



Why do you want an organic coffee? Self-care vs. world-care: A new SOR model approach to explain organic product purchase intentions of Spanish consumers

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ABSTRACT

The growing concern for environmental preservation, sustainability and the well-being of producers and consumers has created demand for alternative organic products. In the context of organic product consumption, individuals may be motivated by self-care or world-care factors. This study proposes a new, adapted version of the SOR model – stimulus (S), organism (O), response (R) – to explore the acceptance of an organic coffee produced in Peru. The model used data from 570 Spanish consumers, and the analysis was carried out using partial least squares (PLS), based on variance. The findings revealed that world-care (S) significantly influences both hedonic and utilitarian attitudes (O), while self-care (S) was not found to have a significant impact on these attitudes. In addition, both hedonic and utilitarian attitudes were found to influence consumers' purchase intentions for organic coffee (R), with hedonic attitudes playing a particularly crucial role. These results carry substantial theoretical and practical implications for the fostering of a more sustainable and environmentally conscious coffee market.

1. Introduction

Coffee is one of the world's most popular drinks (Bayindir & Çaliskan, 2022; Lim, Zwicker, & Wang, 2019) and is in great demand for its flavor, aroma and its capacity to stimulate mental performance (Lim et al., 2019). According to the Food and Agriculture Organization (2024), commercial world coffee production in 2022 was 10,891 million kilograms and, in the same year, coffee was one of the main food products exported globally, with a total of 8,466 million tons, which represented a value of US\$ 46,397 million (International Trade Centre - ITC, (2024, 2024).

Coffee consumption has been increasing steadily, but its cultivation, which plays an important role in the world economy, is endangered due to the effects of climate change (Naik, Kim, Seenaiah, Basha, & Song, 2021). The predominant agricultural system, which seeks to maximize production (Menossi, Ollier, Casalongue, & Alvarez, 2021), uses

chemical fertilizers and pesticides (Hemowng, Sangrit, Phunthupan, Butnan, & Vityakon, 2021). The use of chemicals has been increasing significantly in many countries and residues are now above the Maximum Allowed Limits (MRL) (Osaili et al., 2021). The excessive and inappropriate use of pesticides contaminates ecosystems and creates risks to human health (Hamoud & Sifour, 2021). In addition to the negative effects chemicals have on the environment, they create problems for the social and economic sustainability of farms (Tipi & Erbaslar, 2021), bioaccumulation with adverse effects on soil biodiversity (Deng et al., 2021 & Adiloglu et al., 2021) and foster the development of resistance by pests and the elimination of beneficial insects (Bapat et al., 2021 & Lee, Martinazzo, Garcia, Berbet, & Teodoro, 2021). The health of producers and consumers is put at risk (Menossi et al., 2021) through the generation of diseases and conditions, of diverse natures, such as brain damage (Hamdi, Graiet, Abid-Essefi, & Eyer, 2021) and cancer, both of which are linked to the use of certain pesticides (Rebouillat et al.,

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2021) and to exposure to mixtures of some herbicides (Mesnage, Brandsma, Moelijker, Zhang, & Antoniou, 2021).

This situation has been raising awareness among producers about the need to introduce sustainable and pesticide-free production systems (Muller & Behrendt, 2021), and among consumers concerned about environmental and health care (Zhao et al., 2021). Consumers may indeed be key for the transition to a more sustainable food system and for promoting sustainable development (Vittersø & Tangeland, 2015). This creates an important dilemma: in the context of organic products, which do consumers consider more important, self-care or world-care? To address this crucial question, a new model based on the stimulus-organism-response (SOR) framework (Mehrabian & Russell, 1974; Liu & Zheng, 2019) is proposed. The aim of the model is to explain how perceived environmental and social benefits (world-care) versus the benefits derived by the individual consumer (self-care) (S) influence utilitarian and hedonic attitudes (O), which may in turn impact on the purchase intentions for a new organic coffee produced in an indigenous community (R). Thus, the present study aims to analyze the elements that affect purchase intentions, taking the SOR theory as a reference, as have previous studies, and to advance the knowledge of consumers' purchase intentions for organic products (Utama, Sumarwan, Suroso, & Najib, 2021; Tandon, Jabeen, Talwar, Sakashita, & Dhir, 2021; Lee, Fu, & Chen, 2019; Sultan, Wong, & Azam, 2021; Qi & Ploeger, 2021). The present study aims to enhance the existing literature on the subject by providing additional insights. Given the scarcity of information in the international trade arena, particularly in coffee-producing countries, the study seeks to address the gap in understanding the factors that drive demand for organic food in consumer markets (e.g., Azzurra, Massimiliano, & Angela, 2018; De Maya, López-López, & Munuera, 2011; Escobar-López, Espinoza-Ortega, Lozano-Cabedo, Aguilar-Criado, & Amaya-Corchuelo, 2019; Zander & Hamm, 2010). Therefore, the identification of the main attributes that determine purchase intentions for organic products continues to be a key challenge in producing and consuming countries. Thus, this work aims to contribute, drawing on the SOR theory, at an additional practical level. In addition, the present study is the first to seek to use the SOR theory with supply information from a producing country (Peru) and from a consuming country (Spain). In this sense, including the producer-consumer perspective and the self-care and world-care variables is justified because of the importance of resolving the self-world care dilemma and evaluating the model's explanatory capacity in establishing whether hedonic-utilitarian motivations are drivers of purchase intentions.

