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Segmenting Hungarian Consumers by Domestic Food Preferences Using an Extended TPB Model

Krisztina Taralik[a,b], **Tamás Novák**[a]
Budapest University of Economics and Business[a], Hungarian University of Agriculture and Life Science[b]

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AIM OF THE PAPER
Promoting domestic food consumption is a significant mission from both environmental and economic perspectives. To achieve the effectiveness of targeted marketing strategies promoting domestic food consumption, it is essential to understand domestic customers, identify homogeneous groups, and describe the characteristics of these groups.

METHODOLOGY
For data collection, a quantitative online questionnaire was used to interview 700 respondents representing the Hungarian population over 18. As a cluster-forming criterion, factors of the Theory of Planned Behavior were used, extended with the constructs of Environmental Concern and Collectivism. Demographic patterns were compared among the groups segmented and described based on psychological factors.

MOST IMPORTANT RESULTS
3 segments were distinguished according to how important the respondents considered buying Hungarian food. In the group that considered this more important than the others, there was a higher proportion of females and respondents over 50. There were only trend-like differences in the composition of the segments in terms of type of settlement and region. At the same time, there was a statistically verifiable difference according to settlement types in terms of perceived social pressure, as well as regionally in terms of collectivism and environmental concern.

RECOMMENDATIONS
In those regions where the environmental concern of the respondents was lower, it may be worthwhile conducting a more intensive integrated campaign that targets the cognitive, affective, and conative aspects of environmental concerns at the same time. In more individualistic subcultures, the illumination of individual interests arising from the purchase of domestic food products should be given a greater role, while in more collectivist subcultures, the role of reference groups should be considered more strongly.

Keywords: domestic food purchase, market segments, collectivism, environmental concern, demographic patterns

1. INTRODUCTION

There is increasing criticism in the food industry of the harmful economic, social, environmental, and cultural impacts of the global food systems (Soria-Lopez et al. 2023). There is also a growing demand from consumers for health-conscious, safe, and preservative-free foods, as well as traditional flavors, which has brought with it a preference for quality, uniqueness, naturalness, and appreciation of local and seasonal products. (Gonda et al. 2021). Short food-supply chains (SFSCs) involve minimizing the intermediary steps between producer and consumer, based on their geographical and social proximity (Pinto et al. 2025). SFSCs allow for increased traceability and supply fresh and seasonal products.

In a previous study (Taralik et al. 2025) based on the model of Theory of Planned Behavior (TPB), it was examined which factors and to what extent predict the intention and consumption of domestic food in Hungary, but the sample was treated in an aggregate manner – it did not identify homogenous groups within the sample and did not consider the demographic parameters of the respondents. Building on previous results, the present study focuses on identifying homogeneous groups in the sample based on the factors of the extended TPB model and it also examines the demographic patterns of the segments. Accordingly, the research questions of this study regarding Hungarian consumers' intention to purchase domestic food products are as follows:

RQ1. Can we identify homogeneous groups among respondents?

RQ2. What statistically verifiable differences are there among the segments?

The relevance of this research is partly rooted in Hungary's favorable agricultural conditions stemming from the country's advantageous topography and climate (Fehér 2019). Both international and national statistics further support this statement. According to data from Eurostat (2023) and the Hungarian Central Statistical Office (KSH Stadat 2024), the gross added value of Hungarian agriculture remains significant compared to other EU member states.

Beyond Hungary's favorable production conditions, the importance of this research is further underscored by previous domestic studies (Balsa-Budai & Szakály 2023; Bauerné Gáthy & Szűcs 2019), which indicate that sustainable food consumption is only weakly associated with the purchase of local food in the minds of consumers in Hungary. Therefore, more effective communication and increased consumer awareness are needed in this area. This study aims to facilitate this process by uncovering information tailored to specific consumer segments.

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1. Factors influencing behavior

A social psychological model often used to predict human behavior is Ajzen's (1991) *Theory of Planned Behavior* (TPB) model. This model intends to predict and explain the occurrence of a given behavior in a given context. According to TPB, human behavior is guided by three considerations: a) behavioral beliefs about the likely consequences and experiences associated with the behavior – which produce a favorable or unfavorable *attitude* toward the behavior; b) normative beliefs about the expectations and behaviors of significant others – which result in *perceived social pressure* or so called *subjective norm*; c) control beliefs about the presence of factors that may facilitate or impede performance of the behavior – which give rise to *perceived behavioral control* or self-efficacy (Ajzen 1991).

