

A construct validation of consumer perception of sustainability in Brazil

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Resumo

This paper aims to test and validate the constructs of a theoretical model named consumer perception of sustainability. A structured survey was elaborated from the perspective of the theories of sustainable consumption and also based on the Theory of Planned Behavior. In total, 595 respondents made up the final sample, and an Exploratory Factor Analysis was performed. The empirical study contributed to identifying five constructs: cruelty-free, eco-friendly, social pressure, reference groups, and access to information. The first two are related to product attributes, and the last three are more connected to social aspects and external factors that can motivate sustainable consumption.

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Abstract

This paper aims to test and validate the constructs of a theoretical model named consumer perception of sustainability. A structured survey was elaborated from the perspective of the theories of sustainable consumption and also based on the Theory of Planned Behavior. In total, 595 respondents made up the final sample, and an Exploratory Factor Analysis was performed. The empirical study contributed to identifying five constructs: cruelty-free, eco-friendly, social pressure, reference groups, and access to information. The first two are related to product attributes, and the last three are more connected to social aspects and external factors that can motivate sustainable consumption.

Keywords: Cruelty-free. Eco-friendly. Social pressure. Reference groups. Access to information.

1. Introduction

Recent works have sought to understand the trade-offs of sustainable consumption (White, Habib & Hardesty, 2019; Ross & Milne, 2020). Lim (2017, p. 69) argued that “today's consumers live in a society with unprecedented individual comfort, convenience, and choice” and complete by saying that the debate about sustainability issues, especially regarding consumption, has become valuable to the academic community, practitioners, and policymakers. Marde and Verite-Masserot (2018) and Gupta, Wencke, and Gentry (2019) corroborate by stating that also consumers are becoming conscious of this topic.

On this point, Gorge et al. (2015) introduce the concept of sufficiency - regarding the consumerist lifestyle. On the other hand, Gutsche (2016) and Mai et al. (2019) point out the consumption of the ethical products, Hammad et al. (2019) talk about conspicuous consumption and sustainable consumption, Roos and Hahn (2017) and Ertz et al. (2018) discuss shared consumption. There are also debates like the one proposed by García-de-Frutos, Ortega-Egea, and Martínez-del-Río (2018) about anti-consumption for environmental sustainability.

In fact, in Brazil, studies on sustainability cover all the subjects mentioned above and more. This topic has gained considerable attention since Agenda 21, a set of resolutions produced by the International Conference Eco-92, held in Rio de Janeiro in 1992, whose central axis is sustainability. According to Lim (2017, p. 70), “the pinpoint transformative action for the discourse of sustainable development, the imperative need for an established conceptualization of sustainable consumption is apparent”.

This paper aims to test and validate the constructs of a theoretical model named consumer perception of sustainability. This model was developed based on previous theoretical research conducted by Damázio, Coutinho, and Shigaki (2020). The authors performed a Systematic Literature Review (SLR) in 22 academic and practitioner databases. As a result, the authors identified more than 4600 texts on sustainability and consumption, and based on the previously established criteria, 95 articles were thoroughly analyzed. The results of their paper allowed the identification of seven attributes of consumer perception of sustainability: eco-friendly, guarantee of origin, consumer health, fair trade, cruelty-free, recycling, and natural ingredients.

In essence, this article makes significant contributions. First, it contributes to the demand for more data-driven than theory-driven in the Marketing field (Lim, 2017). Second, it should help academics and practitioners comprise sustainable consumption, considering each case's cultural and economic aspects to be studied.

2. Literature review

2.1 Sustainable consumption

The Department for Sustainable Development, Production, and Consumption (in Portuguese Departamento de Desenvolvimento, Produção e Consumo Sustentáveis – DPCS, 2022) is responsible for implementing sustainable production and consumption practices in Brazil. As a result, the vision of sustainable consumption is understood by the Brazilian government as

A holistic approach is applied to minimize the negative environmental impacts of production and consumption systems while promoting a better quality of life for all; encourages sustainable management and efficient use of resources and inputs; and enables decent jobs and fair trade. Furthermore, it contributes to conserving natural resources and ecosystems, decoupling economic growth from environmental degradation.

