Exploring the impact of the “Mountain Product” label guarantee on the attitude-intention 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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³ Although the study is the result of the joint work of the authors, it can be analytically attributed to each of them in the following way: Elisa Martinelli authored section 1,2, 5 & 6; Francesca De Canio developed section 3 & 4.
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>
<thead>
<tr>
<th>Table 1. Measures. Items loading and reliability</th>
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<tbody>
<tr>
<td>Constructs</td>
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<tr>
<td>-----------------------------------</td>
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<tr>
<td>MP label guarantee (Adapted from Van Ittersum et al. 1999; 2007; Fotopouloos and Kriystallis2003)</td>
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| Factor loading | T-value |
Quality Warranty
- Guarantee the high quality of the product
- Preserve qualitative consistency over time
- Protect the authenticity of the product
- Fully guarantee the region of origin of the product
- Guarantee the product is produced in a traditional way
- That the product is obtained with traditional raw materials and production methods
- Reduce the likelihood of fraudulent copycat products
- Preserve the exclusivity of the product

Authenticity
- Protect the authenticity of the product
- Fully guarantee the region of origin of the product
- Guarantee the product is produced in a traditional way
- That the product is obtained with traditional raw materials and production methods
- Reduce the likelihood of fraudulent copycat products
- Preserve the exclusivity of the product

Economic Support
- Lead to more employment in the region of origin
- Lead to higher farmer income

Health Warranty
- Guarantee the healthiness of the product
- Protect the consumer health

Mountain product label Attitude
- Purchase "Mountain product(s)" is Very unattractive – Very attractive
- Very good – Very bad
- Really dislike – Really like
- Useless – Useful

Mountain product label Knowledge
- I consider myself an expert in food with the "Mountain Product" brand
- I can distinguish the "Mountain Product" brand among others
- I know the "Mountain Product" brand well

Mountain product Purchase Intention
- I will buy foods with the "Mountain Product" brand in my next grocery purchase
- The next time I go shopping, I will buy food with the "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

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Correlation Matrix</th>
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<tbody>
<tr>
<td>Quality Warranty</td>
<td>0.980</td>
</tr>
<tr>
<td>Authenticity</td>
<td></td>
</tr>
<tr>
<td>Economic Support</td>
<td>0.879</td>
</tr>
<tr>
<td>Health Warranty</td>
<td>0.986</td>
</tr>
<tr>
<td>MP label guarantee</td>
<td>0.998</td>
</tr>
</tbody>
</table>

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
Model fit indexes indicate an overall good model fit: Satorra-Bentler $\chi^2 (202) = 539.73$; $\chi^2$/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](image)

*** 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
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