The predictive validity of the Theory of Planned Behavior (TPB) model has been supported by numerous studies across various scientific disciplines, including medicine, psychology, and consumer behavior. Accordingly, the factors influencing domestic food purchase preferences in this study were structured applying the TPB framework. Several scholars – including Al Mamun et al. (2018); Kumar (2021); Minton & Rose (1997); Ru et al. (2018) – have tested and confirmed the model's predictive power in relation to various forms of sustainable consumer behavior, making their findings a valuable reference for developing the measurement items in this research. In addition to the original components of the TPB model, further factors were incorporated into the analysis based on insights gained from the theoretical literature.

2.1.1. Environmental concern

Environmental concern can be interpreted as a combination of three dimensions: the *cognitive component* refers to the level of people's knowledge of environmental issues and their belief that environmental degradation is caused by human activity; the *affective component* includes the emotional reaction, i.e., concern about the threatening consequences of the destruction of the environment; and the *conative component* refers both to the efforts undertaken to address these problems and to the extent of one's contribution to their solution (Dunlap & Jones 2002).

Based on these, environmental concern as a segment-forming criterion in connection with the preference for domestic foods was considered important. The questionnaire included 5 items

related to EC (Table 2.) and contained statements in all three of its dimensions (cognitive, affective, and conative).

2.1.2. Collectivism - Individualism

The individualist/collectivist dimension examines the extent to which society maintains interdependence among its members. Individualism values personal independence, while Collectivism values personal interdependence (Hofstede Insights 2023). Highly collectivist individuals place greater emphasis on collective goals than on individual achievements, which has led to increased scholarly interest in the role of collectivism in shaping sustainable personal practices (Kirmani et al. 2023). The literature examines the relationship between individualism/collectivism and environmentally friendly behavior from several approaches. In the cross-cultural study of Liobikienė et al. (2016) conducted in 28 member states of the European Union, the high level of individualism had a negative impact on knowledge of green products and subjective norms. A study by Saracevic et al. (2022) supported the effect of normative appeals on environmentally friendly behavioral intentions only in collectivist cultures. A study by Kaplan Mintz et al. (2019) examined the motivations of environmentally friendly behavior in collectivist and individualist societies. These studies demonstrate the motivation for "good" actions comes from the subjective norm (perceived social pressure) in collectivist cultures, and from inner attitude in individualist cultures.

Based on this, consumer segmentation of Hungarian food buyers, which includes collectivism as one of the dimensions, can provide green marketers with valuable insights into how to tailor their messages more effectively in line with the cultural characteristics of the target market.

Based on the first research goal (RQ1) and the theoretical literature describing factors influencing pro-environmental behavior, the first hypothesis was formulated as follows:

H1. Applying the factors used to measure the willingness to engage in pro-environmental behavior, it is possible to identify homogeneous groups within the sample.

2.2. Personal characteristics

Personal characteristics, as well as cultural, social, and psychological factors influence how consumers process stimuli. These factors form elements of the buyer's black box in the Stimuli-Response (S-R) model of consumer behavior (Rani 2014). The demographic and geographic characteristics of customers are widely used in market segmentation (Hofmeister-Tóth et al. 2013), since the relevant characteristics can be easily measured and collected.

While processing the characteristics of the respondents, the study aimed to separately examine whether there is a difference in sustainable food consumption across the various types of settlements and regions of Hungary. The regional analysis was considered relevant primarily due to differences in purchasing power (GfK 2024), while the importance of examining settlement types lies in variations in the directness of human relations—which may affect the perception of social pressure (SN), a clustering factor in this study—as well as in the availability of cultivation and production opportunities (e.g., gardens, agricultural areas).

In relation to local food consumption, it is worth mentioning the concept of ethnocentrism. Ethnocentric consumers do not consider it right to buy products from abroad because, in their opinion, this negatively affects the performance of the domestic economy and increases the level of unemployment (Halasi & Nábrádi 2024). According to a study by Mucha et al. (2020), settlement type has a significant impact on ethnocentrism, in that ethnocentrism is most prevalent in villages, which also confirms the relevance of our examining the consumption of local products in comparison by settlement type.

Based on the second research goal (RQ2) and the importance of personal and regional characteristics in the identification of target groups, the second and third hypotheses were formulated as follows:

H2. The segments differ not only in terms of the factors used for group formation but also show statistically verifiable differences based on personal characteristics.

H3. Differences are expected in the composition of the segments across different settlement types and regions.

