




# “Ethical consumerism and demographic differences in preferences for regional food brands”

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# ETHICAL CONSUMERISM AND DEMOGRAPHIC DIFFERENCES IN PREFERENCES FOR REGIONAL FOOD BRANDS

## Abstract

This study investigates the impact of demographic factors on consumers' ethical perceptions and purchasing behavior toward regional food product brands. Specifically, we examine how gender, parenthood, and age influence consumers' ethical perceptions of regional food brands and their willingness to pay a premium. The survey instrument, based on locally recognized regional product brands from the Liberec Region, was administered online and on paper to respondents from the same region, yielding 384 valid responses using quota sampling with quotas set according to available demographic characteristics of the region's population. Data were analyzed using non-parametric methods (Mann-Whitney U, Kruskal-Wallis, Spearman's correlation) and ANOVA, chosen for their suitability with non-normal distributions and ordinal or skewed data. The results reveal significant demographic differences. On average, women are willing to pay an 18% premium for regional food, compared to 13% for men. Parents of dependent children are willing to pay a 17% premium, while non-parents are willing to pay 14%. The lowest willingness to pay was recorded among individuals aged 85 and older, at 8%. In ethical perceptions, women and parents of dependent children view regional food consumption and support for local businesses as more ethically significant than men and non-parents. Age also plays a role, with younger (18-24) and older (65-84) consumers perceiving these practices as less ethical compared to middle-aged groups (25-44 and 45-64). The study concludes that while ethical considerations slightly influence willingness to pay, other factors likely play a more substantial role in shaping consumer behavior.

## Keywords

ethical consumerism, regional food brands, willingness to pay, consumer behavior, local business support, Czech Republic

## JEL Classification

D12, D91, Q13, A13, Z13

## INTRODUCTION

The global food system has raised increasing concerns due to its negative impacts on health, the environment, and social well-being. In response, consumers, governments, and organizations are showing a growing interest in local and regional food products.

Purchasing regional foods boosts the local economy and supports communities by keeping more money circulating within them. This economic impact influences local GDP, job creation, and sustainable rural development in Europe. Several studies clarify this impact. For instance, Cvijanović et al. (2020) demonstrated that local food systems contribute more significantly to local GDP than conventional systems. Additionally, Twuijver et al. (2020) confirm that this is especially important in rural areas, where purchasing local food can stimulate economic activity by creating jobs and supporting local businesses.

The development and success of local food systems depend not only on producers but also on informed and engaged consumers. The public must have the opportunity to choose between local and global food,



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and their purchasing decisions ultimately shape demand for regional products. Local food systems can be strengthened through public and producer education, the support of local authorities, and the use of diverse short supply chains. Political interest and investment in infrastructure are also key drivers, highlighting the role of policy alongside consumer behavior in promoting regional food initiatives (Proškina et al., 2022).

Purchasing regional foods can greatly enhance environmental sustainability. Local food systems have shorter supply chains, resulting in lower transportation emissions and a smaller carbon footprint. This is especially important when considering food miles, which measure the distance food travels from production to consumption and are crucial for assessing its environmental impact (Coelho et al., 2018).

Additionally, local food initiatives can bolster biodiversity and the preservation of rural landscapes by promoting traditional, often more sustainable, farming practices (Baby & Joseph, 2023).

Given the abovementioned factors, supporting the market success of regional food producers and, therefore, regional food brands is highly desirable. Nevertheless, it is ultimately consumers who determine demand through their purchasing decisions. It is essential to examine consumer decision-making processes and behavior, including the diverse factors that shape them. Understanding how demographic factors influence consumers' ethical perceptions and willingness to pay is therefore essential for ensuring the economic, environmental, and socio-cultural sustainability of local food systems.

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## 1. LITERATURE REVIEW AND HYPOTHESES

This literature review synthesizes recent research on consumer behavior regarding ethical and sustainable food choices. A comprehensive search was conducted using the Scopus and Web of Science databases, focusing mainly on studies published in the past decade to capture contemporary trends in sustainability-driven consumption. These studies examine a wide spectrum of issues, including social perceptions, ethical motivations, identity-related factors, and socio-demographic determinants, that shape consumer decisions in markets for local, regional, and organic products. By drawing on these current empirical contributions, the review aims to offer an in-depth understanding of the mechanisms that drive ethical consumption and the effectiveness of strategies designed to promote sustainable food choices. A summary of the reviewed studies, including methodological details and key findings, is provided in Appendix A.

The research consistently shows that consumer preferences for local, regional, and organic food products are influenced by a complex interplay of socio-demographic, moral, and contextual factors. Socio-demographic variables, including gender, age, education, household income, family compo-

sition, and municipality size, affect awareness, recognition, and perceived credibility of food brands, which subsequently shape purchasing decisions. For instance, Zámková et al. (2024), drawing on a large-scale representative survey in the Czech Republic, demonstrate that recognition of the national organic label “biozebra” varies significantly across demographic groups: it is higher among women, positively associated with educational attainment and household income, and more prevalent in larger municipalities. Their results show nuanced family-structure effects: awareness peaks in households with two to four members and those with one child, while it declines in larger households with multiple children. They also identify a non-linear age effect, with awareness increasing until approximately mid-adulthood and then decreasing. These findings underscore that although socio-demographics shape perceptions of organic branding, their direct impact on regional product preferences may be more complex.

