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Why people buy food directly from farmers: Case study from Moldova

MASTER'S THESIS

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Declaration

I hereby declare that I have done this thesis entitled Why people buy food directly from farmers: Case study from Moldova independently, all texts in this thesis are original, and all the sources have been quoted and acknowledged by means of complete references and according to Citation rules of the FTA.

In Prague 20/04/2024

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Acknowledgements

Abstract

Moldova faces a shift from buying food directly from farmers at traditional farmers' markets to buying food in supermarkets and online causing difficulties to domestic small farmers to sell their products. This trend is particularly pronounced among the younger generation who exhibit low interest in traditional markets and prefer supermarkets and online grocery delivery or already prepared food delivery. In the context of a new progressive world of high technologies, where trends can easily shift it is important to understand the factors, attitudes, and intentions of these consumers to be able to support small producers and local farmers.

Several previous studies investigate factors affecting buying intentions from farmers' markets. Only a few of them use the Theory of Planned Behaviour to investigate how its main determinants affect buying intentions Moreover, this topic remains unstudied in the Republic of Moldova. To fill this gap, this study analyses how attitudes, subjective norms, and perceived behavioural control influence the Moldovan consumers' intention to buy from farmers' markets. Data was collected in the capital city of Moldova, Chișinău, at one of the most popular farmer markets, Central Market, and also at other smaller farmers' markets, local markets, and supermarkets, from 3 July 2023 to 31 August 2023. Purposive sampling was used to select the study area and quota sampling with an 80/20 female-to-male ratio depicting that the vast majority of food buyers are female. In-person pen and paper interviews were performed and 150 responses were received.

The result of model estimation and bootstrapping confirmed that attitudes, social norms, perceived behavioural control have an influence on intention to buy from farmers' markets. Furthermore, results describe the average consumer as a middle-aged, educated person with the majority of them having at least a bachelor's degree, a big family, and a low to medium household income.

This research may serve as a starting point or inspiration for other, more comprehensive studies, that may focus on different factor that influence the buying intention among consumer in Moldova.

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List of the abbreviations used in the thesis

AVE	Average Variance Extracted
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
HTMT	Heterotrait-Monotrait Ratio
PBC	Perceived Behaviour Control
PLS	Partial Least Squares
SEM	Structural Equation Model
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Actions
USA	United States of America
USDA	United States Department of Agriculture
VIF	Variance Inflation Factor

1. Introduction and literature review

1.1. Introduction

In recent years, farmers' markets have started to re-emerge more and more as a source of fresh, healthy and organic food, alternative to conventional ways of getting food in EU and the United States. The popularity around them has grown as a consequence of people rising concerns and importance of eating high quality and nutritious food followed by a healthy lifestyle. The global pandemic which caused people re-think their food choices and habits, high rates of inflation which led to rising prices for everything including food and the growing awareness of environmental issues among consumers made people doubt the correctness of the previous lifestyle.

In Moldova, the trend was always more balanced, however people always proffered to do groceries at farmers' markets. The trend reversed when prices started to rise due to regional tension and worsening economic situation as an aftermath of global lockdown. Small farmers who are the mainstays at farmers' markets faced challenges as trade between neighbourhood countries started to be difficult and costly due to war in Ukraine. Additionally, farmers markets closed due to anti-COVID measures. As a result, average consumers prices raised due to costly farmers inputs and scarcity of certain category of products (Şarban 2022).

Literature about farmers' markets is vast, however only a limited number of researches focuses of consumers intention to buy products from these markets or factors which reflect them, and even less analysed how the Theory of Planned Behaviour (TPB) and its main constructs affect buying intention from farmers' markets. To author's knowledge, such researches were not performed in Republic of Moldova, thus this Master's thesis aims to investigate how attitudes, social norms and perceived behavioural control of Moldovan's consumers affect their buying intention from farmers' market and the underling factors linked to main constructs of TPB and fill the gap in scholarly literature on this subject.

