

# Buying local food is not a question of attitude: an analysis of benefits and limitations

Begoña Peral-Peral and Jorge Arenas Gaitán  
*Universidad de Sevilla, Seville, Spain, and*

Jesús Reina-Arroyo  
*ESIC Business and Marketing School, Sevilla, Spain*

## Abstract

**Purpose** – This paper aims to explore the shopping intention of local products. Using the theory of planned behavior model, the authors study the effect of egoistic and altruistic benefits and the influence of contextual limitations and people's own limitations on the intention to buy local fresh fruits and vegetables.

**Methodology** – This paper uses a sample of 1,200 consumers of a south European city to test the model using a structural equation modeling technique with partial least squares.

**Findings** – Although egoistic benefits have a direct effect on the shopping intention, altruistic benefits have a much higher total effect. Surprisingly, attitude does not influence shopping intention. This paper provides elements that favor the consumption of local products from a more global, social and sustainable perspective.

**Value** – This paper provides new empirical evidence on the influence of perceived benefits and personal limitations on local food consumption.

**Keywords** Local food products, Theory of planned behavior, Benefits, Limitations, Partial least squares, PLS, TPB

**Paper type** Research paper

## La compra de productos locales de alimentación no es una cuestión de actitud. Un análisis de beneficios y limitaciones

### Resumen

**Propósito** – Este trabajo explora la intención de compra de los productos locales. Partiendo del modelo de la Teoría del Comportamiento Planificado, estudiamos el efecto que los beneficios egoístas y altruistas y la influencia de las limitaciones contextuales y las propias limitaciones de las personas tienen en la intención de compra de frutas y verduras frescas locales.

**Metodología** – Utilizamos una muestra de 1.200 consumidores de una ciudad del sur de Europa para probar el modelo, utilizando modelos de ecuaciones estructurales con mínimos cuadrados parciales.

© Begoña Peral-Peral, Jorge Arenas Gaitán and Jesús Reina-Arroyo. Published in *Spanish Journal of Marketing - ESIC*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

This research is part of Project 3551/0981 of the Universidad de Sevilla.

The authors wish to thank the SJM-ESIC for their constructive reflections and comments to enable the publication of this paper.



**Hallazgos** – Aunque los beneficios egoístas tienen un efecto directo en la intención de compra, los beneficios altruistas tienen un efecto total mucho mayor. Sorprendentemente, la actitud no influye en la intención de compra.

**Originalidad** – Este artículo proporciona nueva evidencia empírica de la influencia de los beneficios percibidos y las limitaciones personales en el consumo de alimentos locales.

**Palabras clave** – Palabras clave Productos alimenticios locales, Teoría del comportamiento planificado, Beneficios, Limitaciones, Mínimos cuadrados parciales

**Tipo de artículo** – Trabajo de investigación

购买本地食品不是一个态度问题。对好处和局限性的分析。

### 摘要

**目的** – 这项工作意味着探索本地产品的购物意向。利用计划行为理论模型, 我们研究利己主义和利他主义利益的影响, 以及环境限制和人们自身限制对购买本地新鲜水果和蔬菜的意向的影响。

**方法** – 我们使用一个南欧城市的1,200名消费者的样本, 用部分最小二乘法的结构方程模型技术来检验该模型。

**研究结果** – 尽管利己主义利益对购物意向有直接影响, 但利他主义利益的总影响要大得多。令人惊讶的是, 态度并不影响购物意向。这篇文章提供了有利于从更加全球化、社会化和可持续的角度消费当地产品的因素。

**原创性** – 这篇文章提供了新的经验证据, 说明感知到的利益和个人限制对当地食品消费的影响。

**关键词**。当地食品, - 计划行为理论, 利益, 限制, 部分最小二乘法。

纸张类型 – 研究论文

## 1. Introduction

The concern for the sustainability of the planet and caring for the environment has become an obligation. Sustainability is a multidimensional concept, which includes protection of the environment, economic and social sustainability of regions, providing sources of wealth to settle populations in rural areas and so on. Companies, administrations and citizens must be involved. In the case of citizens, decisions such as a change of diet, reducing or substituting meat in food, buying products with less packaging or purchasing organic or local food products are examples of the sustainable food trend (Arenas-Gaitán *et al.*, 2020; Chen, 2020).

There exist strong preferences for local brands and products in the fresh food category (Nielsen, 2017). Local products are perceived as products that have been produced close to the consumption area (20–100 miles) (Shin *et al.*, 2016; Jensen *et al.*, 2019). The literature (Bir *et al.*, 2019; Chen, 2020; Kneafsey *et al.*, 2016; Lang *et al.*, 2014; Zepeda and Deal, 2009) has found that local products are perceived as healthier, tastier and that they support the local economy (producers and retailers), as well as reducing transport, minimizing the carbon footprint and therefore aiding the environment (Stanton *et al.*, 2012). However, although people declare their concern for the environment, there is a gap between consumers' consumption, intention and attitude (Tandon *et al.*, 2020).

This work explores the effect of perceived benefits and barriers on local food product shopping to promote the shopping and consumption of these sustainable products. We propose the theory of planned behavior (TPB), broadened with moral norms, which acts as a mediator between the benefits and the limitations of local products in the shopping intention. We analyze fresh local fruits and vegetables because sustainable food trends have especially affected these categories of products

(Kumar and Smith, 2018; Stanton *et al.*, 2012). We propose three operational aims. First, explain the intention to buy local fresh fruits and vegetables using a TPB model. Second, we delve into perceived benefits and limitations concerning shopping intention by differentiating between altruistic and egoistic benefits, as well as contextual limitations and those of the people themselves. Third, we analyze how the TPB model behaves as a mediator between the benefits and limitations and the shopping intention. To achieve these objectives, empirical research has been done in a medium-sized Mediterranean city, Córdoba, through an in-person questionnaire with a sample of 1,200 consumers.

Below, we continue with the literature review, the model and the proposed hypotheses.

## 2. Literature review

### 2.1 Theory of planned behavior

TPB (Ajzen, 1991) is one of the most popular models to understand consumer choices (Ajzen, 2015) and has been used in recent research on food products (Chen, 2020; Kumar and Smith, 2018; Rosenfeld, 2019). It proposes that attitudes, subjective norms and the person's perceived control influence the intention to perform a behavior. Attitudes are positive or negative beliefs about behavior. Subjective norms refer to the degree of social pressure that people perceive to perform a behavior. Perceived behavioral control (PBC) is the perception that a person has the capacity to perform a certain behavior. The greater the attitudes, the subjective norms and the perceived control, the greater the intention of performing this behavior.

Moral norms refer to people's internal norms that have been formed throughout their lives (Schwartz, 1977) and appear when people are aware that their actions produce consequences (Shin and Hancer, 2016). Including moral norms in the TPB model is one of the most usual extensions (Rivis *et al.*, 2009), such as in the food context (Honkanen *et al.*, 2015; Kumar and Smith, 2018; Shin *et al.*, 2016; Wenzig and Gruchmann, 2018). Therefore, we propose the following hypothesis:

H1. The (a) attitude, (b) subjective norms, (c) moral norms and (d) perceived behavioral control explain the shopping intention of local fruits and vegetables.