Beyond demographic factors, ethical considerations and emotional ties to local communities play a central role in sustainable consumption. Tamaki (2024), using qualitative and behavioral approaches, shows that consumers who feel a strong attachment to their local environment often view local food as an extension of their iden-

tity; ethical branding in such cases reinforces feelings of trust and loyalty and strengthens the alignment between personal empathy, moral values, and sustainable purchasing. Similarly, Im et al. (2023) demonstrate that moral foundations, including care/harm and loyalty/betrayal, predict local food consumption, highlighting that intuitive ethical judgments and identity-based motivations frequently outweigh rational evaluations such as price or product attributes.

Brand recognition and trust function as key mediators of purchasing intentions. Sun et al. (2022), analyzing consumer perceptions of regional public brands, find that brand awareness significantly increases purchase intentions for agricultural products, while perceived quality enhances these effects. This aligns with broader evidence showing that cognitive trust and familiarity are crucial in navigating markets characterized by information asymmetry. Product attributes remain influential as well: Möllers et al. (2022), studying consumer attitudes toward certified organic and local foods in Central and Eastern Europe, report that convenience often acts as a barrier to ethical consumption, with many buyers preferring familiar or traditional products over certified organic options, even when these products are local. Their study also emphasizes the notable research gap related to ethical aspects of regional product consumption.

Cultural and contextual differences further shape sustainable food choices. Ishaq et al. (2021), comparing Italian and Pakistani consumers, show that environmental concern strongly predicts sustainable consumption in both contexts, but socio-economic conditions and educational levels influence how this concern is translated into actual purchasing behavior. In the United States, Schoolman (2020) finds that many consumers prioritize local food primarily out of a desire to support their community rather than out of identification with broader ethical or environmental movements, underscoring the importance of social embeddedness and community ties. Bimbo et al. (2021) similarly highlight that environmentally concerned individuals tend to purchase local food more frequently, with purchase habits additionally influenced by age, education, and occupation. Their study also finds that attention to nutrition labels and greater availability of organic products

in smaller communities increase engagement in ethical consumption. The role of social identity is further supported by Bartels and Onwezen (2014), who demonstrate that pro-environmental group identification enhances willingness to purchase sustainable products, with social norms and perceived shared values mediating these effects.

Overall, the literature indicates that consumer choices related to local, regional, and organic foods result from a dynamic interaction among demographic characteristics, ethical motivations, social identities, brand trust, and contextual influences. However, a significant research gap persists regarding the ethical dimensions of regional food consumption, a gap also highlighted by Möllers et al. (2022). Moreover, demographic factors that may shape ethical preferences remain insufficiently explored. Addressing these limitations, our study focuses on how gender, age, and parenthood influence ethical attitudes and purchasing behavior toward regional foods.

Considering the objectives of the study, a total of seven selected hypotheses were chosen for statistical testing:

- H1: Women are willing to pay extra for a regional food variant than men.*
- H2: People with dependent children are eager to pay more for regional food than people who no longer support their children.*
- H3: Older respondents are less likely to pay extra for regional food compared to younger respondents.*
- H4: Women perceive regional food brands and support of local businesses more ethically than men.*
- H5: People supporting children perceive regional food brands and support of local businesses more ethically than people who no longer support their children.*
- H6: As age increases, respondents perceive regional food brands and support of local businesses more ethically than younger age groups.*

*H7: Consumers who perceive regional product brands and support for local businesses as more ethical are willing to pay more for a regional product variant.*

## 2. METHODOLOGY

This section offers a comprehensive analysis of the respondents, the survey methodology, a detailed description of the primary dataset and data collection techniques, and an overview of the evaluation methods employed.

### 2.1. Respondents and sampling method

The authors collected a total of 384 valid responses from residents of the Liberec Region in the Czech Republic through both online (317) and paper (67) surveys, using a quota sampling method. This non-random technique selects participants based on predetermined characteristics to ensure the sample reflects the wider population (Andini et al., 2023). The authors determined the gender and age group quotas using publicly available demographic data from the Liberec Region published by the Czech Statistical Office (CSO) (2023). Statistical

tests indicated no significant differences between responses obtained online and on paper, therefore, the data were pooled for subsequent analysis.

The research followed national and international ethical guidelines, including COPE. Participation in the questionnaire was anonymous and voluntary, with respondents informed about the study's purpose, data protection measures, and their right to withdraw at any time. Informed consent was obtained prior to participation through an introductory statement that clearly explained the research aims, procedures, and data handling. No personal identifiers were collected, and data were securely stored on CESNET infrastructure and used solely for research purposes.

Table 1 presents the demographic and professional characteristics of the respondents.

