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Eliciting University Students' Attitudes towards Farmers' Markets: The Hungarian Case

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Abstract: Short food supply chains are increasingly investigated areas of international studies. One of its defining sales channels is the farmers' market, the number of which has grown substantially in Hungary in recent years. Many studies analyze the consumers of farmers' markets worldwide, but only a few examine the relationship of university students with farmers' markets. Although university students are not typical customers of farmers' markets, it is essential to investigate their habits since they are the consumers of the future. Based on a questionnaire survey among Hungarian university students (n = 262), the price, convenience, selection, and quality aspects of the products dominate. We also identified clusters based on food purchasing criteria: (1) price-sensitive consumers, (2) health-conscious consumers, and (3) brand-loyal consumers. The main obstacle for non-regular buyers is the distance from farmers' markets, which can be solved by organizing farmers' markets on university campuses. 95% of the sample is open to this, so it would be worthwhile to conduct independent research for each university and put the positive results into practice.

Keywords: short food supply chains; farmers' markets; university students; two-step cluster analysis; Hungary

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1. Introduction

As a result of the food scandals at the end of the 20th century and at the beginning of the 21st century, as well as the increase in information asymmetry between producers and consumers, the importance of short supply chains (SFSCs) is increasing nowadays [1–4]. In the modern agri-food sector, the spread of SFSCs is often considered one of the solutions for sustainability. The case of SFSCs and local foods is receiving more and more attention and concerns consumers, non-governmental organizations (NGOs), producer advocacy, and decision-makers at various levels [5]. SFSCs also try to provide solutions to social, economic, and environmental sustainability challenges. SFSCs can offer a solution to low farm incomes, strengthening the relationships between producers and consumers or reducing food waste [6,7]. However, the desired positive effect cannot be scientifically proven in many cases. It may even happen that the traditional food industry offers a much more sustainable method [8]. Educational institutions, especially universities, are placing more and more emphasis on sustainability issues. University students are the generations of the future; their consumption and purchasing habits will have a substantial impact on the future of the universe, so they must acquire a way of thinking that already includes concepts related to sustainability [9,10].

The most common form of the short supply chain in Hungary is farmers' markets (FMs). Many studies examine the consumers of FMs, but only a few focus on university students and their preferences or shopping habits. At the same time, many studies examine university students in the United States, and more and more university campuses regularly organize FMs. Currently, to the best of our knowledge, no study in Hungary and only a few

European studies examine the relationship of university students with FM. The consumer habits of young people are already having an impact on the state of our environment, which will increase even more in the future; therefore, it is important to investigate what consumer characteristics the youth have and how their behavior can be moved in a more environmentally conscious and sustainable direction.

To meet the abovementioned expectations, our study is structured according to the following steps. First, the main technical literature concerning FMs, and university students will be reviewed; then, with the help of an online questionnaire, we will present the food purchasing habits of university students studying in Hungary and their relationship with FMs. Our main research question is the following: is there a demand for FMs on university campuses in Hungary, as there are already many examples in the USA? After presenting the results, we formulate proposals regarding what strategy producers (mainly in the FMs) should pursue to attract the young (white-collar) generation.

2. Literature Review

2.1. Determinants of Farmers' Markets

Each country defines the concept of FMs and their regulations differently. There may be differences in terms of regulations between different countries and even within a country. Sometimes the type of vendors (e.g., only producers are allowed to sell) or the distance is regulated (e.g., only producers belonging to a specific region can sell in each market), and it also happens that no rules are stated. However, many FMs specify the terms of the vendors and products sold at the market [11].

Selling on the FM was the forerunner of today's short food supply chains. For a long time, the markets served as a link between the cities and the countryside. Their role decreased with industrialization, urbanization, technical development, and due to the improvements in long-distance transport [12]; however, in recent times, they have been playing an increasingly important role again. Research conducted in the USA has concluded that it is often difficult to distinguish specific markets and keep track of FMs since not all markets called FMs function as FMs. There are also organizations and forms that fulfill the function and condition of the FM. In the past, farmers' and resellers' markets were mixed. Still, as more and more importance was attributed to the function and separation of FMs, the participation of the resellers began to be regulated, and various restrictions were introduced [13,14].

According to another definition, an FM is a common facility or area where multiple producers gather regularly to sell fresh fruits, vegetables, and other farm products directly to consumers [15]. A study in Australia separated new-generation FMs from mixed markets. Only agricultural products and processed foods are sold directly to customers in the new-generation markets. These markets are in a prominent, public location and operate regularly. On the other hand, other products can be sold in mixed markets besides these foods [16].

Overall, based on the definitions, FMs are markets regularly held in a public area (institution or open space) where producers directly sell their locally (regionally) produced agricultural products to consumers.

2.2. Farmers' Markets in Hungary

In Hungary, the FMs are the most widespread and important channel for SFSCs [17–19]. The conditions and regulations of their operation are determined by legislation.

Act CLXIV of 2005 on Trade contains the concept of the local FM: local FM means a market where the small-scale producers sell their agricultural or food products originating in the county where the market is located or within a distance of 40 km from the market or, in the case of a market in Budapest (the capital of Hungary), the small-scale producers sell products originating from their farm located anywhere in Hungary [20].

According to the Hungarian Chamber of Agriculture (HCA) database, there will be 288 active FMs in Hungary in 2022. Based on Figure 1, the largest number of FMs are located in the capital and the Southern part of the country (36–34 registered markets, respectively).