This topic is relevant for Moldova since many people use agriculture as their primary source to earn money and one of the most common marketing channels for

them is direct selling to consumers through farmers' markets. Small-farmers were deeply affected by the global pandemic, war in Ukraine, rising prices for fertilisers, fuel, energy, competition from cheaper imported products in supermarkets, lack of support from government and rising trend of online grocery delivery estimated to reach 850.000 users by 2027 (Statista 2023).

The findings of this study may be used for marketing purposes, this way farmers' markets organizers and farmers themselves can grasp the key drivers or barriers that influences consumers behaviour which will permit to improve their marketing strategies leading to enhancing overall shopping experience, attraction and retaining the costumers.

1.2.   Literature review

1.2.1. Farmers' markets concept

Farmers' markets are deeply rooted in our daily life and human history, they were and remain one of the vital institutions, a place, where simple people could intersect with producers along with various artisans and purchase their products directly. Historically, farmers' markets have traced back to the most important and prosperous civilizations such as Rome, Greece or China, however, as time passed and farmers' markets evolved in every aspect, they began to take on a much deeper character than just a simple exchange of goods, besides the economic benefit, these markets became venues where community connections, information exchange, and social capital was built, social aspect have also started to become a significant aspect why people went to those farmers' markets. Continuous technological advancement, new farming practices, the emergence of different pesticides and fertilizers facilitated the adaptation of farmers' markets to economic changes, cultural influences, and revolutions, this kind of centralized market started to become more common (Obeng 2007).

Nowadays farmers' markets can take different aspects compared to how they used to be hundreds of years ago, depending on the physical shape of the market, products that are being offered, and location, they can emerge as farmers' tailgates, curb markets or even named by the day it usually takes place, usually weekend markets or Monday markets (Brown 2001). Simplified, farmers' markets are supermarkets or local stores where instead of employees, farmers operate and sell the products on the shelf. Billing (2006) mentions features that clearly describe the farmers' market concept, through the variety of products that are offered, all should be local grown, picked, backed, brewed, etc. Farmers' markets are often viewed as fresh food markets by many. This perception is often linked to the fact products are grown and harvested at farms close to cities or towns where the farmers' markets are being regularly held, varying by the season or day of the week (Coster 2004).

1.2.2. Benefits of farmers' market

In the USA the prevalence of farmers markets has been constantly rising since 1994 from 1755 to 8761 in 2019 as shown in Figure 1 (USDA 2019).
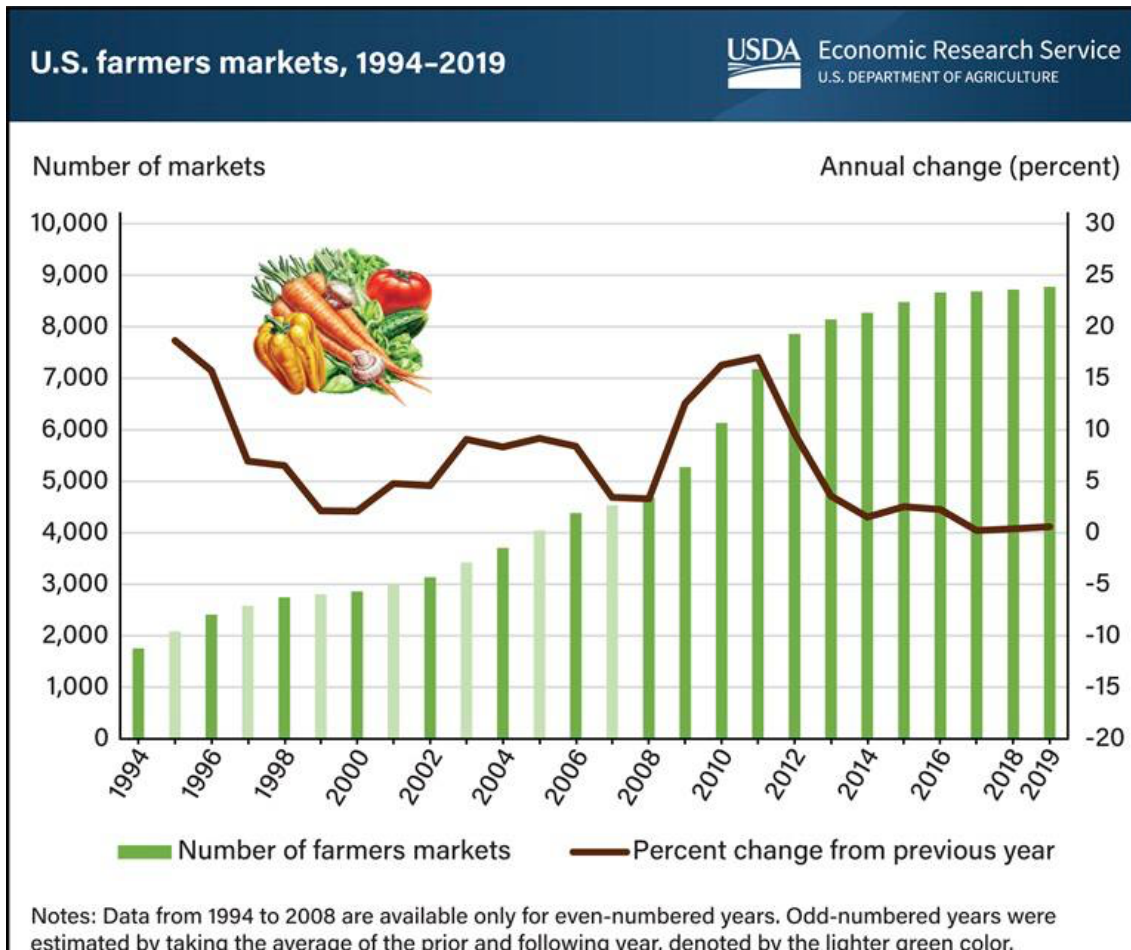
Figure 1. U.S. farmers' markets, 1994-2019.
Source: USDA (2019)