### 2.2. Questionnaire methodology and data collection

The questionnaire was pilot-tested for reliability and clarity. It was designed using Google Forms and included various question types such as multiple-choice, short-answer, and Likert scale items to ensure it was clear, relevant, and easy for re-

**Table 1.** Respondents' characteristics

Sociodemographic data	Variables	Frequency (absolute, relative %)	
Gender	Women	193	50.3
	Men	191	49.7
Age	< 18-24 >	31	8.1
	< 25-44 >	129	33.6
	< 45-64 >	126	32.8
	< 65-84 >	89	23.2
	More than 85	9	2.3
Income	Up to 10,000 Kč	36	9.4
	Up to 20,000 Kč	56	14.6
	Up to 30,000 Kč	120	31.3
	Up to 40,000 Kč	94	24.5
	Up to 50,000 Kč	50	13.0
	Up to 60,000 Kč	16	4.2
	More than 60,000 Kč	12	3.1
Dependent child	Yes	132	34.4
	No	252	65.6
Size of residence	Up to 999 inhabitants	70	18.2
	1,000-4,999 inhabitants	86	22.4
	5,000-19,999 inhabitants	28	7.3
	20,000-99,999 inhabitants	56	14.6
	100,000 inhabitants and more	144	37.5

spondents to complete. The questionnaire was distributed online and offline to reach a defined number of respondents. The primary distribution method used was Computer-Assisted Web Interviewing (CAWI), with the questionnaire link shared through social media and groups, allowing respondents to complete the survey at their convenience and reach a wide geographic area. Additionally, printed questionnaire versions were available for those without reliable internet access. These printed copies were distributed in public venues like insurance offices, community centers, local organizations, and retirement homes. Data collection took place from March to June 2024, allowing for broad respondent participation within a reasonable time frame.

The questionnaire began by assessing respondents' awareness of six selected regional brands. These brands were purposefully chosen by the study authors to represent both smaller and larger producers from the region who have been actively developing their own brand identity over time. This initial section served to situate respondents within the context of regional products, enabling them to clearly distinguish the specific products referenced in subsequent questions. Subsequently, respondents were asked to indicate the extent to which they perceive purchasing regional products as the ethically correct choice. They were then asked to specify the percentage premium they would be willing to pay for a regional product. Finally, demographic information was collected, including age, gender, and whether the respondent has a dependent child, as we hypothesized that parenthood might influence preferences for regional brands.

### 2.3. Methods used for data evaluation

To verify hypotheses *H1*, *H2*, *H4*, and *H5*, the Mann-Whitney test was used due to the non-normal distribution of variables (confirmed by the K-S test). This non-parametric hypothesis testing method assesses significant differences between two independent samples (Karch, 2020).

To verify hypothesis *H3*, the Kruskal-Wallis test was used. This non-parametric method assesses

statistically significant differences between the medians of three or more independent groups and serves as an alternative to one-way ANOVA when normality and homogeneity of variance assumptions are unmet (Ostertagová et al., 2014; Nwobi & Akanno, 2021).

To verify hypotheses *H6* and *H7*, the Spearman correlation coefficient was calculated. This non-parametric statistic evaluates the strength and direction of the monotonic relationship between two ranked variables and does not require normally distributed data, making it suitable for ordinal or non-normally distributed interval data (Salvesen et al., 2019; Hauke & Kossowski, 2011; Nikitina & Chernukha, 2023). By ranking the data, Spearman's method minimizes the impact of outliers and accommodates skewed distributions, providing a robust measure of association (Yu & Hutson, 2020; Myers & Sirois, 2005). Spearman's correlation coefficient is interpreted on a scale where values from 0.00 to 0.19 indicate very weak correlations, 0.20 to 0.39 suggest weak correlations, 0.40 to 0.59 denote moderate correlations, and 0.60 to 0.79 are considered strong. Coefficients between 0.80 and 1.00 reflect very strong correlations, indicating a high degree of monotonic association between the ranked variables (Akoğlu, 2019).

For further analysis of hypothesis *H6*, Analysis of Variance (ANOVA) was employed. ANOVA is a statistical technique used to compare the means of multiple groups to determine if at least one group's mean is significantly different from the others. The core principle of ANOVA is to partition total observed variance into components linked to different sources, allowing evaluation of the effects of one or more independent variables on a dependent variable (Kim, 2017). One-way ANOVA, the most common type, examines the effect of a single independent variable with multiple levels on a continuous dependent variable. The results are summarized using the F-statistic, which represents the ratio of variance between group means to variance within groups. A significant F-statistic indicates at least one group mean differs significantly, leading to post-hoc analyses to identify specific group differences (Kim, 2017; Mishra et al., 2019).

### 3. RESULTS

This section presents the results of the data analysis. All the following statistical analyses were performed in IBM SPSS Statistics 29. Tables 2 and 3 present the results of the Mann-Whitney U test for *H1* (*H1: Women are more willing to pay extra for a regional food variant than men*) and *H2* (*H2: People with dependent children are eager to pay more for regional food than people who no longer support their children*).