3. RESEARCH METHODOLOGY

3.1. Data collection and sample composition

The target group of the study comprises Hungarian residents aged 18 and above, who do their own grocery shopping for themselves and/or their family. To ensure the representativeness of the target population, the respondents were selected using non-probability quota sampling. To compile the quotas, statistics from the Hungarian Central Statistical Office (KSH Stadat 2023) were used.

The composition of the sample of 700 respondents corresponds to that of the Hungarian population in terms of gender, age groups, regions, settlement types (capital city, large city, medium-sized city, small town, village), and educational level.

The questionnaire was distributed between November 13 and 20 2023, among the panel members of a Hungarian market research company (SEDO Research). During this period, data-cleaned questionnaires (filtering out respondents who filled the questionnaire incompletely and those who marked the same answer for all items) with a composition and number corresponding to the quotas (shown in Table 1.) were collected.

Table 1. Quotas for the sample of 700 respondents

Gender	Quota	Age group	Quota
Female	363	18–29 years old	136
Male	337	30–49 years old	240
		50–64 years old	156
		65+	168
Region	**Quota**	**Type of settlement**	**Quota**
Pest	97	Capital	121
Budapest	121	Big city (over 100 thousand)	145
Southern Great Plains	88	Middle town (20–100 thousand)	145
South Transdanubia	63	Small town (5–20 thousand)	144
Northern Hungary	80	Village (under 5 thousand)	145
Central Transdanubia	77		
Western Transdanubia	72		
Northern Great Plain	102		
Education level			**Quota**
Higher education qualification (BA and MA)			205
Higher education vocational training / technician and graduation			404
No high school diploma obtained			91

Source: Taralik et al. (2025) based on KSH Stadat (2023)

3.3. Measurement

To ensure that the sampling has a composition suitable for the research objective and the quota, the questionnaire began with filter questions about whether the respondent usually purchases food themselves (or whether someone else, e.g., a family member, does the grocery shopping), and only then came questions about the parameters defined in the quota (Table 1.).

In accordance with the aim of the study – to gain insight into how marketers can effectively promote the consumption of domestic food in Hungary – we first collected the factors influencing the planned behavior of customers by analyzing the theoretical background. Drawing on the results, we compiled the second block of the questionnaire, which contained items that, on the one hand, were based on Ajzen's Theory of Planned Behavior model, and on the other hand, were based on studies that experimented with the extension of the model and further developed it, which we assumed would influence the buyer's decisions. (Table 2.) These items were measured on a 7-point Likert scale.

Table 2. The latent variables used to explore customer behavior

Constructs	Number of Items	Source of Items
Latent variables of the original TPB model (codes are highlighted in bold in the name)		
Actual **B**ehavior	2	elaborated by the authors
Attitude	5	adapted from Al Mamun et al. (2018) and Ru et al. (2018)
Perceived **B**ehavioral **C**ontrol	2	adapted from Ru et al. (2018)
Subjective **N**orms	3	adapted from Kumar (2021); and Minton & Rose (1997).
Behavioral **I**ntention	3	adapted from Ru et al. (2018)
Latent variables of the extended TPB model (codes are highlighted in bold in the name)		
Environmental **C**oncern	5	adapted from Konuk (2019)
Collectivism	3	adapted from Kirmani et al. (2023)
Sum	23	

Source: (Taraliket al.. 2025)

3.3. Data analysis

The SPSS 29.0 program package was used to analyze the data. Due to the non-normal distributions of the dependent variables, in addition to the descriptive statistics, non-parametric tests were performed to examine the relationships among independent samples: Chi-square test for the variables measured on a nominal scale, and Kruskal–Wallis test for the variables measured on the Likert scale.

The segmentation was carried out using cluster analysis. Before cluster analysis, principal component analysis was performed to eliminate the distorting effect of correlations among items, and cluster analysis was performed based on factor scores. For clustering, a hierarchical cluster analysis was first performed for exploratory purposes using the squared Euclidean distance method and Ward linkage. The desired number of groups were determined based on the dendrogram of the hierarchical cluster method, and consequently, the 3-cluster solution seemed to be the most suitable one. Accordingly, the respondents were sorted into 3 homogeneous groups using K-means cluster analysis.