The Oslo Symposium in 1994 defined sustainable consumption in the same way, just adding the importance of not compromising the needs of future generations. Despite that, Lim (2017, p. 70) remembers that the discussion about sustainability is promising, but that is “a substantial amount of the large population [that] remains ignorant of or chooses not to engage in sustainable consumption practices”.

Academic researchers also have a definition of sustainable consumption. Lee et al. (2015) describes it as an environmental-friendly consumption and follows anti-consumption and sustainable disposal practices. Luchs, Phipps, and Hill (2015) and Phipps et al. (2013) say that sustainable consumption is when individuals make an effort to change their consumption behavior by consuming less or differently. Based on Hammad et al. (2019, p. 540), sustainable consumption is an “environmentally sound and socially just way of consuming resources”.

Lim (2017) reinforces the reminder that consumer needs must be maintained while we continue evolving new and feasible sustainable practices. Phipps et al. (2013) and Balderjahn et al. (2018) state that sustainable consumption optimizes the three sustainability dimensions – environment, society, and economics since it is a multi-faceted phenomenon. Lastly, Nguyen et al. (2019, p. 3) propose that “sustainable consumers are mindful consumers (...) aware of the consequences of consumption, regulate their acquisition of environmental friendly products, minimize their possession through controlling reducing spending, maximizing organic food intake, and engaging in responsible waste disposal”.

Although sustainability is part of a world agenda and has some repercussions in the academic scenario, Lim (2017) states that this topic must be continuously discussed and adaptable to cultural and time changes. Different cultures shape different lifestyles, including sustainable ones (Minton et al., 2018). For example, Lee, Levy, and Yap (2015, p. 598) “propose that environmental attitude and sustainable consumption behaviour are affected by functional, social, emotional and epistemic consumption values through place identity”. It is essential to point out this argument since these factors could be barriers or facilitators in adopting sustainable consumption (Lee, Levy, & Yap, 2015).

Lim (2017, p. 70) asked once if “is the concept of sustainable consumption theoretically coherent and practically actionable to consumers either as a collective group or as individuals?”. After that, Minton et al. (2018) contribute to answering that “a consumer is influenced by macro-level norms of the culture they reside in as well as micro-level norms of groups the consumer desires to include in their self-identity”. Similarly, Damázio, Coutinho, and Shigaki (2020) have found in the literature seven attributes of consumer perception of sustainability - eco-friendly, guarantee of origin, consumer health, fair trade, cruelty-free, recycling, and

natural ingredients. The concept brought by (Minton et al., 2018) of micro-level consumption shows consistency with the findings of Damázio, Coutinho, and Shigaki (2020), embracing ideas from the way they consume.

2.2 Theory of Planned Behavior

The Theory of Planned Behavior (Ajzen, 1991, 2002) suggests that individual behavior is determined by three main factors: attitude, perception of behavioral control, and subjective norm. Each of them is preceded by beliefs. Behavioral beliefs are understood as actions or attitudes, whether with negative or positive valence. The normative or subjective beliefs consider the expectation of one concerning the behavior of the other. As an inhibitory factor, control beliefs are when trying to determine the control perceived by the individual (Pinto, 2007; Plotnikoff et al., 2011; Ajzen & Sheikh, 2013). These beliefs can be combined. When there is a high favorability rate between them, there is a more significant prediction of the desired behavior (Pinto, 2007).

In this way, behavioral beliefs are closely related to attitudes toward an individual's behavior or action. For instance, normative beliefs support understanding each subject's subjective norms concerning their behavioral intention. On the other hand, control beliefs mainly support the control perceived by the individual. In turn, it has an impact on the intention, as well as the others. But, depending on its high level, mediated by the perception of self-efficacy and the individual's self-control, the effect can be directly correlated to behavior and not only to the behavioral intention.

Minton et al. (2018, p. 3) claim that “the literature on sustainable consumption suggests that certain behaviors are influenced by social conditions”. For this reason, mainly, we chose to use the Theory of Planned Behavior to understand the intention of consumer behavior toward sustainable products, then identify attributes of consumer perception of sustainability, and fulfill the proposed objective in this research.

