Exploring the impact of the "Mountain Product" label guarantee on the attitudeintention path

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Abstract

This study aims at verifying a structural model in which the Mountain Product label's guarantee impacts as a second order construct on the attitude-intention path, considering the intention to purchase mountain food products as dependent variable and controlling for the level of the MP label knowledge. The MP label guarantee acts as a multidimensional construct. All the postulated HPs are verified evidencing the importance played by the MP label guarantee in generating positive attitudes and behavioural intentions in consumers. This can be amplified through a higher product label knowledge. Marketing implications are derived.

Key Words: "Mountain Product" label, consumer purchase intention, product knowledge, second-order structural equation model.

1. Introduction

The "Mountain Product" (MP) denomination has been introduced by the European Union (EU) (Regulation No 1151/2012) with the intent to protect and support products whose ingredients and raw materials origin from mountain areas and/or whose processing takes place in mountain areas. By promoting mountain food products, the EU aspires at supporting the mountain agrifood and tourism sector, promoting sustainable models of development in areas that tend to become depopulated due to the scarcity of profitable business activities and higher farming costs in the face of lower yields. Indeed, economic operators are likely to benefit from the opportunity to exploit the positive image of mountains and increase the value-added of their products. With this label, the EU aims also at guaranteeing consumers about the origin authenticity of mountain products, whose healthiness and quality are widely recognised.

Some studies have evidenced the market potential of this denomination: Martins and Ferreira (2017) found that the use of the optional quality term "mountain food" could improve the level of consumers recognition of these products, while Bonadonna (2016) and Mazzucchi and Sali (2021) found the same regarding the level of awareness. However, despite the intents and the market potential, the MP denomination struggles to penetrate the market and get awareness among consumers. Sanjuan and Khliji (2016) state that urban consumers show a lower level of awareness and interest towards the EU food mountain denomination compared to other EU quality labels. So, it is important to understand what factors can leverage MPs consumer purchase and consumption, as many questions remain unanswered when it comes to their consumer behaviour (Bassi et al., 2021), especially regarding the different dimensions composing the MP label guarantee in consumers' perceptions. Within this context, our study aims at understanding if the guarantee given by the MP label to consumers – intended as a multidimensional construct – can result in a positive attitude towards the food products

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displaying this denomination and, in so doing, develop purchase intentions. No prior studies, to our knowledge, verified a similar model.

2. Research Model

This study aims at verifying a structural model in which the Mountain Product label's guarantee impacts as a second order construct on the attitude-intention path, considering the intention to purchase mountain food products (MP Purchase Intention) as dependent variable, and controlling for the level of the MP label knowledge. The MP label's guarantee acts as a multidimensional construct in our model and it is composed by a number of dimensions concerned with quality warranty, authenticity, economic support and health warranty. Bassi et al. (2021) found a positive link between MP label attitude and MP purchase intention but they didn't consider the contribution of the MP label guarantee. Therefore, our hypotheses are as follows:

HP1: *The MP label guarantee positively influence the attitude towards the MP label;*

HP2: The attitude towards the MP label positively affects the intention to purchase food products labelled with the MP label;

H3: the MP label knowledge has a positive and significant impact on consumers' purchase intention of foods labelled with the MP label.

3. Method

To evaluate the role played by the "Mountain product" label, in its multidimensional composition, an online survey was shared with consumers by the means of 150 Facebook thematic pages. To identify those thematic groups, a wider range of key words have been selected a priori; such as: mountain, nature, mountain product, food, as well as key words identifying local mountain areas. The survey has been developed on a Google Module. Although presenting several limitations, such as an over-representation of young respondents and female, Facebook represents a good vehicle to contact our sample, being over 31 million of Italians registered to the social network (Wearesocial, 2019).

3.1 The sample

During a period of 3 weeks, 437 completed and valid questionnaires have been collected. Almost 70% of the respondents are female. Respondents are aged between 19 and 88 years (average age: 43 years old). 53% of respondents achieved a diploma, 35% accomplish a degree and 13% prosecuted a post-degree course.

3.2 Measures

All items included in the survey were derived from extant literature on consumer behaviour and branding. To verify the capability of measures to express the concept under investigation, items have been double-translated English-Italian and Italian-English, and pre-tested on a sample of 10 respondents who assessed their comprehensibility and fit to the measured concept. A 7-point Likert scale was used to anchor measure by "strongly disagree -1" to "strongly agree -7". Constructs and relative measures are presented in Table 1.