4. RESULTS

4.1. Data reduction

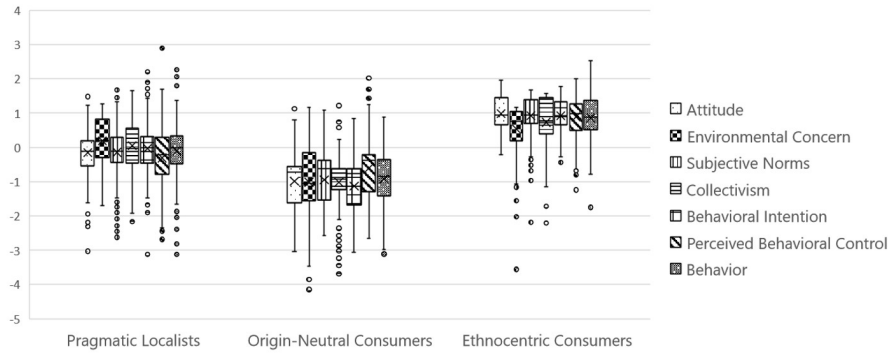
The items were sorted into components corresponding to the latent variables using principal component analysis (PCA), so that we can use them to carry out our further investigations. For PCA we checked the adequacy of the sample with the Kaiser–Meyer–Olkin test (.953) and the Bartlett's sphericity test (<.001), and the components were rotated using the Promax with Kaiser Normalization method, as a result of which we arrived at 7 components identical to the 7 latent variables (summarized earlier in Table 1.), which retained 85.18% of the explanatory power of the 23 items.

4.2. Segmentation with cluster analysis

An exploratory hierarchical cluster analysis was performed, as a result of which 3 groups were clearly separated. In the second round, a K-means cluster analysis was performed by saving the 3-cluster grouping. The distribution of the 700-person sample across the 3 clusters was relatively balanced, with 301, 176, and 223 people (43, 25, and 32% of the sample, respectively).

The boxplots of the 7 factors in relation to the factor centres developed quite uniformly within each cluster. In the case of one segment, the centre of all factors was scattered around the sample mean, while in the case of the other two segments, the centre of all factors was above the sample mean in one and below the sample mean in the other. (Figure 1.) The boxplots within the clusters revealed a consistent pattern, indicating that for the members of the three clusters, domestic origin was considered important, moderately important, or less important. To capture this three-level distinction in the importance of domestic origin and to align the cluster labels with internationally used terminology, we developed meaningful marketing-type names for the groups, identifying the segments as Ethnocentric Consumers, Pragmatic Localists, and Origin-Neutral Consumers.

Figure 1. Boxplot diagram of domestic food preference factors



Source: Authors' own work

Hypothesis 1, which states that homogeneous groups can be distinguished based on the factors used to measure willingness to engage in pro-environmental behavior, was confirmed.

4.3. Comparison of clusters

To compare the clusters' demographic (gender, family status, age group, educational level, settlement type, income level, county, NUTS2 region, and NUTS1 region) composition, chi-square test was used. In addition to demographic characteristics, the clusters were also compared from the point of view of whether there is a difference in the place of purchase of fruit and vegetables and meat products. The chi-square tests showed a significant difference among the clusters in terms of gender and age groups, as well as in the place of purchase of meat products. (Table 3.)

Table 3. Composition of K-means clusters based on gender, age groups, and place of purchase of meat, vegetables and fruits

	Pragmatic Localists	Origin-Neutral Consumers	Ethnocentric Consumers	Total
Gender (p value of Cramer's V = 0.004)				
Female	168 (46.3%)	78 (21.5%)	117 (32.2%)	363 (100%)
Male	133 (39.5%)	98 (29.0%)	106 (31.5%)	337 (100%)
Total	301 (43.0%)	176 (25.1%)	223 (31.9%)	700 (100%)
Age group (p value of Cramer's V = 0.003)				
18–29	69 (50.7%)	36 (26.5%)	31 (22.8%)	136 (100%)
30–49	106 (44.2%)	68 (28.3%)	66 (27.5%)	240 (100%)
50–64	71 (45.5%)	30 (19.2%)	55 (35.3%)	156 (100%)
over 65	55 (32.7%)	42 (25.0%)	71 (42.3%)	168 (100%)
Total	301 (43.0%)	176 (25.1%)	223 (31.9%)	700 (100%)
Where do you most often buy meat? (p value of Cramer's V = 0.013)				
In hyper/supermarket	198 (43.7%)	126 (27.8%)	129 (28.5%)	453 (100%)
Meat and butcher shop	95 (42.2%)	44 (19.6%)	86 (38.2%)	225 (100%)
Total	293(43.2%)	170 (25.1%)	215 (31.7%)	678 (100%)
Where do you most often buy fruit and vegetables? (p value of Cramer's V = 0.198)				
In hyper/supermarket	217 (44.9%)	123 (25.5%)	143 (29.6%)	483 (100%)
In greengrocery or on the market	83 (39.0%)	53 (24.9%)	77 (36.2%)	213 (100%)
Total	300 (43.1%)	176 (25.3%)	220 (31.6%)	696 (100%)

