

## Article

# In Search of the Niche—Targeting Lamb Meat Consumers in North-East Germany to Communicate the Ecosystem Services of Extensive Sheep Farming Systems

Anne Wiedemann \*, Josephine Lauterbach and Anna Maria Häring 

Faculty of Landscape Management and Nature Conservation, Eberswalde University for Sustainable Development, Schicklerstr. 5, 16225 Eberswalde, Germany; josephine.lauterbach@hnee.de (J.L.); anna.haering@hnee.de (A.M.H.)

\* Correspondence: anne.wiedemann@hnee.de

**Abstract:** Extensive sheep farming systems provide numerous ecosystem services, most of which consumers are not aware of. Consumers' subjective quality perception relates to intrinsic and extrinsic quality attributes. Extrinsic quality attributes, like animal welfare, conservation of biodiversity, and regional and sustainable lamb meat production, meet the expectations of meat consumers. Communication of quality attributes can support consumers' willingness to buy and pay a premium price, as well as producers' economic viability. Previous studies focused on consumers' perception of intrinsic quality attributes, while it is our objective to analyse the target group-specific communication of extrinsic quality attributes of extensive sheep farming. An online survey with 387 valid respondents included lamb meat consumers in Berlin-Brandenburg and revealed their consumption patterns. The sample is representative of Berlin-Brandenburg in net household income, population division and gender, while academics and respondents over 50 years were overrepresented. The survey addressed demographics, meat consumption and purchasing behaviour, preferences for different lamb meat products, purchasing motives and barriers, perception of communication messages and personal initiative for the purchase of regional lamb. Via Principal Component Analysis (PCA) and Cluster Analysis, we identified two key target groups for regionally produced lamb meat: "Foodies" and "Cooking enthusiasts". Guided by Alphabet theory with its specific focus on Knowledge, Information seeking behaviour and purchasing Habit, we derive recommendations for target-group-specific communication of regionally produced lamb meat. "Foodies" showed a high potential for direct marketing and personal storytelling of sheep farmers. "Cooking enthusiasts" are best addressed through print and online marketing with a focus on cooking and personal health.

**Keywords:** consumers; lamb marketing; ecosystem services; biodiversity; alphabet theory



**Citation:** Wiedemann, A.; Lauterbach, J.; Häring, A.M. In Search of the Niche—Targeting Lamb Meat Consumers in North-East Germany to Communicate the Ecosystem Services of Extensive Sheep Farming Systems. *Sustainability* **2023**, *15*, 10849. <https://doi.org/10.3390/su151410849>

Academic Editors: Paolo Prosperi and Iuri Peri

Received: 30 April 2023

Revised: 26 June 2023

Accepted: 3 July 2023

Published: 11 July 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Extensive grazing systems for sheep offer a range of ecosystem services, e.g., inter-connection of isolated biotopes, conservation of plant and animal biodiversity, carbon storage and preservation of open landscapes [1–3]. Sheep can graze marginal land and make it accessible for meat production [4], supporting value chains and income. Grazing outdoors and living in a herd fulfils the social demand for species-appropriate animal husbandry [5]. Despite the importance for our ecosystem, rural economy and the provision of meat suitable for conscious meat consumers sheep farming in Germany has declined by 39% since 2010 [6].

In 2020, 1.8 Mio. sheep were kept on 19,870 farms, 97% of them pasture grassland [7–9]. Sheep grazing systems in Germany are mainly extensive systems with herd and paddock management and stabling in the winter period, grazing diverse grassland from dykes, dry grassland and peat bogs to alpine areas. Despite their diverse systems all sheep farmers face the same economic problems [10]. Due to low remuneration with almost two thirds related to

common agricultural policy (CAP) direct or compensatory payments for agri-environmental measures and increasing costs for operating resources, the economic situation of sheep farmers has deteriorated [6]. A key lever to improve economic viability is to sell lamb meat successfully at premium prices [11], being one third of the producers' remuneration [12].

Furthermore, environmentally conscious meat consumption has received increased public attention [13–15]. For example, with its Farm to Fork Strategy, the European Commission aims to reverse biodiversity loss, improve animal health and welfare, and highlights the need to empower consumers to make informed, healthy and sustainable food choices [16]. Communicating the ecosystem services provided through extensive sheep farming in marketing lamb meat products can support consumers' interest and acceptability of purchasing lamb [11,17–19].

Ecosystem services are embedded in extrinsic quality attributes like production system, animal welfare, water and air pollution, social and religious values and product origin [20]. Previous studies showed the rising importance of extrinsic quality attributes for certain consumer segments [17,20,21]; however, their expectations of extrinsic quality attributes are not well understood. Target group specific marketing requires an understanding of the expectations of lamb consumers [20,22,23].

In general, the intention to buy a product can be influenced by three dimensions, (i) perceived costs, (ii) expected fulfilment of purchase motives, and (iii) the expected quality characterised through intrinsic and extrinsic quality cues [24,25]. Intrinsic quality attributes of lamb meat refer to all attributes of the physical product like fat content, breed, sex, castration, freshness, whereas extrinsic attributes include all surrounding factors, e.g., origin, label and additional information on the production process [26,27]. The importance of intrinsic quality attributes for consumers vary strongly from region to region due to different consumption habits and culinary backgrounds [28]. In lamb consumption, tenderness, colour and texture play a key role [29], e.g., low fat content and freshness is highly appreciated by consumers of fresh lamb meat [30,31]. That means that the meat needs to be physically appealing at the point of sale, regardless of the extrinsic quality attributes.

European red meat consumers show high interest in societal benefits such as ecosystem services and "ethical" values [20,32,33]. For example, pasture-raised meat products are associated with improved ecosystem services, animal welfare and husbandry without hormones and pesticides [5,34]. Increasing concerns about the ecological damage of intensive meat production supports consumers' acceptance of extensive production systems [20,35]. Consumers of lamb meat value natural and traditional production systems [11]. Meat from low-intensity sheep grazing can address these consumer interests. Important extrinsic quality attributes for consumers of lamb meat are animal welfare standards or the origin of products [17], particularly when signalling a geographical region close by [33,36,37]. For consumers concerned about safety, personal health and nutrition, animal feed is a key extrinsic quality attribute [32], as grass-based systems produce healthier lamb meat than concentrate-based systems [20].

Extrinsic quality attributes are difficult to assess (before or even after consumption) [36], thus, meat consumers' depend on information given on such process-related quality attributes [38]. It is therefore particularly hard to fulfil individual consumer expectations of extrinsic quality attributes. Furthermore, there are often differences between the attitudes and behaviour of consumers [20,39], which makes it difficult to fulfil expectations of conscious meat consumers in their purchasing behaviour of regionally produced lamb meat.

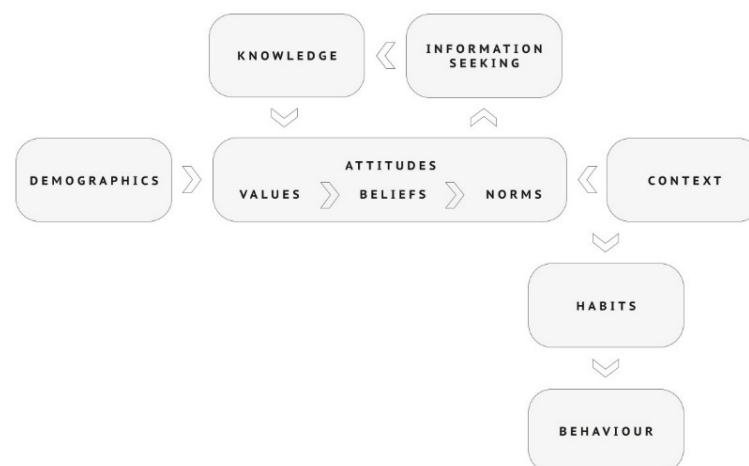
The conceptual framework is based on Alphabet Theory to better understand the Attitude-Behaviour-Gap for regionally produced lamb meat. The study thus aims (a) to identify potential consumer groups for regionally produced lamb meat (b) analyse their Knowledge, Information seeking behaviour and purchasing Habits (c) identify communication strategies of extrinsic quality attributes for key target groups taking the ecosystem services of sheep farming into account.