The dominance of the capital (with the highest level of purchasing power in the country) can be explained by the exception provided by the regulation (farmers from all around the country can sell their products here). At the same time, the other region is traditionally famous for fresh fruit and vegetable production.

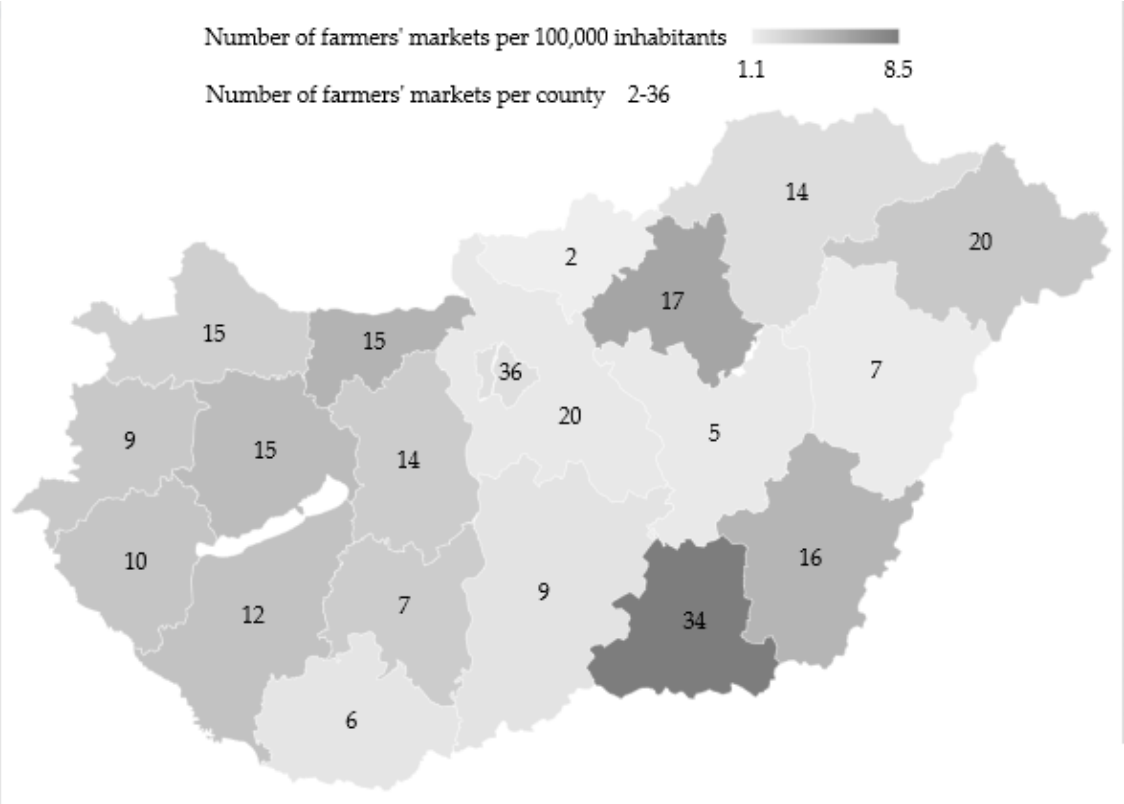

Figure 1. The number of farmers' markets per county and the number of farmers' markets per 100,000 inhabitants by county in Hungary. On the map, the colors indicate the farmers' markets per 100,000 inhabitants per county, and the numbers indicate the number of farmers' markets per county.

Figure 1 also provides information on the density of FMs per 100,000 people in every county. In this regard, the South-Eastern part of the country is still dominating, together with locally important regions (e.g., the highlands of lake Balaton, an important touristic destination with a high number of seasonal FMs) [21].

There have been examples of mobilizing the FM in Hungary. For example, the Mobile Market Program is still operating, within the framework of which FMs are organized in office buildings to provide producers with a market opportunity and help consumers to make conscious food purchases. The focus is mainly on Budapest, but successful moving markets have also been organized in the countryside [22].

2.3. General Characteristics of Farmers' Market Consumers

The typical FM consumer is a higher-educated, upper-middle-class woman over 40 years [23–26], but there are differences in some cases. The phenomenon that women prefer to visit FMs does not necessarily mean that men choose other alternatives for shopping but indicates that men prefer to leave grocery shopping to women [27]. In Kenya, for example, a survey of almost 1000 people showed that men were the majority (68%) [28].

We can also see differences in terms of age. Based on international studies, middle-aged people are the typical customers of FMs. The North American and European studies measured an average age of between 40 and 45 years [23,24,26], and in the case of Hungary, the average is around 45 years [29]. In contrast, the average age at an FM in Illinois was 34 years [30].

Consumers interested in short-supply chains are more educated than average [31–34]. Typically, people with higher education consider it important to buy local food [35–37]. Of course, we can find some exceptions, as there are studies where no clear correlation was found between consumers' purchasing behavior at the FM and their level of education [4,38].

The income situation of consumers is also a prominent factor in determining the general characteristics. In general, the willingness to answer is the lowest for questions about income, but it is still a frequently investigated factor. Most studies identified the upper-middle class as typical FM consumers [23,29,33,39–41].

