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1. Abstract

In the 21st century the demand for organic products has increased dramatically, which has led to an increasing emphasis on studying the determinants of organic food consumption in both importing and exporting countries. This study explores the application of Theory of Planned Behaviour (TPB) to the analysis of consumer attitudes, subjective norms and perceived behavioural control (PBC) in the context of purchase intentions for organic tomatoes. Drawing on a comprehensive literature review, the study fills in existing gaps by conducting a cross-sectional survey with 1014 participants from four European countries, including both importers and exporters. The analysis shows that consumers' attitudes significantly influence their purchase intentions for organic tomatoes, while perceived behavioural control plays a key role in shaping purchase intentions, although to a smaller extent. Furthermore, the study highlights the strong correlation between subjective norms, attitudes and purchase intentions, emphasising the influence of social and cultural factors on consumer behaviour. These findings provide valuable information for companies that want to develop targeted marketing strategies in the organic food market.

2. Introduction

In the 21st century, an increasing number of people have become concerned about the quality of products sold on the market, which has led to an increased demand for organic products and their sustainability (Gurău et al., 2005). Consumers, through ongoing market changes and corporate social responsibility, have changed their shopping habits and are increasingly trying to choose organic food. With the growing demand for organic food in the European market, many consumers feel doubt and uncertainty about their purchases. Many research reports on organic food markets are predictive, but there is a lack of research based on organic tomatoes in organic food exporting and importing countries. The aim of this study is to examine the Theory of Planned Behaviour (TPB) in the study of organic purchases intentions by exporting countries (Spain and Italy) and importing countries (Sweden and Denmark) to investigate the main determinants of organic tomato purchases.

3. Literature review

Consumers who considered it important to support local businesses and buy locally produced food, were more likely to buy organic food than those who did not consider local production important (Adams & Salois, 2019). Organic retail sales value in Europe from 2010 to 2021 rose from 19.5 billion dollars to 54.5 billion $. According to The World of Organic Agriculture (2023) France has the biggest organic farmland in Europe aaround 2.78 million hectares, ollowed by Spain at 2.64 million hectares and Italy which reached the barrier of 2mln hectares. What is more, France, Italy, and Spain by 2021 had more than 50,000 organic producers which seat them as the biggest producers in Europe. In terms of spending the most money per capita on organic food in countries, this is as follows: Switzerland – 425 EU, Denmark 384, Luxemburg 313, Austria – 268 and Sweden – 266. The EU average came to 104.3 euros whereas the east part of Europe presented the lowest spending on organic food.

The TPB is one of the most common theoretical frameworks applied to the prediction and understanding of human behaviour (Ajzen, 1991). The TPB argues that behaviour (e.g., choice of food) is predicted by intentions and perceptions of control over the behaviour. TPB has been supported by empirical studies on consumption and social psychology-related studies (Ajzen, 1991; Taylor and Todd, 1997).

Intentions

Intentions are influenced by three sets of variables. The attitudes are a person's overall assessment of their behaviour. Subjective norms are beliefs about whether significant others believe he or she should engage in the behaviour. Finally, PBC is proposed to predict both intention and behaviour because, if intention remains constant, the effort expended to achieve a successful course of behaviour is likely to rise as PBC rises. As a result, intention is assumed to capture the motivational dimension and to indicate the proclivity to engage in a particular behaviour (Honkanen & Young, 2015).

Attitude

Recent research has emphasised consumer attitudes towards ethical food, particularly organic products. Thogersen's (2016) study revealed that personal norms have a significant influence on consumers' choices between organic and conventional products. Perrini et al. (2010) identified trustworthiness as a critical emotional factor for Italian buyers. Given this, it is hypothesised that a favourable attitude towards organic food influences purchasing intentions (Arvola et al., 2008).

Perceived Behavioural control (PBC)

Perceived Behavioural Control (PBC) refers to people's perceptions of the ease or difficulty of engaging in a specific behaviour (Ajzen, 1991; Ajzen, 2002). According to Thgersen (2009a), perceived behavioural control, which is influenced by perceived barriers and perceived abilities, has a significant impact on organic food purchasing behaviour. Notably, perceived barriers like price and availability are significant impediments to organic food consumption (Rodriguez et al., 2008; Vindigni et al., 2002). Additionally, previous research has identified income or financial resources as important determinants influencing willingness to purchase organic food (Jager, 2000).