## 2. Materials and Methods

### 2.1. Conceptual Framework

Various consumer theories try to explain purchase behaviour and a resulting Attitude-Behaviour-Gap. Seminal work by Ajzen's (1985) Theory of planned behaviour [40], showed that attitudes, subjective norms and perceived behavioural control are driving factors for the purchase intention of ethical consumers [41,42]. For decades behavioural studies established new frameworks to explain the purchase behaviour of consumers. In 1999, Stern et al. [43] introduced the Value-Belief-Norm theory (VBN) bringing together Norm-Activation-theory (NAM, Schwartz 1977), the theory of Personal Values (Schwartz 1994) and the New Ecological Paradigm hypothesis (NEP, Dunlap and van Liere 1978). It takes into account, that individuals who believe in the importance of pro-environmental values, want to protect endangered valued objects through their actions [43]. Their beliefs and actions strengthen their personal norms with the intention of reducing negative environmental impacts [43,44]. While VBN theory explains environmentally supportive attitudes, the Attitude-Behaviour-Context theory (ABC, Guagnano et al. 1995) explains environmentally supportive behaviour more precisely [45] by interrelating consumers' behaviour action with external conditions, such as policies, regulations, costs and other exogenous influences [46].

Conscious lamb meat consumers value extrinsic quality attributes of lamb meat. The effect on consumers purchase behaviour can be evaluated through the Alphabet theory. Alphabet theory (Figure 1) combines previous consumer theories for environmentally significant behaviour like Value-Belief-Norm theory (VBN) and Attitude-Behaviour-Context theory (ABC) with new elements Knowledge (K), Information seeking (IS), Habit (H) and Demographics (D). This leads to a new framework VBN-ABC-D-K-IS-H or "Alphabet theory" [45], which was originally developed to explain the purchase of organic and local food by Zepeda and Deal (2009). They also used Alphabet theory to categorize consumer groups regarding the frequency of organic purchases and organic proportion of total purchases, with a focus on the lived experiences, values and beliefs.



**Figure 1.** Elements to Explain Organic and Regional Food Purchase—Conceptual Framework Alphabet theory (Own Visualisation according to Zepeda, Deal 2009 [45]).

According to Alphabet theory, attitudes are influenced by Demographics, Knowledge and Context (Figure 1). Furthermore, Information seeking of conscious consumers depends on their individual values, beliefs and norms and lead to more in-depth knowledge about the environment and agricultural practices. For example, a broader knowledge of organic production systems leads to a higher motivation to buy organic products [45]. Habits are influenced by the Context and the attitudes leading to individual behaviour. Consumers, who are aware of the origin of their food and know places where to buy them, show that their values, beliefs and norms influence their food purchase habits and behaviour [45].

Until now Alphabet theory has been used for structuring the findings of the literature reviews for pasture-raised livestock products [47], craft food products [48], suboptimal food [49], wine with sustainability characteristics [50] and local food [51]. A few researchers used Alphabet theory to frame their research design [52–55]. Alphabet theory seems particularly helpful with understanding purchase behaviour for regionally produced lamb meat, for the following reasons: (a) extrinsic quality attributes become increasingly important to support the attitudes of conscious meat consumers, (b) information seeking plays a key role in defining and finding extrinsic quality attributes, (c) future meat consumption needs to change towards sustainable consumption patterns, which calls for an examination of the purchasing behaviour. Therefore, our conceptual framework relies on Alphabet theory and integrates the aspects Habits, Knowledge and Information seeking in our online survey.

## 2.2. Questionnaire and Variables

Based on the framework of the Alphabet Theory, a standardized online survey focused on the variables Habit, Knowledge and Information seeking behaviour (Table S2).

Habits are defined as “context-behaviour associations in memory that develop as people repeatedly experience rewards for a given action in a given context” [56]. Consumption frequency, cooking habits and proactive consumption of regionally produced lamb meat served to understand the habits of lamb meat consumers in more detail.

Knowledge depends on the information seeking behaviour and the context, where knowledge is seen as the experience of, skills acquired in, and understanding about an environment or problem in a special context. This insight guides our values, beliefs and norms to result in a desired outcome [57]. In the context of sheep farming and lamb meat production the understanding of the extensive production system and its eco system services and cooking skills were analysed.

Information seeking behaviour contributes to a deeper understanding and knowledge of the product of interest, which reinforces attitudes [45]. Areas of interest were the manner of information seeking, direct contact to farmers, recipes, websites, tastings, brochures, educational offers, local press, events on the farm and social media.

Attitudes reveal the disposition of an individual to react in a special manner to people, objects, situations and groups. It can be measured in a cognitive, affective and behavioural way [58]. According to the Alphabet theory attitudes are influenced through knowledge and form certain beliefs and judgments about a product of interest [47]. Thus, we focus on the factors that form purchasing decisions, such as knowledge, information seeking behaviours and consumption habits.

The variables were found in the following structure of the questionnaire: (a) demographics, (b) meat consumption and purchasing behaviour, (c) preferences for different lamb meat products, (d) purchasing motives and barriers, (e) perception of communication messages and personal initiative for the purchase of regional lamb.

## 2.3. Sampling

We used online access panel data of meat consumers, who had tried lamb meat at least once. A stratified random selection of private households in Berlin-Brandenburg was made [59], based on the following target quota: net household income (minimum 1000 euros), educational level ( $\geq 60\%$  high school diploma), gender (50% male, 50% female) and municipality (60% Berlin, 40% Brandenburg) (Table 1). The survey proceeded from 29 June 2021 to 7 July 2021. Drop-out analysis showed that 1246 participants accessed the questionnaire, 801 abandoned the questionnaire voluntarily or through quotas (105 participants ate no lamb meat and were excluded), resulting in 445 complete sets of answers. Respondents with an answer time less than half of the median time (468 s) were seen as speeders and excluded from the analysis, same for respondents who needed longer than 45 min. In addition a control item for high lamb meat consumption frequency and inappropriate shopping behaviour was included. The final analysis included 387 responses.

**Table 1.** Sample Representativity.

	Survey	Berlin	Brandenburg
Inhabitants in % of total population in Berlin-Brandenburg	60/40	59.2 <sup>1</sup>	40.8 <sup>1</sup>
Average net household income in euro	3000–3499	3145 <sup>2</sup>	3254 <sup>2</sup>
Educational level high school diploma in %	57.4	45.7 <sup>3</sup>	40.1 <sup>3</sup>
Gender (m/w) in %	50/50	49.2/50.8 <sup>1</sup>	49.3/50.7 <sup>1</sup>
Average Age	54	42.6 <sup>1</sup>	47.3 <sup>1</sup>

Data based on sociodemographics of all cluster groups (Table S1) compared with data from the office of statistics Berlin-Brandenburg [60]. <sup>1</sup> Data from 2021. <sup>2</sup> Data from 2020. <sup>3</sup> Data from 2022.

