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Frugality, brand attitude and purchasing behavior in green restaurants in emerging Latin American markets

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Abstract

Frugality has often been associated with resource-saving behavior that contributes to sustainable consumption. The study presented here aims to investigate consumer frugality and its relationship with brand attitude, purchase intention and purchase behavior in ecological foodservice in an emerging market in Ecuador. A non-experimental quantitative study was conducted with a sample of 327 customers residing in Ecuador of an ecological cafeteria considered an icon brand in the country. The conceptual model proposed empirically demonstrates the negative effect on the relationship between frugality and green purchasing behavior and the mediating role of purchase intention and brand attitude in this relationship; it was also shown that the relationship between brand attitude and green purchasing behavior is mediated by purchase intention. The results suggest that green marketing strategies in emerging markets should take into account consumer beliefs and values as they have an impact on purchase behavior. The article includes a theoretical model that yields relevant implications for managers involved in green services and offers practical guidelines for understanding consumer behavior to aid effective green marketing management in foodservice operations.

Keywords: Brand attitude; green purchasing intention; green purchasing behavior; frugal lifestyle; emerging markets.

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Frugalidad, actitud hacia la marca y comportamiento de compra en restaurantes ecológicos de mercados emergentes latinoamericanos

Resumen

La frugalidad ha sido asociada frecuentemente con un comportamiento de ahorro de recursos que contribuye al consumo sostenible. El estudio que se presenta tiene como objetivo investigar la frugalidad del consumidor y su relación con la actitud hacia la marca, la intención y comportamiento de compra en servicios de restauración ecológicos en un mercado emergente de Ecuador. Se realizó un estudio de carácter cuantitativo no experimental con una muestra de 327 clientes residentes en Ecuador de una cafetería ecológica considerada marca ícono en el país. El modelo conceptual planteado, demuestra empíricamente el efecto negativo en la relación frugalidad y comportamiento de compra ecológica y el papel mediador de la intención de compra y la actitud hacia la marca en dicha relación; además se demostró que la relación entre la actitud hacia la marca y comportamiento de compra ecológica es mediada por la intención de compra. Los resultados sugieren que las estrategias de marketing ecológico en mercados emergentes deben tomar en cuenta las creencias y valores del consumidor ya que tienen un impacto en el comportamiento de compra. El artículo incluye un modelo teórico que arroja implicaciones relevantes para los gestores relacionados con servicios verdes y ofrece directrices prácticas para comprender el comportamiento del consumidor y ayudar a una gestión eficaz del marketing verde en las operaciones de servicios de restauración.

Palabras clave: Actitud de marca; intención de compra verde; comportamiento de compra verde; estilo de vida frugal; mercados emergentes.

Introduction

The existing literature describes frugality as a lifestyle trait, reflecting discipline and savings in the acquisition of products or services and ingenuity in using them. The frugal consumer feels good about saving money and resources, he is positive and optimistic. A frugal person avoids waste and uses wisely his economy and material resources; furthermore, a frugal lifestyle does not necessarily have to do with a lack of economic resources (De Young, 1996; Lastovicka et al., 1999).

Frugality has been studied from a business perspective in various investigations. In recent years, it has been systematically analyzed and approached from the concept of frugal innovation (Brem et al., 2020). However, only few studies have examined frugality from the consumer perspective (Suárez et al., 2020; Philip & Nepommuceno, 2020; Wang et al., 2020; China et al., 2021), thus, its study from this perspective becomes relevant and interesting.

The current scenario for emerging economies, including all those that are not considered advanced economies, is

not encouraging. The consequences of the COVID 19 pandemic can be seen in historical inflation and economic decline not only in Latin America but worldwide (Salazar et al., 2022). The possible effects of the pandemic on sustainability, in the context of changing consumption patterns, is a topic of study that attracts attention; thus, it is relevant to analyze how this event shapes the thinking and decision-making processes, determining changes in the consumer's behavior (Wang, Shi & Yuen, 2022).

In this context, it represents a challenge to understand consumption patterns that will evidently be different from those established in a booming economy mindset. Therefore, consumers will likely look for ways to spend less money with a forced frugality approach, as already seen throughout history in recessions and financial crises (Parrott, 2020; Manta, Hysa & Kruja, 2021).

The research scenario for this study is a Latin American country: Ecuador. Ecuador is considered an emerging economy according to its social and economic indicators, such as the increase in the incidence rate of poverty to 6.5% by 2020 and the unemployment rate that has doubled by 2021 to 6.4% (World Bank, 2021).