2. Theoretical framework

2.1. The SOR model in organic food consumption

The SOR model proposes that aspects of the environment have a stimulating role (S) that affect people's internal/mental states (O), evoking behavioral responses (R) (Mehrabian & Russell, 1974; Liu & Zheng, 2019; Utama et al., 2021).

Studies carried out into the consumption of organic foods have highlighted stimuli such as health awareness (Tandon et al., 2021) and altruism (Kumar, Murphy, Talwar, Kaur, & Dhir, 2021). Healthy content, local products, organic product labels and high prices have been seen to exert a significant, positive effect on hedonic and utilitarian attitudes (Lee et al., 2019). Qi and Ploeger (2021) found that utilitarian and hedonic attitudes had a significant effect on purchasing behaviors. Liu and Zheng (2019) proposed that external stimuli (food safety incidents) and internal stimuli (consumers' environmental orientation) can significantly affect consumers' behaviors (consumer ecological cognition), which can influence their purchasing of organic products. Coffee consumption-focused studies that have used the SOR model have proposed that factors (S) such as sensory appeal, lifestyle and health have significant effects on consumers' attitudes (O) and coffee consumption (R) (Utama et al., 2021).

Attitudes and intentions toward organic food consumption can be measured using both hedonic and utilitarian dimensions (Sadiq, Rajeswari, Ansari, & Kirmani, 2021; Voss, Spangenberg, & Grohmann, 2003), indeed, hedonic and utilitarian attitudes positively and significantly affect consumers' purchasing intentions (Lee et al., 2019). Testa, Sarti, and Frey (2018) argued that consumers' purchasing behaviors for organic products is influenced by their purchase intentions, and that consumers' knowledge of the products influences their purchase intentions. Escobar-López et al. (2019) argued that naturalness (natural content) has a significant influence on consumers' motivations to consume organic food. Unal, Deveci, and Yildiz (2019) argued that health, ease of use, mood and a good price had the same effect. Similarly, product traceability (Cavite, Mankeb, & Suwanmaneepong, 2021), nutritional content, respect for the environment and production/processing methods have been shown to influence the consumer attitudes that drive purchasing decisions (Tariq, Wang, Tanveer, Akram, & Akram, 2019; Liang & Lim, 2020). Consumers' attitudes toward buying organic foods have been shown to have a great impact on predictions of purchase intentions (Ercis, Yildiz, & Deveci, 2020; Sadiq et al., 2021; Ut-Tha, Lee, & Chung, 2021).

While many related studies have been conducted, consumers' motivations for the purchase and consumption of organic products remain unclear. To address this uncertainty, drawing on the SOR framework, the present study examines how consumers compare the significance of environmental benefits (world-care) versus personal benefits (self-care) of a new organic coffee produced in an indigenous community, and assess their impact on their purchase intentions. Thus, two stimuli are examined, world-care and self-care, both of which may influence individuals' hedonic and utilitarian attitudes, which may ultimately prompt a purchase intention response.

2.2. Hypotheses development

Various researchers, taking different viewpoints, have expressed interest in identifying consumers' motives for developing organic food purchase intentions and consumption (e.g., Azzurra et al., 2018; De Maya et al., 2011; Escobar-López et al., 2019; Zander & Hamm, 2010). While previous studies have identified a wide range of motivations for organic food consumption, two main tendencies have been noted: first, pro-social-environment/altruistic consumption linked to preserving the environment and enhancing others' well-being (Kareklas, Carlson, & Muehling, 2014; Langen, 2012; Lee & Yun, 2015; Vega-Zamora, Parras-Rosa, Murgado-Armenteros, & Torres-Ruiz, 2013; Van Loo, Caputo, Nayga, & Verbeke, 2014; Zanolli, Gambelli, & Vairo, 2012; Krom & Mol, 2010; Zander & Hamm, 2010) and second, a greater concern about the effects consumption has on individual well-being, triggered by worries about nutritional content and individual health (Kareklas et al., 2014; Lee & Yun, 2015; Vega-Zamora et al., 2013; Van Loo et al., 2014; Zanolli et al., 2012; Krom & Mol, 2010; Zander & Hamm, 2010).