**Table 2.** Differences in willingness to pay for regional food (*H1: gender comparison*)

Gender	N	Mean rank
Women	193	220.03
Men	191	164.68
Total	383	–

Note: Mann-Whitney U = 13,117.5, Z = -4.97, p < 0.001. Women show significantly higher willingness to pay (18% vs. 13%).

**Table 3.** Ranks of *H2*

Parenthood	N	Mean rank
Yes	132	226.98
No	252	174.44
Total	384	–

Note: Mann-Whitney U = 12,081.0, Z = -4.48, p < 0.001. Parents show significantly higher willingness to pay (17% vs. 14%).

**Table 4.** Mann-Whitney test results for gender and parenthood (*H1* and *H2*)

Hypothesis	U-statistic	Z-value	p-value	Conclusion
<i>H1: Gender</i>	13,117.5	-4.97	< 0.001	Women significantly higher WTP (18% vs. 13%)
<i>H2: Parenthood</i>	12,081.0	-4.48	< 0.001	Parents significantly higher WTP (17% vs. 14%)

Note: WTP = Willingness to pay a premium for regional food.

**Table 5.** Kruskal-Wallis test results for age groups (*H3*)

N	Test statistic	df	p-value	Conclusion
384	13.102	4	0.011	Significant differences in WTP across age groups

Note: Older respondents (85+) show lower WTP compared to younger groups (25-44, 45-64).

**Table 6.** Pairwise age group comparisons (*H3*)

Sample 1 – Sample 2	Test statistics	Std. error	Std. test statistic	Sig.	Adj. sig. (a)
(85 and more) – (18-24)	71.025	41.290	1.720	.085	.854
(85 and more) – (45-64)	106.964	37.625	2.843	.004	.045
(85 and more) – (65-84)	113.641	38.143	2.979	.003	.029
(85 and more) – (25-44)	115.421	37.596	3.070	.002	.021
(18-24) – (45-64)	-35.939	21.863	-1.644	.100	1.000
(18-24) – (65-84)	-42.616	22.742	-1.874	.061	.609
(18-24) – (25-44)	44.396	21.812	-2.035	.042	.418
(45-64) – (65-84)	-6.677	15.099	-.442	.658	1.000
(45-64) – (25-44)	8.457	13.659	.619	.536	1.000
(65-84) – (25-44)	1.780	15.026	.906	.906	1.000

Note: Games-Howell post-hoc test. Significant differences mainly between oldest group (85+) and others.

Based on the results (see Table 4) and because the p-values (0.001) < α (0.005), we reject both null hypotheses and accept the alternative hypotheses. On average, women are willing to pay an 18% premium for regional food products, while men are willing to pay a 13% premium. Similarly, consumers who still support dependent children demonstrate a higher willingness to pay, with an average premium of 17%, compared to those without dependent children, who are willing to pay only a 14% premium.

The results of the Kruskal-Wallis test for *H3* (*H3: Older respondents are less likely to pay extra for regional food compared to younger respondents*) are presented in Table 5.

Because the p-value (0.001) < α (0.005), we reject the null hypothesis and accept the alternative hypothesis. Table 6 summarizes the pairwise comparison of “Age”.

Tables 7 and 8 present the verification results of *H4* (*H4: Women perceive regional food brands and support local businesses more ethically than men*) and *H5* (*H5: People supporting children perceive regional food brands and support of local business-*

es more ethically than people who no longer support their children).

**Table 7.** Ethical perception of regional food (H4: gender)

Gender	N	Mean rank
Women	193	174.32
Men	191	210.87
Total	384	–

Note: Mann-Whitney U = 14,922.5, Z = -3.37, p < 0.001. Women perceive regional food as more ethical than men.

**Table 8.** Ranks of H5

Parenthood	N	Mean rank
Yes	132	128.65
No	252	225.95
Total	384	–

Note: Mann-Whitney U = 8,203.5, Z = -8.52, p < 0.001. Parents perceive regional food as more ethical.

Table 9 presents the results of the Mann-Whitney U test criterion and the Wilcoxon W test criterion alongside asymptotic significance for H4 and H5.

Based on the results (see Table 9), and given that the p-values (0.001) are below the significance threshold ( $\alpha = 0.005$ ), we reject both null hypotheses and accept the alternative ones. Our findings suggest that women perceive the consumption of regional food and support for local businesses as more ethically significant than men do. Similarly, individuals currently raising dependent children view regional food consumption as more ethically meaningful compared to those who are no longer responsible for child-rearing.