Consumers' change in awareness is the main determinant for farmers' markets to blossom again, particularly rising awareness regarding the environmental impact they have and products used. There is also a rising concern about health and getting adequate daily nutrition from conventional sources. Additionally, growing uncertainties, such as regional conflicts or unexpected pandemics rise worries regarding availability of fresh, healthy and high-quality (Warsaw et al. 2021). In a broader sense, all of these events reflect how dietary trends are shaped and that eating habits are returning to traditional foodways due to environmental

consciousness, rising awareness and willingness to maintain a healthy lifestyle. Farmers' markets create multiple benefits and opportunities for the whole community, as a social event it creates bonds and facilitates building human capital, a place of social entertainment for visitors, also it links rural regions and urban, creating economic opportunities and transfer of information between both parties (Kirwan 2004). Looking to sell their products, farmers often try to start a conversation and advertise their products, how it was grown, where, and the way they were harvested, also allows customers to have a taste of their products, this is an opportunity for both, farmers who want to sell as many as he can by rising foods perceived value in the eyes of visitors, and for consumers who enjoy bargaining process and social interaction (Andreatta & Wickliffe 2002). Some farmers' market offers exotic goods that are not found in a conventional store such as wild honey, traditional herbs from regional local sources, forests, or mountains, and wild berries sold fresh or processed at home, often presented without much packaging, which further empathize the importance of ecological awareness (Obeng 2007).

Farmers' markets through direct contact of farmer and consumer provide transparency in regards to the product provenience and the methods of production which can directly foster and educate consumers about healthy foods and suitable methods of preparation along with new recipes, this can affect not only consumers' choices in food but also change the behaviour at other type of retailers (McCarthy 2010). As the farm is usually located in the proximity of the farmers' markets, farmers offer their customers fresh, healthy, and high-quality products by reducing the time spent on transportation and storage time (Connor et al. 2010). In opposite, supermarkets have longer supply chains, which means that food travels longer distance and passes through many handlers and trucks to be delivered to the final destination. This can influence the product's final quality, especially in the context of fresh vegetables, fruits, or other perishable products which have to be harvested earlier to be able to handle large travel distances (Berruto & Busato 2009).