Subjective Norms (sn)

Subjective Norms (sn) are defined as perceived societal influences that influence individuals' decisions to engage in or refrain from engaging in certain behaviours (Ajzen, 1991). While previous research has found a significant relationship between attitudes and subjective norms (Chang, 1998), Yadav and Pathak (2016) found no significant impact of subjective norms on the intention to purchase environmentally friendly food. This finding is consistent with Armitage and Conner's (2001) argument that the normative component of the Theory of Planned Behaviour (TPB) may be the weakest link among the constructs within the model.

Current research

Based on the extensive literature review presented, several gaps and opportunities for further research within the context of organic tomato purchases. This study aims to address these gaps and contribute to the existing knowledge by exploring the determinants of organic tomato purchases in both exporting and importing countries, applying the Theory of Planned Behaviour (TPB) as the guiding theoretical framework. For this reason, two hypotheses have been proposed:

H1 Consumer attitudes toward organic food positively influence their intentions to purchase organic tomatoes.

H2 Perceived behavioural control (PBC) significantly affects consumers' intentions and behaviours regarding organic tomato purchases.

4. Methodology

This study utilized a cross-sectional survey design to investigate consumer perceptions and behaviours regarding organic tomatoes. A random sampling technique was utilized to select participants from diverse demographics in both export and import countries. The sample comprised 4305 participants from 8 European countries, with 1346 (31.28%) being male, 2917 (67.76%) being female, and 36 (0.84%) missing data entries. For the purpose of research, two groups were considered: export and import countries. In the group of export countries, 1014 individuals were included, with 292 (28.79%) males, 722 (71.21%) females, and no missing data entries. In the import countries group, there were 1184 individuals, including 380 (32.09%) males, 803 (67.83%) females, and one missing data entry.

The following metrics were included in the questionnaire for categories of organic tomatoes:

Attitude

Four semantic-differential scales that were previously validated in a study (Arvola et al., 2008) were used to measure attitudes. The elements are: “Buying OT instead of … make me feel”, which was rated from 1 (extremely bad) to 7 (extremely good), and from 1 (extremely displeased) to 7 (extremely pleased); and “Buying OT instead of... would be,” which was rated

from 1 (extremely harmful) to 7 (extremely beneficial), and from 1 (extremely foolish) to 7 (extremely wise).

Perceived behavioural control (PBC)

PBC was measured with the following four items. The items are “OT are generally available”, which was rated from 1 (generally available) to 7 (strongly agree), and “In general, to buy OT instead of..” rated from 1 (extremely difficult) to 7 (extremely easy). Additionally, the third measure is “Buying OT would require extra effort” which was rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). Finally, the control item is “If I want, I could easily buy OT instead of...” which was rated from 1 (strongly disagree) to 7 (strongly agree).

Subjective Norms (sn)

Two questions that were verified in a prior study (Arvola et al., 2008) were used to measure subjective norm. The first item is “Most people who are important to me..OT”. The item was rated on a scale ranging from 1 (extremely I should not buy) to 7 (extremely I should buy). The second item is “Most people who I value would buy OT instead of…,” which was rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Intentions

Intentions combine two items: “I intend to buy OT” rated on a scale ranging from 1 (definitely do not) and 7 (definitely do) and followed by “I will buy OT instead of...” which was rated from 1 (extremely unlikely) to 7 (extremely likely).

5.Results

The mean difference was not statistically significant (t = 1.053, df = 2196, p = .292) indicating that the attitudes of the export and import countries did not significantly differ. For the variable "PBC" the assumption of equal variances was not significant (F = 1.607, Sig.= .205). The mean difference was found statistically significant (t = -18.030, df = 2196, p <.001) indicating a significant difference in the PBC between the export and import countries. Similarly, for the variables "SN" and "Intent," Levene's tests indicated that the assumption of equal variances was significant for both (F = 9.848 Sig.= .002) and (F = 6.820, Sig.= .009). The mean difference was found to be statistically significant, with t-value (t = 10.393), p<.001) for "SN" and "Intent" (t = 8.467, (p <.001).

Table 1. Independent Samples Test

						t-test for Equality of Means					
		Leven's Test for Equality of Variances				Significance				95 % Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Attitude	Equal variances assumed	4.543	.033	1.053	2196	.146	.292	.05342	0.05071	-.04602	.15286
	Equal variances not assumed			1.050	2117.907	.147	.294	.05342	.05085	-.04631	.15315
PBC	Equal variances assumed	1.607	.205	-18.030	2196	<.001	<.001	-1.12588	.06245	-1.24834	-1.00342
	Equal variances not assumed			-17.973	2115.028	<.001	<.001	-1.12588	.06264	-1.24873	-1.00303
sn	Equal variances assumed	9.848	.002	10.393	2195	<.001	<.001	.57030	.05488	.46269	.67791
	Equal variances not assumed			10.363	2117.569	<.001	<.001	.57030	.05503	.46238	.67822
Intent	Equal variances assumed	6.820	.009	8.467	2193	<.001	<.001	.60118	.07101	.46194	.74043
	Equal variances not assumed			8.526	2184.864	<.001	<.001	60118	.07052	.46290	.73947

a.Levene's test is significant (p < .05), suggesting a violation of the assumption of equal variances.