Regarding the first type of motivation, identified as altruistic, it has been argued that socio-environmental concerns are significant determinants (Escobar-López et al., 2019; Shashi & Singh, 2015; Padilla-Bravo, Cordts, Schulze, & Spiller, 2013). Consumers with higher organic food purchase intentions seem to be stimulated by the social and environmental impacts of their food consumption decisions (Lee & Yun, 2015; Monier-Dilhan & Bergès, 2016). That is, when consumers are highly concerned about these issues they are more likely to consume organic food (Rana & Paul, 2017). In addition, Azzurra et al. (2018) evaluated consumers' preferences for organic foods and found that their organic consumption was influenced by their degree of concern for food sustainability. Other concerns, such as fair trade, animal welfare and regional production support have been found to be very influential and, even, to be the main factors influencing organic purchasing choices (Padilla-Bravo et al., 2013; Zander & Hamm, 2010). Other studies have shown that concerns for the preservation of biodiversity and natural resources influence organic food consumption behaviors (Shashi &

Singh, 2015).

A review of the previous literature shows that world-care has been conceptualized as a stimulus by merging socio-environmental notions of biodiversity preservation, natural resource conservation, environmental friendliness, animal welfare, fair trade and support for local producers. It has been shown that there is an interaction between social ecological concerns and the hedonic motivations of consumers of organic products (Escobar-López, Espinoza-Ortega, Vizcarra-Bordi, & Thome-Ortiz, 2017). Concern for the preservation of the socio-environment (Ghali-Zinoubi & Toukabri, 2019) has been shown to influence consumers' attitudes toward organic foods and, consequently, their purchase intentions (Unal et al., 2019 & Ercis et al., 2020). This argument was made by Nguyen and Truong (2021), who proposed that concerns for the environment and for human beings and animals is a psychological factor that significantly affects organic food purchasing. Consequently, consumers' reasoning about the socio-environmental benefits of organic food consumption is important (Jager & Weber, 2020). Taking world-care as a stimulus, and taking into account its possible influence on consumers' attitudes, and building upon proposals made in related literature, the following hypotheses are proposed to advance the knowledge of organic coffee consumption:

H1. Hedonic attitudes toward organic coffee are driven by world-care motivations.

H2. Utilitarian attitudes toward organic coffee are driven by world-care motivations.

The second type of motivation for consuming organic food products is related to the individual benefits consumers derive, that is, self-care. This takes into account factors that influence people's dietary choices, such as naturalness and health. It has been suggested that there is a high correlation between consumers' motivations to consume organic products and their concerns about the use of additives and their wish to consume natural ingredients (Stetoe & Pollard, 1995). While purchase intentions positively influence purchase behaviors, health awareness factors have significant effects on consumers' attitudes and, consequently, on their purchases of organic products (Testa et al., 2018). In relation to the naturalness, and healthy content, of organic foods, it has been shown that health concerns are a predictor of purchasing attitudes (Lee et al., 2015); and that healthy content positively and significantly affects utilitarian and hedonic attitudes and, in turn, purchasing behaviors (Lee et al., 2019). Studies carried out with consumers of organic olive oil in Tunisia indicated that purchase intentions are formed by health concerns (Ghali-Zinoubi & Toukabri, 2019); these results corroborate those found in similar health awareness/concerns-focused studies (Escobar-López et al., 2019; Rana & Paul, 2017; Liang & Lim, 2020; Dangi, Narula, & Gupta, 2020). In the present study, the notion of self-care is related to the healthy attributes/natural content of products. Taking self-care as a motivating factor, and taking account of its potential influence on consumers' attitudes, and based on prior, relevant literature, the following hypotheses are proposed to deepen the understanding of organic coffee consumption:

H3. Hedonic attitudes toward organic coffee are driven by self-care motivations.

H4. Utilitarian attitudes toward organic coffee are driven by self-care motivations.

Hedonic attitudes relate to sensory factors that allow consumers to obtain emotional satisfaction (Voss et al., 2003). Previous research has indicated that hedonic attitudes (or dimensions) have a significant impact on consumers' purchase intentions toward organic foods (Qi & Ploeger, 2021) and on their perceptions of the value of coffee consumption (Aragón-Gutiérrez, Montero-Simo, Araque-Padilla, & Gutiérrez-Gutiérrez, 2013). These attitudes have been shown to affect behavioral intentions (Sultan et al., 2021). Ladhari and Tchetsgna (2017) examined consumers' purchase intentions toward fair-trade products, highlighting that the consumption experience consumers undergo with these products provides them with hedonic gratification; it has also been shown that consumers' socioeconomic levels, which affect hedonic

value, are the greatest influence on their willingness to buy (Ghali-Zinoubi, 2021). Drawing on the existing hedonic attitudes-related literature, and taking into account their influence on consumers' purchase intentions for organic products, the following hypothesis is formulated:

H5. Intentions to purchase organic coffee are driven by hedonic attitudes.