**Table 9.** Mann-Whitney test results for ethical perception (H4 and H5)

Hypothesis	U-statistic	Z-value	p-value	Conclusion
H4: Gender	14,922.5	-3.37	< 0.001	Women higher ethical perception
H5: Parenthood	8,203.5	-8.52	< 0.001	Parents higher ethical perception

**Table 10.** Spearman’s correlation coefficient

Correlation coefficient	p-value	Conclusion
-0.019	0.72	No significant correlation

**Table 11.** Tests of homogeneity of variances (H6)

Dependent Variable: Ethical Perception (H6)	Levene’s statistic	df1	df2	Sig.
Based on mean	1.438	4	379	0.221
Based on median	0.735	4	379	0.568
Based on median and with adjusted df	0.735	4	362.690	0.568
Based on trimmed mean	1.334	4	379	0.257

For verification of H6 (H6: As age increases, respondents perceive regional food brands and support of local businesses more ethically than younger age groups), the authors first decided to calculate Spearman’s correlation coefficient. Table 10 shows the calculation of Spearman’s correlation coefficient.

Although Spearman’s correlation coefficient ( $-0.019 < 0$ ) indicates a negative correlation, the correlation is weak. Based on the results, we accept the null hypothesis and reject the alternative hypothesis. For identification of additional differences between the variable age groups authors decided to use Analysis of variance (ANOVA). Table 11 presents the results of the homogeneity of variances.

As shown in Table 11, the p-value associated with Levene’s test for homogeneity of variances is greater than alpha, and there is insufficient evidence to reject the null hypothesis of equal variances. This suggests that the assumption of homoscedasticity is met, and the ANOVA analysis is appropriate. Table 12 presents the results of ANOVA.

Post-hoc comparisons were conducted using the Games-Howell procedure to identify specific group differences following a significant ANOVA result. The Games-Howell test is particularly suitable when assumptions of equal variances are not met. For results, see Table 13. Figure 1 shows the mean graph.

**Table 12.** ANOVA test for ethical perception by age group (H6)

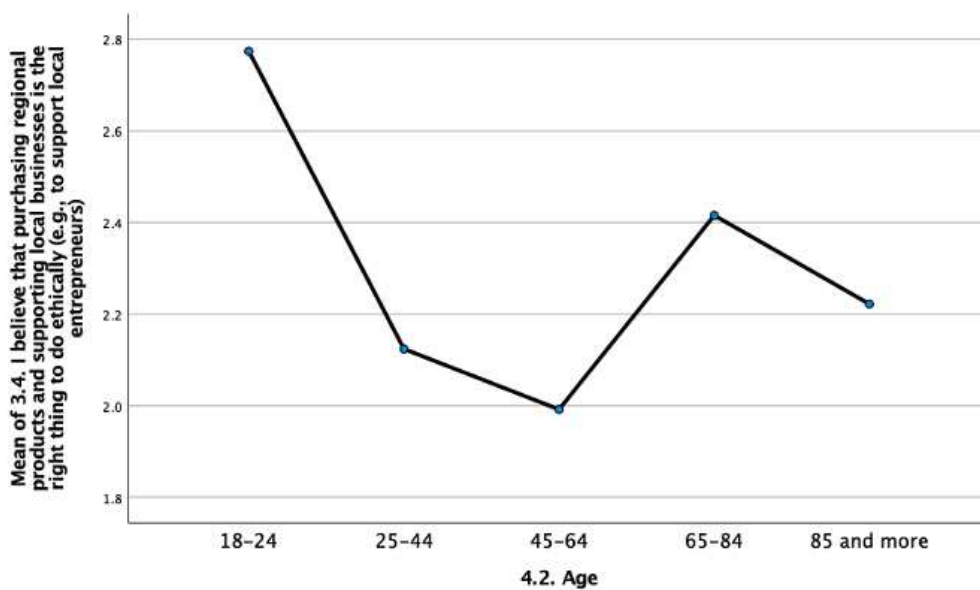
Dependent Variable: Ethical Perception (H6)	Sum of squares	df	Mean square	F	Sig.
Between groups	20.556	4	5.139	3.650	0.006
Within groups	533.600	379	1.408	–	–
Total	554.156	383	–	–	–

Note: Levene’s test confirmed homogeneity of variances. Games-Howell post-hoc shows differences mainly between young (18-24) and middle-aged (25-44, 45-64).

**Table 13.** Multiple comparisons between age groups

Test: Games-Howell						
4.2.1. Age	4.2.1. Age	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
					Lower bound	Upper bound
18-24	25-44	0.650*	0.228	0.050	0.00	1.30
	45-64	0.782*	0.231	0.012	0.13	1.44
	65-84	0.385	0.247	0.597	-0.34	1.05
	85 and more	0.552	0.450	0.738	-0.87	1.98
25-44	18-24	-0.650*	0.228	0.050	-1.30	0.00
	45-64	0.132	0.145	0.892	-0.27	0.53
	65-84	-0.292	0.169	0.418	-0.76	0.17
	85 and more	-0.098	0.413	0.999	-1.49	1.29
45-64	18-24	-0.782*	0.231	0.012	-1.44	-0.13
	25-44	-0.132	0.145	0.892	-0.53	0.29
	65-84	-0.424	0.172	0.105	-0.90	0.05
	85 and more	-0.230	0.414	0.978	-1.62	1.16
65-84	18-24	-0.358	0.247	0.597	-1.05	0.34
	25-44	0.292	0.196	0.418	-0.17	0.76
	45-64	0.424	0.172	0.105	-0.05	0.90
	85 and more	0.194	0.423	0.990	-1.20	1.59
85 and more	18-24	-0.552	0.450	0.738	-1.98	0.87
	25-44	0.098	0.413	0.999	-1.29	1.49
	45-64	0.230	0.414	0.978	-1.16	1.62
	65-84	-0.194	0.423	0.990	-1.59	1.20

Note: \*The mean difference is significant at the 0.05 level.