The economic benefits cannot be denied as farmers' markets play a major role in the lives of the local communities. By eliminating the unnecessary links in the supply chain, farmers who sell directly to customers facilitate the circulation of money inside

the community as the farmer itself becomes the harvester, handler, processor, and also the distributor. By assuming these responsibilities farmers can manage better their funds, reduce the final consumer's prices for their products and increase local food access, especially for rural consumers from the economic viewpoint (Larsen & Gilliand 2009).

1.2.3. Challenges facing farmers' markets

Farmers' markets face various problems depending on the region and country. Because the problem of quality of the products at the farmers markets may result from transport of unsold goods due to it the products may often get bruised, cut, smashed or even completely destroyed due to carelessness or farmer's negligence resulting in poor visual appeal and reduction in overall quality (Hill 2008). Poor logistic solutions and lack of storage facility may further decrease the quality of products, exposure to extremely low or high temperatures, and inadequate humidity during transportation and storage can accelerate the aging and decomposition of the products and create a pleasant environment for various diseases and fungi development (Bellemare & Nguyen 2018). A less obvious factor is that farmers use less packaging for their products than supermarkets, and they often cannot promote their products as well as other types of retailers. This varies by country as those who come to farmers' markets are not always concerned about the packaging. For some visitors minimal packing is considered a selling point. This can play a positive and at the same time a negative role in product promotion, especially when targeting tourists or the younger generation who is often attracted by a fancy packaging (Finlayson 2018).

Price used to be one of the key factors when it came to shopping whether at supermarkets or at farmers' markets. However, the price has ceased to attract consumers as it is already in some countries it is comparable or higher than in the same supermarkets. Despite this, in the pursuit of healthy, fresh and organic products, people are willing to pay an extra premium over the regular price. The amount varies from continent to continent however Sica and Franco (2024) indicate that both U.S. and European consumers are willing to pay up to 25 % premium or in some cases up to

50 % of the original price. This indicate that consumers are buying more from farmers' markets even if the price is high however this shows only the consumers preferences. Intention may not always coincide with actual behaviour, and as a consequence consumers may choose other types of vendors with roughly the same price.

The recent pandemic has also played a huge role in the choice of shopping place. Although no one expected it, the pandemic of COVID-19 has swept the world and forced people to change their lifestyles dramatically. People had less interaction in public places due to the risk of infection and as a consequence have started to order more ready-to-eat food from restaurants, special food delivery services, and in general to do more online shopping. This trend shift further influenced buying behaviour from farmers' markets that were unable to satisfy their needs during the outbreak (Sheth 2020; Jo et al. 2021). During that period of time there was also an increased desire of consumers to eat more healthy, fresh and organic food. This on the one hand increased the demand for locally produced farm products, but because in many countries farmers could not provide a home delivery service and local farmers' markets were closed, consumers began to pay more attention to healthy foods from large supermarket chains (O'Hara et al. 2021; Metz & Scherer 2022). The ambiguity of this term has baited consumers before by suggesting that supermarket local products are the same as those from farmers' markets. Sometimes they were advertised as fresher and healthier while also supporting local farmers, thereby altering people's perception of the real benefits of farmers' markets (Leiper & Clarie-Sather 2017).

1.3. Farmers' markets in Moldova

Situated between Romania and Ukraine, Moldova is a small country with a rich agricultural heritage that has been the backbone of the country in both economic and social aspects for many years. It is also known for its fertile soil of chernozem rich in nutrients, the favourable climacteric situation for agricultural activities. More than 60 % of land under cultivation, with a higher density in the northern and southern part compared to central area as shown in Figure 2 (Bejan et al. 2022). The main directions in the agri-food sector are cereals and their derivatives, wine, sugar, fruit, vegetables,

and other plant-origin production that consist about 90 % of the total country's agricultural production (Şarban 2022).