Utilitarian attitudes relate to practical and rational evaluations (Chaudhuri & Holbrook, 2001); they have been defined as being an overall assessment of value that incorporates quality, convenience and value-for-money characteristics (Chen & Hu, 2010). Utilitarian value is rooted in the instrumental functionality and non-sensory factors of organic foods that produce practical satisfaction (Voss et al., 2003). These attitudes have significant effects on consumers' purchase intentions toward this type of food, which are influenced by nutritional content and price (Qi & Ploeger, 2021; Palau-Saumell, Matute, Derqui, & Meyer, 2021; Ghazali, Soon, Mutum, & Nguyen, 2017; Sadiq et al., 2021), ease of purchasing (Lee et al., 2019), health concerns and eco-labeling (Lee et al., 2019). One of the critical barriers faced in buying organic products is that they are difficult to access. They are not available in all retail/consumption points and are often associated with higher prices. As a result, many people find it challenging to decide to purchase them (Bublitz et al., 2019). Unal et al. (2019) suggested that reasons for consuming organic food include: health, ease of use, mood, good price and concern for the environment. Ghali-Zinoubi (2021) argued that the socioeconomic status of consumers (education, occupation and income) was a predictor of utilitarian attitudes. Dangi et al. (2020) proposed that among the factors that shape intention to purchase organic products are health, previous purchasing behaviors, knowledge of organic foods/certifications, affordability and trust in the organic certification label. Sadiq et al. (2021) found that utilitarian values were the most significant influence on consumers' attitudes toward the consumption of organic food.

This approach complements previous studies into organic foods that proposed that attitudes are influential in predicting purchase intentions (Ercis et al., 2020; Sadiq et al., 2021; Ut-Tha et al., 2021). Consequently, taking into account the previous, related literature, and with the aim of advancing knowledge of organic coffee consumption, the following hypothesis is proposed:

H6. Intentions to purchase organic coffee are driven by utilitarian attitudes.

Based on the theoretical framework described, and taking into account the factors that affect consumers' purchase intentions for organic coffee, the following adaptation of the SOR model is proposed (Fig. 1).

3. Materials and methods

3.1. Data collection and measures

Data were collected to test the proposed model through personalized surveys. The participants were given a coffee that had been sustainably produced by an indigenous community in Satipo, Peru. Peru was selected because it is one of the world's main coffee producers, with 352.6 million kilograms, and 423.85 thousand hectares under cultivation in 2022 (FAO, 2024). In addition, Satipós indigenous communities cultivate coffee beans using traditional methods, produced without pesticides or fertilizers, and which contain less acid and feature a high concentration of nutrients.

The participants were recruited in Spain as its coffee consumption was among the top ten worldwide in 2022, with an import value of US \$1,388 million (ITC, 2024). The final sample consisted of 570 participants over 18 years of age (Table 1). Participants gave informed consent via the statement "I am aware that my responses are confidential, and I agree to participate in this survey" where an affirmative reply was required to enter the survey. They were able to withdraw from the survey at any time without giving a reason. The products tested were

