Mountain Food Products: A Cluster Analysis Based on Young Consumers’ Perceptions

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Abstract: Even though many studies focus on consumer perception of local food, only limited research concerns mountain areas. This paper aims to fill this gap by concentrating on the potential value of mountain food products, with particular reference to young consumers’ perceptions. To this end, an online survey was conducted on a sample of 4079 University students using a specific questionnaire. Collected data underwent hierarchical cluster analysis, defining four clusters. Respondents were found to consider “mountain products” a fundamental commodity with reference to all related categories of food (cheese, meat, honey, fruits and vegetables) and believed that all stages of the supply chain should be carried out in mountain areas. All of the four clusters also reported a positive perception of mountain products, and they associated mountain foodstuffs with various key concepts, such as sustainable development (32.56%, two clusters), local traditions and specialities (49.11%, two clusters) and health (18.34%, three clusters). Therefore, this study provides useful insights for institutions, by further reinforcing the importance of agri-food products in the collective imagination of consumers and producers in mountain areas by promoting understanding of the characteristics sought by younger generations. Finally, this study contributes to increasing knowledge of mountain food products and related perceptions among younger consumers and expands contemporary literature on consumers in mountain market areas.

Keywords: mountain food product; young generation; consumer perception; cluster analysis; food

1. Introduction

Across the continents, mountains cover 24% of the world’s surface [1], hosting approximately 12 percent of the world’s human population, with another 14 percent relying or dependent on resources provided by mountainous areas [2].

Mountains represent a reservoir of several resources for human life, i.e., fresh water, wood, minerals and raw materials: they encourage human beings to settle down in mountainous areas and develop local communities.

On the other hand, due to the different geomorphological, climatic and physical characteristics, the economic growth of mountain societies is highly variable from place to place; thus, while there are many well-established mountain areas, especially thanks to the thriving tourism sector, there are also several mountain communities still needing to find ways to sustain and boost their economies [3].

Agriculture and related food products are often considered a way of supporting local communities and economic operators since they trigger socio-economic benefits for mountain people [4] both in the agricultural and tourism sector [5]: the relationship between food products and consumers has been widely studied by scholars and practitioners. Some studies concentrate on the impact of local food products’ origin and...
tradition on consumers’ opinions [6], whereas others point out the role of local food in creating the tourism image of a local community [7].

Moreover, even if many studies analyse consumer perception of local food from different angles [8–10], only limited research in this field concerns mountain areas. In particular, to the Authors’ knowledge, very few studies measured the perception of the younger generation of consumers [11], i.e., those expected to “drive” the market in coming years.

Based on the above considerations, this paper aims to contribute to the open debate on the potential value of mountain food products by investigating young consumers’ perception of their characteristics and values. Through a process of cluster analysis, the study intends to explore whether there are different types of young consumers and whether these differences lead to different approaches to mountain products and to their specific characteristics, namely preference for different categories of mountain food products, focus on different stages of the supply chain (raw materials, processing, purchase channels) and characteristics sought for (ancient flavours, tradition and contact with the territory, healthiness, tasty and natural food, sustainability).

In this sense, the study aspires to contribute to the literature on mountain products, which is still minor considering their relevance in social, economic and environmental terms.

The paper is thus organised as follows: Section 1.1 contains a literature review with the main conceptual framework of the study, which, starting from an analysis of how consumer perception is approached by scholars, centres on literature concerning the mountain context. Section 2 details the methodological approach chosen for the analysis. Section 3 presents the main results of the study, and Section 4 discusses them in line with previous studies on the relationship between consumer perception and mountain products. Section 5 offers final considerations summarising the main research outcomes: it points out the implications and main limitations of the study as well as new avenues for future research.

1.1. Literature Review

Food is one of the most important goods provided by mountains to humanity. In accordance with the UNGA [12], 6 out of the 20 plant species able to supply 80% of the world’s food originate from mountain areas.

The key role of mountain territories in providing this fundamental commodity is widely recognised by international institutions; however, some concern has been pointed out on the vulnerability of mountain food and agricultural production and, consequently, on the need to support local farmers, recognising in food a central income generating role for local communities [13].