The results suggest that both for Export and Important, all the independent variables (Attittude, PBC, sn) have statistically significant coefficients (p < .001). Furthermore, the t-values for all

of the coefficients are high, further emphasizing the significance of the relationships. For "export" attitude demonstrated the most substantial standardized coefficient (.533), suggesting it has the strongest influence on the dependent variable Intent" among the three independent variables. "PBC" has a standardized coefficient of .179, indicating a comparatively weaker influence on "Intent". "sn" has a standardized coefficient of .229, suggesting it has a moderate influence on "Intent". For "import" has a standardized coefficient of .441, indicating the strongest influence on "Intent" among the three independent variables. "PBC" has a standardized coefficient of .139, suggesting a relatively weaker influence on "Intent". "sn" has a standardized coefficient of .296, indicating a moderate influence on "Intent". (Table 2)

Table 2. Regression: Coefficients

	Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients	t	Sig.
Export	1	(Constant)	-1.103	.167		-6.611	<.001
		Attitude	.695	.036	.533	19.545	<.001
		PBC	.189	.022	.179	8.412	<.001
		sn	.276	.033	.229	8.298	<.001
Import	1	(Constant)	-1.947	.197		-9.890	<.001
		Attitude	.656	.037	.441	17.662	<.001
		PBC	.168	.026	.139	6.389	<.001
		sn	.407	.034	.296	11.979	<.001

a. Dependent Variable: Intent
b. Predictors: (Constant), sn, PBC, Attitude

The correlation of export countries between "PBC" and "Attitude" is (0.98) which indicates that they are weakly negatively correlated. Additionally, the correlation between "sn" and "PBC" (.180), and "Intention" and "PBC" (.273) presents a weakly negative correlation too. On the other, the correlation between "sn" and "Attitude" (.641), "Intention" and "Attitude" (.697), and "Intention" (.603) and "sn" indicates that they are strongly positively correlated. (Table 3)

Table 3. Means, Standard Deviations, and Intercorrelations Among Theory of Planned Behaviour Variabless Export

	M	SD	1	2	3	4
Attitude	5.40	1.20	(.82)			
PBC	3.75	1.49	.098**	(.71)		
SN	4.60	1.30	.641**	.180**	[.62]	
Intention	4.63	1.58	.697**	.273**	.603**	[.82]

**. Correlation is significant at the 0.01 level (2-tailed)

The correlation of import countries between “PBC” and “Attitude” is (0.224) which indicates that they are weakly negatively correlated. Additionally, the correlation between “sn” and “PBC” (.173), and “Intention” and “PBC” (.283) presents a weakly negative correlation too. On the other, the correlation between “sn” and “Attitude” (.516), “Intention” and “Attitude” (.620), and “Intention” (.545) and “sn” indicates that they are strongly positively correlated. (Table 4)

Table 4. Means, Standard Deviations, and Intercorrelations Among Theory of Planned Behaviour Variables Import

	M	SD	1	2	3	4
Attitude	5.35	1.16	(.85)			
PBC	4.87	1.43	.224**	(.77)		
SN	4.02	1.26	.516**	.173**	.[56]	
Intention	4.02	1.73	.620**	.283**	.545**	[.89]

**. Correlation is significant at the 0.01 level (2-tailed)

Discussion

The findings of the study are supported by specific data that align with the hypothesis “H1 Consumer attitudes toward organic food positively influence their intentions to purchase organic tomatoes“ are consistent with the existing literature. The analysis revealed that consumer attitudes toward organic food positively influence their intentions to purchase organic tomatoes. This is supported by the mean difference not being statistically significant for the variable "Attitude" ($t = 1.053$, $df = 2196$, $p = .292$), indicating that the attitudes of the export and import countries did not significantly differ. This is in line with previous research emphasizing the influence of consumer attitudes on organic food consumption patterns (Arvola et al., 2008; Thgersen, 2002). Furthermore, the study confirmed H2 that“ perceived behavioural control (PBC) significantly affects consumers' intentions and behaviours regarding organic tomato purchases. The statistically significant mean difference ($t = -18.030$, $df = 2196$, $p < .001$) for the variable "PBC" between the export and import countries suggests a significant disparity in the perceived ease or difficulty of engaging in organic tomato purchases (Table 2). This finding is in accordance with prior research highlighting the impact of perceived barriers, such as price and availability, on organic food consumption (Rodrguez et al., 2008; Vindigni et al.,