Overall, although a typical customer pattern emerges in terms of consumers visiting FMs, there are also differences and unique characteristics, even within a country, not only between countries. Based on these, university students cannot be considered typical customers of FMs; however, they have at least one characteristic of typical customers: they also (will) have a higher education level.

2.4. Segmenting the Consumers of Farmers' Markets

Typically, factor *and* cluster analyses are used in many studies examining the consumers of FMs to divide the consumers into well-defined groups based on some aspect [32,33,42–44]. One popular aspect is motivation, where several reasons were identified, such as instrumentalist, collective, social or cultural [44]. Others claimed the most important motivation-based FM consumer segments as committed loyals, experiencers, and produce-oriented [43], or Lifestylers, Seasonal shoppers, and Utilitarians. [33].

According to their purchasing behavior, FM visitors can be identified as Market Enthusiasts, Recreational Shoppers, Serious Shoppers, Low-involved Shoppers, and Basic Shoppers [32].

According to the consumers' engagement, they can be classified as conventional and conscious. The first group of consumers considers great importance to the location, the quality and freshness of the products, the activities in and around the market, and the availability and variety of products. In contrast, conscious consumers are more sensitive to food safety and are the majority of FM visitors [37].

Young people and university students were only mentioned in a few clusters [43,44], as they are not typical customers of FMs.

2.5. Food Buying and Consumption Habits of Students

Many studies examine the consumption habits of university students. Typically, students start to make independent decisions about their food purchasing during their university years. Some students live at home and are still greatly influenced by their parents' consumption habits, and there are those who move away and develop their own food-shopping behaviors (they are influenced more by their contemporaries) [45,46]. Students living away from home generally experience negative changes in their food-purchasing attitudes. The main reasons are the consumption of alcohol and other harmful practices, frequent fast food meals, and lack of cooking [45,47]. Other obstacles to healthy eating are time constraints, stress, and high food prices [48].

Regarding the regularity and location of shopping, university students usually shop several times a week. In terms of location, they prefer the supermarket much more [49–52] than other grocery shopping locations. Food stores are chosen based on the following criteria: price level, convenience (proximity to the shopping location and short shopping time), food selection, and quality [45,50,51,53]. Young people are looking for the best quality in relation to their income, and brand loyalty is not important when purchasing food [49,51]. The price of products is also a priority for university students; several surveys have confirmed that they are willing to pay a slightly higher price for local and sustainable food [54,55].

Regarding sustainability, university students strongly feel the need to change consumer habits. Students' attitudes towards sustainability are positive, regardless of the depth of their knowledge. Sustainability is mainly identified with environmental aspects

and actions. Concerning lifestyle changes, university students think of changes that do not require great sacrifices [56]. Regarding food consumption, a segment of young consumers prefers products from local, sustainable, and family farms to impact the local community [57].

Annunziata and Vecchio [58] classified students into 3 clusters in terms of sustainability: (1) the responsible food consumer cluster, (2) the inattentive food consumer cluster, and (3) the potentially sustainable food consumer cluster. The main characteristics of the responsible food consumer cluster are that they are well-informed about sustainability issues, pay attention to the social and environmental impact when purchasing food, and often buy local food. In contrast, inattentive food consumers do not consume sustainable food, are not interested in the impact of food consumption on society and the environment and are less informed about sustainability. The potentially sustainable food consumer cluster includes those aware of sustainability problems but believes it is difficult to find sustainable food [58].

2.6. Farmers' Markets on the University Campus

Education for agricultural sustainability can be part of the sustainability strategy of universities, although, nowadays, it only has a prominent role in the USA. The research was conducted in the USA on sustainability projects at 21 universities, of which six universities had an FM [59]. In the USA, universities are strategic locations for FMs, which have many positive features: ensuring access to fresh and healthy food, appreciation and evaluation of local agriculture; elimination of social and health inequalities; ecological integrity; and sustainable development in general [59,60].

Table 1 shows the most important characteristics and summarizes the similarities and differences between the two selected university FMs. Both universities conducted an a priori survey among students to highlight their attitudes concerning FMs. At the Southeastern Louisiana University (SLU), they found that 82% of respondents would regularly visit the market, and 83% would be willing to pay a higher price for local products. At Appalachian State University (ASU), most students (68%) heard about the market through word of mouth, and bakery products were the most popular overall. The two most common motivations were convenience (54%) and the intention to support local producers (44%).

Table 1. Comparison of the farmers' markets of two universities in the USA.

Aspects	SLU	ASU
Creators	a small group of students	students from the area of public health
Presence of organization	yes (Real Food Challenge)	no
Students' interest	high	
Goal	improving the food environment of the university, providing access to locally produced food	
Specific goal	selling local food at the university buffet	establishing a regular farmers' market
Result	farmers' market held 4 times per year	farmers' market held several times (13) a year with 8–9 local farmers
Expanding students' knowledge	yes	
Market location	outdoors in a busy university area	outdoors in the university car park
Market time	10 a.m. to 2 p.m.	forenoon

Source: Ward, Blackley [60] and Burley, Coker [55].

Both movements achieved important changes. Although the original goal (selling local food in the cafeteria) was not achieved at SLU, an FM was created. Overall, students at both universities learned about the importance of FMs [55,60].