Source: Authors' own work

The distribution of genders shows that in the cluster of Origin-Neutral Consumers, there are more males compared to the sample, while females are more represented in the other two segments. Regarding the distribution of age groups, people over 50 years of age (50–64 and over 65) were included in a higher proportion among those who consider it more important than average to buy domestic products. Comparing the 3 segments in terms of where to buy meat, the proportion of those who prefer to buy in meat and butcher shops is the highest among the members of the Ethnocentric Consumers group, while the proportion of those who prefer to buy in hypermarkets/supermarkets is the highest among the members of the Origin-Neutral Consumers group. Although not statistically proven, a similar distribution of proportions is observed in the locations where fruit and vegetables are purchased across the three segments, indicating a trend. (Fourth section of Table 4.)

Based on this, *Hypothesis 2*, which posits that the segments differ not only in terms of the factors used for group formation but also in terms of personal characteristics that can be statistically verified, was confirmed. On the other hand, *Hypothesis 3*, which states that differences are expected in the

composition of the segments according to settlement types and regions, was *not confirmed*.

Although the composition of the clusters did not differ in a statistically verifiable way according to settlement types and regionality, we continued our investigations in the direction of cluster-forming characteristics. After the results for the normality test of the predictors (which are dependent variables in this context), the use of non-parametric tests was decided upon. The Kruskal–Wallis test was used to check for verifiable differences in terms of settlement types and regions. According to settlement types, only the subjective norm (SN) showed a verifiable deviation of 0.05%. In contrast, there were verifiable differences in the ecological concern (EC) and Collectivism (C) components at the level of 0.04 and 0.002%, respectively across regions. Table 4. shows the mean ranks of components that showed significant differences based on settlement types and regions.

Table 4. Mean ranks of significant Kruskal–Wallis tests of the components according to settlement types and NUT1 regions

Component		N	Mean Rank
Settlement type			
SN	Capital	121	313.61
	Big city (over 100 thousand)	145	357.64
	Middle town (20–100 thousand)	145	359.67
	Small town (5–20 thousand)	144	335.71
	Village (under 5 thousand)	145	384.85
	Total	700	
NUT1 Region			
EC	Central Hungary	218	325.55
	Transdanubia	212	351.95
	Plain and North	270	372.29
C	Central Hungary	218	315.31
	Transdanubia	212	352.29
	Plain and North	270	380.36
	Total	700	

Source: Authors' own work

The mean rank of the subjective norm is the highest in the villages, whereas in the capital, where more impersonal relationships and societal diversity are more common, the mean Rank of the SN component is the lowest.

Examining the statistically proven regional difference in the case of the EC and C components, the mean ranks are the highest in both components in the case of the Plain and North region, and lowest in Central Hungary, which means that for residents of the Plain and North region, environmental concerns and collectivism are significantly more important compared to the residents in central Hungary.

5. DISCUSSION

The sample, which represents the Hungarian population in terms of several characteristics, was divided into 3 segments based on the 7 components (shown in Table 2.). Based on the components pattern, the labels of "Ethnocentric Consumers, Pragmatic Localists, and Origin-Neutral Consumer" were formulated. The composition of the three segments differed in terms of gender, age group, and place of purchase of meat products in a statistically verifiable manner.

According to these results, it is more important for females and the age group over 50 to buy domestic food, while among males and the 30–49 age group, it may be worth promoting its importance. The greater importance placed by older respondents

on purchasing food of Hungarian origin is consistent with the study by Maró et al. (2023), which found that the level of ethnocentrism is significantly higher among respondents over 60 years of age. Consumer ethnocentrism plays an important role in the choice between local and global (non-local) products (Maró et al. 2023) and is increasingly playing a role in marketing strategies aimed at protecting domestic products (Szakály et al. 2016).

A higher proportion of customers who prefer buying food in specialty stores belongs to the "Ethnocentric Consumers" segment. This result is consistent with the more direct producer-consumer relationships characteristic of short food supply chains, which are based on geographical and social proximity (Pinto et al. 2025).