Food products can truly be a flywheel for the development of rural communities because they can help sustain both local farmers and tourism operators [14] by increasing the attractiveness of the territory [15] and strengthening local identity. Furthermore, local foodstuffs are appreciated by consumers, being associated with positive characteristics that differentiate them from the not local ones [8]. Therefore, consumer behaviour and perception of food products, specifically those produced in mountain areas, can be key factors for generating revenue for mountain societies.

Since the mid-1990s, abundant literature has focused on the relationship between consumer perception and food products in general [16–21], and the topic has been debated from different perspectives. Two different centres of interest are presented below, one pertaining to the role of quality systems and related schemes (e.g., labelling and certification schemes) and the other to the topic of local food products.
1.1.1. Quality Systems

Literature on the role of labels and certification systems of environmental quality or quality associated with the origin of consumer perception of food products has significantly grown in the last two decades [22–25]. In this field, together with well-known and implemented certification systems such as the Protected Denomination of Origin (PDO) and Protected Geographical Indication (PGI), new ones have entered the market, specifically intended to boost mountain foodstuff, i.e., the “Mountain product” label, which might significantly contribute to mountain economy [11,26–30]. Furthermore, some studies highlighted that consumer perception increases if foodstuffs with a Geographical Indication specify production in a mountain area [31–33]. Consumer willingness pay a premium price has been recognized in two studies on certified grass-fed dairy products [34,35].

Another part of research work on the evaluation of customers' attitudes towards food was carried out in terms of healthiness, given the growing interest of consumers in healthy food understood as food influenced by a wide range of different factors, e.g., ingredients, product category, label information, origin, sensory characteristics and packaging [36]. In this field, some studies aim to understand how this topic is perceived by consumers [37], even by considering the role of labels in driving their opinion about the healthiness of the foods and beverages [38] as well as orienting their choice. Hartmann et al. [39] point out how consumers tend to consider food products labelled “free-from” as healthier. This result was confirmed by subsequent investigations [40,41]. According to Acton et al. [42], the great majority of consumers would like to see health ratings or nutrient-specific information on labels. This is currently intensively discussed among scholars [43,44]; Biondi and Camanzi [45] argue that front-of-pack messages can drive the perception of a product and that the most important drivers are nutrition claims. Oliveira et al. [46] argue that consumers living in the mountains and those living in other areas have different levels of knowledge about mountain farming practices and different perceptions of mountain agri-food products. However, they all insist on the requirement for mountain food to be healthier and sustainably produced.

A third strand of research was conducted to assess the role of the environmental variable in defining consumer perception, choices and willingness to pay for food and beverages [47,48]. This dimension is extremely important, with food consumption being one of the most significant sources of environmental impact deriving from human beings' everyday life.

Several studies concentrate on the impact of packaging, environmental labels and environmental declarations on consumer willingness to buy or pay; the outcomes are various [49–52].

Consumer consciousness, in any case, does not seem to be completely developed [53], and environmental labels and declarations can act as influencers on customer perception.

In this specific line of inquiry, scholars are discussing organic food [22,54–57] and taking into consideration various dimensions. In a comparative analysis between India and the USA, for instance, Boobalan and Nachimuthu [58] underline the importance of considering the cultural variable when promoting organic food. Annunziata and Mariani’s results [10], on the other hand, point out how consumers tend to adopt an egoistic approach, being more interested in quality and health components rather than environmental, social or economic dimensions of sustainability. In accordance with the authors’ consumer segmentation carried out in Italy, only a small segment of consumers can be called “sustainability-oriented consumers”. German consumers, on the other hand, showed great interest not only in buying organic products but also in local food. Several scholars underlined that willingness to pay a premium price is influenced by environmental and geographical indications, as well as health factors [59–62].

The food market is increasingly interested in promoting natural foods, as consumers are inclined to buy foods containing natural ingredients, which are considered healthier. In fact, natural products tend to be perceived as healthier than as those where human intervention is minimised, while many consumers express concern about the risks
associated with modern technologies. One example is organic food, perceived as more natural; it is also considered less processed and free from pesticides or dubious substances and technologies used in production and processing [63,64]. A recent study, for instance, pointed out how consumers’ WTP for organic rice is higher compared to the actual rice price [65].