Recent works in sustainable consumption have used the Theory of Planned Behavior. An example has been Paul, Modi, and Patel (2016), who has as purpose predict green product consumption, and, Mard and Verite-Masserot (2018), who provided a scale of measure based on the antecedents of environmentally friendly consumption. In addition, Roos and Hahn (2017) tested if shared consumption affects consumers' values, attitudes, and norms. After, the same authors (2019) tried to understand collaborative consumption. Then, Ukenn and Ayodele (2019) applied the Theory of Planned Behavior to predict sustainable street food patronage. Finally, Lira and Costa (2022) sought to understand the ethics and the intention of conscious consumption in the slow fashion industry.

Thus, we used the main characteristics from a validated survey from Ajzen (2002) to build our own survey regarding attributes defined by Damázio, Coutinho, and Shigaki (2020): (i) eco-friendly, a product does not cause environmental damage, has reduced impacts compared to equivalent products, is sustainable, and is an ecological practice that does not compromise the environment; (ii) guarantee of Origin and Fairtrade process, that have information on the guarantee of origin of the raw material and on the conditions of fairtrade with those involved in its manufacture: producers, suppliers, employees (fairtrade); (iii) Healthy and Natural Life, when a product is considered natural, healthy, functional, organic, or free from genetic and chemical modifications, being minimally industrialized; (iv) cruelty-free, a product that does not harm or kill animals during its development or supply process; and (v) recyclable product, that can be transformed at some point in its life cycle, through a selective collection or in its resignification or transformation.

3. Method

This research is characterized as a descriptive type and a quantitative approach, given its purpose to describe a phenomenon (Collis & Hussey, 2005) and the possibility to measure, analyze and describe the causal relationship between the theoretical model variables (Terence & Escrivão Filho, 2006).

A structured survey (Appendix A) was elaborated from the perspective of the theories of sustainable consumption and based on the Theory of Planned Behavior to structure each of the model constructs. Two pre-tests were carried out: (i) face validation with three sustainability specialists and (ii) survey application to 10% of the initial sample. Respondents participating in the pre-tests were not included in the main study. The second pre-test was initially carried out with all seven constructs proposed by the theoretical model of Damázio, Coutinho, and Shigaki (2020), which are: eco-friendly, guarantee of origin, consumer health, fair trade, cruelty-free, recycling, and natural ingredients. The first Exploratory Factor Analysis was performed with Varimax orthogonal rotation. It is a multivariate technique that allows identifying the number of constructs and the variables that compose them from a structured data matrix (Brown, 2006). The results suggested the junction of the constructs guarantee of origin and fair trade and, also, consumer health and natural ingredients constructs. Thus, we tested five constructs: eco-friendly, guarantee of origin and fair trade, cruelty-free, healthy and natural life, and recyclable products.

The final survey consisted of 3 parts: Informed Consent Term, 60 questions that made up the study corpus with a 7-point Likert scale (where 1 = strongly disagree and 7 = strongly agree), and a sociodemographic profile. In total, 801 Brazilian consumers participated in the survey. From that, 206 participants were excluded for disagreeing with their participation (2), for not filling out the survey completely (169), and for not answering correctly the Attention Check Question (ACQ) (35). As a result, 595 respondents made up the final sample, in the expected value by sample calculation suggested by Hair Jr. et al. (2009).

A second Exploratory Factor Analysis was performed with Varimax orthogonal rotation. Variables with commonalities lower than 0.6 were eliminated to determine the factor loadings, resulting in 27 variables distributed in 5 fixed constructs with a variance of 71%, KMO test at 0.892, and significance of 0.000, indicating the existence of a correlation between the variables. The validated constructs were named as follows: (i) cruelty-free, (ii) eco-friendly, (iii) social pressure, (iv) reference groups, and (v) access to information.

4. Results

The sample of this study comprises 595 respondents, of which 47% are women and 53% are men. The predominant age range was between 32 to 40 years old (29.07%), followed by 41 to 50 years old (25.53%), 25 to 31 years old (16.13%), 51 to 60 years old (15.96%), over 60 years old (9.24%) and 18 to 24 years old (5.54%). Partially justified by the average age of the sample, 93.78% have completed higher education. 25.37% of the sample fit within a range of family income over R\$20,901, 20.84% between R\$4,181 to R\$8,360, 20.16% between R\$8,361 to R\$12,540, 11.42% between R\$16,720 to R\$20,900, and exactly 10.75% for both between R\$1,045 to R\$4,180, and R\$16,721 to R\$20,900.