### 2.2 Local products

There is no commonly accepted definition of local products (Jensen *et al.*, 2019), although different works coincide that they are products that have been produced, processed and sold within a specific geographical area, defined according to distance and certain geopolitical limits (Birch *et al.*, 2018; Byrd *et al.*, 2017; Lang *et al.*, 2014; Wenzig and Gruchmann, 2018).

Individuals' perceptions of the world affect their thought process, including motivation, emotions, attitudes and actions (Dang *et al.*, 2021). Perception is a process in which a person selects, organizes, identifies and interprets the sensory information that he or she receives in order to understand his environment (Kenyon and Sen, 2015). Consumer perceptions of quality, environmental friendliness, safety, taste and healthiness affect their intention and behavior of food purchase (Suciu *et al.*, 2019). Therefore, the acceptance of local products depends on the benefits perceived by consumers and the limitations found when purchasing them.

2.2.1 *Benefits of local product shopping.* Born and Purcell (2006) group the arguments for buying and consuming local products into three dimensions: the healthiness and

quality of the products, economic and social benefits and ecological sustainability. [Chen \(2020\)](#) proposes in egoistic, altruistic and biospheric arguments. [Tandon \*et al.\* \(2020\)](#) study the associations between intrinsic and extrinsic motivations, attitude and buying behavior toward organic food. Intrinsic motivation is defined as the drive to engage in specific behavior for its own sake and extrinsic motivation is defined as a responsibility, duty or obligation. [Kim and Huang \(2021\)](#) analyze locavorism, a construct formed by three dimensions: opposition to food transported over long distances; communalization, which refers to consumers seeing themselves as actively participating in the local community; and lionization, which is a belief in the superiority of taste and health of local food.

We propose two types of benefits. Firstly, consumers perceive local products fresher and tastier, having better quality and being healthier and are beneficial for their family's health and for gastronomic aspects ([Bir \*et al.\*, 2019](#); [Witzling and Shaw, 2019](#)). Second, the economic and social benefits of consuming local products are due to the development of local economies, the generation of employment, the support of small local businesses of farmers and commercial establishments and a closer contact between producers and consumers and these are altruistic motivations, understood as an unselfish attention concerning others ([Kumar \*et al.\*, 2021](#)). Third, considered altruistic in this work, there are environmental benefits because the consumption of local products reduces the contaminating gas emissions from transport ([Jensen \*et al.\*, 2019](#); [Kneafsey \*et al.\*, 2016](#); [Kumar and Smith, 2018](#)).

[Birch \*et al.\* \(2018\)](#) find that personal or egoistic motivations influence consumption decisions more than altruistic motivations, just the opposite of [Chen \(2020\)](#). Therefore, we believe that it is interesting to examine the effect that perceived benefits have on the intention to buy local products. For this, we propose the following hypotheses:

*H2a.* Altruistic benefits positively influence the intention to buy local fruits and vegetables.

*H2b.* Egoistic benefits positive influence the shopping intention of local fruits and vegetables.

*2.2.2 Barriers to local product shopping.* However, there exists a set of external influences that affect behavior decisions. The availability of the product, the price, the political regulations and standards and convenience are contextual factors ([Zepeda and Deal, 2009](#)) that act as moderators of attitude and behavior and whose effect can be positive or negative. If attitudes towards local products are very strong, they can overcome negative contextual factors. Similarly, a positive attitude towards local products can be reduced if the limiting external factors are substantial ([Wenzig and Gruchmann, 2018](#)). In this way, the contextual effect becomes an explanation for the attitude-intention gap. Despite consumers believing that local products are a good option, the lack of availability, the high price, the paucity of information concerning local products and distrust in their certification process, identification or labeling ([Feldmann and Hamm, 2015](#); [Thøgersen \*et al.\*, 2017](#); [Vermeir \*et al.\*, 2020](#)) can negatively influence the shopping intention. Therefore, these limitations are contextual or extrinsic limitations.

On the other hand, there are people's own limitations or intrinsic limitations, such as their lack of interest and their ignorance of local foods, which negatively influence the intention to buy. The costs of seeking and processing information about local products can be perceived as greater than the benefits of their purchase ([Gleim \*et al.\*, 2013](#)). [Nie and Zepeda \(2011\)](#) find groups of consumers, careless consumers and conservative uninvolved consumers,

concerned by the convenience in food product shopping, with a lack of knowledge of local foods and therefore, with less shopping intention. Kumar and Smith (2018) find the uninvolved connoisseurs segment, with positive attitudes toward local food, although they do not intend to purchase food for them. Jensen *et al.* (2019) report a similar group called “uninterested” in relation to the purchase of organic or local food products. In relation to local food, Witzling and Shaw (2019) find a group called “uninvolved,” which presents less awareness than the other segments. Saba *et al.* (2019) note that people more oriented toward convenience and less interested in product information and food quality are more likely to be less interested in healthy foods.

In summary, a negative effect of extrinsic and intrinsic limitations on shopping intention is expected. We propose the following hypotheses:

- H3a.* Perceived extrinsic limitations negatively influence the intention of buying local fruits and vegetables.
- H3b.* Perceived intrinsic limitations negatively influence the intention to purchase local fruits and vegetables.

Finally, we propose that the TPB model will act as a mediator in these influences on the shopping intention of local fruits and vegetables. Karimi-Shahanjarini *et al.* (2012) tested the mediating effect of the TPB constructs between perceived parental control and intention on the consumption of junk foods in the case of young women. Emanuel *et al.* (2012) found evidence that gender differences in attitudes and PBC significantly mediated the observed gender difference in fruit and vegetable consumption. Lwin *et al.* (2020) noted that attitude, perceived behavioral control and intention mediate the relationship between availability at home and fruits and vegetables consumption. And recently, Li *et al.* (2021) observed that in the case of organic food, all factors derived from the TPB fully mediate the relationships between social innovativeness and purchase intention, while attitude and personal norms fully mediate the relationships between hedonist innovativeness and purchase intention. Thus, we propose the following hypotheses:

- H4a.* The TPB model acts as a mediator between the benefits and the shopping intention of local fruits and vegetables.
- H4b.* The TPB model acts as a mediator between limitations and the intention of buying local fruits and vegetables.

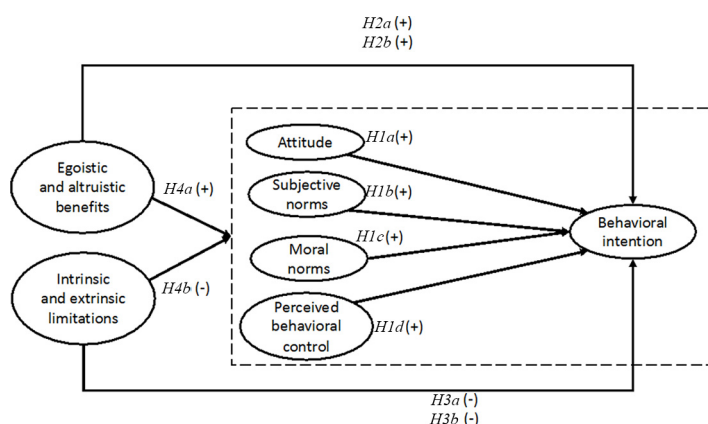
In summary, the proposed model is shown in Figure 1.