The population of Moldova counts approximately 2,500,000 people in 2023 and this number is prognosed to decrease every year, to 2,280,000 inhabitants by 2028 as shown in Figure 3 (Statista 2024), this is due to many internal and external factors such as the unstable situation and conflicts in region, the soaring prices in recent years for majority of services and products starting from electricity and fuel, to food, as well as the lack of prospects for further development in the country.
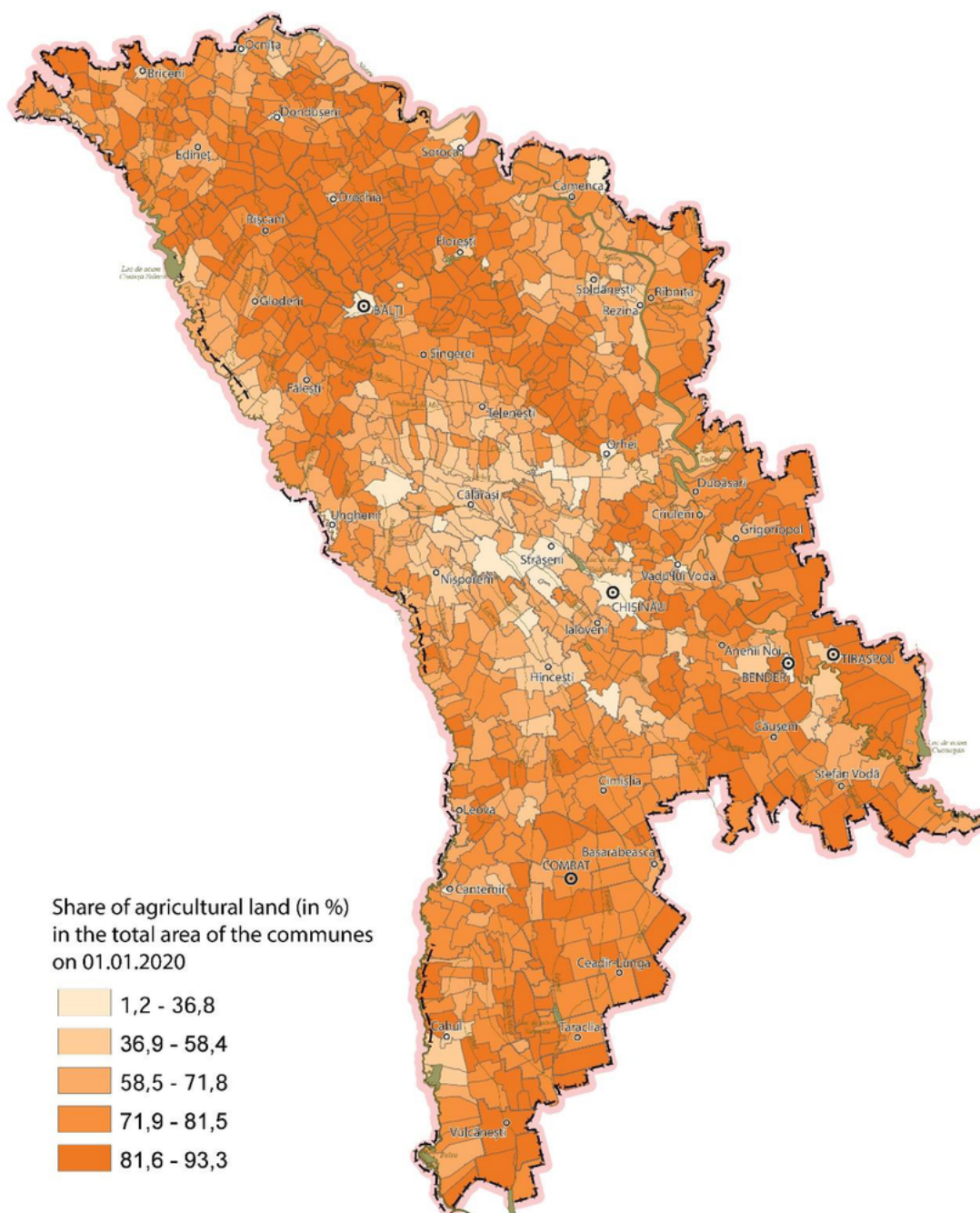
Figure 2. Share of agricultural land (in %) 2020.
Source: Bejan et al. (2022)

As has been mentioned earlier, the agricultural sector is important for the economy as it accounts for about 8 % of GDP and 21 % share of employment (National Bureau of Statistics 2023). Also, more than 90 % of agricultural holdings in Moldova consist of small-holder farmers (FAO 2020), meaning that the main role is played by small farmers, whose welfare should be the first priority. They are the ones that

determine most of the pricing of food products in conventional stores and also at farmers' markets.