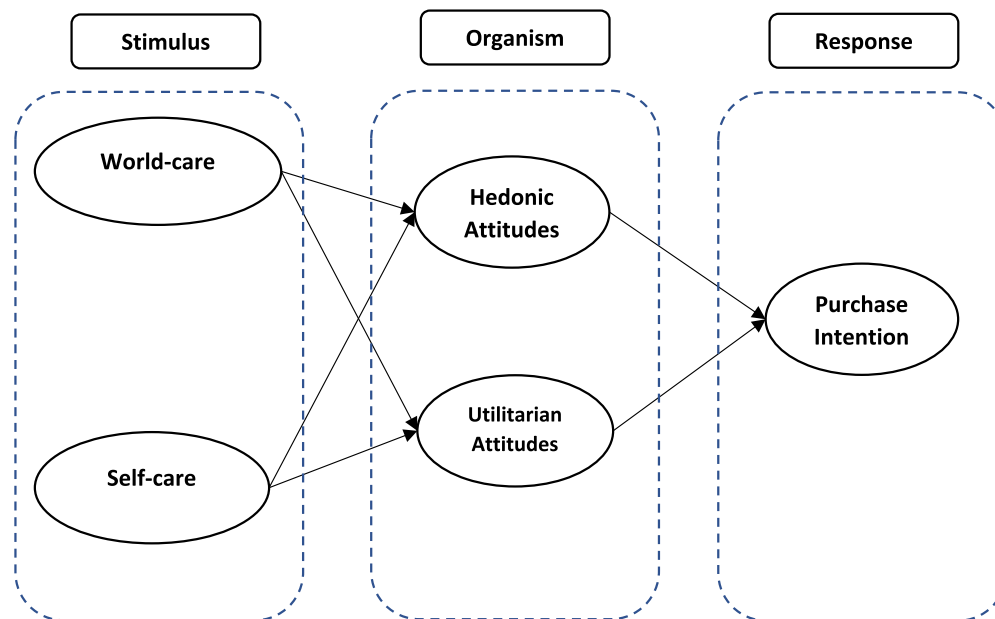


Fig. 1. New, adapted SOR model to explain consumers’ purchase intentions toward organic food.). Source: Adapted from the SOR model (Mehrabian & Russell, 1974; Lee & Yun, 2015; Kim, Lee, & Jung, 2020)

Table 1
Technical data and sample characteristics.

Universe	Individuals over 18 years of age
Data collection method	Personal questionnaire
Ambit	Spain
Sample	570 individuals
Personal characteristics of the sample	
Gender	Men (M) 38.77 % Women (W) 61.23 %
Age	18–29 years: 38.77 % 30–44 years: 26.49 % 45–65 years: 30.00 % 65 years and over: 4.74 %
Daily coffee consumption	None: 15.44 % One cup: 20.18 % Two cups: 28.18 % Three cups: 21.05 % More than three cups: 14.27 % I don't know: 0.88 %
Monthly income level	Less or equal to 1200 €: 45.61 % From 1201 to 3000 €: 33.68 % More than 3000 €: 3.86 % Did not answer: 16.85 %
Education level	Primary/elementary/grade: 7.55 % Secondary/high: 45.96 % University: 46.49 %

safe for consumption.

The questionnaire was designed based on previous studies and the SOR model framework (Table 2). It sought to evaluate whether stimuli (S) world-care and self-care have a significant influence on organism (O) through hedonic attitudes and utilitarian attitudes and, if these, in turn, influence responses (R), purchase intentions for the organic coffee. The questionnaire assessed the respondents’ degree of acceptance of the items, using a Likert-type scale from 0 to 10, from unimportant to very important.

3.2. Statistical analysis

To test the proposed hypotheses, the following steps were taken:

- First, the data quality was analyzed, using the SPSS 25 program; this process validated the information given by the 570 respondents.
- The evaluation of the measurement model was carried out using partial least squares structural equation modeling (PLS-SEM); this process verified the reliability and validity of the measurement scales.
- The structural model was evaluated using PLS-SEM, determining the R^2 and Q^2 values, the trajectory coefficients and their significance.

4. Results

4.1. Evaluation of the measurement model

The reliability of the scale items was examined: their standardized values in all cases were > 0.7 (Roldán & Sánchez-Franco, 2012) and, therefore, they met the reliability criteria of the indicator. Similarly, as shown in Table 3, the reliability of the constructs was verified (through an analysis of composite reliability and Cronbach’s alpha). The composite reliability and Cronbach’s alpha values were significantly higher than 0.70. The convergent validity of the constructs was satisfactory, with an average variance extracted (AVE) greater than 0.5 in all cases. The discriminant validity criterion was satisfactory, the square roots of the AVEs being greater than the inter-construct correlations.

4.2. Structural model evaluation

Table 4 shows the values of R^2 and Q^2 , the direct effects and the t values of each explanatory variable. The R^2 is 55.20 % and the Q^2 value is 0.132.

This information suggests that the proposed model has a high predictive capacity for the “purchase intentions” toward organic coffee. To provide further support for the model’s predictive capacity, a post-hoc test was conducted to evaluate the regressions between the variables that explain purchase intentions (taking into account that the factors of the PLS-SEM model are standardized). Thus, as evidenced by Selya, Rose, Dierker, Hedeker, and Mermelstein (2012), effect sizes are an important complement to null hypothesis significance tests, as they provide a practical measure of significance in terms of effect size, independent of sample size.

The G* Power program was used to identify the power achieved in a

Table 2
Variable measurement items scale.