### 3. Materials and methods

#### 3.1 Questionnaire and measurement scales

An empirical design was designed through a questionnaire on consumers' perceptions about local fruits and vegetables. The questionnaire collected sociodemographic information and the shopping frequency of these local products in the previous month. The importance given to the benefits of local products and the limitations found in their purchase were brought together on a seven-point scale where 1 was not at all important and 7 very important.

The scales used for the TPB model come from previous research and refer to the case of local products. The attitude comes from Aertsens *et al.* (2011) and Testa *et al.* (2018) via a seven-point semantic differential scale. The rest of the scales were seven-point Likert scales, such as subjective norms, which comes from Al-Swidi *et al.* (2014) and Honkanen *et al.*



**Figure 1.**  
Proposed model and hypotheses

(2015), perceived control is from Shin and Hancer (2016) and moral norms and behavioral intention come from Honkanen *et al.* (2015) and Shin and Hancer (2016).

### 3.2 Sample

The sample is made up of consumers of fresh fruits and vegetables who live in Córdoba, a southern European city. These products are characteristic of the Mediterranean diet (Trajkovska Petkoska and Trajkovska-Broach, 2021) and are consumed almost daily by Spanish families (Eurostat, 2019). Córdoba was chosen because it was considered a representative model of other European cities because of its location and population size. Moreover, Córdoba was one of the signatory cities in the Milan Pact, committing themselves to promoting healthy, local or regional, seasonal, sustainably produced food. The province of Córdoba is one of the main agricultural provinces of Spain, with a large extension of agricultural area, the agri-food sector being an important generator of employment and wealth.

The research followed a nonprobabilistic model, by age quotas, in line with the proposal of Martin and Tulgan (2006) and according to data from the National Statistics Institute (2019). Mercacórdoba technicians ([www.mercacordoba.es](http://www.mercacordoba.es)) collected the data through personal interviews with consumers in the city. Data collection was carried out from March to December 2019, with a personal interview and a structured questionnaire.

The sample consists of 1,200 consumers. Based on our model, the minimum sample size is 74, with a moderate effect size (0.15) and a significance level of 95%. However, a convenience sampling by quotas has been used, according to age, to have an adequate representation of the society analyzed. To achieve quotas with sufficiently significant sample sizes, the total sample size had to be large. They belong to different generations: 12.5% of the sample correspond to the Silent Generation – born before 1946; 25.9% are Baby Boomers – born between 1946 and 1964; 25.3% belong to Generation X – born between 1965 and 1977; 20.5% form part of Generation Y – born between 1978 and 1989; and 15.8% of the sample were born between 1990 and 2010 and correspond to Generation Z.

43% of the sample are men, 16.4% have university studies, 40% have a high school diploma and 19.8% have secondary school studies. Regarding the type of family, 38.8%

have four members and 24.4% have three members. 64.4% of the families do not have children. With respect to their economic situation, 37.6% believe that this is better for other Spanish families and 21.6% consider it worse.

It was previously checked that the respondents understood the concept of local products. 22.5% of the families purchase local fruits and vegetables once a week and 51% buy them more frequently.

### 3.3 Statistical tools

The model proposed in [Figure 1](#) was tested using a structural equation modeling (SEM) technique with partial least squares (PLS), a variance-based approach. We have used SmartPLS 3 ([Ringle et al., 2015](#)) to analyze the measurement scales' reliability and validity and to value the structural model ([Henseler et al., 2017](#)). The goal of PLS is to predict the dependent variables, maximizing their explained variance. In our case, the bootstrapping was performed with 5,000 subsamples.

## 4. Results

### 4.1 Preliminary analysis

A factorial analysis was performed to differentiate between the benefits. This led to two factors which grouped the egoistic benefits (health and gastronomic) and the altruistic benefits (economic, social and environmental). Likewise, two factors of limitations were obtained: extrinsic limitations (price, certification, availability, quality and lack of information in the establishment) and those of the person or intrinsic limitations (ignorance and disinterest).

### 4.2 Measurement model evaluation

SEM analysis has two steps: to address the reliability and validity of the measurement scales and to value the proposed structural model. To analyze the measurement model's reliability and validity the measurement model, recommendations that have appeared in the literature have been followed ([Fornell and Larcker, 1981](#); [Henseler et al., 2017](#)). In the case of reflective variables, the individual reliability of the item is ensured. To do so, we examine the factorial loadings on their own variables. These loadings are above the 0.7 proposed in the literature. The reliability of the constructs is analyzed using the indicators of Cronbach's alpha (CA) and composite reliability (CR). In all cases, our indicators are above the recommended 0.7. Furthermore, convergent validity has been ensured by analyzing the average variance extracted (AVE), all indicators having levels higher than the proposed 0.5 ([Table 1](#)).

Two tests have been carried out successfully to analyze the discriminant validity ([Table 2](#)). First, the recommendation of [Fornell and Larcker \(1981\)](#) has been followed, where the square roots of the AVE appear on the diagonal. These must be greater than the correlations expressed in their respective lines and columns. The second test we have used to measure discriminant validity is HTMT, which, in general, had levels lower than the recommended 0.9 ([Henseler et al., 2015](#)). The results enable us to ensure the discriminant validity of the latent variables used. We only find problems of discriminant validity among altruistic and egoistic benefits. In this case, we carried out a bootstrapping analysis with 5,000 subsamples and its results confirmed a value less than 1.

Items	Loadings	
<b>Altruistic benefits (AB)</b> CA: 0.766; CR: 0.864; AVE: 0.679		
Ecological (less environmental impact)	0.798	
Economic (support the local economy)	0.857	
Social (greater information, origin of the products, fair trade, etc.)	0.817	
<b>Egoistic benefits (EB)</b> CA: 0.788; CR: 0.904; AVE: 0.825		
Concern for the family's health	0.901	
Gastronomic (better taste, fresher)	0.915	
<b>Extrinsic limitations (EL)</b> CA: 0.821; CR: 0.875; AVE: 0.583		
Their price is high	0.709	
Inappropriate certification process	0.785	
They aren't found in my usual shops	0.781	
The quality is similar to other, conventional products	0.781	
Lack of information in the establishment to identify local products	0.758	
<b>Intrinsic limitations (IL)</b> CA: 0.875; CR: 0.941; AVE: 0.889		
Ignorance of this type of products	0.936	
Disinterest in this type of products	0.950	
<b>Attitude (ATT)</b> CA: 0.903; CR: 0.928; AVE: 0.720		
Harmful for the environment/ Beneficial	0.853	
Unhealthy/Healthy	0.877	
Not good quality/Good quality	0.853	
Not safe/Safe	0.847	
Bad taste/Good taste	0.811	
<b>Subjective norms (SN)</b> CA: 0.945; CR: 0.965; AVE: 0.901		
Most of my friends believe that the right thing is to buy local products	0.957	
My workmates believe that the right thing is to buy local products	0.951	
Most of my family believe that the right thing is to buy local products	0.940	
<b>Perceived behavioral control (PBC)</b> CA: 0.917; CR: 0.942; AVE: 0.801		
I believe that I'm able to buy local products if I want to	0.884	
It's easy for me to buy local products	0.876	
The decision to buy local food products is under my control	0.928	
To buy local products depends on me	0.891	
<b>Moral norms (MN)</b> CA: 0.928; CR: 0.949; AVE: 0.823		
I believe I have the moral obligation to buy local products	0.893	
To buy local products is coherent with my principles	0.928	
My personal values motivate me to buy local products	0.930	
I have a social responsibility to buy local products	0.878	
<b>Behavioral intention (BI)</b> CA: 0.945; CR: 0.964; AVE: 0.900		
I expect to buy local food products during the next month	0.946	
I want to buy local food products during the next month	0.963	
I'm going to try and buy local food products during the next month	0.937	