Regarding marital status, 60% of the respondents declared themselves married, 30.92% single, 7.73% divorced, and 0.5% widowers. Regarding geographic location, 64.53% claim to reside in the southeastern region of Brazil, 14.96% in the southern, 9.24% in the northeast, 4.36% in the center-west, and 1.84% in the northern. Figure 1 illustrates the statements regarding the consumption of products related to the constructs of the theoretical model.

Figure 1. Consumption of products



In the Eco-friendly construct, 78.15% (n = 465) of the respondents stated that they had already consumed this product. On the other hand, 45.38% (n = 270) and 43.03% (n = 256), respectively, Guarantee of origin and fair trade, and Cruelty-free, were unable to inform whether they had already consumed any product in this category. It is worth mentioning that the concept of all constructs was informed to respondents, as shown in the Appendix A. Lastly, 94.12% (n = 560) and 97.13% (n = 579), respectively, Healthy and natural life, and Recyclable products, declare that they have already consumed this category of products.

Kolmogorov-Smirnov and Shapiro-Wilk tests were performed to verify the sample normality. At a 95% significance level, an absence of a standard of normality was confirmed in the distribution of the sample. Mesquita (2010) suggests that the number of factors extracted with eigenvalues above 1 corresponds to the number of constructs of the model. For this study, were indicated five constructs with eigenvalues above 1.8 and explained variance of 71.03 as shown in Table 1.

Table 1. Community of variables

#	Variable	Extraction
EF_1	I intend to consume (or continue to consume) eco-friendly products	0.693
EF_2	I plan to consume (or continue to consume) eco-friendly products	0.764
EF_4	I prefer to consume eco-friendly products over those that are not	0.617
EF_6	People who are important to me approve if I consume eco-friendly products	0.772
EF_7	I feel pressured by society to consume eco-friendly products	0.676
EF_10	I believe it is my responsibility to consume eco-friendly products	0.618
EF_11	I am willing to pay more for an eco-friendly product	0.543
EF_12	People who have more access to information about eco-friendly products consume more of this type of product	0.682
GT_1	I intend to consume (or continue to consume) products with a guarantee of origin and fair trade	0.681
GT_2	I plan to consume (or continue to consume) products with a guarantee of origin and fair trade	0.648
GT_6	People who are important to me approve if I consume products with a guarantee of origin and fair trade	0.796
GT_7	I feel pressured by society to consume products with a guarantee of origin and fair trade	0.705
GT_12	People who have more access to information about products with a guarantee of origin and fair trade consume more of this type of product	0.732
HL_6	People who are important to me approve if I consume products that provide a healthy and natural life	0.692

HL_7	I feel pressured by society to consume products that provide a healthy and natural life	0.697
HL_12	People who have more access to information about products that provide a healthy and natural life consume more of this type of product	0.732
CF_1	I intend to consume (or continue to consume) cruelty-free products	0.810
CF_2	I plan to consume (or continue to consume) cruelty-free products	0.843
CF_3	I believe that consuming cruelty-free products is smart	0.746
CF_4	I prefer to consume cruelty-free products over those that are not	0.802
CF_6	People who are important to me approve if I consume cruelty-free products	0.761
CF_7	I feel pressured by society to consume cruelty-free products	0.702
CF_10	I believe it is my responsibility to consume cruelty-free products	0.660
CF_11	I am willing to pay more for a cruelty-free product	0.718
RP_6	People who are important to me approve if I consume recyclable products	0.722
RP_7	I feel pressured by society to consume recyclable products	0.701
RP_12	People who have more access to information about recyclable products consume more of this type of product	0.665

Note: EF (Eco-Friendly), GT (Guarantee of origin and fair trade), HL (Healthy and natural life), CF (Cruelty-Free), and RP (Recyclable products)

Table 2 presents the rotational factor matrix, in which the factorial load of each variable that composes a given construct is 0.50 or greater, considered relevant by Hair Jr. et al. (2009).