	Constructs and source	Indicator statements	Factor Loading*
Stimuli	World-care (W) Adapted from: Azzurra et al., 2018; Escobar-López et al., 2019; Lee et al., 2015	W1. It is locally produced to support local farmers	0.862
		W2. Produced with respect for human rights	0.893
		W3. It is sold at a fair price for the producer	0.907
		W4. It is produced in an environmentally friendly way	0.851
		W5. Produced in a way that respects biodiversity	0.851
		W6. Produced respecting animal welfare	0.844
		W7. Produced with low carbon emissions	0.893
		W8. Produced in a natural environment	0.822
		W9. Produced in a way that minimizes waste	0.779
		W10. Packaged in an environmentally friendly way	0.848
Organism	Self-care (SC) Adapted from: Escobar-López et al., 2019; Lee & Yun, 2015.	SC1. The coffee does not contain additives	0.911
		SC2. The coffee contains natural ingredients	0.906
		SC3. The coffee does not contain artificial ingredients	0.873
Organism	Hedonic attitude (HA) Adapted from: Voss et al., 2003; Lee et al., 2019; Lee et al., 2018	HA1. Drinking this coffee can be fun	0.844
		HA2. Drinking this coffee can be nice	0.935
		HA3. Drinking this coffee can be delicious	0.914
	Utilitarian attitude (UA) Adapted from: Voss et al., 2003; Lee et al., 2019	UA1. I think this organic coffee is easy to drink	0.903
		UA2. I find it easy to purchase organic drinks like this	0.859
Response	Purchase intention (PI) Adapted from: García-Milon, Martínez-Ruiz, Olarte-Pascual, & Pelegrín-Borondo, 2019	PI1. If I could, I would try to buy it	0.955
		PI2. If I could, I predict that I would drink it	0.955

* All loadings significant at 0.05.

post-hoc test, whose results for the test group (n = 570, R² = 0.552) returned a value greater than 99.99% for large effect size, greater than 0.62 (Selya et al., 2012). The R² value for utilitarian attitude was 0.072, and for hedonic attitude was 0.201.

The results showed that world-care had a significant influence on the development of hedonic and utilitarian attitudes, supporting H1 and H2; however, they did not show that self-care had a significant influence on

Table 3
Reliability of the constructs, convergent validity and discriminant validity.

Construct	Mean	Standard Deviation	Compound reliability > 0.7	Cronbach's alpha	Average variance extracted (AVE) > 0.5	W	SC	HA	UA	PI
W	8.764	1.333	0.965	0.959	0.732	0.856	0.806	0.475	0.321	0.393
SC	8.808	1.451	0.925	0.879	0.804	0.743	0.897	0.419	0.250	0.365
HA	7.595	1.928	0.926	0.881	0.808	0.443	0.374	0.899	0.657	0.819
UA	7.737	1.908	0.874	0.714	0.777	0.269	0.200	0.524	0.881	0.595
PI	7.176	2.216	0.954	0.903	0.912	0.369	0.326	0.734	0.482	0.955

Note: The diagonal numbers (in bold) are the square roots of the average variances extracted (AVE). Below the diagonal are the inter-construct correlations. Above the diagonal are the HTMT ratios.

these attitudes, so hypothesis H3 and H4 are not supported. Hedonic (to a greater extent) and utilitarian attitudes had significant positive effects on consumers' purchase intentions for organic coffee, supporting H5 and H6.

5. Discussion

The search for sustainable and pesticide-free production systems is a major issue for both environmental and human health (Muller & Behrendt, 2021; Zhao et al., 2021). Identifying the main influencers of organic and sustainable consumption would be the first step in promoting that type of production. In this regard, an important dilemma arises: when individuals consume organic products, do hedonic or instrumental attitudes, determined by self-care or world-care, influence purchase intentions more? To address this question, coffee, one of the most globally consumed products, with significant environmental impact, was selected. The present study addresses this important question based on a new SOR model approach (Mehrabian & Russell, 1974; Liu & Zheng, 2019). In (S), two factors were assessed: world-care and self-care, which may influence hedonic and utilitarian attitudes (O), which in turn can have an impact on purchase intentions (R).

The variables were constructed by compiling the attributes associated with organic products (Lee & Yun, 2015). Based on the work of Kareklas et al. (2014), a distinction was made between aspects that related to individual benefits versus collective benefits. This enabled us to identify the aspects that provide a positive impact on the environment (world-care) and those that directly affect the individual (self-care).

First, the present study provides an holistic vision of the concept of world-care, taking into account aspects such as: "environmental protection" (Lee et al., 2015; Liang & Lim, 2020), "environmental consciousness" (Lee et al., 2019), "environmentally friendly" (Dangi et al., 2020), "ethical concern" (Lee et al., 2015), "index of consumers' food sustainability concerns" (Azzurra et al., 2018), "social ecological concern" (Escobar-López et al., 2019) and "ecological welfare" (Tandon et al., 2021).