**Table 1.**  
Loadings, Cronbach's  
alpha, composite  
reliability and AVE

#### 4.3 Structural model evaluation

We evaluated the structural model to test the proposed hypotheses. To do so, we have carried out bootstrapping with 5,000 subsamples to check the statistical significance of each of the coefficients or paths and the variance explained ( $R^2$ ) in the endogenous variables. The standardized root mean squares residual criterion is used to evaluate the saturated model's goodness of fit. In our case, this is 0.046, less than the 0.08 proposed by [Henseler et al. \(2015\)](#).



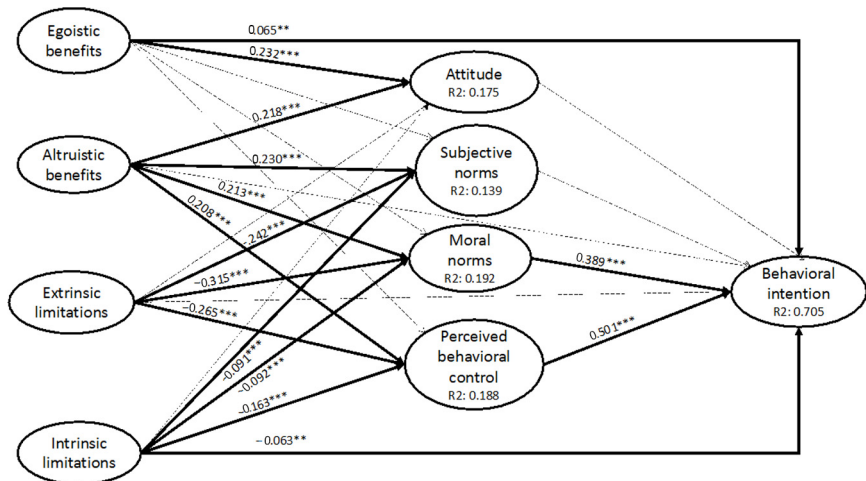
**Table 2.**  
Discriminant validity, Fornell–Larcker criterion and heterotrait-monotrait ratio (HTMT)

	AB	EB	EL	IL	ATT	SN	PBC	MN	BI
<b>AB</b>	<b>0.824</b>	0.933	0.072	0.055	0.458	0.247	0.236	0.260	0.228
<b>EB</b>	0.737	<b>0.908</b>	0.052	0.054	0.463	0.177	0.177	0.206	0.212
<b>EL</b>	0.008	0.018	<b>0.763</b>	0.701	0.072	0.330	0.411	0.418	0.407
<b>IL</b>	0.045	-0.004	0.596	<b>0.943</b>	0.027	0.245	0.345	0.298	0.357
<b>ATT</b>	0.387	0.391	0.027	0.025	<b>0.848</b>	0.190	0.210	0.193	0.182
<b>SN</b>	0.215	0.154	-0.294	-0.225	0.177	<b>0.949</b>	0.792	0.676	0.653
<b>PBC</b>	0.200	0.152	-0.360	-0.311	0.194	0.739	<b>0.895</b>	0.763	0.844
<b>MN</b>	0.225	0.177	-0.367	-0.269	0.179	0.635	0.705	<b>0.907</b>	0.804
<b>BI</b>	0.198	0.184	-0.362	-0.326	0.170	0.618	0.787	0.755	<b>0.949</b>

**Notes:** The diagonal elements (in bold) are the square root of the AVE. Values below the diagonal elements are the inter-construct correlations (Fornell and Larcker’s test). Values above the diagonal indicate the HTMT ratio. AB: Altruistic benefits; EB: egoistic benefits; EL: extrinsic limitations; IL: intrinsic limitations; ATT: attitude; SN: subjective norms; PBC: perceived behavioral control; MN: moral norms; BI: behavioral intention

Figure 2 shows the results of the PLS analysis. Although the TPB model has a fit of 0.689 with moral norms, the proposed model, which includes the effect of altruistic and egoistic benefits and of contextual limitations and those of the person, achieves a fit of 0.705.

To analyze the mediation of the TPB between limitations and benefits with the intention of buying local products, we have used the process described by Hair *et al.* (2017) and the bootstrapping test proposed by Zhao *et al.* (2010). The results (Table 3) show that the TPB acts as a mediator between altruistic benefits and purchase intention. Similarly, we find mediation of the TPB between both types of limitations and the intention to purchase local products. Following the mediation analysis process described by Hair *et al.* (2017), we observed full mediation of TPB in the cases of altruistic benefits and extrinsic limitations and partial mediation of the TPB between the intrinsic limitations and the purchase



**Figure 2.**  
Results of the model

**Notes:** \*\*\* $p < .001$ ; \*\* $p < .01$ ; no significant relationships in discontinue arrows

**Table 3.**  
Mediation analysis

Hypotheses	Total effect		Direct effect		Mediation: bootstrapping test			
	Coefficient	P-value	Coefficient	P-value	Coefficient		P-value	
<i>H4a</i> AB ⇒ BI	<b>0.154</b>	<b>0.000</b>	-0.028	0.307	AB->PBC->IB	<b>0.104</b>	<b>0.000</b>	
					AB->MN->IB	<b>0.083</b>	<b>0.000</b>	
<i>H4b</i> EB ⇒ BI	<b>0.076</b>	<b>0.042</b>	<b>0.065</b>	<b>0.018</b>	EL->PBC->IB	<b>-0.133</b>	<b>0.000</b>	
					EL-> MN->IB	<b>-0.123</b>	<b>0.000</b>	
EL ⇒ BI	<b>-0.259</b>	<b>0.000</b>	-0.008	0.716	IL->PBC->IB	<b>-0.081</b>	<b>0.000</b>	
					IL-> MN->IB	<b>-0.036</b>	<b>0.004</b>	
IL ⇒ BI	<b>-0.178</b>	<b>0.000</b>	<b>-0.063</b>	<b>0.003</b>				

**Notes:** AB: Altruistic benefits; EB: egoistic benefits; EL: extrinsic limitations; IL: intrinsic limitations; PBC: perceived behavioral control; MN: moral norms; BI: behavioral intention

intention. Mediation is only not recorded in the relation between egoistic benefits and behavioral intention.