1.1.2. Local Food Products

The concept of local products was also considered. Numerous scholars worked out models of short food supply chains (SFSCs) for local and mountain food that can bring social, economic and environmental benefits compared to more conventional practices [66]. SFSCs might deliver mutual benefits for farmers and consumers and contribute to a more sustainable food system while addressing some of the most pressing environmental and social issues [67–71].

Ciuchta and O’Toole [72] studied localism, a social movement often associated with “buy local”, whilst Bakos [73] pointed out that the empowerment of local food systems is an essential tool for local development. Several studies analysed the perception of consumers buying local foods in short food supply chains (SFSC). Results show an overall positive opinion on quality linked to freshness, healthiness and taste [74–77]. Independently from local contexts, a significant correlation between education and the choice to purchase food through SFSC was identified in several studies. In fact, other socio-economic variables such as gender, income and age are also detected in the consumer samples of the various studies, but what differs is that the consumers involved in SFSC generally have a high level of education [78,79].

Distribution channels for local and/or short supply chain products are another element to consider when analysing the perception of mountain products. Direct sale is the main channel for SFSC and mountain products [5,27]. At the same time, diversification of sales channels can be a winning strategy for farms since integration with conventional distribution can lead to greater economic benefits [80]. In addition, e-commerce may represent an additional opportunity to purchase local products [81,82], although digitization seems to negatively affect this perception as it may disrupt the direct link between consumer and farmer [83].

Some studies evaluate consumer perception of local products compared to products with national and regional brands. Results show that consumers consider local products of higher quality than others [84,85]. Cacciolatti et al. [86] identified five critical factors affecting decision making: product knowledge, country of origin, perceived transactional value, consumers’ life stage and available income.

The growing interest shown by consumers in local and mountain products is motivated not only by the quality of these products but also by a rediscovery of local cultures with psychological benefits for consumers [87–89]. Notably, some consumers are oriented to a rediscovery of their roots and therefore value “ancient flavours” [90,91]. Temperini et al. [92] pointed out the willingness of a sample of Italian consumers to pay a premium price for food with national park brands, evidencing the attractiveness of mountain products made in park areas. In this sense, communication strategies aimed at promoting mountain products and guaranteeing better positioning and higher market prices for them are fundamental for the sustainable development of mountain companies and adequate remuneration for high-quality products [93–95].

Some researchers focus on the perception of food by younger generations: they highlight the attention to price, ingredients, origin and healthiness of the products [96], traceability and information on the label [97]. Specifically, local branded foods are perceived by young consumers as very satisfying and of significant quality and are also considered natural. In addition, the local origin is a determining factor in purchasing decisions [98]. Sometimes, younger consumers (college students) who value local, sustainable, family farm systems may not have positive attitudes toward other brands, such as organic
production, showing that the “local” concept may have a greater impact than other characteristics [99].

2. Materials and Methods

2.1. Questionnaire Design

An empirical approach was chosen to investigate the perception of mountain products by the younger generation. To this end, University students from the Northwest of Italy were involved in a survey aimed at assessing their perception of mountain products. Initially, a focus group consisting of 6 people (three males and three females) who go to the mountains and are between 19 and 27 years old was formed in order to investigate the topic of mountain food products among people belonging to the younger generations. This step enabled us to collect useful information to draft the first version of the questionnaire. In particular, the different interpretations of mountain food products, in terms of perception, definition, specificity and attributes and characteristics sought, were highlighted. A first version of the questionnaire was defined and then tested by a second expert focus group. This group included 6 people (3 males and 3 females), namely 4 University professors specializing in consumer behaviour and 2 agribusiness professionals. At this stage, further input was collected on the accuracy of the questionnaire and the use of specific terms.

The resulting version of the questionnaire was pre-tested by 20 young consumers selected on the basis of a high level of education in food quality systems and survey organisation. Based on their suggestions and indications, more effective communicative expressions and a more careful evaluation of the order of the proposed questions were applied after the pre-test. In addition, the answers obtained led to the inclusion of some variables and to the definition of the final version of the questionnaire, with closed multiple-choice questions.