#### 2.4. Statistical Analysis

To identify lamb meat target groups, a Principal Component Analysis (PCA) was conducted as a common factor reduction procedure for subsequent Cluster Analysis [61]. PCA downscaled the variables ( $n = 21$ ) through content duplications, factor loadings below 0.3 and cross-loadings limited the final selection of variables ( $n = 14$ ) [59].

A Hierarchical Cluster Analysis (Ward method, interval: squared Euclidean distance) clustered all cases. The dendrogram showed a four-cluster solution and no significant outliers. Thus, a k-means Cluster Analysis ( $k = 4$ ) was applied. Descriptive univariate analyses (means and frequencies) characterized the cluster groups more precisely.

The influence of Knowledge, Information seeking behaviour and Habit was examined via dependency analyses. The underlying structure for the examination were the categories and the dedicated variables (Table S2). Shapiro-Wilk-Test showed that the cluster and the frequency of consumption were not normally distributed ( $p < 0.001$ ). Therefore, a non-parametric test, Kruskal–Wallis was chosen. Kruskal–Wallis is the non-parametric equivalent of a one-way ANOVA and rank-based [62]. For a better understanding of the results and allocation on the item scale, the data were processed in mean value. The results showed significant differences between the cluster groups but could not distinguish which cluster was responsible for the significant difference. For choosing the appropriate post hoc test, homogeneity of variances was asserted using Levene’s Test which showed that non equal variances could be assumed for Knowledge, Information seeking behaviour and Habit. The value  $p$  differed widely in the categories. Subsequently Games Howell test was chosen, as equivalent for the Tukey test under the condition of no variance homogeneity. In contrast to the Omnibus test Kruskal–Wallis, Games Howell examines the differences between the groups through pairwise comparison [63] and analyses if there are significant differences between the clusters and the variables in the categories Knowledge, Information seeking and Habit.

### 3. Results

#### 3.1. Principal Component Analysis

In the PCA, a 4-factor solution was extracted using the Kaiser-criterion (proportion of variance  $> 1$ ). A KMO of 0.8 was achieved, which can be considered as meritorious [61]. The Bartlett test showed a significant result. The extracted factors can explain 64.96% of the total variance. The factors are named based on the highest loading variables as follows: Factor 1 “Conscious consumption and post-materialism”, Factor 2 “Cooking aversion”, Factor 3 “Knowledge gap sheep farming” and Factor 4 “Price orientation” (Table 2).

**Table 2.** Rotated Component Matrix of the PCA with Important Purchase Motives and Shopping Barriers.

Variables	Factors with Regression Values			
	F1 Conscious Consumption and Post-Materialism	F2 Cooking Aversion	F3 Knowledge Gap Sheep Farming	F4 Price Orientation
<b>Importance of following elements for the purchase of regionally produced lamb meat (Likert-Scale)</b>				
Label on origin	0.792			
Further information about product and producer	0.792			
Direct sale	0.557			
Fair remuneration of producers	0.768			
Price				0.933
Animal welfare	0.777			
Personal health	0.634			0.355
Support of regional sheep farming	0.790			
Environment and nature conservation	0.773			
<b>Shopping barriers (Likert Scale)</b>				
I know little about husbandry, feeding and the ecosystem services provided by sheep farming.			0.846	
I know little about slaughter and processing of lambs.			0.886	
I do not know how to cook lamb.		0.821		
I do not like cooking.		0.768		
I do not like the taste of lamb meat.		0.784		

### 3.2. Cluster Analysis

The sample ( $n = 387$ ) was clustered based on the factors and their associated regression values (Table 3). The factors 1 to 3 showed significant differences between the target groups, while price orientation was not significant between the four clusters. The significant differences and the regression values allowed the clusters to be named according to their conscious consumption, habits, information seeking and knowledge. The clusters included Cooking enthusiasts (35%) with the highest cooking passion, Passionless cooks (26%) with the highest cooking aversion, Foodies (24%) (The term Foodie is used to describe the combination of cooking passion and knowledge of the product (i.e. production process, origin, breed) as important factors for a consumer) with the highest knowledge and second highest cooking passion and conscious consumption and Uninvolved (14%) with the lowest conscious consumption. Table 3 shows the regression factor scores of the extracted factors and important sociodemographics of each cluster.

**Table 3.** Regression Factor Scores and Sociodemographic (Mean) of the Clusters.

Factors and Regression Values	Cluster			
	Cooking Enthusiasts	Passionless Cooks	Foodies	Uninvolved
N	130	97	89	54
Cluster size %	35	26	24	14
F1 Conscious consumption and post materialism *	0.21	0.36	0.31	−1.67 <sup>a</sup>
F2 Cooking aversion *	−0.69 <sup>a</sup>	1.2 <sup>a</sup>	−0.4 <sup>a</sup>	0.17 <sup>a</sup>
F3 Knowledge gap sheep farming *	0.7 <sup>a</sup>	0.21	−1.27 <sup>a</sup>	0.04
F4 Price orientation	−0.04	0.03	−0.07	0.17
<b>Socio-demographic characteristics</b>				
Gender (1: male, 2: female)	1.53	1.55	1.48	1.40
Average age in years	54	51	54	57
Inhabitants of residence (4: 50.000 to <100.000, 5: 100.000 to <500.000)	5.11	4.95	4.56	4.98
Net household income (5: €2500 to €2999, 6: €3000 to €3499)	6.25	5.71	6.29	5.22
Household size (2:2)	2.28	2.01	2.48	1.89
Highest education level high school degree %	60	47.4	65.2	55.6
Frequency of lamb meat consumption * (4: once a month, 5: 4 to 6 times/year, 6: 1 to 2 times/year)	4.53	5.47	4.53	5.17

\* Kruskal–Wallis test showed significant differences,  $p < 0.01$ . <sup>a</sup> Games Howell test showed significant differences between the clusters,  $p < 0.005$ .  Primary target group,  secondary target group.

In the following phrases, the salient characteristics of the clusters are presented. Cooking enthusiasts had the highest percentage of the cluster (35%) and showed the highest cooking passion. They tended to be female (52.8%) and lived mainly in the major cities (68,5%) (Over 500,000 inhabitants) with a mean age of 54 years. Overall, 60% of the Cooking enthusiasts had a high school degree. They consumed lamb meat with a mean of 4–6 times a year with a tendency towards once a month.

The Passionless cooks made up 26% of the cluster. They reported a conscious consumption behaviour but did not enjoy cooking. They tended to be female (51.6%), were the youngest group with a mean age of 51 years and lived mainly in the major cities (58.8%). They showed the lowest educational level (47.4% high school degree) and the lowest lamb meat consumption at 1–2 times a year.

The cluster of the Foodies comprises 24% of the total. Foodies showed the highest knowledge about sheep farming and the second highest rate of conscious consumption and cooking passion. Foodies tended to be male (51.7%) with a mean age of 54 years and lived mainly in the major cities (52.8%). In addition, there was a mid-sized city peak at 10,000 to below 100,000 inhabitants (27%). They had the highest level of education (65.2% high school degree) and shared together with the Cooking enthusiasts a lamb meat consumption of 4–6 times a year with a tendency towards once a month.

The Uninvolved made up 14% of the cluster. They showed the highest price orientation and were rather unconscious consumers. They tended to be male (60.4%) with a mean age of 57 years and lived mainly in the major cities (59.3%). High school degrees were held by 56.5%. They showed the smallest household net income with a mean of €2500 to €2999 and a lamb meat consumption of 4–6 times a year.