We present the summary of the results (Table 4). Attitude and subjective norms do not explain the intention to buy, but perceived behavioral control and moral norms do affect the intention to purchase the local product analyzed. With respect to *H2* and *H3*, the egoistic motivations and the intrinsic limitations directly influence the shopping intention. Regarding the mediator role of the TPB, while the benefits influence the attitude of consumers, the limitations do not affect it.

### 5. Discussion

This work has led to a series of results that enable us to address the general aim of the effect that perceived benefits and barriers have on the purchase of fresh local fruits and vegetables. Next, we analyze the operational objectives of the research.

The first subobjective proposes explaining the shopping intention of those products via a TPB model broadened with moral norms. The results indicate that the model explains 68.9% of the variance of the local food shopping intention. Only moral norms (*H1c*) (Honkanen (*H1d*) (Shin and Hancer, 2016; Vabø and Hansen, 2016) are significant and positively affect the intention of local food.

Attitude (*H1a*) and subjective norms (*H1b*) are not significant. Although attitude has been found to be a determinant of shopping intention in many research works (Al-Swidi

**Table 4.**  
Summary of the results of the hypotheses

Hypotheses	Supported	Not supported
<i>H1</i>	ATT, SN, MN and PBC on BI	Neither ATT nor SN explains BI
<i>H2a</i>	Altruistic benefits on BI	Do not influence
<i>H2b</i>	Egoistic benefits on BI	Yes, directly
<i>H3a</i>	Extrinsic limitations on BI	Do not influence
<i>H3b</i>	Intrinsic limitations on BI	Yes, directly
<i>H4a</i>	TPB mediator with benefits	Both benefits influence ATT Only altruistic benefits influence SN, MN and PBC
<i>H4b</i>	TPB mediator with limitations	Both limitations influence PBC, SN and MN Neither limitation influences ATT

*et al.*, 2014; Honkanen *et al.*, 2015; Kumar and Smith, 2018; Shin and Hancer, 2016), other works find different results. Vabø and Hansen (2016) note that attitude is only significant at 10%. Vermeir and Verbeke (2006) observed a gap between attitude-behavioral intention in the case of sustainable food products, due to the effect of perceived behavioral control on attitude. Ajzen (2001) considers that attitudes are a weak predictor of the shopping intention in the establishment, as other factors, such as habit, the quality and promotions, can be more influential. The context influences the intention to purchase (Zepeda and Deal, 2009), even surpassing a positive attitude (Wenzig and Gruchmann, 2018). Chen (2020) finds a minimum and negative effect of attitude on the local product shopping intention and Tandon *et al.* (2020) observe that attitude has no significant association with the buying behavior toward organic food. Sarabia-Andreu *et al.* (2020) offer different ways of measuring attitudes, which affects the relationship between attitude and the shopping intention and buying behavior.

With respect to subjective norms, it is expected that the opinion of friends and family will positively influence the purchase intention. However, Shin and Hancer (2016) only report this relation in those consumers with a lower attitude and show that the results of the literature in this case are not conclusive. Vabø and Hansen (2016) are of the opinion that individualistic consumers do not consider subjective norms to make decisions. Moreover, the choices in western cultures fundamentally depend more on personal than social factors (Ajzen, 2001).

In summary, *H1* is partially accepted, because only two of the variables are significant in the shopping intention.

The second subobjective, corresponding to *H2* and *H3*, examines the effect of perceived benefits and limitations on the intention to purchase local fresh fruits and vegetables. We find that only those that are egoistic benefits directly and significantly influence the shopping intention (*H2b*), while altruistic benefits (*H2a*) do not directly influence the intention. Birch *et al.* (2018) noted the same results: egoistic benefits positively influence the propensity to buy local products, while environmental benefits do not influence this propensity. Wenzig and Gruchmann (2018) suggest that there may be an interest in buying local food without there being an interest in the environment. Tandon *et al.* (2020) find a positive relationship between intrinsic motivation and consumer attitudes toward organic foods, as well as an integrated regulation or personal values and external pressures. In Kumar *et al.* (2021), the value of altruism acts as the stimulus supporting local producers, transparency, satisfaction with labeling and a desire for labeling, but does not influence purchase intentions.

Regarding limitations, contextual or extrinsic barriers (*H3a*) do not have a direct influence on the intention to purchase local food. However, the effect of the person's own limitations (*H3b*), that is, lack of interest and ignorance of local products, directly and negatively affects the intention to buy. In the case of ecological products, Gleim *et al.* (2013) find that experience is a fundamental factor, whose absence prevents the purchasing of ecological products. If knowledge and experience increase, the person will understand the impact of buying local products.

In summary, in relation to the second subobjective, in this work we see how egoistic benefits and people's own limitations have a significant effect, positive and negative, respectively, on the shopping intention.

The third subobjective analyzed the mediator role of the TPB model between the benefits and limitations in the purchase intention. In relation to the benefits of local food (*H4a*), we find how both benefits directly and positively influence attitude, those that are egoistic having a greater effect. Kumar and Smith (2018) also reported that the health aspects (encompassed in egoistic benefits in this work), environmental and social aspects

(altruistic) positively affect the attitude toward local products. However, only altruistic benefits, that is, economic, social and environmental benefits, influence subjective norms, moral norms and perceived control. That is, the greater the perceived benefits of local products in their effect on the local economy, on social and environmental aspects, the greater the influence they have on the opinion of others, on the person's own norms and on people's perception that they can perform the behavior. If we analyze the total effects of the benefits on the shopping intention of local fruits and vegetables, we note how the altruistic benefits are those with the greatest effect, due to their indirect effects on the TPB variables. When consumers perceive that altruistic benefits rise, their moral norms increase. They accept that buying local products is a duty, it is what must be done for society and the world. Furthermore, these altruistic benefits also affect perceived control, increasing the perception that a person is prepared to purchase local food products. In this way, the meta-analysis of [Patall et al. \(2008\)](#) indicates that people's intrinsic motivations increase when they feel autonomous and control the results of their choices. Therefore, the choices that reflect personal values or interests will have a greater effect on motivation, performance and learning. Furthermore, a greater knowledge of environmental aspects can increase moral norms ([Vermeir et al., 2020](#)). This reinforces people's values, increasing their responsibility.

Regarding the mediation of the TPB with limitations or barriers (*H4b*), we find that barriers do not influence attitude, although this does not mean that the consumer buys those products ([Wenzig and Gruchmann, 2018](#)). However, the limitations significantly and negatively influence the other three TPB constructs. Contextual barriers are the strongest and decrease moral norms and perceived behavioral control. The greater the importance of limitations such as the higher price, the lack of availability of the product in the establishment and the lack of certification, the lower the perceived control that the shopping decision depends on oneself. In addition, people reduce their own moral norms because the context negatively affects their opinions. When the environment is perceived as a controller, self-determination and intrinsic motivation decrease ([Patall et al., 2008](#)). As to the intrinsic limitations, disinterest and ignorance negatively influence perceived control and moral norms. When consumers are not interested or do not know local products, their obligation to buy them decreases and the perception that they can be purchased is reduced. Lack of experience is, according to [Gleim et al. \(2013\)](#), the main limitation of buying sustainable products, as it causes self-doubt about their purchasing capacity ([Wenzig and Gruchmann, 2018](#)). It should be noted that both the direct effects and those due to the mediation of the extrinsic limitations in the shopping intention are greater, in an absolute value, than those of the intrinsic limitations. In summary, the TPB model acts as a mediator when explaining the intention to buy, as benefits and limitations have indirect effects on the intention to buy local fruits and vegetables through their influence on perceived behavioral control and moral norms.