Table 2. Rotational factor matrix

	Constructs				
	1	2	3	4	5
CF_1	0,845				
CF_2	0,855				
CF_3	0,832				
CF_4	0,834				
CF_10	0,732				
CF_11	0,773				
EF_1		0,766			
EF_2		0,815			
EF_4		0,732			
EF_10		0,642			
EF_11		0,631			
GT_1		0,789			
GT_2		0,773			
EF_7			0,803		
GT_7			0,812		
HL_7			0,817		
CF_7			0,785		
RP_7			0,821		
EF_6				0,792	
GT_6				0,831	
HL_6				0,794	
CF_6				0,693	
RP_6				0,778	
EF_12					0,746
GT_12					0,803
HL_12					0,810
RP_12					0,784

Hair Jr. et al. (2009) recommend assigning names to the factors that were extracted, in order to obtain a consistent factorial solution. Also, Cronbach's alpha, a measure of internal consistency, was calculated for each construct, as indicated in the sequence: (i) construct 1 – Cruelty-free ($\alpha = 0.935$); (ii) construct 2 - Eco-friendly ($\alpha = 0.901$); (iii) construct 3 - Social

pressure ($\alpha = 0.882$); (iv) construct 4 - Reference groups ($\alpha = 0.898$); (v) construct 5 - Access to information ($\alpha = 0.856$).

5. Discussion

In the first construct, there was an indication of the intention and the planning to consume or continue to consume cruelty-free products. The respondents believe that consuming cruelty-free products is smart and indicate the preference to consume cruelty-free products over those that are not. They also believe it is their responsibility to consume cruelty-free products, and they are willing to pay more for these products. Accordingly to Lim, Cho, and Bedford (2019), people perceive animal cruelty practices when negative emotions and arousal are associated with the message. The feeling of sympathy increases as there is a recognition of proximity with the other - human or animal, and is usually related to moral issues, conclude the authors.

In the second construct, there was an indication of the intention and the planning to consume or continue to consume eco-friendly products. The respondents indicate a preference to consume eco-friendly products over those who do not do it. They also believe it is their responsibility to consume eco-friendly products, and they are willing to pay more for these products. Given the concept of eco-friendly by Damázio, Coutinho, and Shigaki (2020), the results showed that the respondents indicated the intention and the planning to consume or continue to consume products with a guarantee of origin and fair trade. An explanation for the composition of this construct lies in the similar aspects between the two product categories as an ecological practice that does not compromise the environment (eco-friendly) and guarantees fairtrade conditions with those involved in its manufacture: producers, suppliers, employees. Accordingly to Lim (2017), this is one reason that shows progress and rationality to take on a new sustainable lifestyle. That is, responsible consumption is consuming products that do not damage the environment, improve resource use efficiency, and could avoid consumerism.

In the third construct, it was indicated that the respondents feel social pressure to consume products that: are cruelty-free, are eco-friendly, have a guarantee of origin and fair trade, provide healthy living, and are recyclable. Social pressure, explained by subjective norms, is a find that agrees with Lim (2017, p. 71) when he says that sustainable consumption “meets the basic need of the current generation [and] does not impoverish future generations”.

The benefit of social pressure may be related to social guilt. Accordingly to Davies and Gutsche (2016, p. 15), social guilt could be “divided into two intentions: a desire for social justice, and the perceived win-win situation”. When individuals support a cause under pressure from society, it can have consequences, including responsible consumption.

In the fourth construct, it was indicated that there was an importance of the approval of people in the reference group regarding the consumption of the products that are cruelty-free, eco-friendly, have a guarantee of origin and fair trade, provide healthy living, and are recyclable. Lee, Levy, and Yap (2015) use the place identity theory to clarify the sense of self-identity in a physical environment. Despite being a physical space, we can understand the attribute of reference groups as part of the mentioned theory, given its relationship with emotional connections and the need to belong. This construct is also related to social consumption value once Lee, Levy, and Yap (2015, p. 603) have tested that sustainable consumption may not be connected with status or appearance.

Lastly, the fifth construct was the association of consumption with information accessibility with products that are eco-friendly, have a guarantee of origin and fair trade, provide healthy living, and are recyclable. Accordingly to Davies and Gutsche (2016), that is evidence that information dissemination influences ethical consumption. Nonetheless, the authors conclude that information is “not a barrier to behavior but simultaneously the consumer

has no interest in seeking information on which to base a decision” (p. 10). Regarding information, the literature talks about price (Davies & Gutsche, 2016), availability (Davies & Gutsche, 2016; Roos & Hahn, 2019), calories (Luchs, Phipps, and Hill, 2015), ecological consumption (Marde & Verite-Masserot, 2018), credible information (García-de-Frutos, Ortega-Egea, & Martínez-del-Rio, 2018), potential benefits, transparent information, and ease of use (Roos & Hahn, 2019).