3. Materials and Methods

3.1. The Process of Research

The research took place between January and March 2022 among Hungarian university students. The questionnaire was completed with the online software Qualtrics and could have been filled out on a computer or mobile device. The sampling procedure was based on a snowball approach involving various Facebook groups of university students of different fields of study. The questionnaire was compiled based on previous surveys examining FMs in the USA, the Netherlands, and Hungary [26,61,62].

The survey consisted of five blocks. In the first block, the students' general food purchasing attributes were examined, including questions on the frequency, location, and the most important factors affecting their food purchasing decisions. Before the second block, a clear explanation of the definition of the farmers' market was provided. Then, information on the students' attitudes towards FMs was collected, including market attributes that might influence their FM shopping. In the third block, we asked the respondents to compare FM attributes with supermarkets (the most important shopping place of consumers in Hungary), and then the fourth block collected data on the idea of organizing FM on a university campus. Finally, the fifth block gathered the most important socio-economic information of the students. In the survey, the quality attributes were measured on a five-point Likert scale.

The survey was filled by 382 people, of which 262 responses could be evaluated from the completed questionnaires after data cleaning (excluding incomplete or improperly filled questionnaires). Table 2 contains the characteristics of the sample consisting exclusively of university students. The average age of the surveyed university students is 23.32 years (standard deviation: 4.09). The youngest participant is 18, and the oldest is 46.

Table 2. Characteristics of the sample.

Characteristics	Share (%)
Sex	
Female	72.9
Male	27.1
Residence (Place of origin)	
Village	17.18
Town	41.6
Big city	12.6
Capital	28.62
Living conditions	
College	11.83
Own apartment	15.65
Sublet	24.43
With parents	48.09
Work engagement	
Yes	56.11
No	37.79
Didn't answer	6.1
Income status	
Below average	14.12
Average	50
Above average	17.18
Didn't answer	5.72
Has no income	12.98

Figure 2 shows how the proportions of the Hungarian students participating in the research are compared to the distribution by field of study of all students participating in higher bachelor's and master's programs in the academic year 2020/2021. The majority of

students are in the field of economics at the national level and in the case of the examined sample. This area is overrepresented in the sample. At the same time, we could not reach students from natural sciences and the arts, while informatics, technical sciences, and teacher training were relatively underrepresented in the sample. However, other areas were almost representatively approached [63].

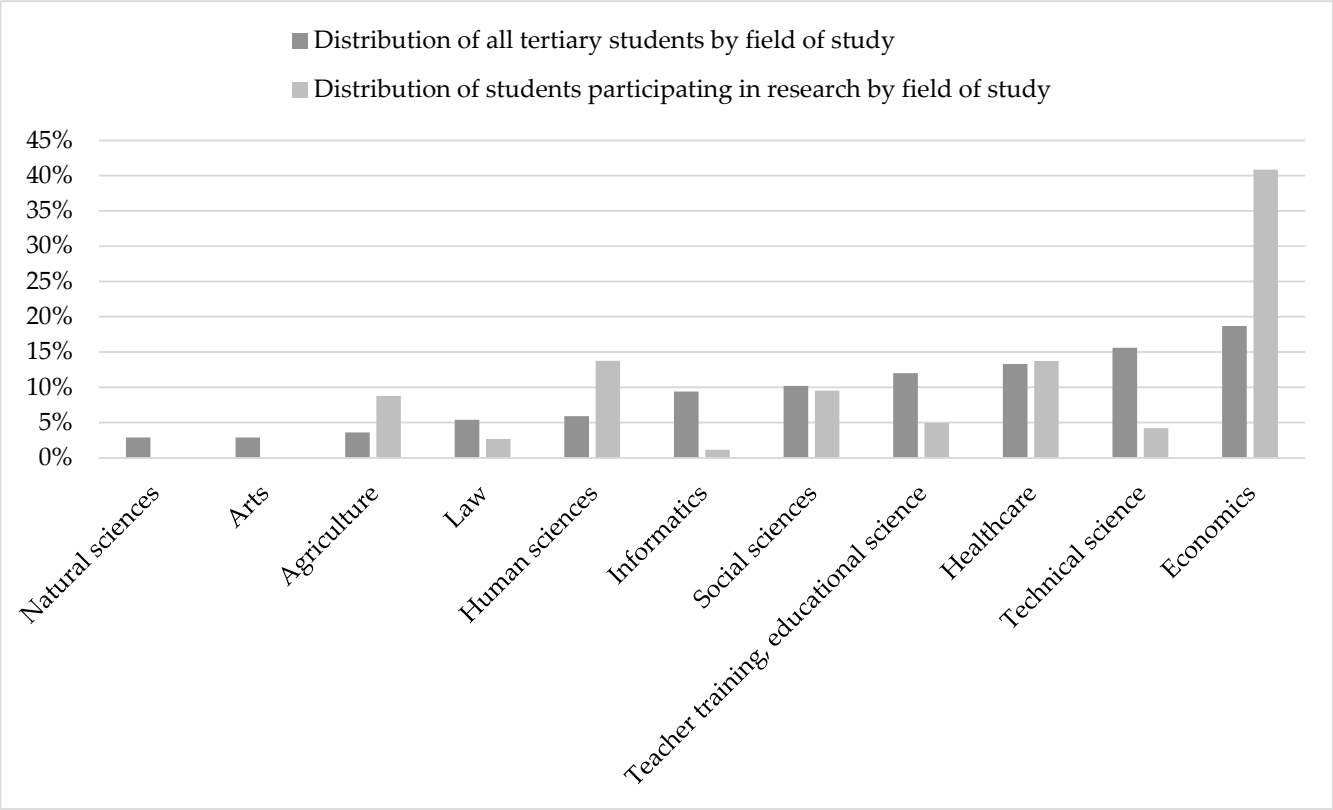

Figure 2. Distribution of students by field of study in Hungary and in the examined sample.