Cooking enthusiasts and Foodies consume more lamb meat than the Passionless cooks and the Uninvolved and can therefore be perceived as primary target groups for regionally

produced lamb meat. Further, they showed factors conducive to the consumption of lamb such as a passion for cooking, knowledge of sheep farming and conscious consumption. Passionless cooks and Uninvolved can be classified as secondary target groups.

### 3.3. Including Alphabet Theory: Knowledge, Information Seeking Behaviour and Habit

To further understand the consumption behaviour and develop marketing approaches for regionally produced lamb meat, all clusters were analysed according to the variables on Knowledge, Information seeking behaviour and Habit.

The variables describing Knowledge (Table 4) showed significant differences between the clusters according to the post hoc test Games Howell (Table S4). Foodies were most knowledgeable about shopping outlets for regionally produced lamb meat in the immediate vicinity. Furthermore, they had a high knowledge of sheep farming and the ecosystem services provided as well as about slaughter and processing. Cooking enthusiasts showed less knowledge about shopping opportunities and were not aware of the ecosystem services provided through sheep farming. Although these primary target groups differ widely in their knowledge about sheep farming and shopping outlets, both groups had the skills to cook and prepare lamb meat. The secondary target groups were characterised through a slight cooking aversion, low cooking skills and low knowledge about sheep farming.

**Table 4.** Knowledge about Sheep Farming and Purchase for All Cluster (Mean, Likert-scale (1: totally disagree, 5: totally agree)).

Variables Knowledge	Cluster			
	Cooking Enthusiasts	Passionless Cooks	Foodies	Uninvolved
I do not know of any lamb meat shopping outlets in my immediate vicinity. *	3.95	3.67	2.72 <sup>a</sup>	3.52
I know little about husbandry, feeding and the ecosystem services provided through sheep farming. *	3.72	3.69	1.93 <sup>a</sup>	3.30 <sup>a</sup>
I know little about slaughter and processing of the lambs. *	4.04 <sup>a</sup>	3.77	2.22 <sup>a</sup>	3.63
I do not know how to cook and prepare lamb meat. *	1.62	3.25 <sup>a</sup>	1.44	2.5 <sup>a</sup>

\* Kruskal–Wallis test showed significant differences,  $p < 0.01$ . <sup>a</sup> Games Howell test showed significant differences between the clusters,  $p < 0.005$ .  primary target group,  secondary target group.

Table 5 shows the detailed results of the post hoc test Games Howell on variables capturing Information seeking behaviour (see also Table S6). Foodies had direct contact with sheep farmers in contrast to all other target groups. This is also reflected in the highest rate of farm gate sales (Table S9). A lack of personal contact with the sheep farmers is characteristic for the Cooking enthusiasts. Marketing tools were rated similarly by Cooking enthusiasts, Foodies and Passionless cooks. The Uninvolved were less interested in websites, brochures and articles, tastings or actions on the farm. Foodies like educational offers and actions on the farm. Cooking enthusiasts had slightly higher ratings for an article about sheep farming in the local press and an appealing website of the producers. Cooking enthusiasts and Foodies rated a tasting in their favourite shopping place highly. The Passionless cooks only appreciated a higher presence in social media channels.



**Table 5.** Consumers Information Seeking Behaviour for Regionally Produced Lamb Meat (Mean, Likert-Scale (1: totally disagree, 5: totally agree)).

Variables Information Seeking Behaviour	Cluster			
	Cooking Enthusiasts	Passionless Cooks	Foodies	Uninvolved
<b>Which shopping barriers do you see?</b>				
I have no direct contact to sheep farmers. *	4.22	3.87	3.26 <sup>a</sup>	3.96
<b>Which of the following communication material would motivate you towards the purchase?</b>				
Appealing website of the producers *	3.89	3.60	3.63	3.09 <sup>a</sup>
Brochures with information on sheep farming in Berlin-Brandenburg *	3.68	3.51	3.60	2.98 <sup>a</sup>
Tasting in your favourite place of purchase *	3.84	3.72	3.79	3.19 <sup>a</sup>
Educational offers (e.g., cooking course, seminars on wool processing)	2.89	3.05	3.00	2.43
Article on sheep farming in the local press *	3.61	3.42	3.47	2.85 <sup>a</sup>
Higher presence on social media (e.g., twitter, Instagram)	2.79	3.08	2.82	2.44

\* Kruskal–Wallis test showed significant differences,  $p < 0.01$ . <sup>a</sup> Games Howell test showed significant differences between the clusters,  $p < 0.005$ .  primary target group,  secondary target group.

The variables describing Habit showed significant differences between the clusters (Table 6 and Table S8). Passionless cooks and the Uninvolved showed a cooking aversion and the highest agreement with the statement “I do not like the taste of lamb meat”. In contrast, Foodies and Cooking enthusiasts like to cook. The cooking passion of the Cooking enthusiasts and Foodies is consistent with a liking of the flavour. Uninvolved displayed less personal involvement to develop their habits towards the purchase of regionally produced lamb meat, are less interested in finding out more about sheep farming and shopping outlets. Foodies had the highest commitment to talking with people in their surroundings about sheep farming and landscaping. In addition, they were open to supporting the farmer’s costs in form of a lamb sponsorship.

**Table 6.** Consumers Habits in the Purchase of Regionally Produced Lamb Meat (Mean, Likert-Scale).

Variables Habit	Cluster			
	Cooking Enthusiasts	Passionless Cooks	Foodies	Uninvolved
Frequency of meat consumption (2: 2 to 4 times/week, 3: 2 to 4 times/month)	2.38	2.64	2.27	2.22
Frequency of lamb meat consumption * (4: once a month, 5: 4 to 6 times/year, 6: 1 to 2 times/year)	4.53	5.47	4.53	5.17
<b>Which shopping barriers do you see? (1: totally disagree, 5: totally agree)</b>				

Table 6. Cont.

Variables Habit	Cluster			
	Cooking Enthusiasts	Passionless Cooks	Foodies	Uninvolved
I do not like cooking. *	1.47	3.14 <sup>a</sup>	1.64	2.19 <sup>a</sup>
I do not like the taste of lamb meat. *	1.48	3.04 <sup>a</sup>	1.51	2.11 <sup>a</sup>
<b>Which of the following ways of contributing to the preservation of regional sheep farming do you personally consider? (1: totally disagree, 5: totally agree)</b>				
I am finding out more about sheep farming in Berlin and Brandenburg. *	3.47	3.25	3.58	2.64 <sup>a</sup>
I will talk more about sheep farming and landscaping around me. *	2.95	2.88	3.22	2.34 <sup>a</sup>
I could imagine a sponsorship of a lamb. *	2.31	2.55	2.54	1.77 <sup>a</sup>

\* Kruskal–Wallis test showed significant differences,  $p < 0.01$ . <sup>a</sup> Games Howell test showed significant differences between the clusters,  $p < 0.005$ . □ primary target group, □ secondary target group.

## 4. Discussion

### 4.1. Target Groups

Development of target-group specific marketing strategies and communication of specific product attributes emerge as important aspects to support the lamb meat market [23,32,64]. Our study revealed two key target groups for lamb meat marketing.

While they showed similarities in their net-household income, average age, level of education and household size, they differed in Knowledge, Information seeking behaviour and Habit. Ripoll et al. (2018) [31] and Gracia (2005) [65] found similar results, which reveals purchase behaviour of lamb meat consumers is more related to their lifestyle than to their sociodemographics. Price orientation of Foodies and Cooking enthusiasts was low. This suggests reconsidering lamb meat as a niche product for people with a conscious and cooking-affine lifestyle rather than lamb meat as a premium product for wealthy consumer segments.

