Enhancing Traditional Product Brand Equity through the Mountain Product label: a Consumer-Based Brand Equity approach*

E. Martinelli¹, F. De Canio², E. Sarti³

Abstract

Promoting traditional mountain food products guarantees consumers of products' quality, supports local economies and promotes farm sustainability in mountain regions. The EU Commission has introduced the "Mountain Product" (MP) denomination to this aim. However, the MP label strives to be used by producers and has low awareness among consumers. Our study aims to assess the contribution of the MP label to the brand equity of products farmed in mountain regions. This is performed by assessing the brand equity antecedents of the MP label brand equity and verifying the latter effect on a traditional product brand equity: a potato cultivated in the Modena Apennines named the "Montese potato".

A survey through a structured questionnaire was administered in-store to a sample of 317 consumers and analysed with the CB-SEM method to assess the validity of the hypotheses underpinning our study. Results confirm that MP brand awareness, perceived brand quality and brand associations are all positive and significant drivers of the MP label brand equity. Moreover, the MP label brand equity positively and significantly influences the specific product's brand equity. Our findings provide implications for producers and retailers interested in using the MP label but doubtful of its value creation.

Keywords: Consumer-Based Brand equity; Mountain Products; EU quality labels; structural equation modelling.

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¹ Department of Economics Marco Biagi, University of Modena and Reggio Emilia, Viale Berengario 51, Modena, Italy.

² Department of Life Science, University of Modena and Reggio Emilia, Viale Amendola, 2 – Pad. Besta, Reggio Emilia, Italy.
Correspondence author e-mail: francesca.decanio@unimore.it

³ Department of Economics Mana Diosi University of Medana and Decois 1

³ Department of Economics Marco Biagi, University of Modena and Reggio Emilia, Viale Berengario 51, Modena, Italy.

1. Objectives and rationale of the study

The European Union Regulation No 1151/2012 defines the legal framework to protect the originality and authenticity of mountain food products. Specifically, article 31 of the EU regulation allows the use of the term "Mountain Product" (MP) only for those food products produced, processed, and made with ingredients and raw materials that come from mountain areas (cultivated at 600 at 1500 m altitude). In 2017, the Italian Ministry of Agriculture, Food and Forestry regulated the implementation procedures such as the use of an optional identification logo to benefit from the quality scheme. The promotion of mountain food products has many advantages such as, among others, the support of local economies, the guarantee of quality to consumers and the promotion of developing and sustainable models in European mountain regions. However, the MP brand strives to be used by producers, to penetrate the market and to get awareness among consumers. Till now, the literature on the topic has focused on identifying the MP label market potential (Martins and Ferreira, 2017), its level of awareness among consumers (i.e.: Bassi, et al., 2021; Finco et al., 2017) and consumers' willingness to pay (Mazzocchi and Sali, 2022). However, no studies - to our knowledge - have surveyed the possible contribution of the MP label to the Consumer-Based Brand Equity (CCBE) of products farmed in mountain regions. This study aimed to be key in convincing producers and retailers to use this optional label because of its capacity to create additional value for products coming from mountain areas. The paper also contributes to the CCBE and food literature, verifying a poorly studied relationship, such as the effect of an EU quality label equity on a specific product equity, a local potato cultivated in the Modena Apennines, named the "Montese potato" - performing it through an in-store survey.

The paper presents the theoretical framework and the hypotheses of this study, and then describes the methodology, the structural model and the results. The work ends with remarks and conclusions, including managerial and policy implications.

2. Theoretical Background and Hypotheses Development

Traditionally, brand equity has been defined as "[...] a set of assets and liabilities linked to a brand's name and symbol that adds to (or subtracts from) the value provided by a product or service to a firm and/or to a firm's customers" (Aaker, 1991, p. 15). CCBE is considered as the value of a brand to the consumer. The brand equity paradigm represents a key point for analysing the intrinsic and market value of the MP label. According to Thode and Maskulka (1998), a specific geographic designation is a sign of superiority in many circumstances. A place-based strategy supported by a specific brand helps establish a sustainable competitive advantage, represents an incentive for product development and improves the marketplace competitiveness.

Aaker (1991) looks at brand equity as a function of different variables, among which brand awareness (H1), perceived quality (H2) and brand associations (H3).

H1: *MP brand awareness positively influences a mountain product's brand equity* **H2:** *MP brand quality positively influences a mountain product's brand equity*

H3: MP brand association positively influences a mountain product's brand equity

As mountain foods are potentially successful and attractive in the market (Bassi et al., 2021), we can postulate a positive contribution of the MP label to our DV:

H4: MP brand equity positively influences a mountain product's brand equity

The overall theoretical model has been extended with several demographics as control variables.

3. Methodology

The Montese potato (Modena Apennines) was chosen as a specific product cultivated in a mountain area, with high local brand awareness. Thanks to the collaboration with a national retailer, the survey was administered to a convenience sample of consumers approached into a shopping centre at the entry of a hypermarket. A total of 317 questionnaires were collected on different days/weeks of January 2023.

Respondents are mainly women (68.1%), ranging in age from 18 to 92 years (mean 54.6, standard deviation: 18.394), living in families composed mainly of two people (37.9%), followed by three (20.8%) or four (20.5%) components.

Measurement items were derived from extant literature and adapted to the context of this study (Table 1), assessed using a 7-point Likert scale anchored by "strongly disagree – 1" and "strongly agree – 7" and double translated (English-Italian, Italian-English) to avoid translation bias. A pre-test was performed too.