3.2. Methods

For the analysis of the data, different methods were used. The food purchasing habits of university students are presented through descriptive statistics (ratios, measures of central tendency, and variability).

Chi-square tests were performed to process the data using the SPSS program [64]. The test is a non-parametric statistical method suitable for determining whether there is a significant relationship between the questionnaire variables at certain nominal and ordinal measurement levels. The test examines the existence of a significant difference between an empirical and a theoretical frequency table, the latter of which represents the independence of the two variables [65]. A 10% type I error level (α) was determined during the examination of the hypotheses.

To further analyze the aspects taken into account during the purchase and reduce the number of variables, we used a dimension reduction procedure of principal component analysis, which serves as input for the cluster analysis [66]. The latter is carried out using the widespread method known as two-step cluster analysis, which has several advantageous properties (it can be used well in the case of a high number of observations, it has an efficient cluster number search algorithm, it also allows the inclusion of categorical variables in the analysis) compared to more traditional procedures [67].

4. Results

4.1. Food Purchasing Habits of University Students

Figure 3 shows that more than 90% of respondents buy food at least once a week and more than 65% more than once a week. Only 2% of participants do not purchase food.

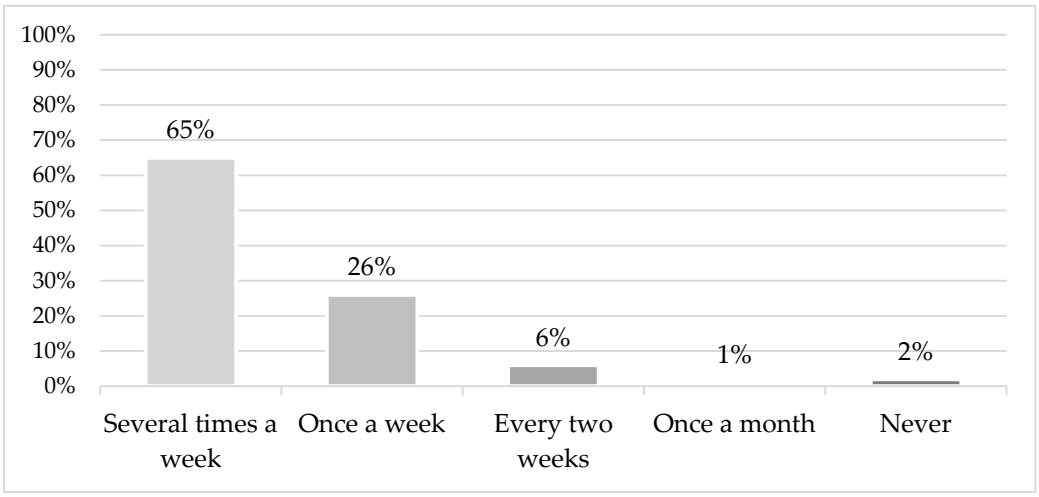

Figure 3. Frequency of food purchases by university students.

Figure 4 illustrates the respondents' preferences regarding the place of grocery shopping. Several options could be marked here. The most popular was the supermarket, where 91% of the participants purchased food. The convenience store and the food discount followed this. Twice as many people marked the traditional market (markets where not only producers but also traders can sell products–respondents were informed about the difference) as the FM. Only 11% of respondents buy at the FM.

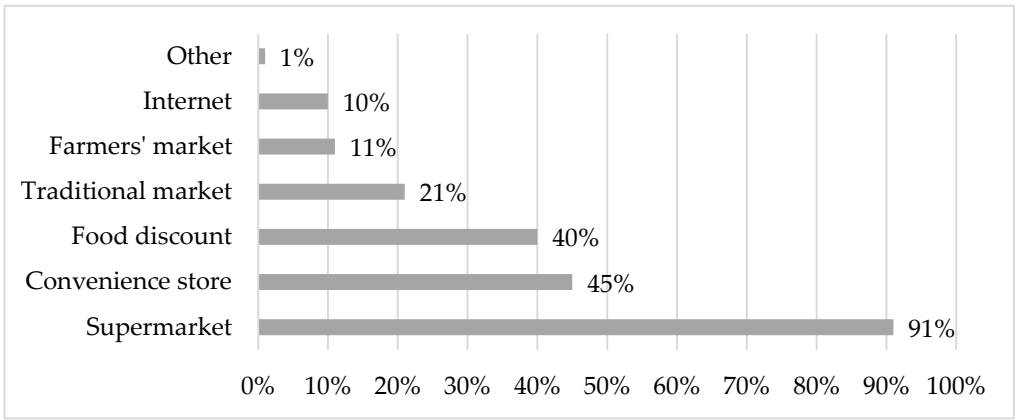

Figure 4. Grocery shopping locations are preferred by university students.

Finally, the university students evaluated 12 aspects of purchasing food (Table 3). Undoubtedly, quality (average = 4.28) is the most important aspect, closely followed by price (4.11), which is not surprising for this age group. Minor determining aspects were the brand (2.57) and familiarity with the producer (2.34).