Foodies are knowledgeable about cooking and sheep farming and valued the taste of lamb meat highly. Because of their agricultural involvement, they know shopping outlets for regionally produced lamb meat, and they are highly motivated to change their consumption behaviour towards actively supporting extensive sheep farming systems. This target group is especially suitable for direct marketing and personal story telling of the sheep farmers. The “Rhön lamb” in Germany is a best-practice marketing example that attracts Foodies by promoting meat quality and story of origin, product identity [64].

Cooking enthusiasts are passionate cooks and enjoy food. Their interest in regionally produced lamb meat is underpinned by product quality, taste and personal health. Their food enjoyment is an important reason to buy lamb meat. Lamb meat like the “Württemberg lamb” is listed in retail in Southern Germany [66], related programs in Northern Germany could attract Cooking enthusiasts. Compared to Foodies, their knowledge level about sheep farming and the provision of ecosystem services is low. They are open towards more information about sheep farming, but a bit restrained in their Information seeking behaviour.

The clusters confirm target groups identified for lamb meat consumption in Aragon, Spain [27,31] although the methodological approaches employed in the two studies were different. In 2018, an online-survey ( $n = 200$ ) revealed the target groups “Gourmet”, “Disinterested”, “Conservative” and “Basic” for lamb and lamb confit [31] and, in 2012, a postal survey ( $n = 343$ ) displayed “Traditional”, “Uninvolved”, “Adventurous” and “Careless” as target groups for lamb meat. Cooking enthusiasts show similarities with “Traditional” and “Basic” with a high importance of product quality and traditional cooking. Whereas

Foodies are comparable with “Gourmet” and “Adventurous” showing innovative cooking habits. The particularity of the conceptual framework of our study to take Knowledge, Information seeking behaviour and Habit into account can provide a wider understanding of similar cluster types.

#### *4.2. Knowledge, Information Seeking Behaviour and Habit of Consumers of Regionally Produced Lamb Meat*

Figure 2 shows that Knowledge plays an important role for the purchase of regionally produced lamb meat. Foodies showed the highest knowledge of sheep farming and the provision of ecosystem services, slaughter and processing of sheep and shopping outlets. Both, Cooking enthusiasts and Foodies are very knowledgeable and competent in cooking. Their high consumption of regionally produced lamb meat could be linked to these factors, as the culinary background and the predominant production system in the region plays an important role in choosing lamb meat [67]. Communicating the benefits related to the consumption of lamb meat, such as high animal welfare and appropriate animal feeding [20,23] affects attitudes, beliefs and prejudices and allows an accurate comparison of the product with one’s own expectations [45]. Consumers with high expectations are more likely to consume a product, whereas low expectations lead towards a rejection [68].

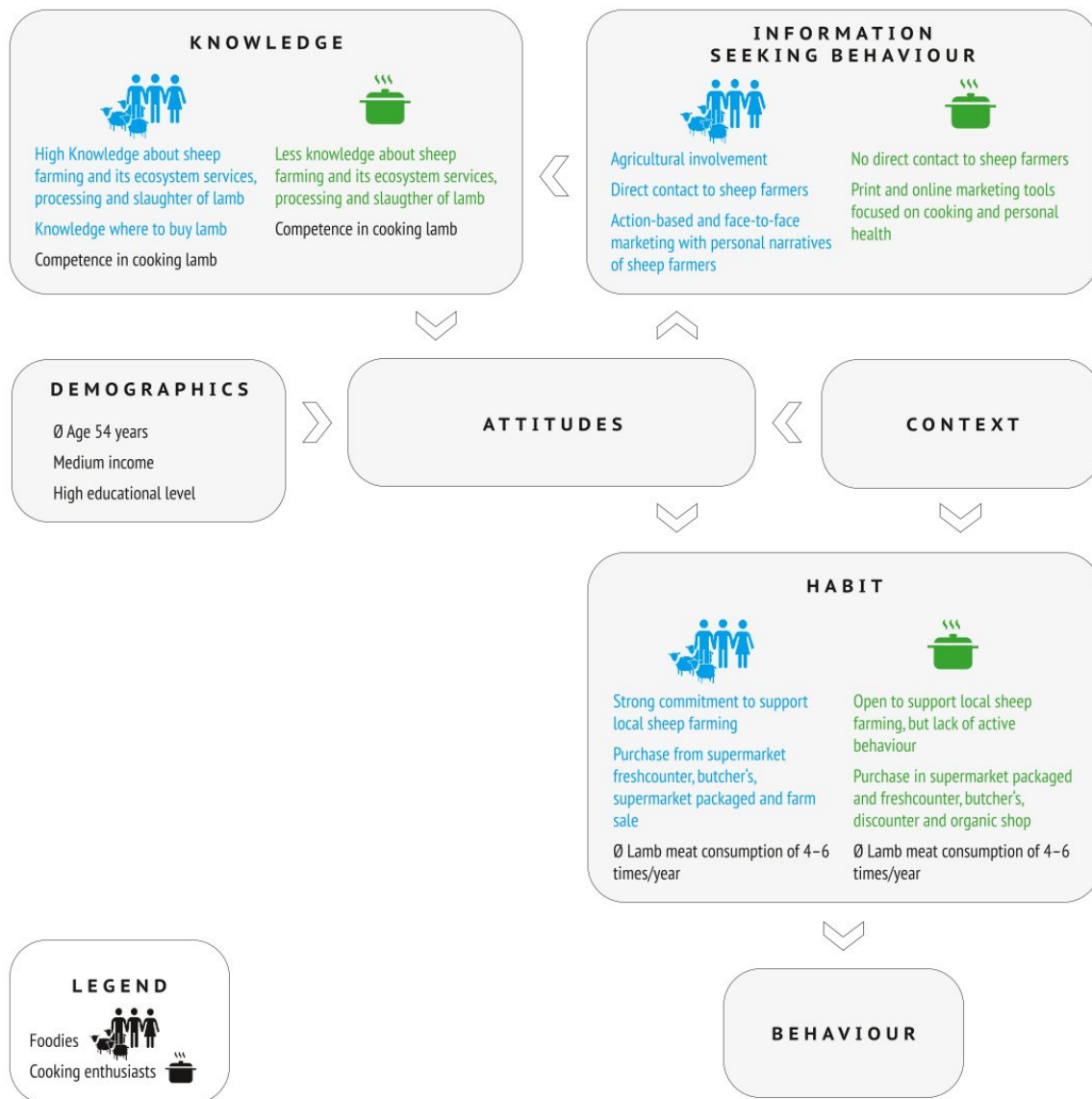
Information on production methods combined with a regional origin has a particularly strong effect on consumers’ perception of purchasing meat [36]. More comprehensive information about the extensive production methods via story-telling of the farmers or narrative videos help to support the understanding of animal husbandry and extrinsic quality attributes, which cannot be evaluated before the purchase [69].

Information seeking behaviour of Foodies and Cooking enthusiasts is similar: they are open to more information about sheep farming through various marketing channels. Foodies profit from their personal contact to sheep farmers and direct information about the product. Thus, producers could target Foodies through personal narratives by sheep farmers and additional information about the product. However, a small number of consumers with direct contact to farmers and a tendency to buy in bigger retail markets might limit this potential [5].

Cooking enthusiasts lack knowledge about shopping outlets. Thus difficulties in access and the low year-round availability with a self-sufficiency rate of 39.7% [70] may be an obstacle to frequent lamb meat consumption, while taste and own health are important demand factors [11].