Moldova: Total population from 2018 to 2028 (in million inhabitants)

Year	Inhabitants (millions)
2018	2.73
2019	2.68
2020*	2.63
2021*	2.59
2022*	2.54
2023*	2.5
2024*	2.45
2025*	2.41
2026*	2.37
2027*	2.32
2028*	2.28

Source
IMF
© Statista 2024

Additional Information:
Moldova; IMF; 2018 to 2028
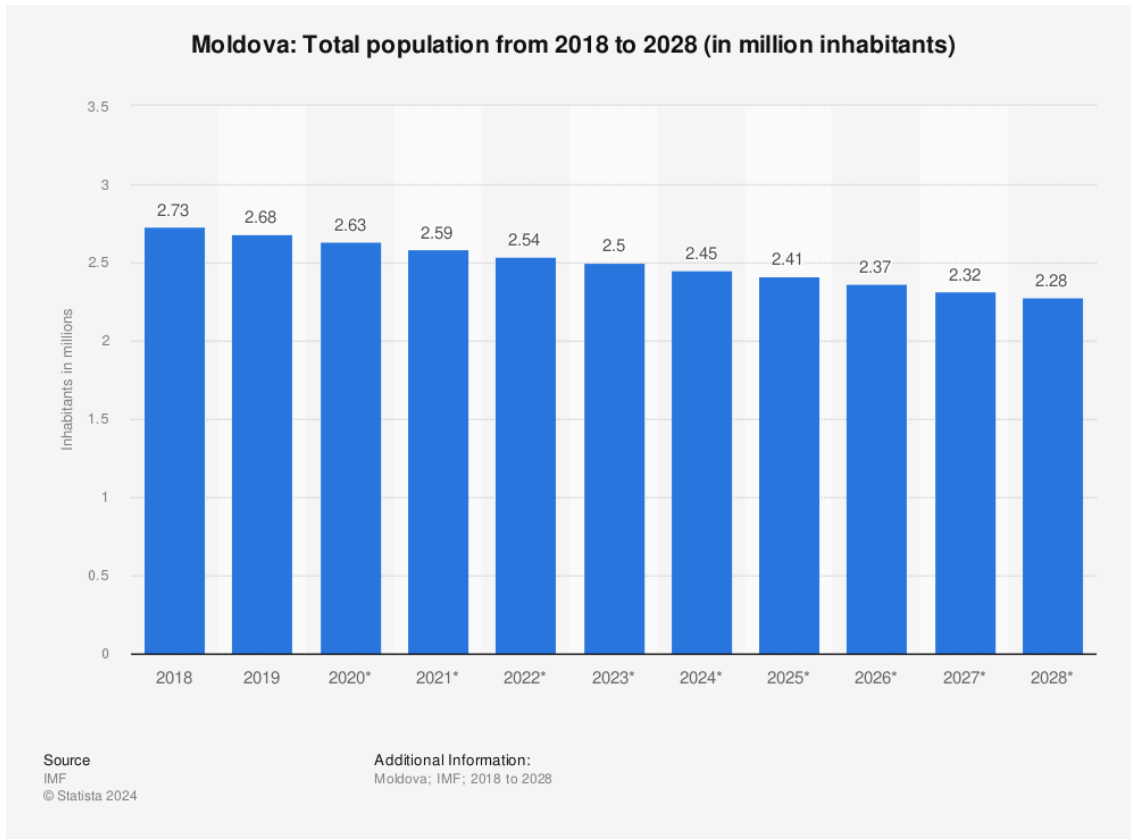
Figure 3. Moldova: Total population from 2018 to 2028.
Source: Statista (2024)

In Eastern Europe, these farmers' markets are slightly different from those in the West or Central Europe and have a greater importance for consumers. In recent years farmers' markets have become more and more difficult to compete with hypermarkets that are increasingly spreading through the region (Polimeni et al. 2018). In Moldova, these markets are called "piață", a place where one can find nearly everything, from fresh and processed food to household goods for daily needs (Polimeni et al. 2022). Hundreds of farmers come almost every day from nearby settlements to bigger cities or the capital city to sell their products, mostly fruits, vegetables, and other agri-food derivates. The products at such markets are usually more ecologically and environmentally friendly produced since most cases small farmers cannot afford big amounts of chemical fertilizers and pesticides due to high prices.