Table 1. Measures. Items loading and reliability

Constructs	Measures	Factor loading	T-value
MP label guarantee (Adapted from Van Ittersum et al. 1999; 2007; Fotopouloos and Kriystallis2003)	In your opinion, the "Mountain Product" label:		

Quality Warranty	Guarantee the high quality of the product	0.775	n.a.
	Preserve qualitative consistency over time	0.855	26.035
Authenticity	Protect the authenticity of the product	0.881	n.a.
	Fully guarantee the region of origin of the product	0.813	20.358
	Guarantee the product is produced in a traditional way	0.856	24.475
	That the product is obtained with traditional raw materials	0.890	26.208
	and production methods		
	Reduce the likelihood of fraudulent copycat products	0.756	18.966
	Preserve the exclusivity of the product	0.814	21.609
Economic Support	Lead to more employment in the region of origin	0.818	n.a.
	Lead to higher farmer income	0.770	14.111
Health Warranty	Guarantee the healthiness of the product	0.903	n.a.
•	Protect the consumer health	0.863	24.207
Mountain product	Purchase "Mountain product(s)" is		
label Attitude	Very unattractive – Very attractive	0.875	n.a.
(derived from	Very good – Very bad	0.855	17.626
Ittersum et al. 1999)	Really dislike – Really like	0.911	10.144
	Useless – Useful	0.851	20.071
Mountain product	I consider myself an expert in food with the "Mountain	0.891	n.a.
label Knowledge	Product" brand		
(adapted by Park &	I can distinguish the "Mountain Product" brand among	0.805	19.372
Lessig, 1981)	others		
	I know the "Mountain Product" brand well	0.932	28.047
Mountain product	I will buy foods with the "Mountain Product" brand in my	0.947	n.a.
Purchase Intention	next grocery purchase		
(adapted by Diallo	I intend to purchase foods with the "Mountain Product"	0.927	35.633
2012)	brand in the future		
	The next time I go shopping, I will buy food with the	0.940	42.864
	"Mountain Product" brand		

Notes: n.a.= not available

The correlation matrix among constructs related to the mountain product label confirms that a second-order model is suitable for modelling the overall concept of Mountain Product Label (Table 2).

Table 2. Correlation matrix for Mountain Product label measures

Constructs	Correlation Matrix			
Quality Warranty				
Authenticity	0.980			
Economic Support	0.879	0.865		
Health Warranty	0.986	0.970	0.870	
MP label guarantee	0.998	0.982	0.881	0.988

3.3 Measurement model validity

To assess the model validity, several indicators were considered. First all factor loadings were statistically significant (t-value > 14) and properly loaded on their latent construct (factor loading > 0.7) (see Table 1). Values for the composite reliability (CR) and average variance extracted (AVE) show measure reliability being above of their recommended cut-offs (CR> 0.7 and AVE > 0.5) (see Table 3). Finally, the discriminant validity was assessed using the Fornell and Larcker criterion (1981). Indeed, the amount of variance extracted for each variable is higher than the squared value of the correlation coefficient between pairs latent constructs (see Table 3).

Table 3. Correlation matrix among latent constructs

Constructs	AVE	CR	Correlati	Correlation Matrix		
MP purchase intention	0.830	0.957	0.911			
MP label attitude	0.701	0.928	0.420	0.837		
MP label knowledge	0.770	0.909	0.579	0.103	0.878	
MP label guarantee	0.696	0.965	0.288	0.344	0.300	0.834

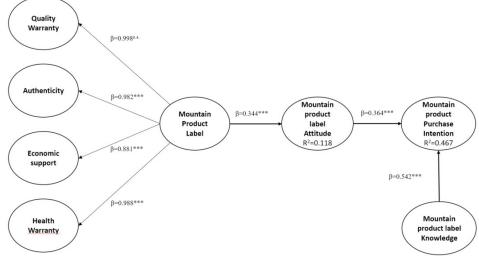
Notes: squared values of the correlation coefficient are reported in diagonal (bold)

Model fit indexes indicate an overall good model fit: Satorra-Bentler χ^2 (202) = 539.73; χ^2/df =2.67; RMSEA = 0.0619 (p-value=0.001); NFI=0.982; CFI=0.989; GFI= 0.862.