Both Cooking enthusiasts and Foodies highly value tastings in their favourite shopping outlets. While Cooking enthusiasts prefer printed and online media, Foodies prefer action-based and face-to-face communication as they have direct contact to the sheep farmers and a good knowledge of sheep farming. Their Information seeking behaviour contributes to their Knowledge [45]. Narrative videos, image films or leaflets can convert extrinsic quality attributes into search attributes and consequently help fulfil the need for information [69].

Regarding the Habit of Foodies and Cooking enthusiasts, they show a similar lamb meat consumption of 4–6 times per year, with a tendency to more frequent consumption, mainly driven by a cooking passion and high skills for preparing and cooking lamb. While food enjoyment and personal health are key motivations to buy lamb meat [11], consumers see the cooking and preparation of lamb meat as time-consuming and a purchase barrier [11,71]. Figure 2 shows the social involvement as important factor for a frequent consumption. Foodies display an active habit in their support of extensive sheep farming systems by talking about sheep farming in their personal surrounding and imagining a lamb sponsorship. Cooking enthusiasts are open but more restrained with active support of local sheep farming like talking about sheep farming and landscaping and expanding their own knowledge.



**Figure 2.** Knowledge, Information Seeking and Habits Regarding Extensively Produced Lamb Meat in North-East Germany.

## 5. Conclusions

Ecosystem services of extensive sheep farming are embedded in extrinsic quality attributes of regionally produced lamb meat. Consumers interested in extrinsic quality attributes depend on information about them. The information gap between consumers and producers is especially wide in animal husbandry.

To improve the economic viability of sheep farmers, target-group-specific marketing strategies towards conscious meat consumers need to be developed. Key target groups identified are Foodies and Cooking enthusiasts. Foodies are best addressed by personal stories about the farmers and their daily business while Cooking enthusiasts can be addressed with culinary topics of lamb meat and personal health.

Cluster analysis of lamb meat consumers benefited from taking factors like Knowledge, Information seeking behaviour and Purchasing habit into account, leading to a broader view of target groups.

Limitations are seen in the regional setting and the composition of the sample, with an over quotation of academics and a high average age. Further research could consider the impact of information about specific ecosystem services in sheep farming on purchasing behaviour, as well as a broader analysis of the attitudes of lamb meat consumers.

**Supplementary Materials:** The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/su151410849/s1>, Table S1: Sociodemographic of the Cluster, Table S2: Classification of the Variables, Table S3: Descriptive Statistics of Kruskal Wallis Test for the Category Knowledge, Table S4: Results of Games Howell Test for the Category Knowledge, Table S5: Descriptive Statistics of Kruskal Wallis Test for the Category Information Seeking, Table S6: Results of Games Howell Test for the Category Information Seeking, Table S7: Descriptive Statistics of Kruskal Wallis Test for the Category Habit, Table S8: Games Howell Test for the Category Habit, Table S9: Shopping Outlets for Lamb Meat Dependent on Cluster.

**Author Contributions:** A.W.: Conceptualization, Methodology, Data collection, Data analysis, Writing—original draft, review and editing, Visualization. J.L.: Conceptualization, Methodology, Data analysis, Writing—review and editing. A.M.H.: Conceptualization, Methodology, Data collection, Data analysis, Writing—original draft, review and editing. All authors have read and agreed to the published version of the manuscript.

**Funding:** This project *Gesellschaftliche Leistungen honorieren: Begleitung eines Konzeptes zum Aufbau einer Wertschöpfungskette für regionales Lammfleisch* (29.09.2020 bis 31.01.2023) is funded by the Ministry of Agriculture, Environment and Climate Protection of the State of Brandenburg (MLUK) within the framework of the development program for rural areas in Brandenburg and Berlin for the funding period 2020 to 2022 Measure M16 (Cooperation for the implementation of resource-saving land use methods and cultivation practices and sustainable farm management). The funding for this project is made up of EAFRD and state funds. The project is supervised by the project management agency ILB.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** The online survey was commissioned by the company norstat, who are specialised on online-surveys with panel data. Participants register themselves voluntarily in the data pool of the company. According our quotas potential participants received invitations to our online-survey. All participants were over the age of 18 years. As part of the company's incentive concept, participants receive Norstat coins as compensation for their time and effort.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. García, R.R.; Peric, T.; Cadavez, V.; Geß, A.; Cerqueira, J.O.L.; Gonzales-Barrón, Ú.; Baratta, M. Arthropod biodiversity associated to European sheep production systems. *Small Rumin. Res.* **2021**, *205*, 106536. [[CrossRef](#)]
2. Enri, S.R.; Probo, M.; Farruggia, A.; Lanore, L.; Blanchetete, A.; Dumont, B. A biodiversity-friendly rotational grazing system enhancing flower-visiting insect assemblages while maintaining animal and grassland productivity. *Agric. Ecosyst. Environ.* **2017**, *241*, 1–10. [[CrossRef](#)]
3. Fraser, M.; Vallin, H.; Roberts, B. Animal board invited review: Grassland-based livestock farming and biodiversity. *Animal* **2022**, *16*, 100671. [[CrossRef](#)] [[PubMed](#)]
4. Macfarlane, J.M.; Simm, G. The Contribution of Genetic Improvement for Lamb Meat Production. Presented at the 3rd International Symposium about Goat and Sheep Meat Type, 3rd Sincorte, João Pessoa, Brazil, 2007. Available online: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d4e7c1eb44b6a5f5fd87d5177beb755b35b5839e> (accessed on 14 April 2023).
5. Conner, D.S.; Campbell-Arvai, V.; Hamm, M.W. Consumer Preferences for Pasture-Raised Animal Products: Results from Michigan. *J. Food Distrib. Res.* **2008**, *39*, 12–25. [[CrossRef](#)]
6. Von Korn, S. Strukturen und Perspektiven der Schafhaltung. DGfZ-Schriftenreihe, No. 78, 2019. Available online: <https://www.dgfz-bonn.de/schriftenreihe/?category=schaf#filterbox> (accessed on 14 April 2023).
7. BMEL. Statistics: Sheep Farming in Germany. Available online: <https://www.bmel-statistik.de/landwirtschaft/tierhaltung/schafhaltung> (accessed on 19 April 2023).
8. Statistisches Bundesamt. Fachserie 3—Land-und Forstwirtschaft, Fischerei: Reihe 2.1.3 Viehhaltung der Betriebe. Available online: [https://www.destatis.de/DE/Service/Bibliothek/\\_publikationen-fachserienliste-3.html?nn=206136#485776](https://www.destatis.de/DE/Service/Bibliothek/_publikationen-fachserienliste-3.html?nn=206136#485776) (accessed on 14 April 2023).
9. Statistisches Bundesamt. Nutztierbestand in Deutschland 1900–2021. Available online: <https://de.statista.com/statistik/daten/studie/659045/umfrage/nutztierbestand-in-deutschland/> (accessed on 19 April 2023).
10. Deblitz, C. Future of Sheep Farming in Germany. Available online: <https://www.thuenen.de/en/institutes/farm-economics/projects/future-of-sheep-farming-in-germany> (accessed on 14 April 2023).