According to what was stated in previous lines, frugality may become a global mega trend, driven by the need of austerity and moderate lifestyles, thus arising the need for economic and environmentally responsible products and services in the post-pandemic era (Manta et al., 2021); it is therefore, relevant to know new consumption patterns and macro trends that influence consumer's decision making, posing as a necessary line of research. Thus, Jagannathan, Bawa & Rai (2020) recommend in their work to expand the study of frugality and the

analysis of its effects, pointing out the importance of providing new approaches to understand this behavior and to develop new models and theories that help to understand it.

In this sense, some investigations carried out by De Young (1996); Fujii (2006); and Evers et al. (2018), have studied the ways in which consumers practice frugality and have considered how they are connected with sustainable consumption and green consumption, indicating that a frugal consumer has more resource-saving behaviors and pro-environmental behaviors.

Despite extensive research on the sustainable consumer in the European and North American context, this study has been neglected for several years in developing economies, even more so in the case of Latin American countries (Biswas & Roy, 2015). Due to this increased scholarly interest and lack of focused reviews, this study aims to examine the effect of frugality as a lifestyle on consumers' sustainability consumption and thus analyze the relationship between frugality, attitude, intention and purchase behavior in the context of green catering, using as a theoretical framework the Theory of Planned Behavior (TBP) approach.

Taking into account the novel character of the frugality variable from the consumer's perspective, the article contributes to the theory of consumer's behavior by measuring brand attitude and frugality and their influence on consumers green purchasing intentions and behavior. In addition, it also explores, the interesting application of global approaches through the consideration of a local perspective, which contextualizes the study in an emerging market in Latin America.

1. Theoretical background and hypothesis

1.1. Frugality

Consumer's frugality is defined as the "careful use of resources and avoidance of waste" (De Young, 1996, p. 285). This definition has been neglected in the marketing literature even though it is associated with individuals and social groups. However, scholars recommend to studying frugal behavior as a lifestyle (Todd & Lawson, 2003), which is the approach this study has considered to analyze.

Frugality is considered as a consumption restriction that is not necessarily related to the economic scarcity of the consumer, but rather, a moral restriction associated with consumption, excess and waste (Evans, 2011; Coskun & Yetkin, 2019). It is considered of ecological origin, insofar as it acts to reduce the environmental impact generated by consumption.

On the other hand, frugality is defined as a "unidimensional consumer lifestyle trait characterized by the degree to which consumers are both restrained in acquiring and resourceful in using economic goods and services to achieve longer-term goals" (Lastovicka et al., 1999, p. 98).

According to the conceptual model proposed by Goldsmith, Reinecke & Clark (2014), frugality as a lifestyle is motivated by internal psychological factors. Herstatt & Tiwari (2020), denominate the frugal lifestyle as the conscious reflection of the human being, of what he needs and of his decisions about purchase, consumption, and disposal, which positively motivates the responsible care for people, animals, and the environment. In this way, a frugal individual does not stop consuming, but does so with a focus on conservation and economy of resources. Thus, the

difference between a frugal and non-frugal consumer is the way in which he consumes.

In a way, the vision of frugality is often confused with the behavior of a miserly individual. However, the frugal consumer is not an anti-consumer, but tends to conserve the resources he already has and is careful that new acquisitions are of higher value (Kropfeld, Vinhal & Dantas, 2018). Suárez et al. (2020), concludes in their study that frugality is based on the level of consciousness that individuals present with respect to the multiple effects of consumption; thus, confirming that awareness of the social, environmental, and economic consequences of consumption influence frugal behavior.

In conclusion, frugality is a consumer lifestyle that can be influenced by internal factors such as the individual's personality and external factors such as purchasing capacity; thus, a frugal lifestyle is usually an antecedent of frugal purchasing behavior, especially in products and services that contribute to the saving of material and economic resources.

As shown in the previous lines, studies to assess frugality have highlighted the exploration of its consequences, being relevant the sustainable purchase intention and behavior, possibly motivated by the global economic recession, consumer distrust in the market and uncertainty (Fujii, 2006; Pepper, Jackson & Uzzell, 2009; Evans, 2011; Chen et al., 2019; Wang et al., 2020; Kapitan et al., 2021).