Lastly, the questionnaire was structured into 3 parts. The first aimed at assessing behaviour at the stage of buying a food product, e.g., factors influencing choice, factors determining a high-quality product and knowledge of quality brands. The second part delved into issues specifically related to the mountain product: categories of products that can be considered, such as necessary production processes, sought characteristics, purchasing channels and willingness to recognise a higher economic value. The third part looked at some demographic and social characteristics of the respondents: gender, age, municipality of residence, level of education and occupation. In the first and second parts, the level of importance assigned to the different qualitative variables considered was measured using a 1–7-point Likert scale.

An online version of the questionnaire was created and sent to a large sample of University students. The collection of questionnaires was completed in early 2020, and after careful evaluation of the collected responses, 4079 valid questionnaires were selected.

2.2. Methodology and Variables Description

Given the breadth of the administered questionnaire, a step-by-step process was used to synthesise the responses and turn them into useful information. First, the key points of the questionnaire, i.e., the information collected through the first and second parts of the questionnaire, were considered. Each key point was explored by synthesising a range of information collected through the questionnaire to obtain a qualitative summary variable through a dimensional reduction process conducted by principal component analysis (PCA) and subsequent hierarchical clustering analysis (HCA). HCA was performed on the first dimensions of the PCA, which overall yielded at least 75% of the variance explained. The identified key points are as follows:

- “Purchase influences”. The factors influencing the purchase of agri-food products were analysed on the basis of 8 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 3 groups, i.e., respondents
influenced mainly by the origin of the raw material, place of production and sensory characteristics; respondents influenced by brands; respondents influenced by price and the outward appearance of the packaging;

- “Definition of high quality food product”. The characteristics that identify a high-quality agri-food product were analysed on the basis of 4 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 3 groups, i.e., respondents oriented to consider a high-quality agri-food product as a product of verified quality (certified and controlled for health purposes); respondents oriented to consider a high-quality agri-food product as a product with a guaranteed production process and/or raw materials; respondents oriented to consider a high-quality agri-food product as a product characterized by a high-quality production process and/or raw materials;

- “Mountain product categories”. The food categories that can be considered mountainous were investigated using 9 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 3 groups: respondents oriented to consider all food categories such as oil, wine, liquor, jam, mushroom, cheese, meat and honey, as mountain products; respondents oriented to consider cheese, meat and fresh vegetable products as mountain products; respondents oriented to consider animal food products (i.e., cheese, meat and honey) and processed products as mountain products;

- “Mountain product definition”. Aspects of production processes to consider a mountain food product were analysed on the basis of 3 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 2 groups: respondents oriented to consider mountain product as a product made from raw materials of mountain origin; respondents oriented to consider mountain product as a product made from raw materials of mountain origin processed in mountain area;

- “Mountain product perception”. The attributes sought in mountain food products were investigated using 7 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 3 groups: respondents oriented to consider mountain product as a useful tool to achieve the triple bottom line, i.e., environmental, social and economic sustainability; respondents oriented to consider mountain product as a useful tool to rediscover forgotten flavours, tradition and contact with the land; respondents oriented to consider mountain product as a useful tool to eat healthy, tasty and natural food;

- “Place of purchase”. Places of purchase of mountain food products were investigated on the basis of 7 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 3 groups: through direct sales channels and/or speciality stores; through online sales channels; through large retailers;

- “Willingness to Pay”. The willingness to pay a higher and more recognised value for a mountain food product than for a conventional product was investigated on the basis of 10 variables assessed with Likert scales. A qualitative variable was obtained by assigning the respondents to 3 groups: respondents willing to place a higher and more recognised value on mountain meat and sausages than on the similar conventional category; respondents willing to place a higher and more recognised value on all categories of mountain foods than on the other categories of conventional foods; respondents willing to place a higher and more recognised value on fresh mountain vegetable products than on the similar conventional category.