11. Mandolesi, S.; Naspetti, S.; Arsenos, G.; Caramelle-Holtz, E.; Latvala, T.; Martin-Collado, D.; Orsini, S.; Ozturk, E.; Zanolli, R. Motivations and Barriers for Sheep and Goat Meat Consumption in Europe: A Means–End Chain Study. *Animals* **2020**, *10*, 1105. [CrossRef]
12. Von Korn, S. Wirtschaftlichkeit der Schafhaltung in Deutschland: Abschlussbericht. April 2020. Available online: [https://www.nutztierhaltung.de/fileadmin/Redaktion/Dokumente/5-Schafe/3-Stallbau/Abschlussbericht\\_Wirtschaftlichkeit\\_Schafhaltung.pdf](https://www.nutztierhaltung.de/fileadmin/Redaktion/Dokumente/5-Schafe/3-Stallbau/Abschlussbericht_Wirtschaftlichkeit_Schafhaltung.pdf) (accessed on 19 April 2023).
13. IPCC. Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security and Greenhouse Gas Fluxes in Terrestrial Ecosystems. 2019. Available online: <https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf> (accessed on 23 January 2023).
14. Independent Group of Scientists Appointed by the Secretary-General. *Global Sustainable Development Report 2019: The Future Is Now—Science for Achieving Sustainable Development*; New York, NY, USA, 2019. Available online: [https://sustainabledevelopment.un.org/content/documents/24797GSDR\\_report\\_2019.pdf](https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf) (accessed on 23 January 2023).
15. Hundscheid, L.; Wurzinger, M.; Gühnemann, A.; Melcher, A.; Stern, T. Rethinking meat consumption—How institutional shifts affect the sustainable protein transition. *Sustain. Prod. Consum.* **2022**, *31*, 301–312. [CrossRef]
16. European Commission (EC). *A Farm to Fork Strategy for a Fair, Healthy and Environmentally-Friendly Food System*; European Commission: Brussels, Belgium, 2020; Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0381> (accessed on 5 April 2023).
17. Caroprese, M.; Ciliberti, M.G.; Marino, R.; Napolitano, F.; Braghieri, A.; Sevi, A.; Albenzio, M. Effect of information on geographical origin, duration of transport and welfare condition on consumer’s acceptance of lamb meat. *Sci. Rep.* **2020**, *10*, 9754. [CrossRef]
18. Napolitano, F.; Braghieri, A.; Caroprese, M.; Marino, R.; Girolami, A.; Sevi, A. Effect of information about animal welfare, expressed in terms of rearing conditions, on lamb acceptability. *Meat Sci.* **2007**, *77*, 431–436. [CrossRef]
19. D’alessandro, A.; Maiorano, G.; Kowaliszyn, B.; Loiodice, P.; Martemucci, G. How the nutritional value and consumer acceptability of suckling lambs meat is affected by the maternal feeding system. *Small Rumin. Res.* **2012**, *106*, 83–91. [CrossRef]
20. Montossi, F.; Font-i-Furnols, M.; del Campo, M.; San Julián, R.; Brito, G.; Sañudo, C. Sustainable sheep production and consumer preference trends: Compatibilities, contradictions, and unresolved dilemmas. *Meat Sci.* **2013**, *95*, 772–789. [CrossRef]
21. Wiedemann, A.; Saurma-Jeltsch, A.; Häring, A.M.; Münchhausen, S.V. *Gesellschaftliche Leistungen Honorieren: Begleitung Eines Konzeptes zum Aufbau Einer Wertschöpfungskette für Regionales Lammfleisch*; Hochschule für nachhaltige Entwicklung Eberswalde: Eberswalde, Germany, 2023.
22. Bernués, A.; Olaizola, A.; Corcoran, K. Labelling information demanded by European consumers and relationships with purchasing motives, quality and safety of meat. *Meat Sci.* **2003**, *65*, 1095–1106. [CrossRef] [PubMed]
23. Sepúlveda, W.S.; Maza, M.T.; Pardos, L. Aspects of quality related to the consumption and production of lamb meat. Consumers versus producers. *Meat Sci.* **2011**, *87*, 366–372. [CrossRef] [PubMed]
24. Grunert, K.G.; Baadsgaard, A.; Larsen, H.H.; Madsen, T.K. Market Orientation in Food and Agriculture. *Eur. Rev. Agric. Econ.* **1997**, *24*, 150–151. [CrossRef]
25. Brunsø, K.; Fjord, T.A.; Grunert, K.G. *Consumer’s Food Choice and Quality Perception*; Working Paper No. 77; The Aarhus School of Business: Aarhus, Denmark, 2002.
26. Olson, J.C.; Jacoby, J. Cue Utilization in the Quality Perception Process. ACR Special Volumes, SV-02, 1972. Available online: <https://www.acrwebsite.org/volumes/11997/vol> (accessed on 14 April 2023).
27. Bernués, A.; Ripoll, G.; Panea, B. Consumer segmentation based on convenience orientation and attitudes towards quality attributes of lamb meat. *Food Qual. Prefer.* **2012**, *26*, 211–220. [CrossRef]
28. Sañudo, C.; Muela, E.; Campo, M.D.M. Key Factors Involved in Lamb Quality from Farm to Fork in Europe. *J. Integr. Agric.* **2013**, *12*, 1919–1930. [CrossRef]
29. Troy, D.; Kerry, J. Consumer perception and the role of science in the meat industry. *Meat Sci.* **2010**, *86*, 214–226. [CrossRef]
30. Mullen, J.D.; Wohlgenant, M.K. The willingness of consumers to pay for attributes of lamb. *Aust. J. Agric. Econ.* **1991**, *35*, 247–262. [CrossRef]
31. Ripoll, G.; Joy, M.; Panea, B. Consumer Perception of the Quality of Lamb and Lamb Confit. *Foods* **2018**, *7*, 80. [CrossRef]
32. Bernués, A.; Olaizola, A.; Corcoran, K. Extrinsic attributes of red meat as indicators of quality in Europe: An application for market segmentation. *Food Qual. Prefer.* **2003**, *14*, 265–276. [CrossRef]
33. Dudinskaya, E.C.; Naspetti, S.; Arsenos, G.; Caramelle-Holtz, E.; Latvala, T.; Martin-Collado, D.; Orsini, S.; Ozturk, E.; Zanolli, R. European Consumers’ Willingness to Pay for Red Meat Labelling Attributes. *Animals* **2021**, *11*, 556. [CrossRef]
34. Harper, G.C.; Makatouni, A. Consumer perception of organic food production and farm animal welfare. *Br. Food J.* **2002**, *104*, 287–299. [CrossRef]
35. Boogaard, B.K.; Bock, B.B.; Oosting, S.J.; Wiskerke, J.S.C.; van der Zijpp, A.J. Social Acceptance of Dairy Farming: The Ambivalence between the Two Faces of Modernity. *J. Agric. Environ. Ethic* **2011**, *24*, 259–282. [CrossRef]
36. Fernqvist, F.; Ekelund, L. Credence and the effect on consumer liking of food—A review. *Food Qual. Prefer.* **2014**, *32*, 340–353. [CrossRef]
37. Hersleth, M.; Næs, T.; Rødbotten, M.; Lind, V.; Monteleone, E. Lamb meat—Importance of origin and grazing system for Italian and Norwegian consumers. *Meat Sci.* **2012**, *90*, 899–907. [CrossRef]