**Figure 1.** The mean graph

**Table 14.** Calculation of Spearman’s Rho

Correlation coefficient	p-value	Conclusion
-0.191	< 0.001	Weak negative correlation – not supported

The analysis revealed statistically significant differences in how age affects ethical perceptions of regional food consumption. The respondents aged 18-24 and 65-84 view the preference for regional food and support for local businesses as less ethical compared to other age groups. On the other hand, consumers aged 25-44 and 45-64 perceive regional food preferences and support for local businesses as more ethical.

For verification of *H7* (*H7: Consumers who perceive regional product brands and support for local businesses as more ethical are willing to pay more for a regional product variant*), the authors decided to calculate Spearman’s correlation coefficient (see Table 14).

A Spearman’s correlation coefficient of -0.191 indicates a weak negative correlation between “willingness to pay more” and “ethnic preferences.” This suggests that individuals who are more willing to pay a premium may exhibit a slight inclination towards stronger ethical preferences. However, the relationship between willingness to pay and ethical considerations is relatively weak, indicating that additional factors likely influence consumer willingness to pay and their preferences.

## 4. DISCUSSION

Our findings show that women are willing to pay an 18% premium for regional food products, while men are willing to pay a 13% premium. This result is consistent with previous studies on organic and eco-friendly food, which demonstrate that women tend to prioritize health and sustainability in their choices (Büyükkaragoz et al., 2014, Kyung et al., 2023, Nam, 2020). Taken together, this suggests that women’s stronger ethical orientation towards food extends beyond health and sustainability to also include regional origin.

We also found that consumers supporting dependent children are willing to pay a higher pre-

mium (17%) than those without dependent children (14%). While direct evidence is scarce, this is in line with research showing that parents often prioritize their children’s health and are more inclined to pay extra for foods perceived as beneficial (Oellingrath et al., 2013; Roos et al., 2012). Our result therefore extends these findings to the domain of regional foods, suggesting that parental responsibility may strengthen ethical and health-related motivations in food purchasing.

Respondents aged 85 and older exhibit the lowest willingness to pay (8%). This aligns with research suggesting that older consumers generally have a lower WTP for premium products (Haghiri, 2019; Steur et al., 2012). One possible explanation is that older consumers may perceive less value in paying extra for regional foods, either due to fixed incomes or different prioritization of product attributes.

Our analysis also shows that women tend to view the consumption of regional food and the support of local businesses as more ethically significant compared to men. This finding resonates with studies demonstrating that women exhibit higher ethical attitudes across various contexts (Chen et al., 2023). It therefore reinforces the notion that women’s ethical considerations consistently shape their food-related behaviors.

Our findings show that the perception of regional food consumption as being more ethical is stronger among individuals currently raising dependent children, compared to those no longer responsible for child-rearing. However, there is a lack of previous direct research addressing this specific hypothesis, so our findings cannot be directly compared with existing studies.

According to our data, respondents aged 18-24 and 65-84 view the preference for regional food and support for local businesses as less ethical compared to other age groups. The academic discourse on this topic offers valuable insights. Previous research conducted in the same geo-

graphic region (the Czech Republic) suggests that older consumers often exhibit stronger ethical considerations in their purchasing decisions compared to younger individuals. For example, a recent study by Zámková (2024) indicates that older consumers are more interested in health and healthy lifestyles, which correlates with a higher willingness to support local and organic food brands. Zámková (2024) suggests that as individuals age, they may develop a heightened ethical perspective on food choices, favoring regional products that align with their values of health and sustainability. However, the research design and study context differ significantly from ours, which accounted for discrepancies in the results. Additionally, Dove et al. (2020) explored the concept of food transparency and its influence on consumer perceptions of quality and safety. Their findings suggest that older consumers prioritize ethical factors such as transparency and local sourcing more than younger consumers, who tend to be more influenced by trends and brand popularity. Our find-

ings therefore partially contradict these studies, suggesting that context and research design may shape the observed relationship between age and ethical perceptions. This discrepancy highlights the importance of cross-comparing cultural and methodological factors in future research.

Finally, we found a weak negative association between willingness to pay more and ethical preferences, suggesting that ethically inclined individuals may be slightly more willing to pay a premium, although other factors likely play a more significant role. This finding complements earlier work. Sun et al. (2022) report that consumers who perceive regional brands positively are likely to exhibit a higher purchase intention, supporting the notion that ethical perceptions can enhance willingness to pay for regional products. By linking ethical perceptions with willingness to pay, our study contributes to a more nuanced understanding of how consumer values translate into actual purchasing behavior.