1.2. Theory of the Planned Behavior (TPB) and sustainable consumption

Sustainable consumption consists of promoting sustainable lifestyles, increasing resource efficiency and preventing environmental impact (Kabel, Elg &

Sundin, 2021). According to Ariztía et al. (2014), there is an evolution in the adoption of sustainable consumption practices in Latin American countries such as Brazil and Chile, thanks to corporations and their RSE policies and the role played by the State in the connections between their policies and ethical and sustainable consumption. This trend is also observed, in the countries of the region possibly in their attempt to respond to the Sustainable Development Goals (ODS 12) (Gaspar, Shah & Tankha, 2019).

According to Matharu, Jain & Kamboj (2021), a greater understanding of the consumer's willingness to engage in sustainable purchasing behavior is required, being thus the TBP used as a lens, through which we try to understand the intentions and purchasing behavior of a green catering service, understood as a service with the same functions as conventional ones, but that has less environmental impact (Yang et al., 2021).

Green purchasing behavior was addressed for the first time by the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1975) and later, due to its limitations, the TBP was used to explain it. TPB, proposed by Ajzen in 1991, is the most tested and debated social cognitive theory, it is derived from the TRA, which was developed by Ajzen & Fishbein (1975). This theory supports the conception of the human being as a rational being who can use the information available to exercise the actions or behaviors learned. It is a model that explains the behavior of the people based on the relationship between beliefs, intention, behavior, and attitude (Ajzen, 1991).

1.3. Frugality, green purchasing intention and behavior

Lifestyles are a set of behavioral patterns that denote people's way of life,

which is closely related to motivational and behavioral aspects (Espina-Romero, Guerrero-Alcedo & Marreros, 2023). Research has found that, as a lifestyle, frugality is a significant and independent predictor of adopting positive environmental behaviors (Kropfeld et al., 2018). The economic recession is likely to encourage more environmentally sustainable consumption patterns (Evans, 2011). Furthermore, some frugal consumers actively show more resource-saving and pro-environmental behaviors, from which it can be deduced that frugality may have a significant relationship with the sustainable consumption behaviors of consumers (Fujii, 2006; Evers et al., 2018; Naderi & Van Steenbur, 2018).

In this sense, consumers with a frugal lifestyle are motivated to consume products that contribute to the care of the environment, due to their interest in eliminating waste and saving material resources. According to the analyzed literature, frugality is posited as a predictor of environmental behavior, giving rise to the following hypothesis:

H1: Frugality positively and significantly influences the purchasing behavior of green restaurant services.

Various studies (Cervellon, Carey & Harms, 2012; Naderi & Van Steenbur, 2018; Chen et al., 2019; Wang et al., 2020; Kapitan et al., 2021) confirm the influence of frugality on consumers' green purchasing intentions, recognizing an intuitive sense of saving material and economic resources. In this way, frugality influences purchase intentions, and these in turn, significantly predict purchasing behavior (Chen et al., 2019; Ndofirepi & Cowen, 2019). To confirm the mediating role of purchasing intentions in the relationship between frugality and purchasing behavior, the following

hypothesis is proposed:

H2: The effect of frugality on the green purchasing behavior of catering restaurant services is mediated by purchasing intention.

The connection between attitudes and behaviors is a complex process; being so, attitude is a key concept in consumer behavior research as it is attributed the final decision on purchase decisions (Kuzniar, Surmacz & Wierzbiński, 2021). In trying to understand pro-environmental behavior, the importance of the environmental concern variable, considered a feature of the frugal lifestyle, has been highlighted because of the positive influence it has on consumers' attitude towards green products and their purchase intention (Fujii, 2006).

Several studies on the consumer of organic food, Singh & Verma (2017); Zhang et al. (2018); Huang et al. (2019); and Nitima, Aya & Mayuree (2020), have explored various factors that lead to the consumer's favorable attitude and drive real organic purchasing behaviors have been explored. Thus, personal background factors and factors related to the product have been considered. In this study, frugality is seen as a personal background factor that leads to a favorable attitude towards the brand of the green restaurant service and purchasing behavior; being so, it is proposed to verify:

H3: The effect of frugality on the green purchasing behavior of restaurant services is mediated by brand attitude.

1.4. Brand attitude, purchasing intention and behavior

The TPB is based on an expectancy-value formulation to describe the attitude formation towards the behavior. As previously stated, empirical evidence shows that the intention to purchase organic products is influenced by the three variables of the TPB:

Attitude, subjective norm, and perception of behavioral control (Ajzen, 2020; Nitima et al., 2020).

According to previous studies, considering that attitude is represented by the degree to which a person has a favorable or unfavorable evaluation of the behavior in question, a more positive attitude towards the behavior makes the intention to execute it also stronger (Qi & Ploeger, 2019; Alam et al., 2020; Ajzen, 2020; Dangi, Narula & Kumar, 2020).