Table 3. Evaluation of the examined aspects by university students.

Field	Mean	Standard Deviation
Quality	4.28	0.56
Price	4.11	0.73
Healthiness	3.85	0.82
Product ingredients	3.72	0.90
The product is environmentally friendly	3.36	0.98
Opinions heard about the product	3.23	0.98
Supporting local producers	3.20	1.02
External appearance of the product	3.19	0.98
Method of production of the product	3.09	1.03
Place of origin	2.82	1.04
Brand	2.57	0.91
Familiarity with the producer	2.34	1.01

4.2. Conclusions on Students' Access to the Farmers' Market

69% of the students analyzed have already, and 31% have not purchased food at an FM. Only 31% of university students who already have purchased at FM do it regularly. This includes weekly, fortnightly, and monthly customers. The largest number of buyers are those who purchase a few times a year; they represent 51% of the respondents who have already bought food at FM. 18% buy even less often at the FM. This confirms that university students are not typical buyers of FMs.

Those students who do not regularly shop at the FM (48%) answered the reasons for not visiting the FM more often (Figure 5). The main reason is distance, which is an obstacle for 98% of university students. In recent years, the number of FMs in Hungary has increased, but they tend to be narrowed down to one region at a time, so there are counties that can hardly find any FMs, making it more difficult for consumers. The other outstanding value was convenience (73%).

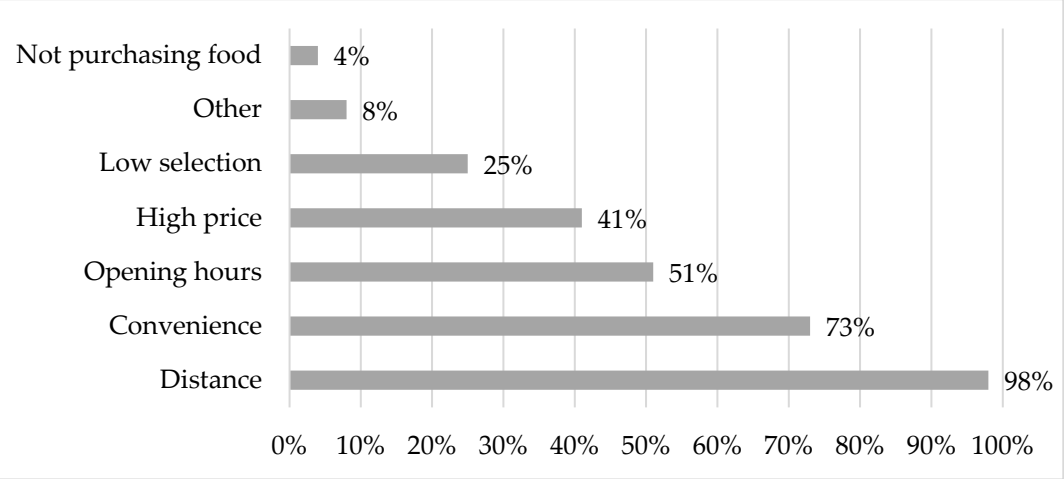

Figure 5. Barriers to farmers' market access. It was possible to mark more options.

It was also possible for the respondents to indicate their own explanations why not visiting FMs. The answers received in this "other" category can be summarized as (1) better option (preference of supermarket instead of FM), (2) lack of information (location of FMs

is unclear), and (3) seasonality (e.g., during summer break instead of FM they purchase via other SFSC, e.g., on a farm).

A Chi-square test can be used to see whether there is a significant relationship between the willingness to buy at the university FM and the distance factors. This was necessary to determine whether the university FM would solve the main obstacle, the distance. Based on the results (Table 4), there were significantly more people among those who showed a willingness to buy in the university market, for whom distance was an obstacle.

Table 4. Contingency table between variables.

			Distance		Total
			Not a Factor	Factor	
Would you purchase there if a farmers' market were held on the university campus weekly?	Yes	Frequency	77	93	170
		Adjusted residual	−3.1	3.1	
	Maybe	Frequency	74	42	116
		Adjusted residual	3,1	−3.1	
Total		Frequency	151	135	286 *

* χ^2 = 9.468; df = 1; p = 0.002; Cramer's V = 0.182.

4.3. Clustering

To better understand the university students' attitudes, we performed a principal component analysis and a cluster analysis. With this, we can get to know university student groups' preferences, which provides producers guidance on how to reach this consumer segment. As a result of the principal component analysis, four dimensions were separated (Table 5). The first component focuses on the origin and sustainability of the products: the production method, the visit of local producers, the environmental friendliness of the product, the place of origin, and the familiarity of the producer. The second component focuses on awareness and a healthy lifestyle, which includes quality, healthiness, and the importance of the product's ingredients. The third component concentrate on the appearance of the product. This category contains the brand and the appearance of the product. Finally, the last component prioritizes the price-value ratio of the product, including the price and the opinions heard about the product.

Table 5. Results of principal component analysis.

Aspects	Product Origin and Sustainability	Consciousness, Healthy Lifestyle	Product Appearance	The Product's Price-Value Ratio
Method of production of the product	0.760			
Supporting local producers	0.741			
The product is environmentally friendly	0.735			
Place of origin	0.652			
Familiarity with the producer	0.634			
Quality		0.765		
Healthiness		0.719		
Product ingredients		0.631		
Brand			0.804	
The external appearance of the product			0.686	
Price				0.739
Opinions heard about the product				0.698

Total explained variance: 62.068%, Bartlett-test: χ^2 = 837.284, p < 0.001; KMO value = 0.803.