Farmers' markets in Moldova are important to consumers first of all because of their affordable prices and good quality compared to similar imported products from supermarkets. Moreover, in Moldova, most of those who come to "piață" are pensioners, because of their fixed low income, they are pushed to save on everything including food in order to meet their limited budget (Polimeni et al. 2018). Usually, elderly people are not visiting farmers' markets for the first time, but are already loyal customers for many years and managed to understand, what to buy and from which farmer. They already have connections within the farmers' market, or because they are farmers themselves, which is not an uncommon thing in Moldova where the rate of pensioners who participate in the agricultural sector is about 40 % (FAO 2020).

The unexpected pandemic outbreak of COVID-19 that spread all around the world and the war in neighbouring Ukraine greatly affected the all-round development of the country. Prices for food and various products for everyday use rose sharply, and inflation was one of the highest in Europe. According to the National Bank of Moldova from 18 % in February 2022 to 33 % in August 2022 (BNM 2022). Farmers' markets were also closed due to quarantine measure, which affected the welfare of small farmers and consumers. Due to tension in the region, imports and exports were also hugely affected, a lot of mineral fertilizers, plant protection equipment, and food were blocked or redirected to other countries. The impossibility of delivering those products at the intended time created additional costs for national economy and final recipients, further influencing the price in agri-food business (MAFI 2022).

High production costs, limited support of Moldovan farmers from the government when compared to EU farmers who receive payments from Common Agricultural Policy, inflexible internal regulations, and overall food safety challenges in the region has driven smallholder farmers to quit their business as it becomes less and less viable (Varga 2019; Piras et al. 2021). Moreover, Moldova does not even have something similar to Common Agricultural Policy of EU, any support or funds are assigned by the government on the basis of the live queue or first come, first served, which is an unfair approach in the context of such crisis, especially for poor smallholder farmers (Kovács et al. 2022).

1.4. Theory of planned behaviour

The Theory of Planned Behaviour (TPB) is a strong psychological theory that is renowned among scholars studying human behaviour and what drives that behaviour. The theory explains beliefs, attitudes, intentions, and all sorts of factors that may interfere with intentions and real behaviour, as well as how they are all interrelated. The first mentions of this theory date back to the late 1980s, when it was first introduced by Icek Ajzen (Ajzen 1985) as an independent theory since the core principles of TPB, are an improved extension of the Theory of Reasoned Actions (TRA), which was introduced earlier in 1975 by Martin Fishbain.

TRA assumed that human behaviour is influenced by our own attitudes toward a particular situation and that opinions of important and dear people matter for us, also behavioural norms implied by society have a great influence on the behaviour (Hale et al. 2002). Despite this, the theory had its own limitations, it could not fully explain human behaviour in situations where people were not fully sure of their ability to carry out the action, basically when they lacked control, also external barriers that could impede an action or behaviour from being taken (Ajzen 2012).

Ajzen developed TPB, which was based on TRA, in an effort to overcome the limitations of earlier theories. In his new theory, he introduced a novel concept: perceived behaviour control (Figure 4). This concept reflects an individual's belief and perceived control over whether or not they would be able to perform a particular action or follow a particular behaviour, as well as any other external factors that may influence them. In other words, the more obstacles one faces or the less confident one is, the less likely he is to act (Ajzen 1991).

