rules; - English as a means of integration; • Nonverbal communication: <ul style="list-style-type: none"> - Social coercion and disapproval; - German student as a role model; • Verbal communication: <ul style="list-style-type: none"> - Orientations or direct complaints made by Germans to Brazilian students.

Source: Authors, based on the research data.

From Table 2, we can see how cultural dimensions affect consumer behavior toward sustainability. We observed that the influence of material culture and artifacts took place through (i) the awareness of a healthy life and environmentally friendly habits, (ii) sustainable consumption rituals, as well as (iii) the pressure exerted by social norms. In turn, the influence of the language and communication systems occurred through (iv) the difficulty regarding the local language, partially circumvented with the use of English, as well as (v) the mechanisms of verbal and nonverbal communication that were used to exert social coercion, criticizing and articulating guidelines on expected behavioral patterns.

In a sentence: under a diverse socially constructed context – the German culture – the consumer behavior of Brazilian exchange students is reflected in a set of practices consciously or unconsciously performed, but that derives from a dynamic process of cultural and social construction determined by the cultural dimensions discussed here. These findings align with Shove et al. (2012) and Warde (2014), who report that the individual who enters a new social context tends to carry out the practices performed by other participants from that context. Our results also corroborate the studies by Craig and Douglas (2006) and Ceglia et al. (2015) by empirically validating the role of both

material culture and artifacts and language and communication systems as cultural dimensions shaping consumer behavior towards sustainability.

5 FINAL CONSIDERATIONS

The study's objective was to investigate the influence of cultural determinants on sustainable consumption, comparing the same culture in different contexts. Specifically, we intended to analyze how sustainable consumption practices were perceived by Brazilian exchange students experiencing influences from another culture (Germany), considering two main components: material culture and artifacts, and language and communication systems.

It was possible to observe the changes in the participants' sustainable consumption practices when subject to the culture of another country. Brazilian exchange students reported the cultural shock they experienced when studying and living in another cultural context. Through interviews analysis, our findings showed that cultural determinants and context directly influence the consumption of the individual. In this study, such determinants made students more environmentally aware in different types of consumption.

From a cross-cultural approach, results also showed the influence of the elements of material culture on sustainable consumption, namely, institutions, objects, and consumption patterns. These components of the material culture are integrated into the exchange students' daily life, making them consuming in a sustainable way, either to avoid fines or to manage social pressures.

In addition, results confirmed the relationship between language and communication and sustainable consumption. Language can be a barrier to the understanding of communications whose messages intend to encourage sustainable consumption. Both verbal and nonverbal communications work as vital cultural elements influencing sustainable consumption. The way institutions and organizations communicate was a remarkable finding, as they use different ways (e.g., education, encouragement, or punishment) to influence individuals' consumption and foster more sustainable habits.

An interesting finding emerged from the analysis was the relationship between material culture and communication and language systems, which corroborates the framework proposed by Ceglia et al. (2015). Each institution observed, such as government and families (material culture), has its own strategy for communicating with exchange students.

As a theoretical contribution, the study highlighted a topic once forgotten in studies on sustainable consumption: the relationship between the system of material culture and artifacts and the system of communication and language with sustainable consumption practices. Other than that, in the literature visited, no measurement scales were found for these two constructs. Therefore, this study can underpin the development of scales for measuring material culture and artifacts and language and communication systems for complementary empirical efforts.

The study faced some limitations, which might indicate opportunities for future research. The restriction to Brazilian students of administration and business, as well as to German exchange programs, made the research viable while, on the other hand, limiting its results. Future studies could analyze the influence of cultural determinants on consumption behavior in the perception of Brazilian students living in other countries than Germany. Likewise, studies aimed at investigating the same phenomenon by capturing the perception of German students and other exchange students living in

Brazil are well-timely. Such efforts could complement our findings and consolidate a broader cross-cultural research agenda on sustainable consumption.

REFERENCES

Ajzen, F. (1991) The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50 (2), 179–211.

Ássimos, B. M.; Batina, G. L.; Almeida, G. T.; Pinto, M. R. (2017). o ato de presentear em relações amorosas incipientes: uma investigação interpretativa sobre o reflexo do amor em bens materiais. *Revista ADM.Made*, 21 (1), 17-30.