Thus, when restaurant customers feel connected to the brand, they can show a strong attitude towards it (Foroudi, Palazzo & Sultana, 2021). In the same way, Park (2020), in his study in a context of premium coffee shops, mentions that the behavior and the intention of choice may vary depending on the brand attitude.

Likewise, other studies have seen attitude as a function of the prominent beliefs of consumers about a product or service and evaluative judgment about how good or bad the brand is. Researchers have explained that brand attitude implies cognitive and affective measures, and these are linked to the consumer's intention (Liu et al., 2020). It is considered then that the consumer knowing the brand and having a positive perception of it, generates a favorable attitude which would lead to the purchase intention.

In this way, the attitude towards the brand has both a direct and indirect impact on purchasing intention the products / services by consumers (Salehzadeh et al., 2021). According to George (2004), positive attitudes towards the behavior in question should lead to the performance of said behavior, so the probability that there is a certain behavior depends on the intention of the individual to perform it, thus, the attitude plays a crucial role in developing those intentions.

Under these premises the following hypotheses are proposed:

H4: Brand attitude positively and significantly influences the green purchasing

behavior of restaurant services.

H5: The effect of brand attitude on green purchasing behavior of restaurant services is mediated by the purchasing intention.

1.5. Purchasing intention and purchasing behavior of green restaurant services

Alam et al. (2020) mention that the direct relationship between intention and behavior is much stronger than the other relationships in TPB. Purchasing intention is a strong indicator of purchasing behavior, which is the actual transition from intention to action (George, 2004; Yadav & Pathak, 2016; Sharma, 2021). Thus, according to Lo, Yu & Chen (2020), intentions indicate how much effort people are willing to exert and how much effort they plan to exert to perform a behavior.

Thus, the green purchasing intention refers to the willingness to buy products or services that respect the environment. Joshi & Rahman (2015); Wang (2017); Jaiswal & Kant (2018); and Ndofirepi & Cowen (2019), mention that the intention significantly predicted the purchasing behavior of ecological

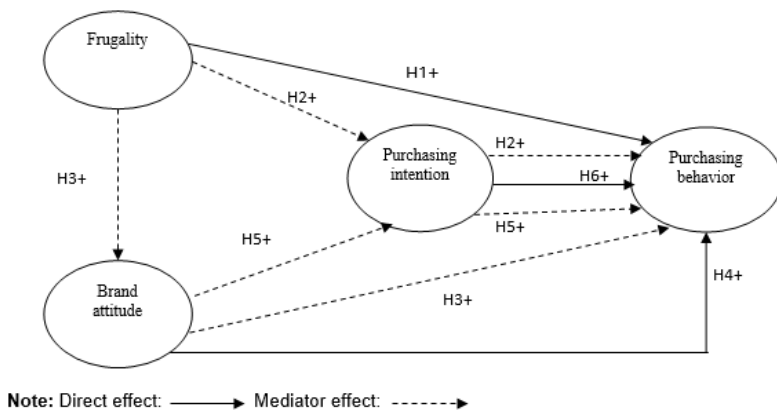
products, behavior that represents an ethical and socially responsible purchasing decision making when acquiring products or services that do not harm society or the environment (Marvi et al., 2020). Few studies have yet attempted to address the potential gap between sustainable purchasing intent and behavior and have not further investigated the actual purchasing behaviors (Nitima et al., 2020).

In the case of green purchasing behavior, research tends to focus solely on intention, while the effect on actual behavior is only assumed (Canova, Bobbio & Manganelli, 2020). Consequently, this study suggests that consumers' purchasing intentions towards ecological brands are positively associated with their purchasing behavior, therefore, it intends to move forward and not just stop with the intention.

According to the literature review, the following hypothesis is proposed:

H6: Purchasing intention positively and significantly influences the purchasing behavior of green-restaurant services.

Once all the hypotheses have been stated, Figure I summarizes the theoretical model to be empirically tested.



Source: Own elaboration, 2023.

Figure I: Proposed structural model

2. Methodology

To verify the hypotheses, a quantitative study was conducted. The study population consisted of customers of the organic coffee shop Sweet & Coffee, residing in Ecuador; Ecuadorian brand that adopts ecological practices⁽¹⁾, and that demonstrates sustained success in the market with 22 years of experience, 100 stores nationwide and 1,200 collaborators at present; it is also recognized as an icon brand in the country by Marketing Hall of Fame Ecuador (Alvarado, 2020).