2002). Moreover, income and financial resources were identified as crucial determinants influencing consumers' willingness to purchase organic food (Jager, 2000). Moreover, the strong positive correlations between subjective norms (SN) and attitudes, as well as between intentions and both subjective norms and attitudes, reinforce the findings from studies by Chang (1998). These studies emphasize the significant impact of social and cultural influences on individual attitudes and intentions. The correlation values of .641, .697, and .603 in the export countries, and .516, .620, and 0.545 in the import countries, indicate the strong association between societal norms, individual attitudes, and purchase intentions, thus underscoring the importance of social context in shaping consumer behaviour, as highlighted by the existing literature. In addition, in the export countries, the PBC coefficient is .179, indicating a comparatively weaker influence on Intent. This is consistent with Thgersen's (2009a) emphasis on the multifaceted nature of perceived behavioural control in the literature. While PBC influences intentions, other factors such as social norms and individual beliefs may have a greater influence on organic food purchasing behaviour.

Conclusion

To summarise, the study explored the determinants of purchasing organic tomatoes, using the Theory of planned behaviour to examine consumer attitudes, subjective norms, and perceived behavioural control in both exporting and importing countries. Based on the analysis of the data, it is evident that consumer attitudes play a key role in determining purchase intention for organic tomatoes. This finding is in line with the existing literature and underlines the importance of consumer shaping of organic products. The strong correlations between subjective norms, attitudes and purchase intentions highlight the influence of social and cultural factors on consumer behaviour. This highlights the importance of taking social influences into account when developing marketing and promotional strategies for organic products. The results of this study contribute valuable insights to the existing literature, highlighting the need for a targeted approach to marketing organic products in different market contexts. These insights can help companies develop effective strategies that address the diverse determinants of consumer behaviour in the organic food sector. Further research can delve into the specific factors influencing perceived behavioural control and explore additional contextual variables to provide a comprehensive understanding of consumer decision-making processes in the organic food market.

References:

Adams, D. C., & Salois, M. J. (2010). Local versus organic: A turn in consumer preferences and willingness-to-pay. Renewable agriculture and food systems, 25(4), 331-341.

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. Journal of applied social psychology, 32(4), 665-683.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. British journal of social psychology, 40(4), 471-499.

Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. Appetite, 50(2-3), 443-454.

Chang, E. C. (1998). Dispositional optimism and primary and secondary appraisal of a stressor: Controlling for confounding influences and relations to coping and psychological and physical adjustment. Journal of personality and social psychology, 74(4), 1109.

Gurău, C., Ranchhod, A., 2005. International green marketing. A comparative study of British and Romanian firms. Int. Mark. Rev. 22 (5), 547–561.

Helga Willer, Bernhard Schlatter, Jan Trávníček (Eds.) (2023). The World of Organic Agriculture 2023. FiBL, IFOAM - Organics International. Research Institute of Organic Agriculture FiBL. https://www.fibl.org/fileadmin/documents/shop/1254-organic-world-2023.pdf. Data Accessed 29.10.2023.

Honkanen, P., & Young, J. A. (2015). What determines British consumers' motivation to buy sustainable seafood?. British Food Journal, 117(4), 1289-1302.

Jager, W. (2000), Modelling Consumer Behaviour, University of Groningen, Groningen.

Perrini, F., Castaldo, S., Misani, N., & Tencati, A. (2010). The impact of corporate social responsibility associations on trust in organic products marketed by mainstream retailers: a study of Italian consumers. Business Strategy and the Environment, 19(8), 512-526.

Rodr´ıguez, E., Lacaze, V. and Lup´ın, B. (2008), "Valuation of consumers' willingness-to-pay for organic food in Argentina", paper presented at 12th Congress of the European Association of Agricultural Economists – EAAE, August 26-29, Ghent.

Taylor, S., & Todd, P. (1997). Understanding the determinants of consumer composting behavior 1. Journal of Applied Social Psychology, 27(7), 602-628.

Thøgersen, J. (2016). Consumer decision-making with regard to organic food products. In Traditional food production and rural sustainable development (pp. 173-192). Routledge.

Vindigni, G., Janssen, M.A. and Jager, W. (2002), "Organic food consumption: a multi-theoretical framework of consumer decision making", British Food Journal, Vol. 104 No. 8, pp. 624-642.

Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. Journal of Cleaner Production, 135, 732-739.