Babcock, R.; Du-Babcock, B. (2001). Language-based communication zones in international business communication. *The Journal of Business Communication*, 38 (4), 372- 412.

Bardin, L. (2010). *Análise de conteúdo*. Lisboa: LDA.

Barth, A.; Adomssent, M.; Fischer, D.; Richter, S.; Rieckmann, R. (2014). Learning to change universities from within: a service-learning perspective on promoting sustainable consumption in higher education. *Journal of Cleaner Production*, 64, 72–81.

Becchetti, L.; Fiaschetti, M.; Salustri, F. (2021). Let us buy sustainable! The impact of cash mobs on sustainable consumption: Experimental results. *Journal of Cleaner Production*, 317 (128419), 1-16.

Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15 (2), 139-168.

Bonaccio, S.; O'Reilly, J.; O'Sullivan, S. L.; Chiocchio, F. (2016) Nonverbal behavior and communication in the workplace: a review and an agenda for research. *Journal of Management*, 42 (5), 1044-1074.

Brundtland Commission (1987). *Our Common Future*. World Commission on Environment and Development, Brussels.

Bradley, P. (2021). An institutional economics framework to explore sustainable production and consumption. *Sustainable Production and Consumption*, 27, 1317-1339.

Burrell, G.; Morgan, G. (1979). *Sociological paradigms and organizational analysis*. Heineman, London.

Byers, V.; Gilmer, A. (2021). The challenge of sustainable consumption for governance and policy development—a systematic review. *Sustainability*, 13(12), 6723.

Caune, J. (2008) As relações entre cultura e comunicação: núcleo epistêmico e forma simbólica. *Líbero*, 11 (22), 33-42

Ceglia, D.; Lima, S.; Leocádio, A. (2015). An alternative theoretical discussion on cross- cultural sustainable consumption. *Sustainable Development*, 23, 414–424.

Coglianese, C. (2001). *Social movements, law, and society: the institutionalization of the environmental movement*. Faculty Scholarship at Penn Law. Paper 1404. Recovered in 8 Feb. 2019, de: https://scholarship.law.upenn.edu/faculty_scholarship/1404.

Craig, C.S.; Douglas, S. P. (2006). Beyond national culture: implications of cultural dynamics for consumer research. *International Marketing Review*, 23 (3), 322–342.

Dietz, T; Stern, P. C.; Guagnano, G. A. (1998). Social structural and social psychological bases of environmental concern. *Environment and Behavior*, 30 (4), 450–471.

Dernbach, J.; Mintz, J. (2011). Environmental laws and sustainability: an introduction. *Sustainability*, 3, 531-540.

Eurostat. (2018). Waste statistics. Recovered in 31 May 2021, de https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Waste_statistics#Waste_treatment.

Evans, D. (2011). Consuming conventions: sustainable consumption, ecological citizenship and the worlds of worth. *Journal of Rural Studies*, 27, 109–115.

Faria, A. C., Silva, L. S., Silva, D., & Milani Filho, M. A. F. (2018). Influência do conhecimento sobre sustentabilidade nas atitudes, comportamentos e consumo de estudantes de Administração. *Revista Eletrônica de Ciência Administrativa*, 17(2), 239-260.

Felipe, I. J. D. S.; Ceribeli, H. B.; Brandão, R. M. (2017). Antecedentes da Compra Compulsiva dos Universitários em Mariana (MG). *Revista Ciências Administrativas*, 3 (2), 322-335.

Fischer, R. (2009). Where is culture in cross cultural research? An outline of a multilevel research process for measuring culture as a shared meaning system. *International Journal of Cross Cultural Management*, 9 (1), 25–49.

Gazzola, M. (2016). Multilingual communication for whom? Language policy and fairness in the European Union. *European Union Politics*, 17 (4), 546–569.

Gil, A. C. (2008). *Métodos e técnicas de pesquisa social*. (6. ed.) São Paulo: Atlas.

Hall, E.T. (1973). *The silent language*. New York: Anchor Books.