## 6. Implications and limitations

In this work, we delve into local food products, which are a sustainable trend in the more developed countries. Although information about the benefits of local products is readily available, there is a gap between what is thought and felt and how consumers act. From a marketing point of view, consumers who demand these products are an attractive segment ([Hempel and Hamm, 2016](#); [Witzling and Shaw, 2019](#)), so it is necessary to understand how they make shopping decisions and how these can be influenced.

The main objective of this work was to analyze the effect of perceived benefits and barriers on the intention to purchase local products. We have found that the expanded TPB

model with moral norms explains a high percentage of the purchase intention of these products. We have noted how both the benefits and the limitations affect the purchase intention through the mediating role of the TPB model and its variables. In addition, there is a direct positive effect of egoistic benefits and a direct negative effect of intrinsic limitations on the intention to purchase local fruits and vegetables products.

### *6.1 Academic implications*

The proposed model explains the effect of the benefits perceived by consumers and the barriers found in the intention of shopping for local products. Although other research has considered the benefits (Born and Purcell, 2006) and limitations (Zepeda and Deal, 2009) in consumers' shopping behavior, we analyze their influence on shopping intention, as well as the mediator effect of the TPB model. Faced with the particular situation of each person, characterized by egoistic benefits and the person's own barriers, we find that the limitations due to the context and altruistic benefits are those that most influence, directly and indirectly, the intention to purchase fresh fruits and vegetables.

Attitude does not influence the shopping intention (Ajzen, 2001; Vermeir and Verbeke, 2006; Chen, 2020; Tandon *et al.*, 2020): having a positive predisposition toward a type of product does not seem to be enough to modify behavior. However, moral norms (Shin *et al.*, 2016; Kumar and Smith, 2018) and perceived behavioral control (Vabø and Hansen, 2016; Chen, 2020) directly affect the shopping intention through their mediator role, indicating that these constructs are especially important.

### *6.2 Implications for management*

Vermeir *et al.* (2020) propose different stages in the consumption of sustainable products and suggest distinct strategies to orient the consumer in the right direction. Although some people are cognitively and affectively involved with these products, not all decide to buy them. There are also consumers who lack knowledge and experience with local products (Gleim *et al.*, 2013). Especially for consumers who do not have the correct beliefs about the environmental impact of certain products, knowledge must be increased about what behavior is desirable (Gifford and Nilsson, 2014) and what the benefits of local products related with health, taste, the local economy and community and caring for the environment are. Food chain supply members must be involved in making the advantages of local products known and reducing, as much as possible, their inconveniences.

Marketing strategies must increase consumers' perceptions of their own experience with local products. This would produce an increase in the shopping intention of these products (Gleim *et al.*, 2013), decreasing the limitations due to lack of knowledge or interest. Furthermore, increasing consumer knowledge enables understanding of external limitations, such as where to buy these local products, accepting a higher price, while increasing trust in them. On the other hand, using recognizable and visually impacting labels and certificates can clearly identify local products. Kumar *et al.* (2021) suggest that consumers, in particular altruistic, need labels with detailed information on health-related benefits, ethical implications and environmental outcomes of the food product. These labels help identify local products and affect their purchase intentions. When intrinsic cues are not available or when consumers feel less able to judge product quality, they use these extrinsic cues (Lopez-Lomeli *et al.*, 2019).

The sales levels in specialized local businesses have grown significantly in countries in confinement, such as Spain, Italy and Chile, due to two factors: many population segments

have had the opportunity to rediscover the existence of a close complementary business offer in their neighborhood and on the other hand, have perceived local establishments as at least equally safe as those to which they have to go by car. In this case, egotistic and altruistic motivations with the same aim are added together, exploring the factor of roots and the link with the local economy of many consumers.

An immediate behavior in the establishment can even take place, without changing the values of the consumers, via nudging (Vermeir *et al.*, 2020). Given that food shopping is considered a routine low-effort decision, presentation elements in the establishment could be used to increase the visibility of the products (Lombart *et al.*, 2018), such as retailer suggestions (Septianto and Kemper, 2021), or by using messages that remind about desirable behavior to perform on interactive displays or mobile applications. Digitalization can be used to redesign the business model (Arenas-Gaitán *et al.*, 2021).

### 6.3 Social implications

Supranational bodies are involved in the development of local products. These are considered by the Food and Agriculture Organization of the United Nations (2017) as one of the ways for the sustainability of the global food system. The Milan Pact proposes to “develop sustainable food systems that are inclusive, resilient, safe and diverse” (Milan Urban Food Policy Pact, 2015), including local food products.

COVID-19 will influence the demand of consumers for food safety. The food supply chain can be forced to increasingly depend more and more on local products due to the closure of borders and the paralysis of international trade. In this sense, there is a relationship between producers of local products and retailers, especially with respect to small local distributors (Arenas-Gaitán *et al.*, 2021).

To add a note of hope, we underscore that the influence of perceived altruistic benefits on the purchase and consumption of local fruits and vegetables, that is, a concern for the local economy and society and an interest in the environment, is greater than the effect that egoistic or direct benefits, such as taste and health, have for people. These results seem to us to be especially positive at present.

A summary of the conclusions and implications is provided in Table 5.

Conclusions	Theoretical and managerial implications
Moral norms and perceived behavioral control affect the intention to buy local food. Attitude and social factors do not.	Attitude is not enough to change behavior. Food chain members and institutions must clearly report the benefits of local products in their positive effect on the local economy, social and environmental aspects, to increase consumers' responsibility for the environment.
Egoistic benefits and intrinsic limitations of consumers directly influence (positive and negative, respectively) on the intention to purchase local foods. Both benefits and both limitations influence the constructs of the TPB model.	Marketing strategies must increase consumers' perceptions of their own experience with local products. And increase the knowledge of the consumer to understand the external limitations of local foods. Extrinsic cues such as labels and certificates, merchandising, retailer suggestions, or digital messages to the consumer are desirable.

**Table 5.** Summary of the conclusions and implications

#### 6.4 Limitations

This study has some limitations. The sample uses inhabitants of a medium-sized city in southern Europe, with a Mediterranean diet, which allows expanding the study area of previous research from northern European and Anglo-Saxon countries. The study does not have a longitudinal character, which would allow the changes in consumer perceptions and behaviors to be verified. On the other hand, collecting information through a survey may not be as representative as direct observation. Finally, other psychosocial variables or recent advances in types of behavioral control (Lim and Weissmann, 2021) can be used, which would improve the explanatory capacity of the proposed model. These limitations could be overcome in future research works that would analyze other variables and compare different geographic environments that have distinct culinary traditions.