4. Structural Model results

R²s indicate that the predictors account for more than 10% of the explained variance of the MP label attitude and almost 47% of the explained variance of the MP purchase intention. Results of the structural model confirm all the postulated hypotheses (Figure 1). The second-order construct summarising all the main characteristics of the MP label positively influence the Attitude towards the MP label, confirming H1. In turn, Attitude towards MP label positively affects the intention to purchase food products labelled with the Mountain Product label, as hypothesised in H2. Finally, in line with our postulated third hypothesis, MP label knowledge has a positive and significant impact on consumers' purchase intention of foods labelled with the MP label.

Figure 1: Structural model results



*** p< .001; n.a= not available

5. Discussion

All the postulated HPs are verified, evidencing the role played by the MP label guarantee in generating positive attitudes and behavioural intentions in consumers. Moreover, Italian consumers recognise the signalling value of the MP denomination as they perceive it as standing for quality, healthy and authentic products and able to support mountain farmers' business. In this way this work extends Van Ittersum et al.'s (1999) study, testing its proposed dimensions in a structural model in the context of MP labels; it also contributes to the consumer behaviour literature on EU quality labels verifying the MP label guarantee-attitude-intention path importance. From a marketing perspective, mountain farmers and policy makers should try to leverage on these values - authenticity, quality, healthy and sense of support to mountain farmers - when communicating and promoting the MP label offer. In so

doing, they can generate positive attitudes towards the MP label and develop the push towards buying intents with positive returns for MP producers.

Moreover, this study confirms the important role played by the product label knowledge, which acts as an amplifier of MP purchase intentions. Consequently, EU investments in supporting the MP denomination diffusion and awareness among EU citizens are key in order to reach this policy's goals. To this concern, local authorities can play a supporting and leveraging role, adopting quickly the label into their boundaries. Unfortunately, this is not the case of Italy, which launch the MP logo only very recently (early 2018, see www.politicheagricole.it).

6. Limitations and Further Research

Although proposing a second-order structural model showing the potential impact of several characteristics of the MP EU label on the overall consumer's purchase process, the study presents some limitations that require further attention in future works. First, data collection has been conducted using Facebook thematic pages, and this may lead to self-selection bias in data collection. Second, the analysis has been performed on the Italian context, where customers are well acknowledged about EU labels. Future studies should replicate the empirical analysis in countries less sensitive to EU labels, such as Baltic countries or in countries of eastern Europe. Last but not the least, the model may be extended with further variables connected to the production process's sustainability, to verify the relevance of new issues relating to sustainable production with the relevance of MP EU label.

Bibliography

- Bassi I., Carzedda M., & Grassetti L. (2021), Consumer attitudes towards the mountain product label: Implications for mountain development. *Journal of Mountain Science*, 18(9).
- Bonadonna A. (2016), What Does the Optional Quality Term "Mountain Product" Involve? The Biellese Mountain (NorthWest Italy) Farmers' Opinions. *Mediterranean Journal of Social Sciences*, 7(1), 18-23.
- Diallo M.F. (2012), Effects of store image and store brand price image on store brand purchase intention: Application to an emerging market. *Journal of Retailing & Consumer Services*, 19: 360-367.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fotopoulos, C., Krystallis, A., & Ness, M. (2003). Wine produced by organic grapes in Greece: using means—end chains analysis to reveal organic buyers' purchasing motives in comparison to the non-buyers. *Food Quality and Preference*, 14(7), 549-566.
- Mazzocchi, C., & Sali, G. (2022). Supporting mountain agriculture through "mountain product" label: A choice experiment approach. *Environment, Development and Sustainability*, 24(1), 701-723.
- Park, C. W., & Lessig, V. P. (1981). Familiarity and its impact on consumer decision biases and heuristics. *Journal of consumer research*, 8, 223-231.
- Sanjuan A.I., Khliji S. (2016), Urban consumers' response to the EU food mountain labelling: an empirical application in Southern Europe. *New Medit*, 15(1), 72-81
- Van Ittersum, K., Candel, M., & Torelli, F. (1999,. The market for PDO/PGI protected regional products: consumers' attitudes and behaviour, 67th Seminar, October 28-30, 1999, LeMans, France 241121, European Association of Agricultural Economists.

- Van Ittersum, K., Meulenberg, M. T., Van Trijp, H. C., & Candel, M. J. (2007). Consumers' appreciation of regional certification labels: a Pan-European study. *Journal of Agricultural Economics*, 58(1), 1-23.
- Wearesocial (2019). Digital 2019: tre italiani su cinque attivi sui social per quasi due ore al giorno. Accessed: 17 agosto 2020. Available at: https://wearesocial.com/it/blog/2019/01/digital-in-2019