Hicks, D. (2010). The material-cultural turn: Event and effect. In: Hicks D, Beaudry MC (eds) *Oxford Handbook of Material Culture Studies*: 26–98. Oxford: Oxford University Press.

Hilton, M. (2007). Social activism in an age of consumption: the organized consumer movement. *Social History*, 32 (2), 121–143.

Hofstede, G. (1991). *Cultures and organizations: software of the mind*. London: McGraw Hill.

Holt, D. B. (1998). Does cultural capital structure American consumption? *Journal of Consumer Research*, 25, 1-25.

Holt, D. B. (2012). Constructing sustainable consumption: From ethical values to the cultural transformation of unsustainable markets. *The Annals of the American Academy of Political and Social Science*, 644, 236-255.

Ibiapina, I.; Cunha, M.; Paiva, M.; Romero, C. (2020). Consumer myopia: a cross-cultural study about the attitude and sustainable behavior of management students. *Revista de Administração da UFSM*, 13(5), 959-976.

Ibiapina, I.; Leocádio, A.; Lázaro, J. C.; Romero, C. (2021). The culture and personal disposal practices of university students: a qualitative study in Brazil and Germany. *Journal of Education for Sustainable Development*, 15(1), 51-71.

Ihtiyar, A. (2018). The role of social environment and personality: Validation of antecedents of intercultural communication competence and its effects on customer satisfaction. *Journal of Management, Economics, and Industrial Organization*, 2 (1), 33-59.

Khan, M. (2007). *Consumer Behaviour*. New Delhi: New Age International.

Kanga, J.; Joyner, C.; Johnson, M. (2021). Minimalism as a sustainable lifestyle: Its behavioral representations and contributions to emotional well-being. *Sustainable Production and Consumption*, 27, 802-813.

Kim, E. (2017). The material culture of Korean social movements. *Journal of Material Culture*, 22 (2), 194–215.

Koontz, T. (2006). Collaboration for sustainability? A framework for analyzing government impacts in collaborative environmental management. *Sustainability: Science, Practice and Policy*, 2 (1), 15-25.

Kroeber, A.; Kluckhohn, C. (1952). Culture: a critical review of concepts and definitions. *Papers of the Peabody Museum of American Archeology and Ethnology*, 47, 1-223, Harvard University, Cambridge.

Ladeira, W. J.; Araújo, C. F.; Santini, F. O.; Dalmoro, M. (2016). O ato de presentear e a frustração: uma análise na determinação da distância psicológica. *Revista Brasileira de Marketing*, 15 (1), 133-145.

Luna, D.; Gupta, S. F. (2001). An integrative framework for cross-cultural consumer behavior. *International Marketing Review*, 18 (1), 45-69.

Markus, H. R.; Kitayama, S. (2010) Cultures and selves. *Perspectives on Psychological Science*, 5 (4), 420–430.

Masumoto, D.; Yoo, S. H. (2006). Toward a new generation of cross-cultural research, perspectives. *Psychological Science*, 1 (3), 234-250.