The data were collected through a structured questionnaire with two main parts using a convenient sample of 327 Ecuadorian users who have made purchases during the last six months. The survey incorporates a filtering question where participants are asked to confirm their status as active customers of the

coffee shop. The questionnaire was pre-tested by means of a qualitative study to review the items and ensure content validity with 30 randomly selected people. The surveys were collected online during the month of August 2021.

For the measurement of all items of each construct, a 5-point Likert scale was used ranging from 1 = strongly disagree to 5 = strongly agree. The measurement of frugality was done by using the scale proposed by Evers et al. (2018) with eight items. Brand attitude was measured using the three items of the Qi & Ploeger (2019) scale. For measuring purchasing intention, the scale proposed by Kim, Njite & Hancer (2013) was applied. A three-item scale was also used for measuring purchasing behavior with the help of the scale developed by Alam et al. (2020) (see Table 1)

Table 1
Measurement scales

Variable	Author	Items
Frugality	Evers, Gruner, Sneddon, & Lee, 2018	F1. Making better use of my resources makes me feel good. F2. I believe in being careful how I spend my money. F3. I discipline myself to get the most from my money F4. There are things I resist buying today so I can save for tomorrow. F5. I am willing to wait on a purchase I want so that I can save money. F6. If you take good care of your possessions, you will definitely save money in the long run. F7. If you can reuse an item, you already have, there's no sense in buying something new. F8. There are many things that are normally thrown away that are still quite useful.
Brand attitude	Qi & Ploeger, 2019	BA1. Buying in Sweet & Coffee is a good idea. BA2. Buying in Sweet & Coffee is pleasant. BA3. Purchasing in Sweet & Coffee is a wise choice.
Purchasing intention	Kim, Njite & Hancer, 2013	PI1. I will choose to purchase in the green coffee shop Sweet & Coffee. PI2. I will make an effort to purchase in the green coffee shop Sweet & Coffee. PI3. I am willing to purchase at the green coffee shop Sweet & Coffee.
Purchasing behavior	Alam, Ahmad, Ho, Omar & Lin, 2020	PB1. I frequently buy in green coffee shop Sweet & Coffee. PB2. I prefer to buy at Sweet & Coffee than another coffee shop when the quality is similar. PB3. I buy at Sweet & Coffee even if it is more expensive than other coffee shops.

Source: Own elaboration, 2023.

In reference to the main demographic variables of the sample, it is observed that 44.3% of the sample is made up of men and 55.7% of women. Regarding age, most of those surveyed range between 20 and 39 years old. It can be observed that 67% of the sample has university degrees and more than 70% of respondents declared having a monthly income between 400 and 880 dollars. Forty-percent of the sample has a purchase

frequency within the range of 1 to 2 times per month and 21.1% 3 to 5 times per month.

Table 2, describes the perception of customers of Sweet & Coffee on green image. The mean and standard deviation were calculated for each item and the results were used to analyze the green image of the coffee shop's customers. All items have a mean greater than 4, the total mean of the scale being 4.20.

Table 2
Descriptive statistics: Perception on green image (Sweet & Coffee)

Items	N	Min	Max	Mean	SD
PGI1. Behaves with social conscious	327	1.00	5.00	4.2813	0.87592
PGI2. Responds to environmental issues	327	1.00	5.00	4.1682	0.99654
PGI3. Is concerned about the preservation of the environment	327	1.00	5.00	4.1743	0.96418
PGI4. Not only concerned about the profit but also concerned about the environment and other consumers	327	1.00	5.00	4.2141	0.95451

Source: Own elaboration, 2023.

3. Results and discussion

The model was tested by applying a partial least squares structural equation modelling (PLS-SEM) analysis because it is a method that reaches high statistical power and is widely applied in many disciplines of social sciences, including marketing management (Hair et al., 2019). It also allowed to perform the analysis from a predictive approach. The data analysis was carried out in two steps: the first, analyzing the measurement model, and the second, testing the structural relationships between the latent variables. For the analysis, the SmartPLS software version 3.3.3 (Ringle, Wende & Becker, 2015) was used.

3.1. Measurement model

During the initial estimation, the reliability of indicators of each variable was assessed, maintaining those that met the

individual reliability criterion, Cronbach's Alpha (CA). Two items with external loadings of 0.596 and 0.603 of the Frugality constructs, which presented an AVE < 0.5, were eliminated. According to the criteria of Hair et al. (2014), in the case of loadings between 0.40 and 0.70, the changes of AVE and CR when items are eliminated must be assessed. If the new values of AVE and CR of the constructs are higher than the previous values, items should be eliminated. This is the case of the construct Frugality.