Although there was no statistically proven difference in the composition of the segments by settlement types and regions, considering the results of domestic research on domestic food consumption, we considered it important to conduct further analysis based on geographical characteristics. According to settlement types, a statistically verifiable difference was observed in the Subjective Norm. This concept refers to the social pressure an individual perceives as influencing their behaviour in a certain way. According to Liobikienė et al. (2016), in all EU countries, SN has the greatest influence on green purchase behavior. Given the smaller community, more direct relationships with friends and acquaintances, and the stronger presence of respect for traditions, it is not surprising that results show a verified difference between those living in the villages and those living in the capital.

In the comparison of the NUTS1 regions, a significant difference was found between Central Hungary and the Plain and the North for the environmental concern and collectivism components. According to a study by Kirmani et al. (2023), environmental concern is a precursor to consumer attitudes toward green products, and the antecedents of environmental concern include collectivism and eco-knowledge. The analogous mean-rank patterns observed across the NUTS1 regions for environmental concern and collectivism are consistent with this finding; however, they were only associated with trend-like (statistically non-significant) differences in attitudes. Our findings indicate that more intensive communication efforts are required in the Central Hungarian region compared to other regions. Given the lower level of collectivism in these areas, communication strategies may benefit from emphasizing the freshness, health benefits, and reliability of Hungarian food products, as well as their traceability, lower environmental impact, support for local businesses, and product authenticity, thereby reinforcing individual convictions and intrinsic motivation.

5.1. Implication

The identification of more homogeneous groups and segments in a heterogeneous market is the basis for developing a targeted marketing strategy, and targeted market influence is a prerequisite for efficiency. Since the preference for domestic foods over foods transported from longer distances is both an environmental and an economic interest, it is important to get to know the characteristics of the target groups and to understand what factors have a significant impact on their decisions. Consumer groups that assign differing levels of importance to the purchase of domestic food products require communication strategies that vary both in content and in intensity.When formulating messages promoting the consumption of domestic food, in addition to demographic characteristics, the cultural, social, and psychological characteristics of the target group must be considered, such as perceived social pressure, collectivism, and environmental concern.

The general rule of the TPB model is that the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger the person's urge to perform the behavior in question (Ajzen 1991). Among the factors of the TPB model, subjective norms represent social influence pressuring individuals to perform specific behaviors that important social groups dictate (Nguyen & Nguyen 2024), reflecting an individual's perception of how important others evaluate their behavior (Krueger et al. 2000). The direct effect of the subjective norms on green behavior has been proven by several studies. Van Tonder et al. (2023) found that subjective norms influence both green attitudes and green customer citizenship behaviors contributing to the largest portion of the variance in green customer citizenship behaviors. According to Mahmud & Osman's study (2010), SN was an important predictor of recycling intention behavior. Consequently, where the role of the SN is stronger, the influence of the reference groups should also be given a greater role in the strategy.

As previously mentioned, environmental concerns are the combination of cognitive, affective, and conative components, and contribute to the spread of various forms of environmentally friendly behavior (Bouman et al. 2020). In those regions where the environmental concern of the respondents was lower, it may be worthwhile conducting a more intensive integrated campaign that targets the cognitive, affective, and conative aspects of EC at the same time.

Based on the literature, green purchasing in individualistic cultures is primarily the result of internal motivation, while in collectivist cultures, the role of perceived social pressure is more significant. In other words, in more individualistic cultures, the illumination of individual interests arising from the purchase of domestic food products should be given a greater role (e.g., on various aspects of health preservation), while in more collectivist cultures, the role of reference groups should be considered more strongly.

5.2. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

In addition to its valuable findings, this study also has several noteworthy limitations. The first limitation is that the cross-sectional design of the study restricts its ability to capture the dynamic nature of consumer behavioral intention towards domestic food purchases. Longitudinal research would be valuable for tracking changing ethnocentric behavior over time. Second, using self-reported perceptions to assess domestic food preferences may introduce subjective bias, potentially leading to either overestimation or underestimation of sustainability priorities. Complementing survey-based data with objective indicators – such as sales data analysis or observational studies – would increase the reliability of future analyses. Third, in addition to the advantage that the study examined the willingness to purchase domestic food products on a representative sample, it did not extend to examining the deeper subcultural characteristics of different regions and settlement types, which would encourage the search for explanations for the differences found between settlement types and regions. Fourth, the distribution of settlement types by NUTS1 region was not uniform in the sample; therefore, the study does not reveal whether the difference in the subjective norm for settlement types also appears in the regions of the country. To gain a deeper understanding of the segments, it would be worthwhile to incorporate these factors into further studies. Addressing these limitations can provide more comprehensive, accurate, and context-sensitive insights for developing effective strategies to support local food consumption.

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