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## CONCLUSION

The purpose of this study was to explore how demographic and ethical factors influence consumer preferences and purchasing behavior towards regional food. Our results demonstrate that gender, age, and parenthood play distinct roles in shaping both ethical perceptions and willingness to pay for regional products. In particular, women and parents of dependent children assign stronger ethical meaning to regional food, while older consumers show a lower willingness to pay.

From these findings, several conclusions can be drawn. Given that women and parents of dependent children regard regional food consumption as more ethically significant, marketing strategies should be specifically designed to resonate with these consumer demographics and ethical attitudes. Communication efforts can emphasize the ethical and community-supporting aspects of regional food, such as sustainability, local economic benefits, and health advantages for families. Storytelling that highlights the origins of products and the individuals behind them may strengthen emotional connections, particularly among parents who prioritize ethical considerations in their purchasing decisions. Packaging and promotional materials should convey these messages effectively, utilizing labels and certifications that reinforce both ethical and local identity. Furthermore, engaging these audiences through family-oriented campaigns, community events, or partnerships with schools and parenting platforms could enhance brand trust and loyalty, ultimately increasing their willingness to pay a premium for regional products.

Future research should extend these insights by examining additional factors that may bridge the attitude-behavior gap, such as cultural influences, trust in certification systems, or generational differences in value orientations. Longitudinal or cross-country studies could further clarify how stable or context-dependent these patterns are.

## AUTHOR CONTRIBUTIONS

Conceptualization: Jitka Vávrová, Vojtěch Beran.  
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## DECLARATION OF INTEREST

The authors report there are no competing interests to declare.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in Zenodo at <https://doi.org/10.5281/zenodo.13981248>, reference number 13981247.

## NOTE

The access restriction will be lifted upon publication of this paper.

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## APPENDIX A

**Table A1.** Literature review summary

Source: Authors' own research.

Authors and year of publication	Country	Purpose	Research design	Summary points
Zámková et al. (2024)	Czech Republic	To evaluate the recognition and familiarity of Czech consumers with the national organic agri-food brand "bio zebra" This brand is established under the direct control of the Czech Ministry of Agriculture	Quantitative analysis – logistic regression and contingency table	The study highlights the importance of socio-demographic factors in shaping consumer perceptions and awareness of organic food brands, indicating variations in recognition based on demographic characteristics
Tamaki (2024)	Japan	To elucidate the pathways through which empathy, self-identity, and ethical branding influence consumers' decisions to engage in sustainable local food consumption	Quantitative analysis – SEM (PLS)	Strong emotional ties to the community and environment drive sustainable consumption through a sense of social responsibility. Local food consumption is seen as part of consumers' identity, influencing their choices. Ethical branding strengthens trust, loyalty, and the connection between empathy, identity, and sustainable consumption
Im et al. (2023)	South Korea	To create and evaluate a theoretical model for local consumption choices by incorporating moral foundations theory and literature on local-global identity	Quantitative analysis – correlational SEM	Pro-group moral foundations strongly influence consumers' sense of moral obligation toward local consumption, with identity-based motivations predicting local consumption behaviors. Traditional knowledge-based ethical frameworks are insufficient to explain this. The study emphasizes the need to consider both moral intuitions and reasoning in understanding local consumption
Sun et al. (2022)	China	To investigate the factors that influence consumers' purchase intentions for agricultural products associated with regional public brands	Quantitative analysis – SEM, regression analysis	The study found a significant positive relationship between consumer awareness of regional public brands and their purchase intentions for agricultural products. Perceived quality of the agricultural products was also positively correlated with purchase intention. Brand trust was identified as a crucial mediator in the relationship between awareness and purchase intention
Möllers et al. (2022)	Romania	To explore the market potential for products from alternative food networks in the context of a transitioning economy. The research examined consumer preferences and willingness to pay for products perceived as more sustainable and ethical than conventional options	Quantitative approach – multinomial logit model, discrete choice experiment, segmentation analysis	The study emphasizes the importance of food attributes for ethical consumers, with convenience being the main barrier to ethical choices. Romanian consumers prefer non-certified "traditional" vegetables over certified organic products. While the production method matters more than local production, there is a clear preference for traditional over certified organic options
Ishaq et al. (2021)	Italy and Pakistan	To examine the underlying motives driving individuals' organic food purchases and how these motives are moderated by price sensitivity and ethical considerations within a cross-cultural context	Quantitative research design – SEM (the moderated hierarchical regression)	Higher environmental concern and awareness drive sustainable consumption in Italy and Pakistan, with education playing a key role. Italian consumers prioritize sustainability, while in Pakistan, socio-economic factors heavily shape consumption and awareness levels
Sciarelli et al. (2021)	Italy	To examine factors influencing consumer behavior in Italian Solidarity Purchasing Groups, aiming to contribute to the discussion on drivers of ethical food consumption	Quantitative approach – partial least squares structural equation modeling	Consumers' intention to buy and consume food is influenced by their attitude and perceived behavioral control. Consumers' attitudes are affected by their ethical self-identity, willingness to support the local economy, and concerns about food safety