Second, this study complements the contributions made by previous works that analyzed, both individually and in combination, the effects of the variables discussed on purchase intentions. The study also established that a positive relationship exists between taking a world-care perspective and hedonic (H1) and utilitarian attitudes (H2). This result corroborates those of previous studies that analyzed the relationship between the "environmental protection" variable and "attitude and trust toward foods labeled as organic" (Liang & Lim, 2020). Previous studies have identified the positive moderating effect of "ethical concerns" on "organic coffee purchasing behaviors" (Lee et al., 2015), "ecological social concerns" (Escobar-López et al., 2019) on "motivations to consume organic food" and "ecological well-being" (Tandon et al., 2021) on "reported organic food purchasing behaviors." The results of studies that addressed the direct and indirect relationship (moderating effect) between aspects such as motivations to choose (consumption) and purchasing behaviors, are corroborated by the results of the present study, which established that a positive relationship exists between care for the planet (world-care) and hedonic and utilitarian motivations, which in turn influence purchase intentions.

Table 4
Effects on the endogenous variable.

Construct	R ²	Q ²	SRMR	VIF	Direct effects	t-value	p-value	Hypothesis supported
PI	55.20 %	0.132	0.044					
H1. W → HA				2.231	0.371	4.850	0.000	
H2. W → UA				2.231	0.268	3.514	0.000	
H3. SC → HA				2.231	0.097	1.487	0.137	X
H4. SC → UA				2.231	0.000	0.023	0.982	X
H5. HA → PI				1.379	0.663	19.101	0.000	
H6. UA → PI				1.379	0.135	3.270	0.001	

Similarly, the results of the present study are consistent with those of Azzurra et al. (2018), who evaluated the effects of local production, respect for human rights, fair price, biodiversity, respect for animals, low carbon emissions, environmental friendliness and local production as variables of the “index of consumers’ concerns about food sustainability”; these concerns had a positive impact on the variable “intensity of organic food consumption.”

Third, although Escobar-López et al. (2019) and De-Magistris and Gracia (2016) argued that naturalness (self-care) is a significant motivation for the consumption and purchase of organic foods, our study did not identify it as having a positive influence on hedonic (H3) and utilitarian (H4) attitudes. In this sense, Lee & Yun (2015) argued that consumers’ perceptions of natural content are not a significant driver of hedonic and utilitarian attitudes; however, they did propose that hedonic and utilitarian attitudes influence purchase intentions and that the relevant relationships can be explained by the SOR model (through the relationships of stimulus, organism and response), and argued that these attitudes formed the theoretical basis for studies that have examined the purchasing behaviors of consumers of organic foods (e.g., coffee, as in the present study). Tandon et al. (2021) suggested that self-care had a negative effect on “declared organic food purchasing behaviors.”

The differences identified between the results of the present study and that of Escobar-López et al. (2019) may be due to the fact that they examined the direct influence of the naturalness factor (self-care) on “motivations to consume ecological foods” of a population sample who go to organic markets and, surely, will be aware of the features of these products and value the natural content of organic foods; in our study the influence of self-care on purchase intentions was assessed through hedonic and utilitarian motivations, with a random population, not necessarily with preferential attitudes toward organic foods. It is true that people generally attach importance to foods being healthy, but not all food products are necessarily linked to health, and coffee might be among them.

Fourth, the positive results obtained in this study about the influence of hedonic attitudes on purchase intentions have been corroborated by previous studies (Lee & Yun, 2015; Lee, Jin, & Shin, 2018; Voss et al., 2003). While our results differ from those of Lee et al. (2019), who did not find that hedonic attitudes had a significant influence on purchasing behaviors, we infer that hedonic attitudes have a significant influence on consumers’ purchase intentions toward organic coffee (H5). Coffee might be seen as a product to consume in social settings, where the hedonic aspect is crucial. On the other hand, the positive influence of utilitarian attitudes on “purchase intentions” has been corroborated by studies that have examined the purchase intention variable (Lee & Yun, 2015; Lee et al., 2019; Voss et al., 2003); in the present study support is provided for the proposal that intention to purchase organic coffee is influenced by utilitarian attitudes (H6). This result is explained by both the intrinsic aspects of the product (coffee), which determine its organoleptic attributes, and by its relevant extrinsic aspects, such as its distribution system. A sustainable supply chain that can solve the problem of the accessibility of the product is fundamental in this regard.

In summary, the “world-care” stimulus was found to influence consumers’ hedonic and utilitarian attitudes, whereas “self-care” was not found to have any such influence. Both attitudes influence consumers’ purchase intentions toward organic coffee, hedonic attitudes being

particularly important.

6. Conclusions

The question posed is: “Why do you want an organic coffee?”. The answer seems to be that, in the international market, consumers, when thinking of organic coffee, demand attributes that generate external benefits, which we refer to as “world-care”. This addresses the self-world care dilemma related to organic products, discussed at the beginning of this work.