Marde & Verite-Masserot (2018) and Longo, Shankar, and Nuttall (2019) found that available information on the product is one of the significant barriers to purchasing something. Consequently, Kim and Yoon (2021) inform that the activity of sharing information can cause enjoyment and social interactions, and it could be a critical factor for sustainable consumption. Sahelices-Pinto, Lanero-Carrizo, and Vázquez-Burguete (2021, p. 4) point out that “hat the more exposed people are to information that deals with environmental topics, the more pronounced their ecological engagement is”. Quality and quantity also matter.

6. Conclusion

This article aimed to test and validate the constructs of a theoretical model named consumer perception of sustainability. This article’s literature review clarifies sustainable consumption considering that consumer is influenced by macro and micro level norms. Therefore, while previous studies identified a lack of academic knowledge regarding the consumption of sustainable products (Lim, 2017), this study demonstrates that the five constructs may be indicators for understanding this phenomenon: cruelty-free, eco-friendly, social pressure, reference groups, and access to information.

Considering the results found here, three key takeaways are notable: (i) were found two attributes (cruelty-free and eco-friendly) and three factors more connected to social aspects and external factors that can motivate sustainable consumption (social pressure, reference groups, and access to information) that explain the sustainable consumer behavior (ii) this article has an implication for responsible consumption, as it raised the debate about social and economic reflection about the constructs mentioned above, and (iii) we provided a behaviorally driven research insight into sustainable consumption as a potential way to increase the products offer to consumers while companies, government, and society are concerned about ethic and consumerism.

This study has some limitations. We employed convenience sampling and this study was conducted using an online survey. New studies should be taken into account for the generalization of the results. We recommend, for future research, a model validation from the constructs that were validated in this study. Also, New studies must be carried out, primarily with a qualitative approach, in order to understand in-depth the relationship within and between the validated constructs.

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Appendix A – Final questionnaire

You were invited to participate in this study, which aims to understand the consumption of sustainable products. This research is being carried out by [covered]. We ask for your

cooperation in completing this questionnaire, which is entirely anonymous and confidential. Research results will be presented in scientific studies published in scientific journals or through oral communication. The average participation time is 7 minutes. We inform you that this survey does not incur any risk, cost, or remuneration to the respondent, and your participation is entirely voluntary. Therefore, you should feel free to answer all questions as honestly as possible. Throughout the questionnaire, you will encounter attention questions, so read it carefully.

A - I agree with my voluntary participation in this research.

B - I DISAGREE with my voluntary participation in this research (the questionnaire will be closed)

Part 1

Please read the following concept to answer the questions below:

An Eco-Friendly product does not cause environmental damage, has reduced impacts compared to equivalent products, is sustainable, and is an ecological practice that does not compromise the environment.

I have already consumed eco-friendly products

Yes

No

I don't know

Now answer, on a scale of 1 (strongly disagree) to 7 (strongly agree), the questions below related to your daily consumption:

Questions	1	2	3	4	5	6	7
I intend to consume (or continue to consume) eco-friendly products							
I plan to consume (or continue to consume) eco-friendly products							
I believe that consuming eco-friendly products is smart							
I prefer to consume eco-friendly products over those that are not							
The pandemic made me value more products eco-friendly							
People who are important to me approve if I consume eco-friendly products							
I feel pressured by society to consume eco-friendly products							
People who care more about their image in their social environment consume more eco-friendly products							
I believe that it is easy to consume eco-friendly products							
I believe it is my responsibility to consume eco-friendly products							
I am willing to pay more for an eco-friendly product							
People who have more access to information about eco-friendly products consume more of this type of product							

Part 2

Please read the following concept to answer the questions below:

A product with a Guarantee of Origin and Fairtrade process has information on the guarantee of origin of the raw material and on the conditions of fairtrade with those involved in its manufacture: producers, suppliers, employees (fairtrade)

I have already consumed products that have a Guarantee of Origin and Fairtrade.