Table 3, shows the psychometric properties of the measurement scale. Discriminant validity was tested by comparing the square root of the AVE and the correlations with its factors; as well as the HTMT-ratios method, a recently proposed criterion, determines that if the HT/MT ratio is < 0.90 there will be discriminant validity between constructs. In this case the values are less than 0.80, thus the measurement model presents reliability and validity (Henseler, Ringle & Sarstedt, 2014).

Table 3
Psychometric properties of the measures

Factor	Item	Factor loading	t-value	CA	CR	AVE
Frugality	F1	0.692***	12.263	0.831	0.875	0.540
	F2	0.737 ***	20.225			
	F3	0.775 ***	27.593			
	F4	0.733 ***	16.957			
	F5	0.701 ***	14.525			
	F6	0.767 ***	20.214			
Brand attitude	A1	0.902***	57.751	0.898	0.936	0.830
	A2	0.902***	43.293			
	A3	0.929***	74.366			
Purchasing intention	PI1	0.918***	41.156	0.911	0.944	0.849
	PI2	0.908***	46.338			
	PI3	0.937***	66.720			
Purchasing behavior	PB1	0.817***	32.055	0.810	0.887	0.724
	PB2	0.892***	64.075			
	PB3	0.842***	31.062			

Note: CA= Cronbachs Alpha; CR= Composite Reliability; AVE= Average variance extracted; *** p< .01; **p< .05; *p <.10

Source: Own elaboration, 2023.

3.2. Structural Model

After the assessment of the reliability and validity of the measurement of the constructs, it is necessary to evaluate the significance of the relationships between the latent variables

of the model. Thus, the estimation of the significance of the parameters (bootstrapping) was carried out with 5.000 subsamples. Next, the results of the direct effects are analyzed (see Table 4), in order to validate the hypotheses H1, H4 and H6.

Table 4
Direct effect testing

Path	Standardized beta	t-value (Bootstrap)	Hypothesis testing
Frugality → Purchasing behavior	-0.127 **	2.359	H1 Not Supported
Brand attitude → Purchasing behavior	0.503 **	6.935	H4 Supported
Purchasing intention → Purchasing behavior	0.302 **	4.418	H6 Supported

Note: R2 (Attitude) = 0,325; R2 (PI) = 0,436; R2 (PB) = 0,439; Q2 (F) = 0; Q2 (PI) = 0,366; Q2 (Attitude) = .265; Q2 (PB) = .306; **p < .01, *p < .05

Source: Own elaboration, 2023.

The results of the analysis regarding H1 indicate that there is a negative (-0.127) and significant ($p = 0.0009$) relationship between frugality and purchasing behavior of green restaurants service. Therefore, this hypothesis is not supported. A positive (0.503) and significant ($p = 0.00$) relationship between brand attitude and purchasing behavior of services in green restaurants (H4) can be observed. Therefore, it is verified that TPB is based on the expectation-value formulation to describe attitude formation towards a behavior, and that these positive attitudes should lead to the realization of said behavior (George, 2004; Ajzen, 2020). Thus, the hypothesis H4 is supported.

At the same time, a significant ($p = 0.00$) and positive (0.302) relationship between the purchasing intention and the purchasing behaviour of services of green restaurants (H6) is observed, in a such way that both constructs complement each other insofar as one would better define the other (Alam et al., 2020). In other words, the intention would shape the purchasing behaviour of services in green restaurants, thereby supporting hypothesis H6.

When analyzing the Q2 result (0.306), it is observed that the model has moderate predictive power on the endogenous variable purchase behavior with a value >0.25 . When

obtaining the q-squared values to determine the effect size, it is observed that the attitude towards the brand (0.136 medium) is the variable that most contributes to predicting the purchase behavior of organic catering services.

On the other hand, when analyzing the result of Q2 (0.366), it is observed that the model has a moderate predictive power on the endogenous variable purchase intention with a value >0.25 . Also, when obtaining the q-squared values, it is observed that the attitude towards the brand (0.212 medium) is the variable that most contributes to predicting the intention to purchase green catering services (Schirmer et al., 2016; Hair et al., 2019).

a. Analysis of the mediating effect

Table 5 shows the results of the analysis of the mediator effect. The results of the analysis of the mediating effect posed in H2 show that the direct effect of frugality on purchasing behavior (-0.127) and the specific indirect effect of the mediation (0.74) are both significant and with different signs. Thus, the total effect reaches the -0.053 value and the mediation is competitive (Nitzl, Roldan & Cepeda, 2016).