- McCracken, G. (1986). Clothing as language: an object lesson in the study of the expressive properties of material culture. In: Reynolds, B.; Stott, M. (Ed.). *Material Anthropology: Contemporary Approaches to Material Culture*. New York: University Press of America.
- McCracken, G. (1988). *The long interview*. Londres: Sage Publications.
- Melo, P. (2013). Indicadores da dimensão institucional do desenvolvimento sustentável e os objetivos da Rio +20. *Desenvolvimento em Questão*, 11 (23), 74-117.
- Merriam, S. B. (2002). *Qualitative research in practice: examples for discussion and analysis*. San Francisco: Jossey-Bass.
- Meyer, D. S.; Laschever, E. (2016). Social movements and the institutionalization of dissent in America. In: Valelly, R.; Mettler, S.; Lieberman, R. (orgs.) *The Oxford Handbook of American Political Development*: 564-590. London: Oxford University Press.
- Miller, D. (2007). Consumo como cultura material. *Horizontes Antropológicos*, 13 (28), 33-63.
- Mitchell, J. P. (2013). Performances. In: Tilley C et al. (eds) *Handbook of Material Culture*: 384-401. London: Sage.
- Polavieja, J. G. (2015). Capturing culture: a new method to estimate exogenous cultural effects using migrant populations. *American Sociological Review*, 80 (1), 166-191.
- Pons, F.; Laroche, M. (2007). Cross-cultural differences in crowd assessment. *Journal of Business Research*, 1 (60), 269-276.
- Quezado, I.; Costa, J. S.; Peñaloza, V.; Matos, F. R. N.; Ferraz, S. B. (2015). Sempre cabe mais um? Uma investigação cross-cultural do comportamento do consumidor em ambiente aglomerado. *Revista de Administração FACES Journal*, 14 (3), 56-74.
- Romero, C.; Laroche, B. M.; Aurup, G.; Ferraz, S. (2017). Ethnicity and acculturation of environmental attitudes and behaviors: A cross-cultural study with Brazilians in Canada. *Journal of Business Research*, 82, 300-309.
- Scharf, E. R.; Fernandes, J.; Perfeito, J.; Dapper, M. K. (2017). Práticas de consumo consciente em campanha publicitária de organização competitiva. *Revista de Gestão Social e Ambiental*, 11 (2): 1-18.
- Schmitt, B.; Zang, S. (1998). Language, structure and categorization: a study of classifiers in consumer cognition, judgment and choice. *Journal of Consumer Research*, 25, 108- 122.
- Schmitt, B.H.; Pan, Y.; Tavassoli, N.T. (1994). Language and consumer memory: the impact of linguistic differences between Chinese and English. *Journal of Consumer Research*, 21, 419-431.

Schwartz, S. H. (1994). Are there universal aspects in the content and structure of values? *Journal of Social Issues*, 50 (4), 19–45.

Sheth, J.; Gardner, D. M.; Garret, D. (1988). *Marketing theory: evolution and evaluation*. New Jersey: John Wiley & Sons.

Shove, E.; Pantzar, M.; Watson, M. (2012). *The dynamics of social practices: everyday life and how it changes*. London: Sage.

Spencer-Rodgers, J.; McGovern, T. (2002). Attitudes toward the culturally different: the role of intercultural communication barriers, affective responses, consensual stereotypes, and perceived threat. *International Journal of Intercultural Relations*, 6, 609-631.

Teixeira, A. A.; Freitas, A. A. (2011). O ato de presentear em relacionamentos comerciais. *Organizações & Sociedade*, 18 (59), 719-737.

Tavassoli, N. (1999) Temporal and associative memory in Chinese and English. *Journal of Consumer Research*, 26, 170-181.

Tseng, M.; Lin, C.; Sujanto, R. Y.; Lim, M. K.; Bui. T. (2021). Assessing sustainable consumption in packaged food in indonesia: corporate communication drives consumer perception and behavior. *Sustainability*, 13(14), 8021.

Tylor, E. B. (1896). *Anthropology: an introduction to the study of man and civilization*. New York: D. Appleton.

UN. (2015). *The 17 goals*. Recovered in 31 may.2021, de <https://sdgs.un.org/goals>.

Veblen, T. (1974). *A Teoria da Classe Ociosa – Um estudo econômico das instituições*. Trad. Olívia Krähenbühl. São Paulo: Ática.

Wahlen, S; Laamanen, M. (2015). Consumption, lifestyle and social movements. *International Journal of Consumer Studies*, 39 (5), 397–403.

Warde, A. (2014). After taste: culture, consumption and theories of practice. *Journal of Consumer Culture*, 14 (3), 279–303.

Wenzel, K.; Süßbauer, E. (2021). Exploring domestic precycling behavior: a social identity perspective. *Sustainability*, 13 (1321), 1-31.

Como citar:

Ibiapina, I. R. P., Lima, S. H. de O., Leocádio, Áurio L., & Lima, D. S. V. R. (2021). Cultural Dynamics and Sustainable Consumption: a Perception of Brazilian Students in Germany. *Revista De Gestão Social E Ambiental*, 15, e02714. <https://doi.org/10.24857/rgsa.v15i1.2714>