#### References

- Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J. and Van Huylenbroeck, G. (2011), "The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food", *British Food Journal*, Vol. 113 No. 11, pp. 1353-1378.
- Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.
- Ajzen, I. (2001), "Nature and operation of attitudes", *Annual Review of Psychology*, Vol. 52 No. 1, pp. 27-58.
- Ajzen, I. (2015), "Consumer attitudes and behavior: the theory of planned behavior applied to food consumption decisions", *Rivista di Economia Agraria*, Vol. 70 No. 2, pp. 121-138.
- Al-Swidi, A., Mohammed Rafiul Huque, S., Haroon Hafeez, M. and Noor Mohd Shariff, M. (2014), "The role of subjective norms in theory of planned behavior in the context of organic food consumption", *British Food Journal*, Vol. 116 No. 10, pp. 1561-1580.
- Arenas-Gaitán, J., Peral-Peral, B. and Reina-Arroyo, J. (2020), "Local fresh food products and plant-based diets: an analysis of the relation between them", *Sustainability*, Vol. 12 No. 12, p. 5082.
- Arenas-Gaitán, J., Peral-Peral, B. and Reina-Arroyo, J. (2021), "Ways of shopping and retail mix at the greengrocer's", *Journal of Retailing and Consumer Services*, Vol. 60, p. 102451.
- Bir, C., Lai, J., Widmar, N.O., Thompson, N., Ellett, J. and Crosslin, C. (2019), "'There's no place like home': inquiry into preferences for local foods", *Journal of Food Distribution Research*, Vol. 50 No. 1, pp. 29-45.
- Birch, D., Memery, J. and De Silva Kanakarathne, M. (2018), "The mindful consumer: balancing egoistic and altruistic motivations to purchase local food", *Journal of Retailing and Consumer Services*, Vol. 40, pp. 221-228.
- Born, B. and Purcell, M. (2006), "Avoiding the local trap: scale and food systems in planning research", *Journal of Planning Education and Research*, Vol. 26 No. 2, pp. 195-207.
- Byrd, E.S., Widmar, N.J.O. and Wilcox, M.D. (2017), "Are consumers willing to pay for local chicken breasts and pork chops?", *Journal of Food Products Marketing*, Vol. 24 No. 2, pp. 1-14.
- Chen, M.F. (2020), "Selecting environmental psychology theories to predict people's consumption intention of locally produced organic foods", *International Journal of Consumer Studies*, Vol. 44 No. 5, pp. 455-468.
- Dang, V.T., Wang, J., Nguyen, H.V., Nguyen, Q.H. and Nguyen, N. (2021), "A moderated mediation study of consumer extrinsic motivation and CSR beliefs towards organic drinking products in an emerging economy", *British Food Journal*, In press.

- Emanuel, A.S., McCully, S.N., Gallagher, K.M. and Updegraff, J.A. (2012), "Theory of planned behavior explains gender difference in fruit and vegetable consumption", *Appetite*, Vol. 59 No. 3, pp. 693-697.
- Eurostat (2019), "Do you eat fruit and vegetables daily?", available at: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190401-1>
- Feldmann, C. and Hamm, U. (2015), "Consumers' perceptions and preferences for local food: a review", *Food Quality and Preference*, Vol. 40, pp. 152-164.
- Food and Agriculture Organization of the United Nations (2017), *The Future of Food and Agriculture—Trends and Challenges*, FAO. Rome.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, p. 382.
- Gifford, R. and Nilsson, A. (2014), "Personal and social factors that influence pro-environmental concern and behaviour: a review", *International Journal of Psychology: Journal International de Psychologie*, Vol. 49 No. 3, pp. 141-157.
- Gleim, M.R., Smith, J.S., Andrews, D. and Cronin Jr, J.J. (2013), "Against the green: a multi-method examination of the barriers to green consumption", *Journal of Retailing*, Vol. 89 No. 1, pp. 44-61.
- Hair Jr, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage Publications, Thousand Oaks, CA.
- Hempel, C. and Hamm, U. (2016), "How important is local food to organic-minded consumers?", *Appetite*, Vol. 96, pp. 309-318.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Henseler, J., Hubona, G. and Ray, P.A. (2017), *Partial Least Squares Path Modeling: Updated Guidelines, Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*, Springer.
- Honkanen, P., Norway, T. and Young, J.A. (2015), "What determines British consumers' motivation to buy sustainable seafood?", *British Food Journal*, Vol. 117 No. 4, pp. 1289-1302.
- Jensen, J.D., Christensen, T., Denver, S., Ditlevsen, K., Lassen, J. and Teuber, R. (2019), "Heterogeneity in consumers' perceptions and demand for local (organic) food products", *Food Quality and Preference*, Vol. 73, pp. 255-265.
- Karimi-Shahanjari, A., Rashidian, A., Majdzadeh, R., Omidvar, N., Tabatabai, M.G. and Shojaezadeh, D. (2012), "Parental control and junk-food consumption: a mediating and moderating effect analysis", *Journal of Applied Social Psychology*, Vol. 42 No. 5, pp. 1241-1265.
- Kenyon, G.N. and Sen, K.C. (2015), "The perception process", *The Perception of Quality*, Springer, London, pp. 41-50.
- Kim, S.H. and Huang, R. (2021), "Understanding local food consumption from an ideological perspective: locavorism, authenticity, pride and willingness to visit", *Journal of Retailing and Consumer Services*, Vol. 58, p. 102330.
- Kneafsey, M., Venn, L., Schmutz, U., Balázs, B., Trenchard, L., Eyden-Wood, P., Bos, E., Sutton, G. and Blackett, M. (2016), "Short food supply chains and local food systems in the EU: a state of play of their socio-economic characteristics", *European Parliamentary Research Service*, pp. 1-129.
- Kumar, A. and Smith, S. (2018), "Understanding local food consumers: theory of planned behavior and segmentation approach", *Journal of Food Products Marketing*, Vol. 24 No. 2, pp. 196-215.
- Kumar, S., Murphy, M., Talwar, S., Kaur, P. and Dhir, A. (2021), "What drives Brand love and purchase intentions toward the local food distribution system? A study of social media-based REKO (fair consumption) groups", *Journal of Retailing and Consumer Services*, Vol. 60, p. 102444.