Table 5
Mediating effect testing

Path	Mediation model purchasing intention				Mediation	Hypothesis testing
	Standardized β	Indirect Effect	R ²	f ²		
Frugality → Purchasing behavior	-0.127	0.074**	0.439	0.092 Low effect size	Competitive partial	H2 supported
Frugality → Purchasing intention	0.244**					
Purchasing intention → Purchasing behavior	0.302**					

Cont... Table 5

Mediation model brand attitude						
Frugality → Purchasing behavior	-0.127 **	0.287**	0.439	0.237 Medium effect size	Competitive partial	H3 supported
Frugality → Brand attitude	0.571**					
Brand attitude → Purchasing behavior	0.503**					
Mediation model purchasing intention						
Brand attitude → Purchasing behavior	0.503**	0.148**	0.439	0.092 Low effect size	Complementary VAF (22.73%) Partial	H5 supported
Brand attitude → Purchasing intention	0.490**					
Purchasing intention → Purchasing behavior	0.302**					

Note: VAF = variance accounted; $f^2= 0.15$ low; $f^2= 0.25$ medium; $f^2= 0.35$ high. * $p < 0.05$; ** $p < 0.01$.
Source: Own elaboration, 2023.

R squared reaches a value of 0.439, which indicates that the mediation explains 43.9% of the variance of the variable purchasing behavior. The value of f square of the mediation variable is 0.092, which mean a low effect size. On the other hand, the variable frugality reaches a f square value of 0.018, indicating a low effect size. Therefore, the mediation variable purchasing intention contributes the most to explain purchasing behavior.

In accordance with the results, hypothesis H2 is validated, confirming the results of the studies carried out by Chen et al (2019); and Ndofirepi & Cowen (2019). These studies have demonstrated that frugality generates purchasing intentions of green products and these intentions in turn are a strong predictor of purchasing behaviour.

The analysis of the mediating effect posed in H3 also shows a significative competitive mediation of brand attitude. The direct effect of frugality on purchasing behavior is -0.127, and the specific indirect effect of the mediation is 0.287, both being significant and with different sign. The total

effect is positive, 0.16. The value of f square of the mediation variable of 0.237 indicates a medium effect size, being brand attitude the variable that contributes the most to explaining purchasing behavior.

Therefore, hypothesis H3 is validated, since the results indicate that brand attitude can mediate the relationship between frugality and purchasing behavior of green services and products, as shown in previous studies (Fujii, 2006; Nitima et al., 2020; Foroudi et al., 2021).

Finally, the analysis of the mediating effect posed in H5 shows that the direct effect of purchasing behavior (0.503), the indirect specific effect of the mediation (0.148) and the total effect (0.651) are significative ($p \leq 0.05$) and positive. Thus, it is considered a case of complementary mediation (Nitzl et al., 2016). The value of f square of the mediation variable is 0.092, which means a low effect size. On the other hand, brand attitude reaches a f square value of 0.237, indicating a medium effect size and the highest contribution to explain the variance of purchasing behavior.

For this mediation effect, the explained variance (VAF) was also calculated, reaching a

value of 22.73% that indicates a case of partial mediation (Nitz et al., 2016). In accordance with the results, hypothesis H5 is validated. Thus, it is empirically demonstrated that brand attitude has a direct as well as an indirect effect on purchasing intention and this, in turn, on purchasing behavior of green products and services, in line with previous studies (Salehzadeh et al., 2021).

Conclusions

Evidence in the academic literature indicates that the economic recession will encourage consumers to embrace frugality, and that this behavior is likely to emerge as a mega trend that will lead to more environmentally sustainable forms of consumption. However, the results of H1 show that frugality is not positively related with a green purchasing behavior, having been observed that the studied frugal consumers are likely to reduce the purchasing of green restaurants service.

This result could be due to the characteristics of the analyzed emergent market: Ecuador. It could also be explained by the economic recession generated by COVID-19, that has the potential to increase the social interest of consumers in developing favorable attitudes towards the search for alternatives to spend less money, opting for lower prices and saving as a shared vision that they should exercise a greater financial prudence in times of economic crisis.