Transitioning consumption models towards sustainability requires consumer awareness. In this research, we examined the effectiveness of a new, adapted SOR model for organic food consumption; we found that the acceptance of the new product by consumers is linked to the external benefits (world-care) they derive, which significantly impacts on both their hedonic and utilitarian attitudes, which, in turn, influence their purchase intentions toward organic coffee.

Consequently, when introducing new products into the market, particularly in the case of organic coffee, producers should understand that world-care is a determining element in consumers’ purchase intentions. Thus, it is concluded, in the case of organic coffee, that world-care (S) influences hedonic and utilitarian attitudes (O), which significantly shape consumers’ purchase intentions (R), with the natural content of the product not necessarily being the sole determining factor.

7. Theoretical and practical implications

7.1. Theoretical implications

As to the factors that influence consumers’ purchase intentions toward organic coffee, a noteworthy theoretical implication of this study is the proposal for a new, adapted SOR model for organic food consumption. This model, based on the SOR framework (Mehrabian & Russell, 1974), seeks to compare the benefits that consumers perceive they derive from world-care (benefits for the environment) and from self-care (benefits for oneself) (S). Consumers’ perceptions of these benefits, in turn, condition their utilitarian and hedonic attitudes (O), and potentially impact on their purchase intentions toward organic food (R).

The study confirms the positive influence of the world-care factor on hedonic and utilitarian attitudes, which aligns with the SOR model, thereby validating the role of the world-care factor. This factor, not directly examined in previous studies, together with the influence of the attitudes studied, constitutes an original theoretical contribution that can pave the way for further research on organic food. Ultimately, this contribution can help in the building of a sustainable global development model.

7.2. Practical implications

This work has important implications for market agents who design, promote and position new products (in the case of this study, organic coffee). It is suggested that they target messages to increase consumers’ purchase intentions. To increase consumers’ purchase intentions for organic coffee, these agents must be seen to be supporting world-care, defined as local production (e.g., local farmers), paying the producer a

fair price, respecting human rights and biodiversity, environmental friendliness, reducing carbon emissions and recycling packaging. These activities can help the consumption of organic coffee contribute to greater efficiency in the use of the world's resources and, thus, to have better consequences for the planet. Coffee marketing campaigns should focus on these aspects. Previous research has also suggested that these activities have a significant effect on purchase intentions (e.g., Wang, Dang, Hui, Zheng, & Qi, 2021).

Organic coffee consumption is driven by both utilitarian and hedonic motivations, as people seek the practical benefits and pleasure it offers. While utilitarian consumption focuses on ease of access and practicality, hedonic consumption centers on the sensory pleasure and relaxation derived from the product. Organic coffee provides the hedonic aspect by offering a pleasurable experience through its association with responsible behaviors and fostering a sense of connection with personal fulfillment. Simultaneously, the utilitarian aspect is satisfied by supporting environmentally and human-rights friendly practices.

Therefore, the primary recommendations for organic coffee producers are as follows: First, establish hedonic connections with consumers through targeted communication efforts that highlight the daily lives and working conditions of those involved in organic coffee production (in our case, Satipo's indigenous communities) and emphasize how their production practices not only sustain their way of life but also actively safeguard the natural environments they rely on. Second, prioritize certifying production processes as organic and environmentally conscious. Offering quality seals that validate consumers' dedication to environmental stewardship will reinforce their utilitarian attitudes. These actions can be seen as having a positive impact on the world's resources and better consequences for the planet, thus contributing to overall well-being.

8. Limitations and future lines of research

It is suggested that future research should broaden the evaluation of the influence of the natural content of organic foods on utilitarian and hedonic attitudes as factors that condition consumers' buying behaviors.

A second limitation of this study is that taking into account only organic coffee, with its specific characteristics, restricts its generalization among organic foods, which will require additional research.

This opens new lines of research related to the identification of other factors that determine the acceptance of organic products, such as the profiles of consumers of organic products.

Similarly, there is limited information in previous studies that can help in the analysis of the consumption behavior of organic food, specifically for coffee. Factors such as world-care and self-care should be further analyzed. Future studies could specify the variables that make up world-care to create a more balanced scale, thereby paving the way for the introduction of more concise metrics in this context. Therefore, new lines of research might go deeper into the subject, particularly examining mediation effects in the measurement model.

Ethical statement

Participants gave informed consent via the statement "I am aware that my responses are confidential, and I agree to participate in this survey" where an affirmative reply was required to enter the survey. They were able to withdraw from the survey at any time without giving a reason. The products tested were safe for consumption.

CRedit authorship contribution statement

José Laos-Espinoza: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Cristina Olarte-Pascual:** Writing – review & editing, Writing – original draft,

Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Emma Juaneda-Ayensa:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Alba García-Milon:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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