- Lang, M., Stanton, J. and Qu, Y. (2014), "Consumers' evolving definition and expectations for local foods", *British Food Journal*, Vol. 116 No. 11, pp. 1808-1820.
- Li, L., Wang, Z., Li, Y. and Liao, A. (2021), "Impacts of consumer innovativeness on the intention to purchase sustainable products", *Sustainable Production and Consumption*, Vol. 27, pp. 774-786.
- Lim, W.M. and Weissmann, M.A. (2021), "Toward a theory of behavioral control", *Journal of Strategic Marketing*, pp. 1-27.
- Lombart, C., Labbé-Pinlon, B., Filser, M., Anteblian, B. and Louis, D. (2018), "Regional product assortment and merchandising in grocery stores: Strategies and target customer segments", *Journal of Retailing and Consumer Services*, Vol. 42, pp. 117-132.
- Lopez-Lomeli, M.Á., Llonch-Andreu, J. and Rialp-Criado, J. (2019), "Local, global and glocal consumer brand relationships: Relación entre marcas de consumo locales, globales y glocales", *Spanish Journal of Marketing – ESIC*, Vol. 23 No. 3, pp. 775-798.
- Lwin, M.O., Malik, S. and Lau, J. (2020), "Association between food availability and young people's fruits and vegetables consumption: understanding the mediation role of the theory of planned behaviour", *Public Health Nutrition*, Vol. 23 No. 12, pp. 2155-2164.
- Martin, C.A. and Tulgan, B. (2006), *Managing the Generation Mix: From Urgency to Opportunity*, Human Resource Development Press.
- Milan Urban Food Policy Pact (2015), "Pacto de política alimentaria urbana de Milán", p. 6.
- National Statistic Institute (2019), available at: [www.ine.es](http://www.ine.es), Retrieved September 2020.
- Nie, C. and Zepeda, L. (2011), "Lifestyle segmentation of US food shoppers to examine organic and local food consumption", *Appetite*, Vol. 57 No. 1, pp. 28-37.
- Nielsen (2017), 'Nielsen Global Brand Origin Survey'.
- Patail, E.A., Cooper, H. and Robinson, J.C. (2008), "The effects of choice on intrinsic motivation and related outcomes: a meta-analysis of research findings", *Psychological Bulletin*, Vol. 134 No. 2, pp. 270-300.
- Ringle, C. Wende, S. and Becker, J.-M. (2015), "SmartPLS 3".
- Rivis, A., Sheeran, P. and Armitage, C.J. (2009), "Expanding the affective and normative components of the theory of planned behavior: a meta-analysis of anticipated affect and moral norms", *Journal of Applied Social Psychology*, Vol. 39 No. 12, pp. 2985-3019.
- Rosenfeld, D.L. (2019), "A comparison of dietarian identity profiles between vegetarians and vegans", *Food Quality and Preference*, Vol. 72, pp. 40-44.
- Saba, A., Sinesio, F., Moneta, E., Dinnella, C., Laureati, M., Torri, L., Peparai, M., Saggia Civitelli, E., Endrizzi, I., Gasperi, F., Bendini, A., Gallina Toschi, T., Predieri, S., Abbà, S., Bailetti, L., Proserpio, C. and Spinelli, S. (2019), "Measuring consumers attitudes towards health and taste and their association with food-related life-styles and preferences", *Food Quality and Preference*, Vol. 73, pp. 25-37.
- Sarabia-Andreu, F., Sarabia-Sanchez, F.J., Parra-Meroño, M.C. and Moreno-Albaladejo, P. (2020), "Attitudes toward organic products: a cross-national comparison and scale validation", *Spanish Journal of Marketing – ESIC*, Vol. 24 No. 1, pp. 115-132.
- Schwartz, S.H. (1977), "Normative influences on altruism", *Advances in Experimental Social Psychology*, Vol. 10, pp. 221-279.
- Septianto, F. and Kemper, J.A. (2021), "The effects of age cues on preferences for organic food: the moderating role of message claim: subjective age and organic food", *Journal of Retailing and Consumer Services*, Vol. 62, p. 102641.
- Shin, Y.H. and Hancer, M. (2016), "The role of attitude, subjective norm, perceived behavioral control and moral norm in the intention to purchase local food products", *Journal of Foodservice Business Research*, Vol. 19 No. 4, pp. 338-351.
- Shin, Y.H., Hancer, M. and Song, J.H. (2016), "Self-congruity and the theory of planned behavior in the prediction of local food purchase", *Journal of International Food and Agribusiness Marketing*, Vol. 28 No. 4, pp. 330-345.

- 
- Stanton, J.L., Wiley, J.B. and Wirth, F.F. (2012), "Who are the locavores?", *Journal of Consumer Marketing*, Vol. 29 No. 4, pp. 248-261.
- Suciu, N.A., Ferrari, F. and Trevisan, M. (2019), "Organic and conventional food: comparison and future research", *Trends in Food Science & Technology*, Vol. 84, pp. 49-51.
- Tandon, A., Dhir, A., Kaur, P., Kushwah, S. and Salo, J. (2020), "Why do people buy organic food? The moderating role of environmental concerns and trust", *Journal of Retailing and Consumer Services*, Vol. 57, p. 102247.
- Testa, F., Sarti, S. and Frey, M. (2018), "Are green consumers really green? Exploring the factors behind the actual consumption of organic food products", *Business Strategy and the Environment*, pp. 1-12.
- Thøgersen, J., Pedersen, S., Paternoga, M., Schwendel, E. and Aschemann-Witzel, J. (2017), "How important is country-of-origin for organic food consumers? A review of the literature and suggestions for future research", *British Food Journal*, Vol. 119 No. 3, pp. 542-557.
- Trajkovska Petkoska, A. and Trajkovska-Broach, A. (2021), "Mediterranean diet: a nutrient-packed diet and a healthy lifestyle for a sustainable world", *Journal of the Science of Food and Agriculture*, Vol. 101 No. 7, pp. 2627-2633.
- United Nations (2020), "Sustainable development goals".
- Vabø, M. and Hansen, H. (2016), "Purchase intentions for domestic food: a moderated TPB-explanation", *British Food Journal*, Vol. 118 No. 10, pp. 2372-2387.
- Vermeir, I. and Verbeke, W. (2006), "Sustainable food consumption: exploring the consumer 'attitude – behavioral intention' gap", *Journal of Agricultural and Environmental Ethics*, Vol. 19 No. 2, pp. 169-194.
- Vermeir, I., Weijters, B., De Houwer, J., Geuens, M., Slabbinck, H., Spruyt, A., Van Kerckhove, A., Van Lippevelde, W., De Steur, H. and Verbeke, W. (2020), "Environmentally sustainable food consumption: a review and research agenda from a goal-directed perspective", *Frontiers in Psychology*, Vol. 11, pp. 1-24.
- Wenzig, J. and Gruchmann, T. (2018), "Consumer preferences for local food: testing an extended norm taxonomy", *Sustainability (Sustainability)*, Vol. 10 No. 5, pp. 1-23.
- Witzling, L. and Shaw, B.R. (2019), "Lifestyle segmentation and political ideology: toward understanding beliefs and behavior about local food", *Appetite*, Vol. 132, pp. 106-113.
- Zepeda, L. and Deal, D. (2009), "Organic and local food consumer behaviour: alphabet theory", *International Journal of Consumer Studies*, Vol. 33 No. 6, pp. 697-705.
- Zhao, X., Lynch, J.G. and Chen, Q. (2010), "Reconsidering Baron and Kenny: myths and truths about mediation analysis", *Journal of Consumer Research*, Vol. 37 No. 2, pp. 197-206.

### Corresponding author

Begoña Peral-Peral can be contacted at: [bperal@us.es](mailto:bperal@us.es)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)