38. Font-I-Furnols, M.; Guerrero, L. Consumer preference, behavior and perception about meat and meat products: An overview. *Meat Sci.* **2014**, *98*, 361–371. [CrossRef]
39. Shaw, D.; Shiu, E.; Hassan, L.; Hogg, G.; Wilson, E.; Bekin, C.; Hogg, G. Intending to be Ethical: An Examination of Consumer Choice in Sweatshop Avoidance. *Adv. Consum. Res.* **2007**, *34*, 31–38.
40. Ajzen, I. From Intentions to Actions: A Theory of Planned Behavior. In *Action Control: From Cognition to Behavior*; Kuhl, J., Beckmann, J., Eds.; Springer Series in Social Psychology; Springer: Berlin/Heidelberg, Germany, 1985; pp. 11–39.
41. Carrington, M.J.; Neville, B.A.; Whitwell, G.J. Why Ethical Consumers Don't Walk Their Talk: Towards a Framework for Understanding the Gap between the Ethical Purchase Intentions and Actual Buying Behaviour of Ethically Minded Consumers. *J. Bus. Ethic* **2010**, *97*, 139–158. [CrossRef]
42. Chatzidakis, A.; Hibbert, S.; Smith, A.P. Why People Don't Take Their Concerns about Fair Trade to the Supermarket: The Role of Neutralisation. *J. Bus. Ethic* **2007**, *74*, 89–100. [CrossRef]
43. Stern, P.C.; Dietz, T.; Abel, T.; Guagnano, G.A.; Kalof, L. A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism. *Res. Hum. Ecol.* **1999**, *6*, 81–97.
44. Dunlap, R.E.; Van Liere, K.D. The "New Environmental Paradigm". *J. Environ. Educ.* **1978**, *9*, 10–19. [CrossRef]
45. Zepeda, L.; Deal, D. Organic and local food consumer behaviour: Alphabet Theory. *Int. J. Consum. Stud.* **2009**, *33*, 697–705. [CrossRef]
46. Guagnano, G.A.; Stern, P.C.; Dietz, T. Influences on Attitude-Behavior Relationships. *Environ. Behav.* **1995**, *27*, 699–718. [CrossRef]
47. Stampa, E.; Schipmann-Schwarze, C.; Hamm, U. Consumer perceptions, preferences, and behavior regarding pasture-raised livestock products: A review. *Food Qual. Prefer.* **2020**, *82*, 103872. [CrossRef]
48. Rivaroli, S.; Baldi, B.; Spadoni, R. Consumers' perception of food product craftsmanship: A review of evidence. *Food Qual. Prefer.* **2020**, *79*, 103796. [CrossRef]
49. Hartmann, T.; Jahnke, B.; Hamm, U. Making ugly food beautiful: Consumer barriers to purchase and marketing options for Suboptimal Food at retail level—A systematic review. *Food Qual. Prefer.* **2021**, *90*, 104179. [CrossRef]
50. Schäufele, I.; Hamm, U. Consumers' perceptions, preferences and willingness-to-pay for wine with sustainability characteristics: A review. *J. Clean. Prod.* **2017**, *147*, 379–394. [CrossRef]
51. Feldmann, C.; Hamm, U. Consumers' perceptions and preferences for local food: A review. *Food Qual. Prefer.* **2015**, *40*, 152–164. [CrossRef]
52. Decuyper, R.; Robaeyst, B.; Hudders, L.; Baccarne, B.; Van de Sompel, D. Transitioning to energy efficient housing: Drivers and barriers of intermediaries in heat pump technology. *Energy Policy* **2022**, *161*, 112709. [CrossRef]
53. Nydrioti, I.; Grigoropoulou, H. Using the water footprint concept for water use efficiency labelling of consumer products: The Greek experience. *Environ. Sci. Pollut. Res.* **2022**, *30*, 19918–19930. [CrossRef]
54. Rivaroli, S.; Hingley, M.; Spadoni, R. Motivations Behind Craft Beer Online Buying Habits among Italian Millennials. In *Researching Craft Beer: Understanding Production, Community and Culture in an Evolving Sector*; Clarke, D., Ellis, V., Patrick-Thomson, H., Weir, D., Eds.; Emerald Publishing Limited: Bingley, UK, 2021; pp. 195–223.
55. Taghikhah, F.; Voinov, A.; Shukla, N.; Filatova, T. Exploring consumer behavior and policy options in organic food adoption: Insights from the Australian wine sector. *Environ. Sci. Policy* **2020**, *109*, 116–124. [CrossRef]
56. Mazar, A.; Wood, W. *The Psychology of Habit: Defining Habit in Psychology*; University of Southern California: Los Angeles, CA, USA, 2018.
57. McQueen, R. Can Collaborative Technology Support Tacit Knowledge Creation in Individuals? 1999. Available online: <http://aisel.aisnet.org/amcis1999/48> (accessed on 1 March 2023).
58. LaPiere, R.T. Attitudes vs. Actions. *Soc. Forces* **1934**, *13*, 230–237. [CrossRef]
59. Mooi, E.; Sarstedt, M. *A Concise Guide to Market Research*; Springer: Berlin/Heidelberg, Germany, 2011.
60. Office of Statistics Berlin-Brandenburg. Overview Population. Available online: <https://www.statistik-berlin-brandenburg.de/bevoelkerung> (accessed on 11 April 2023).
61. Backhaus, K.; Erichson, B.; Gensler, S.; Weiber, R.; Weiber, T. *Multivariate Analysis: An Application-Oriented Introduction*; Springer Gabler: Wiesbaden, Germany, 2023.
62. Kruskal, W.H.; Wallis, W.A. Use of Ranks in One-Criterion Variance Analysis. *J. Am. Stat. Assoc.* **1952**, *47*, 583–621. [CrossRef]
63. Chen, T.; Xu, M.; Tu, J.; Wang, H.; Niu, X. Relationship between Omnibus and Post-hoc Tests: An Investigation of performance of the F test in ANOVA. *Shanghai Arch. Psychiatry* **2018**, *30*, 60–64.
64. Rahmann, G.; Ashworth, S.W.; Boutonnet, J.-P.; Brunori, G.; Papadopoulos, I. Opportunities and barriers for niche marketing of lamb in European LFAs based on consumer attitudes to product quality. *Agrarwirtschaft* **2001**, *50*, 293–301.
65. Gracia, A. Consumers' Attitudes towards Designation of Origin Lamb Meat: Segmentation and Profiles. ITEA (Información Técnica Económica Agraria). 2005; pp. 25–44. Available online: <https://www.aida-itea.org/index.php/revista/contenidos?idArt=181&lang=eng> (accessed on 2 April 2023).
66. Lammfleischerzeuger-gemeinschaft e.V. Württemberger-Lamm. Available online: <https://www.wuerttemberger-lamm.de/> (accessed on 15 June 2023).
67. Sanudo, C.; Sanchez, A.; Alfonso, M. Small ruminant production systems and factors affecting lamb meat quality. *Meat Sci.* **1998**, *49*, S29–S64. [CrossRef]

68. Cardello, A.V. Consumer expectations and their role in food acceptance. In *Measurement of Food Preferences*; MacFie, H.J.H., Thomson, D.M.H., Eds.; Springer: Boston, MA, USA, 1994; pp. 253–297.
69. Musto, M.; Cardinale, D.; Lucia, P.; Faraone, D. Influence of Different Information Presentation Formats on Consumer Acceptability: The Case of Goat Milk Presented as Obtained from Different Rearing Systems. *J. Sens. Stud.* **2015**, *30*, 85–97. [[CrossRef](#)]
70. BLE. Zukunftsfähige Nutztierhaltung: Lammfleisch Gebündelt Vermarkten. Available online: <https://www.nutztierhaltung.de/schaf/oekonomie/lammfleisch-gebundelt-vermarkten/> (accessed on 13 June 2023).
71. De Andrade, J.C.; Sobral, L.D.A.; Ares, G.; Deliza, R. Understanding consumers' perception of lamb meat using free word association. *Meat Sci.* **2016**, *117*, 68–74. [[CrossRef](#)]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.