The described principal components served as input (cluster forming) variables for the cluster analysis. According to the cluster analysis, three groups can be identified, which are well characterized along the main components (Table 6). Based on their characteristics, we have named them as follows: (1) price-sensitive customers, (2) health-conscious customers, and (3) brand-loyal customers.

Table 6. Cluster profiles.

	Product Origin and Sustainability	Consciousness, Healthy Lifestyle	Product Appearance	The Product's Price-Value Ratio
	Mean (Standard Deviation)	Mean (Standard Deviation)	Mean (Standard Deviation)	Mean (Standard Deviation)
Price-sensitive consumers (43.2%)	0.09 (0.88)	−0.60 (0.67)	0.07 (0.80)	0.61 (0.70)
Health-conscious consumers (35.5%)	0.03 (1.12)	1.01 (0.62)	−0.24 (1.11)	<0.01 (0.77)
Brand-loyal consumers (21.3%)	−0.24 (1.00)	−0.53 (0.72)	0.25 (1.10)	−1.24 (0.65)

The first cluster is the price-sensitive customers, including the largest respondents (43.2%). This group mainly pays attention to the price and the opinions of others during purchasing. This group gives the greatest heed to the product's origin and sustainability. They are least interested in the healthiness and quality of the food.

The second segment is the group of health-conscious customers. They make up 35.5% of the respondents. They pay much attention to a healthy lifestyle, product quality, and ingredients. Brands and appearances do not concern this group of consumers at all. They do not pay much attention to the product's price, considering the quality more important.

The last group of consumers is the group of brand-loyal buyers, with 21.3% of university students. This group is only concerned with the brand and the product's external appearance. They happily pay a higher price for a better brand and a more excellent product. This customer segment is not that interested in price, product origin, environmental friendliness, or healthiness.

We can approach these consumer groups differently since different factors are important for each group. Among these groups, health-conscious customers are the easiest to reach for producers since quality and product ingredients are important to them, and they would even pay a higher price for higher-quality products. In addition, the product's origin and sustainability are not their last considerations. It is much more challenging to approach price-sensitive customers, the quality and healthiness of the product are less important to them, and the price is what matters. Due to recent shocks in food chains (e.g., the COVID-19 pandemic, the Russian-Ukrainian war, changes in energy prices, etc.), the differences in food prices sold on FMs and via long chains have disappeared, especially considering the price-value ratio. Furthermore, reaching brand-loyal customers is a big challenge since they only prefer the external appearance of the product and the brand.

Finally, we examined whether the clusters created based on the different aspects taken into account when buying food (12 aspects, then the 4 components formed from them) show a significant relationship with the willingness to buy at the university FM. Based on the result of the Chi-square test ($\chi^2 = 0.662$; df = 2; $p = 0.718$), it can be concluded that there is no significant relationship between the clusters and the willingness to buy in the FM on the university campus.

4.4. Is There a Demand for a Farmers' Market on Campus?

Considering the international examples [55,60], it is worth investigating whether there would be a demand for an FM in the area of universities in Hungary. 60% of the respondents would buy, and 35% would possibly buy at the FM regularly organized on the university

campus. Those who chose the "no" option (5%) had to justify their decision. The following types of answers were received: "I don't have time to shop between my classes", "There is a farmers' market near where I live", "There is a market near the university", "I prefer to shop in a supermarket". Regarding what the students would like to purchase, fruits came; first, 90% of the students marked this option (Figure 6). Not far behind were vegetables (82%). What also showed high interest was bakery products (66%). Fish, meat, organic foods, and alcohol were not popular options in our sample.