Similarly, it is shown that frugal consumers exhibit a high level of concern regarding their expenditures and display a preference for cost-saving measures. In other words, the more frugal consumers are, the less likely they are to buy green products because of the perception of a high price, which is usually characteristic of a green service or product. On the other hand, their motivation to save is more likely to increase and their environmental beliefs to weaken.

In some studies, it has been shown, that it is reasonable to think that behaviors related to money or possessions need not be

related to smart resource management and it is evident that frugality not have a direct impact on the purchase of environmentally friendly products, therefore, a frugal lifestyle does not necessarily represent green consumption. Other studies reveal the opposite when stating that the frugal consumer tends to opt towards sustainable consumer's behavior, these conflicting results could be caused by cultural and socioeconomic differences of the countries where these investigations were carried out and the context of the current study, which was performed in an emergent market.

It is also relevant to mention that the relationship between frugality and purchasing behavior (H1) is mediated by the green purchasing intention and by brand attitude, relationships that are further analyzed. In this context, frugal lifestyle is more closely related to savings and economic motivations than to pro-environmental considerations.

This study developed a suitable theoretical model that might be able to explain frugality as an antecedent variable of green purchasing intention. The empirical analysis of the model proved that purchasing intention has a competitive mediating role in the relationship between frugality and green purchasing behavior. Brand attitude, a variable that has a theoretical basis in the TPB, and that allows to understand the intention of consumers towards a behavior that respects the environment, resulted to be a relevant construct in the proposed model.

The mediating role of brand attitude in the relationship between frugality and green purchasing behavior (H3) and the acceptance of this hypothesis is of great relevance in the field of green marketing, since attitude has been considered a good predictor of the intention and purchase behavior of green restoration services. The positive and direct relationship between purchase intention and actual purchase behavior in the field of organic foodservice is also demonstrated.

The findings contribute globally to the study of consumer's behavior and the conceptualization of the frugal lifestyle, demonstrating that the frugal lifestyle is not

necessarily related to green consumption; that is, the frugal consumer could save material resources with the objective of saving financial resources, but not, solely, for an environmental care motivation. Since this is an important issue for the restoration sector and academia, this study emphasizes the need to recognize the right segments for sustainable and green practices.

Although other authors have focused on the study of consumer purchasing intention and behavior in a green context, most of these efforts have been limited to a specific green product, rather than investigating the attitude and purchasing products of green brands.

On the other hand, COVID 19 has changed people's behavior and social awareness; consumers are more aware of the social and environmental problems around them and can adopt alternative behaviors such as establishing new consumption patterns or reducing their consumption expenditures within the scope of understanding social responsibility. Thus, taking data in a health crisis landscape with COVID 19, allows revealing how consumers adapt their purchasing and spending behavior in response to constantly changing social and environmental stimuli; more so in an emerging economy.

The results obtained in this study show the importance of the positive attitude towards the green brand, the same that is enhanced when customers feel that the service received is in line with their values and expectations. Therefore, the study suggests that, in order to improve consumers', purchase intention towards green foodservice, based on certain values related to sustainable consumption, favorable brand attitudes should first be created through experiential marketing programs and green advertising appeals. Marketers should consider in their analysis, personal behavioral beliefs to attract consumers' favorable attitude.

Although it is true that responsible consumption trends have increased during the pandemic period, it should be considered that environmental sensitivity is not a determining factor in a change of consumption pattern;

thus, if green restaurants seek to attract frugal consumers, they could generate promotional marketing strategies by developing sales promotion activities such as discounts and bonuses that represent savings of economic resources and that will surely be valued by the consumer with a frugal lifestyle.

The results of this study are important, but it does have some limitations which offer several interesting lines for future research. Among them, it is relevant to mention the size of the sample and the fact that it was applied to one country and to a specific service and brand. This aspect must be considered when generalizing the results, however, previous studies have also focused only on one brand.

In this line, future research could include variables such as brand preference and perception of ecological image in the model; since there is a partial mediation in the model, it opens a door to investigate constructs that could also mediate the relationship positively. Moreover, moderating variables such as age and gender can be included, since, beliefs and attitudes about green restaurants and their impact on purchasing intention may be different between men and women. Finally, the study can also be applied in other culturally different country.

Notes

¹ Currently, the brand has a project called "Our Pact with the Planet", which deals with the application of the "3Rs": Recycle, reduce and reuse; thus, they use eco-friendly packaging made of recycled and biodegradable material to consequently reduce CO2 emissions; in addition, they raise awareness in society about the responsible use of disposable utensils (Chávez, 2020).

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