In the next step, the variables deemed most interesting (corresponding to the key points exposed above) were considered, and multiple correspondence analysis (MCA) was obtained on the dimensions of which an HCA was performed, and four clusters were identified. To better explain the results obtained, variables related to demographic data were also added as “illustrative” variables. Multivariate analysis was performed using the R environment and the FactoMineR package [100]. In particular, PCA, MCA and HCPC (hierarchical cluster on principal components) functions were used.
The identified sample consisted of 4079 valid answers, of which 70.70% were provided by women and 29.4% by men. The age of the individuals was distributed into two main groups: 50.33% of the individuals were less than or equal to 21 years old, and 49.47% were older than 21 years. A description of all variables used in the analysis is presented in Table 1.

Table 1. Identified variables, categories for each variable and related descriptions, frequency for each category and related percentages.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category Description</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>2884</td>
<td>70.70</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>1195</td>
<td>29.30</td>
</tr>
<tr>
<td>Age</td>
<td>Respondents 18–21 years old</td>
<td>2061</td>
<td>50.33</td>
</tr>
<tr>
<td></td>
<td>Respondents 22+ years old</td>
<td>2018</td>
<td>49.47</td>
</tr>
<tr>
<td>Purchase influences</td>
<td>Respondents are influenced by origin and production place in the purchase phase</td>
<td>1254</td>
<td>30.75</td>
</tr>
<tr>
<td></td>
<td>Respondents are influenced by the brand in the purchase phase</td>
<td>1704</td>
<td>41.77</td>
</tr>
<tr>
<td></td>
<td>Respondents are influenced by price and packaging in the purchase phase</td>
<td>1121</td>
<td>27.48</td>
</tr>
<tr>
<td>Definition of high quality food product</td>
<td>Respondents are oriented to consider high-quality food products or produce with verified quality, i.e., certified and checked, for health purposes</td>
<td>1444</td>
<td>35.40</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider high-quality food products or produce with a guaranteed production process and/or raw materials.</td>
<td>1870</td>
<td>45.85</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider high-quality food products or produce characterized by a high-quality production process and/or raw materials</td>
<td>765</td>
<td>18.75</td>
</tr>
<tr>
<td>Mountain product categories</td>
<td>Respondents are oriented to consider all categories of food, i.e., oil, wine, spirits, jam, mushroom, cheese, meat and honey, as mountain products</td>
<td>1631</td>
<td>39.99</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider cheese, meat and fresh vegetable products as mountain products</td>
<td>1140</td>
<td>27.95</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider animal origin food (i.e., cheese, meat and honey) and processed products as mountain products</td>
<td>1308</td>
<td>32.06</td>
</tr>
<tr>
<td>Mountain product definition</td>
<td>Respondents are oriented to consider mountain products as products made with raw materials of mountain origin</td>
<td>1080</td>
<td>26.48</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider mountain products as products made with raw materials of mountain origin processed in mountain areas</td>
<td>2999</td>
<td>73.52</td>
</tr>
<tr>
<td>Mountain product perception</td>
<td>Respondents are oriented to consider mountain products a useful tool for reaching the triple bottom line (TBL), i.e., environmental, social and economic sustainability</td>
<td>1328</td>
<td>32.56</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider mountain products a useful tool for rediscovering old flavours, traditions and land contact</td>
<td>2003</td>
<td>49.11</td>
</tr>
<tr>
<td></td>
<td>Respondents are oriented to consider mountain products a useful tool for eating healthy, tasty and natural food</td>
<td>748</td>
<td>18.34</td>
</tr>
</tbody>
</table>
3. Results

Hierarchical clustering analysis was carried out to define the profile of respondents interested in mountain food products. Data processing and hierarchical clustering analysis enabled the identification of four main clusters of respondents with different influences and purchasing behaviour, specific perceptions of mountain food products and different focuses on mountain food categories.

The first cluster (1048 individuals, 25.69%) comprises younger respondents (mainly 18–21-year-olds) willing to pay for fresh vegetarian mountain food more than other food categories. They believe that mountain products can be purchased at large-scale retail traders, and they are attracted by all mountain food categories. They believe mountain products should be made in mountain areas, processing raw materials of mountain origin. Moreover, they are oriented to consider mountain products a useful tool for eating healthy, tasty and natural food. Generally, in the purchasing phase, they are mainly influenced by price, packaging and brand, and they define high-quality food products as those with a guaranteed production process and/or raw materials.