Yes

- No
 I don't know

Now answer, on a scale of 1 (strongly disagree) to 7 (strongly agree), the questions below related to your daily consumption:

Questions	1	2	3	4	5	6	7
I intend to consume (or continue to consume) products with a guarantee of origin and fair trade							
I plan to consume (or continue to consume) products with a guarantee of origin and fair trade							
I believe that consuming products with a guarantee of origin and fair trade is smart							
I prefer to consume products with a guarantee of origin and fair trade over those that are not							
The pandemic made me value more products with a guarantee of origin and fair trade							
People who are important to me approve if I consume products with a guarantee of origin and fair trade							
I feel pressured by society to consume products with a guarantee of origin and fair trade							
People who care more about their image in their social environment consume more products with a guarantee of origin and fair trade							
I believe that it is easy to consume products with a guarantee of origin and fair trade							
I believe it is my responsibility to consume products with a guarantee of origin and fair trade							
I am willing to pay more for a product that has a guarantee of origin and fair trade							
People who have more access to information about products with a guarantee of origin and fair trade consume more of this type of product							
If you are reading this question, check option 7							

Part 3

Please read the following concept to answer the questions below:

A product that provides a Healthy and Natural Life is considered natural, healthy, functional, organic, or free from genetic and chemical modifications, being minimally industrialized.

I have already consumed products that provide a healthy and natural life.

- Yes
 No
 I don't know

Now answer, on a scale of 1 (strongly disagree) to 7 (strongly agree), the questions below related to your daily consumption:

Questions	1	2	3	4	5	6	7
I intend to consume (or continue to consume) products that provide a healthy and natural life							
I plan to consume (or continue to consume) products that provide a healthy and natural life							
I believe that consuming products that provide a healthy and natural life is smart							
I prefer to consume products that provide a healthy and natural life over those that are not							
The pandemic made me value more products that provide a healthy and natural life							

People who are important to me approve if I consume products that provide a healthy and natural life							
I feel pressured by society to consume products that provide a healthy and natural life							
People who care more about their image in their social environment consume more products that provide a healthy and natural life							
I believe that it is easy to consume products that provide a healthy and natural life							
I believe it is my responsibility to consume products that provide a healthy and natural life							
I am willing to pay more for a product that provides a healthy and natural life							
People who have more access to information about products that provide a healthy and natural life consume more of this type of product							

Part 4

Please read the following concept to answer the questions below:

A Cruelty-free product does not harm or kill animals during its development or supply process.

I have already consumed cruelty-free products.

- Yes
- No
- I don't know

Now answer, on a scale of 1 (strongly disagree) to 7 (strongly agree), the questions below related to your daily consumption:

Questions	1	2	3	4	5	6	7
I intend to consume (or continue to consume) cruelty-free products							
I plan to consume (or continue to consume) cruelty-free products							
I believe that consuming cruelty-free products is smart							
I prefer to consume cruelty-free products over those that are not							
The pandemic made me value more products cruelty-free							
People who are important to me approve if I consume cruelty-free products							
I feel pressured by society to consume cruelty-free products							
People who care more about their image in their social environment consume more cruelty-free products							
I believe that it is easy to consume cruelty-free products							
I believe it is my responsibility to consume cruelty-free products							
I am willing to pay more for a cruelty-free product							
People who have more access to information about cruelty-free products consume more of this type of product							

Part 5

Please read the following concept to answer the questions below:

A Recyclable Product can be transformed at some point in its life cycle through a selective collection, resignification, or transformation.

I have already consumed recyclable products.

- Yes
- No
- I don't know

Now answer, on a scale of 1 (strongly disagree) to 7 (strongly agree), the questions below related to your daily consumption:

Questions	1	2	3	4	5	6	7
I intend to consume (or continue to consume) recyclable products							
I plan to consume (or continue to consume) recyclable products							
I believe that consuming recyclable products is smart							
I prefer to consume recyclable products over those that are not							
The pandemic made me value more products recyclable							
People who are important to me approve if I consume recyclable products							
I feel pressured by society to consume recyclable products							
People who care more about their image in their social environment consume more recyclable products							
I believe that it is easy to consume recyclable products							
I believe it is my responsibility to consume recyclable products							
I am willing to pay more for a recyclable product							
People who have more access to information about recyclable products consume more of this type of product							

Part 6

Sociodemographic profile

What is your gender?

What state in Brazil do you currently reside in?

What is your marital status?

What is your level of education?

What is your age?

What is your average family income?

Note: Originally, the questionnaire was applied in Portuguese, and a copy may be requested from the authors.