**Table A1 (cont.). Literature review summary**

Authors and year of publication	Country	Purpose	Research design	Summary points
Schoolman (2020)	United States of America	To explore the motivations behind local purchasing behaviors among individuals who may not typically identify as “ethical consumers”	Exploratory qualitative research approach	Consumers primarily buy local to support their community and benefit neighbors. Many local buyers do not fit the traditional «ethical consumer» profile and may not identify with broader ethical movements. Social connections and local identity strongly influence local purchasing decisions. Local purchasing can positively impact communities, even without strict definitions of “local”
Lin (2020)	Taiwan	To explore the intersections between sustainable food practices, ethical consumption, and responsible innovation within the context of the Slow Food and low carbon food movements in Taiwan	Qualitative approach	The study explores sustainability in Taiwan’s food sector, focusing on Slow Food and low carbon food movements. Consumers prioritize health, local economy, and environmental sustainability, with ethical concerns influencing choices. These movements foster community resilience and innovation in sustainable practices through local production and education. However, challenges like low awareness, industrial competition, and weak policy support persist. Collaboration, education, and policy are crucial for advancing sustainable food practices, shaped by Taiwanese cultural and social factors
Ditlevsen et al. (2020)	Denmark	To investigate the values, opinions, and sociodemographic differences that influence consumer preferences for locally produced food, specifically comparing organic and conventional consumers	A mixed-methods design (qualitative and quantitative approach), Fisher’s exact test	Both organic and local-food consumers share similar values, though organic consumers prioritize environmental issues more. Some local-food buyers lack specific motivations. Organic consumers tend to live in the capital and have higher education, while local-food consumers often have vocational education. Despite seeking authentic food, organic and local-food consumers represent distinct consumer types
Bimbo et al. (2021)	Italy	To examine the relationship between consumers’ environmentally sustainable attitudes and behaviors (such as conserving water and energy) and their frequency of purchasing locally sourced food	A quantitative approach, a multivariate ordered logit regression	Environmentally conscious individuals are more likely to buy local food. Age, education, and occupation correlate with purchase frequency, while reading nutrition labels, living in small communities, and buying organic products strongly predict higher local food purchases
Lee et al. (2020)	Taiwan	To evaluate the connection between trust factors and purchasing behavior among consumers in Taiwan’s organic food market	Quantitative research design – confirmatory factor analysis and the structural equation modeling	Health content, locally produced products, organic food labels, and price premiums significantly enhance both utilitarian and hedonic attitudes. Both utilitarian and hedonic attitudes have a strong positive impact on buying behavior. There is a clear link between product attributes and consumer attitudes, which in turn drives purchasing decisions
Bartels et al. (2013)	United Kingdom	To examine how social perceptions and consumers’ identification with those who purchase organic food influence their intentions to buy products that make environmental and ethical claims	Quantitative approach – confirmatory factor analysis	The study shows that positive social perceptions of sustainability boost consumers’ willingness to buy ethical products. Identification with pro-environmental groups increases this tendency, with social perceptions mediating the link between social identity and purchasing behavior

## APPENDIX B

**Table B1.** Summary of tested hypotheses

Hypothesis	Null hypothesis ( $H_0$ )	Test used	Result	Conclusion
<i>H1: Women are more willing to pay extra for a regional food variant than men</i>	No significant difference between women and men	Mann-Whitney U	$p < .001 \rightarrow$ reject $H_0$	Supported – women willing to pay ~18%, men ~13%
<i>H2: People with dependent children are more willing to pay extra than those without</i>	No significant difference between parents vs. non-parents	Mann-Whitney U	$p < .001 \rightarrow$ reject $H_0$	Supported – parents ~17%, non-parents ~14%
<i>H3: Older respondents are less willing to pay than younger respondents</i>	No significant difference across age groups	Kruskal-Wallis	$p = .011 \rightarrow$ reject $H_0$	Supported – older groups less willing, younger more willing
<i>H4: Women perceive regional food brands and local support more ethically than men</i>	No significant difference between men and women	Mann-Whitney U	$p < .001 \rightarrow$ reject $H_0$	Supported – women perceive higher ethical significance
<i>H5: Parents perceive regional food more ethically than non-parents</i>	No significant difference between parents vs. non-parents	Mann-Whitney U	$p < .001 \rightarrow$ reject $H_0$	Supported – parents perceive higher ethical significance
<i>H6: Age is positively associated with ethical perception of regional food</i>	No correlation between age and ethical perception	Spearman's rho / ANOVA	$\rho = -0.019$ , $p = .72$ (corr.), ANOVA $p = .006$	Mixed – correlation not supported, ANOVA shows group differences (25-64 higher ethics)
<i>H7: Stronger ethical perception <math>\rightarrow</math> higher willingness to pay</i>	No correlation between ethics and WTP	Spearman's rho	$\rho = -0.191$ , $p < .001 \rightarrow$ reject $H_0$	Weak negative correlation – not supported