The second cluster (1055 individuals, 25.86%) comprises young respondents who, generally, in the purchasing phase, are mainly influenced by brands and define high-quality food products as those with a guaranteed production process and/or raw materials. They are willing to pay for meat of mountain origin more than other food categories, and, in any case, they pay more attention to all mountain food than to conventional food. They argue that mountain products should be made in mountain areas, processing raw materials of mountain origin. They believe that mountain products can be mainly purchased through direct sales, food markets or farms and from specialised shops. Moreover, they consider mountain products a useful tool for reaching the triple bottom line (TBL), i.e., environmental, social and economic sustainability, and rediscovering old flavours, traditions and land contact.

The third cluster (894 individuals, 21.92%) comprises younger respondents (mainly 18–21-year-olds) largely influenced by price and packaging in the purchasing phase; they define high-quality food products as those with verified (i.e., certified and checked) quality, for health purposes. They are oriented to consider mountain products as products made only from raw materials of mountain origin and are attracted by mountain animal origin food (i.e., cheese, meat) and fresh mountain products such as mushrooms, fruit and vegetables. Similar to the second cluster, they believe that mountain products can be mainly purchased through direct sales and from specialised shops, and they consider mountain products a useful tool for reaching the TBL. Moreover, similar to the first cluster, they consider mountain products a useful tool for eating healthy, tasty and natural food.
The fourth cluster (1082 individuals, 26.53%) comprises young respondents (>21 years old) influenced by origin and production place in the purchasing phase, who consider high-quality food products as those with verified (i.e., certified and checked) quality, for health purposes. They are oriented to consider animal-origin food (i.e., cheese, meat and honey) and processed products as mountain products, which can be mainly purchased through e-service providers but also through direct sales and from specialised shops. They are willing to pay for all categories of mountain products more than other conventional food categories, and they consider mountain products a useful tool for rediscovering old flavours, traditions and land contact and eating healthy, tasty and natural food.

The clusters’ characteristics related to mountain food products are summarised in Table 2.

Table 2. Summary of clusters’ characteristics related to mountain food products.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Freq.</th>
<th>%</th>
<th>Favoured Categories</th>
<th>Production</th>
<th>Sought Attributes</th>
<th>Purchase Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>1048</td>
<td>25.69</td>
<td>All foods</td>
<td>Original mountain raw materials processed in a mountain area</td>
<td>Healthy, tasty and natural food</td>
<td>Large-scale retail traders</td>
</tr>
<tr>
<td>Second</td>
<td>1055</td>
<td>25.86</td>
<td>All foods</td>
<td>Original mountain raw materials processed in a mountain area</td>
<td>TBL, old flavours, traditions and land contact</td>
<td>Direct sales, specialised shops</td>
</tr>
<tr>
<td>Third</td>
<td>894</td>
<td>21.92</td>
<td>Cheese, meat and fresh vegetable products</td>
<td>Original mountain raw materials</td>
<td>TBL, healthy, tasty and natural food</td>
<td>Direct sales, specialised shops</td>
</tr>
<tr>
<td>Fourth</td>
<td>1082</td>
<td>26.53</td>
<td>Animal origin of food and processed products</td>
<td>-</td>
<td>Old flavours, traditions and land contact, healthy, tasty and natural food</td>
<td>E-commerce providers (online shops), direct sales, specialised shops</td>
</tr>
</tbody>
</table>

Legenda. Cluster name (column 1), frequency (column 2) and related percentage (column 3), and a summary of clusters’ characteristics related to mountain food products, i.e., favour categories (column 4), production (column 5), searching attributes (column 6) and purchase channels (column 7).

The analysis of the perception of mountain food products by young generations revealed different approaches to considering a food product as a result of a combination of mountain characteristics.