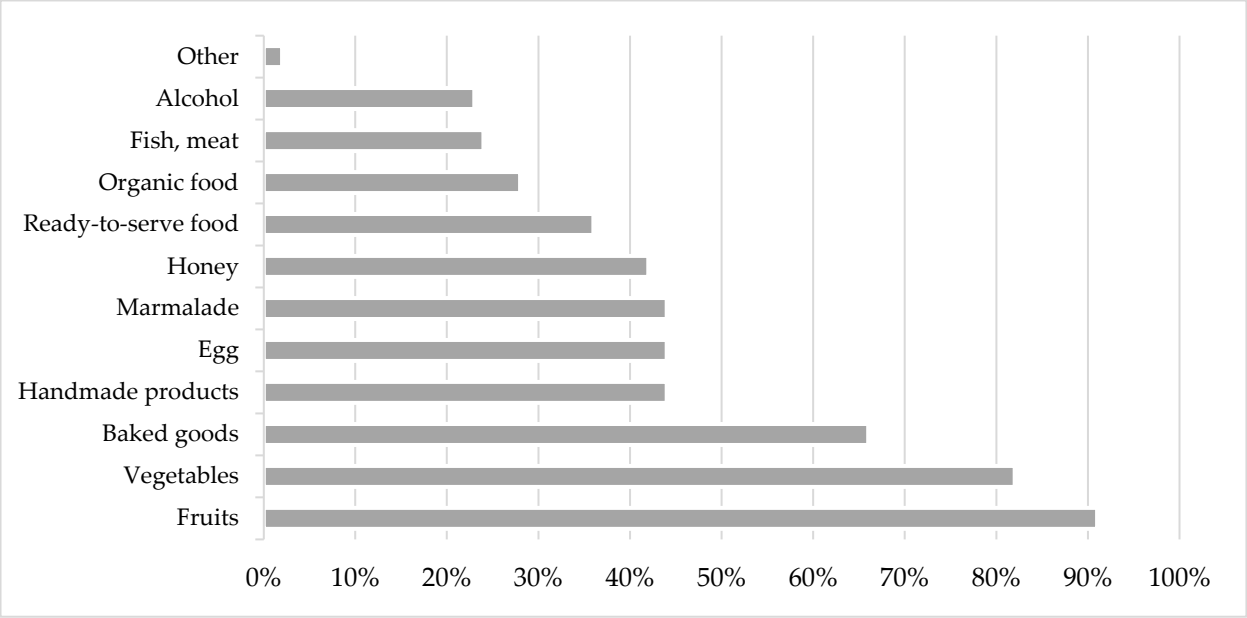

Figure 6. What would university students like to buy at the farmer's market? It was possible to mark several factors at the same time.

5. Discussion and Conclusions

The study presented aimed to investigate consumers' attitudes toward FM, the most important SFSC channel in Hungary, in the specific context of university students. The results are insightful in the scope of consumer behavior research as well as in practice for producers and other FM stakeholders; these findings have several implications. In addition, as the number of studies focusing on young consumers' (in particular, university students) engagement with FMs is very limited, our results can contribute to the literature. Moreover, the FM-related attitudes of university students clearly indicate the future opportunities of this important short food supply chain channel, as university students are expected to be one of the most important future customer groups.

The food purchasing habits of university students studying in Hungary largely match the results of previous research. For university students, the main factors that dominate when purchasing food are product price, convenience, selection, and quality. They pay more and more attention to health and are open to sustainable solutions [45,50,51,53]. For university students, the brand is less important than other factors when buying food [49,51]. They seek the best possible quality for their income and seek cheaper brands [51]. This is consistent with the fact that they pay much attention to prices [45,50,51] due to their low income [51]. On average, the brand, as a factor, was also given a small value in our research, but the cluster with the smallest number (21.3%) was the group of brand-loyal customers. Although it is the smallest group, there are university students in Hungary who prefer the brand and the external features of the product.

They usually buy food several times a week, and the supermarket is the most popular shopping location [49–52]. Based on the aspects considered when purchasing food, we have separated three clusters, with the help of which producers can develop different strategies

to reach different groups of university students. The three clusters are (1) price-sensitive customers, (2) health-conscious customers, and (3) brand-loyal customers. These consumer segments are affected by different factors.

Health-conscious customers are the easiest to approach, as quality and healthy products are essential to them. They are even willing to pay more for these aspects. This segment could be the primary target group of the university FM. The most straightforward strategy to use with them is to provide high-level information. They like to know the product's ingredients, the production method, and the origin. Suppose the information started before the FM, for example, with the help of university community sites or non-university FMs with their own social sites. In that case, the producers could reach this group of consumers in greater numbers.

Price-sensitive customers are more difficult to approach than health-conscious customers. Students in this group pay special attention to the price of the product and their opinions about it. The latter can be positive, as university community members can easily influence their opinion. The easiest way to approach them is with discounts (e.g., student discounts) and positive opinions. Producers can create an opinion and evaluation function on their own pages, and in the case of a university FM, it is also worth displaying the students' personal opinions on the university's social media pages.

Finally, the group of brand-loyal customers is the smallest in the analyzed sample. This group focuses only on the brand and external factors of the product. It is hard to reach them because of the brand's love but paying attention to the packaging can help. Producers can attract the interest of this segment with more aesthetic or striking packaging.

In the cluster analyses conducted on the FM consumers, university students are distributed into only a few clusters. The motivations of the consumers of these clusters are the search for experience in the FM, the search for fresh products, as well as collective aspects such as supporting producers [20,43,44]. In our research, seeking fresh products and the support of producers is also important for the students.

Only 21% of university students regularly buy at the FM. The main obstacle for non-regular customers is the distance from FMs. Convenience, inadequate opening hours, and high prices can also be important obstacles. Our analysis confirms that the FM organized on the university campus can be an alternative solution to the main obstacles. Among those who showed a willingness to buy in the university market, there were significantly more people for whom distance was an obstacle.

Similar to the students of the previously presented universities in the United States, Hungarian university students are also open to the university FM [55,60]. 60% of the respondents would buy, and 35% would possibly buy at the weekly FM on campus.

Overall, most university students are open to the FMs organized on the university campus. In implementing this, the education on short supply chains within sustainability-themed courses is important since information and knowledge in this area can be said to be low. In the future, it would be worthwhile to assess the needs of students and the attitude of producers within a specific university and put the positive results into practice.

Some limitations of the study should also be highlighted. First, due to the sampling procedure, our results cannot be generalized for the total population of Hungarian university students. It would be beneficial to extend the number of respondents across the Hungarian universities and also across the European regions in future research. Moreover, components used for the clustering cover only a limited part of the consumer preferences. Finally, due to technical limitations, the survey could not include all the attributes that might have an influence on the behavior of university students (e.g., ethnocentrism). These deficiencies might be considered by other studies investigating similar topics.

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