Table 1. Measures, items loading and reliability

Measures	FA	T	CA	AVE	CR
Product Brand Equity (PBE) (Yoo et al. (2000)	_		0.947	0.862	0.962
The Montese potato has a well-known brand	0.880	n.a			
The Montese potato has a strong brand	0.943	25.105			
The Montese potato has a unique brand	0.870	20.826			
The Montese potato has a recognized brand	0.917	22.833			
MP Label Brand Equity (MPLBE) (Adapted from Van Ittersum et al.			0.917		0.947
1999)				0.857	
It would be positive if the "Montese Potato" were protected by the "Mountain Product" brand	0.900	n.a.			
The "Montese Potato" would guarantee me more thanks to the "Mountain Product" brand	0.906	18.966			
The "Mountain Product" brand would add value to the "Montese Potato"	0.851	14.207			
MP Label Brand Awareness (MPLBAW) (Yoo et al., 2000)			0.910	0.847	0.943
I know the "Mountain Product" brand	0.937	n.a			
I can distinguish the "Mountain Product" brand	0.844	22.191			
I consider myself an expert on the "Mountain Product" brand	0.861	25.406			
MP Label Brand Quality (MPLBQ) (Adapted from	ı Yoo et al.	., 2000)	0.865	0.881	0.937
"Mountain Product" brand has high quality	0.953	n.a.			
The "Mountain Product" brand guarantees constant quality over time	0.800	12.856			
MP Label Brand Associations (MPLBAS) (Yoo et	al., 2000)		0.955	0.918	0.971

The "Mountain Product" brand is:

Negative – Positive	0.880	n.a.
Bad – Good	0.976	11.863
Unfavourable – Favourable	0.958	11.642

Notes: F.L. = Standardised Factor Loading, T = T-statistic, CA = Cronbach's alpha, AVE = Average Variance Extracted, CR = Composite Reliability, n.a. = not available.

4. Structural Model and Results

A two-step approach was used to assess the validity of the hypotheses (Anderson and Gerbing, 1988). A confirmatory factor analysis (CFA) tested the unidimensionality and convergent validity of the constructs; a robust Covariance-Based Structural Equation Model (CB-SEM) with the Maximum Likelihood method measured causal paths among constructs. Data were analyzed through Lisrel 8.80 (Jöreskog and Sörbom, 2006). Results show that all items are significant (t-values >14.650) and present a completely standardized factor loading higher than 0.6 proving the convergent validity of the measurement model (Hu and Bentler, 1999). All items exhibited a high itemtotal correlation, indicating their capability to measure the constructs investigated. Average Variance Extracted (AVE) and Composite Reliability (CR) are good and assess the convergent validity of the investigated constructs (Table 1).

The structural model procedure provides a significant Satorra-Bentler Chi-Square ($\chi_{\rm B^2}(116) = 187.111$, p<0.00) evidencing potential multicollinearity problems. However, the non-significant value for the RMSEA = 0.0440 (p-value=0.797), and the Chi-square ratio lower than 3 ($\chi_{\rm S-B^2}/df$ ratio=1.613) confirm no multicollinearity problems. The model fit indexes are all good (Hu and Bentler, 1999): CFI=0.991; NFI=0.977; GFI =0.908; SRMR= 0.0639.

The empirical model shows a good predictive ability and a strong explanatory power in defining product brand equity (R²=30.1%), and MP Label Brand Equity (R²=49.7%). Figure 1 shows the direct effects among latent constructs. Regarding indirect effects, the MP brand associations highlight the indirect effect on the dependent variable (MPLBAS \rightarrow MPLBE \rightarrow PBE: β : 0.247, T-value: 3.857). Weak but highly significant the indirect effect between MP brand awareness and product brand equity (MPLBAW \rightarrow MPLBE \rightarrow PBE: β : 0.069, T-value: 3.817). With a lower significance (two-tailed p-value = 0.048), the MPLBE has an indirect effect on the DV (MPLBQ \rightarrow MPLBE \rightarrow PBE: β : 0.129, T-value: 1.998). The overall mediation analysis confirms a partial mediation of the relationships analysed.

MP Label Brand
Awareness
(MPLBAW)

O.225** (2.232)

MP Label Brand
Quality (MPLBQ)

MP Label Brand
Associations
(MPLBAS)

MP Label Brand
Associations
(MPLBAS)

Age

Age

Gander

Fam.
Num

Figure 1. Structural model results

Note: ***p<0.01, **p<0.05, n.s \rightarrow not significant path. T-values are reported in brackets.

5. Conclusions, theoretical and managerial implications

Results confirm that MP brand awareness, MP perceived brand quality and MP brand associations are all positive and significant drivers of MP brand equity, with MPBAS emerging as the main variable supporting the creation of a positive MPLBE. The latter, in turn, positively and significantly influence PBE, confirming H4.

The control variables show a positive relationship concerning the age of the respondents, highlighting a higher PBE for older respondents. This result is in line with the type of product selected for the empirical study, with a strong purchasing tradition for local consumers. No significant effect was found considering gender and household composition. Although still young in the EU quality labels panorama, the MP label can play an important role in supporting the brand equity of traditional mountain products. Branding is a powerful means of differentiation. The use of the MP label provides mountain farmers with a competitive advantage in increasing the value of their products and addressing their offer, particularly to the eldest people. EU and national policymakers should implement communication strategies aimed at increasing consumers' awareness of MPs stressing in particular the good image and positive associations this label can develop, and leveraging the protection and diffusion of the label, supporting a cultural change towards a more collaborative approach among producers, improving their willingness to use the MP label thanks to the value it can generate in terms of BE.

The study presents an initial perspective on the brand value generated by the MP quality label. Future studies should better understand the interaction between the use of multiple labels to get a better understanding of CBBE's formation.

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