4. Discussion

This research aimed at increasing the knowledge of young consumers’ perceptions of mountain products, and data analysis revealed a different approach to viewing a food product as the result of a combination of “mountain characteristics”. For respondents, mountain products are a very important commodity, encompassing all categories of food, such as cheese, meat, honey, fruits and vegetables. They believe that mountain products should be produced entirely in the mountains (i.e., all stages of the supply chain), although they realise that the most important stage is the production of raw materials.

Overall, the four clusters emphasise a widespread positive perception of mountain products, showing consumer sensitivity to the issue of mountain product brands [11]. The characteristics of mountain products sought by young respondents refer to aspects related to sustainable development (32.56 percent of the sample), common to two clusters (second and third), territorial traditions and specialities (49.11 percent) considered in two clusters (Second and Fourth), and, although less relevant, health aspects (18.34 percent) shared among the first, third and fourth clusters.
The literature review revealed a small number of articles exclusively concern consumer perceptions of mountain food products. Therefore, the discussion was conducted using scholars' contributions to outline new trends in speciality food consumption in general, which allow some evidence on the topic to be compared.

A portion of young consumers in the sample are very concerned about sustainability in its various dimensions. Local foods, among which mountain foods can be considered, tend to be produced in short supply chains (SFSC) with a high degree of attention to sustainability. Some research conducted on samples of young generations showed that declinations of sustainability can be criteria of choice and/or identified attributes, especially when traceability and short supply chain are considered [10,97,99].

At the same time, many consumers are becoming increasingly aware of the relationship between products and the environment. There is a gradually growing awareness, especially among the younger generation, of the need to buy food products with a low environmental impact [48,51]. In this sense, findings identified a group of respondents who seemed very interested in reaching the TBL by recognising a major value for foods obtained by a farming/breeding activity perceived as more sustainable (third cluster). Moreover, younger consumers seem to be interested in the quality of food and related health [10] in line with the obtained results evidencing the need to identify healthy and natural attributes in mountain foods in the three clusters (first, third and fourth).

Research findings confirm that consumers’ growing interest in local and mountain products is also motivated by the necessity to rediscover traditional and local cultures, in line with other studies [87–89]. In addition, roots and “ancient flavours” are attributes identified by different scholars [90,91] that are presented and confirmed by respondents belonging to the second and fourth clusters.

The results of the sample also showed a strong interaction between mountain food and the origin of the raw materials, as well as the production process. In this sense, respondents underline the specific importance of the production process and the origin of raw materials in three different clusters (first, second and third). This indication may be interpreted as a need for strengthening communication tools for the identification of the main characteristics of mountain products; the European Union took this direction in its “Mountain Product” labelling scheme, as already identified by other authors [27–29]. At the same time, further insights are provided by several studies [23,25,92] emphasising that reference to origin might be enhanced by geographical indications and trademarks of parks located in mountain areas.

Lastly, results identified the orientation of the respondents as to the distribution channels chosen for purchasing mountain products. Specialised shops and direct sales are indicated as the main channels by the sample; specifically, three clusters underlined the importance of direct sales, in line with other studies [5,27]. Large distribution and online shops are also identified as purchasing channels and, therefore, can be considered useful paths to reach final consumers [80–82].

5. Conclusions

The mountain agri-food economy is a fundamental pillar not only for economic resilience but also for boosting the social and environmental sphere of mountain areas in need of solid economic activities in order to support their population and protect the environment.

The results are in line with the indications of scholars dealing with these issues and contribute to improving knowledge in the sector, showing that interviewees are sensitive to the issue of mountain products. The main evidence that emerged offers precious suggestions to public and private stakeholders. In the case of institutions, the need to further strengthen the importance of agri-food products in the collective imagination of consumers was highlighted; in this sense, the study provides insights into the need to define new communication tools to enhance the qualities of mountain products. In the private sphere, it suggests to marketers that mountain products are considered high-quality products and
that they are positively perceived for several aspects reaching beyond the intrinsic characteristics of the products. However, the research is limited to a sample of young, highly educated consumers; therefore, future research should be geared towards extending the study to other categories of the respondents’ generation and to other generations. In this context, a confirmatory analysis could be performed by applying tools such as analysis of variance (ANOVA) as well as specific models, including structural equation models.


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