Attitudes toward the behaviour refer to how likely a person fells to carry out a specific action based on personal experiences, positive or negative emotions related to that action, as well as other associations, whether it is desired or undesired, or if it will ultimately lead to a good or bad outcome for the individual (Ajzen & Fishbein 2004). For example, if a person considers buying from farmers' market as something that will lead to a healthy life, then the likelihood of taking actions might rise, the same in the

opposite direction, if it is considered that buying from farmers' market will lead to waste of time and tiering, then the chances of performing the actions will fall.
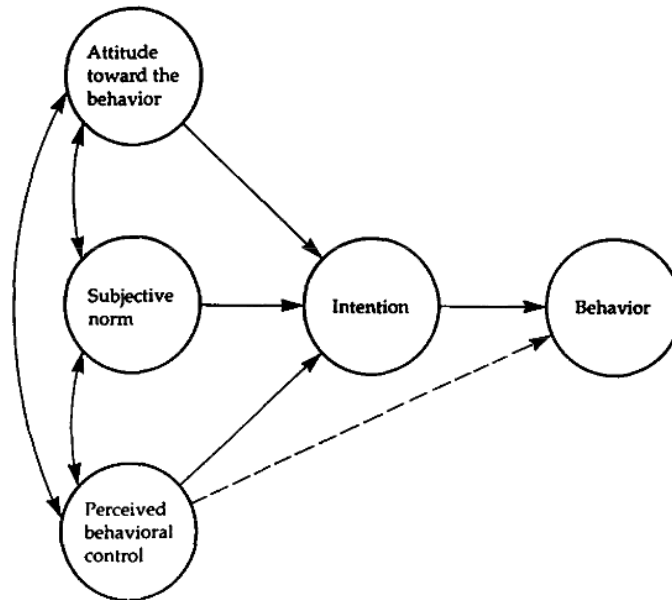
Figure 4. TPB.
Source: Ajzen (1991)

Subjective norms reflect how a person perceives pressure or influence from other people, especially from family members, friends, colleagues, or society as a whole. The essence of subjective norms is that a person's behaviour in regard to a specific action or situation can be distorted by what other people think, and how they react to it (Ajzen & Cote 2008). For example, if family members think that buying from the farmers' market is a good thing, then the pressure on the left member will rise, and the likelihood of performing the action will also increase.

Intention is the central figure of the TPB, and it reflects the explicit intention to perform a certain action. It is formed by the other three main concepts discussed earlier, attitudes, norms, and behavioural control which ultimately also shape real behaviour through intention (Ajzen 1991). Although attitudes and subjective norms have a major influence on intentions, perceived behavioural control has a clear predominant impact on the final performed action or behaviour as seen in Figure 4.

The Theory of Planned Behaviour has found its application in various spheres of scientific activity, including in research on understanding consumer behaviour at

farmers' markets and factors that may influence it. Although the literature about farmers' markets with the application of TPB is limited, still we can learn and understand consumers' behaviour and choices at those markets in various contexts (Mazzocchi et al. 2008; Shin 2014; Feldmann & Hamm 2015; Bavorova et al. 2018; Jo et al. 2020; Kumar et al. 2021; Costa et al. 2021; Phuong et al. 2022)

1.5. Factors affecting buying intention

In present study, we identified, based on previous literature factors that influence consumers' intention to buy from farmers' market.

When it comes to farmers' market, freshness is the first attribute that may come to mind. Consumers often associated produce from farmers market with fresher and higher quality products compared to those from supermarkets (Carey et al. 2011; Carson et al. 2016). This may be a result of shorter supply chains where farmers don't need to spend a lot of time on storage and transportation as the produce sold at farmers' market is often grown in proximity of farmers' markets (Carey et al. 2011; Bavorova et al. 2018; Radulescu et al. 2021).

Price is an important consideration in revealing consumer behaviour at farmers' markets. It reflects a critical aspect in deciding whether or not to buy products from there. Farmers markets are often associated with high-quality locally grown products, that due to lower storage and transportation costs can compete in price with products from other type of retailers (Feldmann & Hamm 2015; Cetina et al. 2018; Bavorova et al. 2018; Phuong et al. 2022).

It is also important to include factors reflecting perceived product healthiness and its potential impact on environment in context of this research as farmers often advertise their products as healthier than those from supermarkets or other retailers, organic, chemical and pesticide-free, environmentally friendly, etc. Consumers were always concerned about their health and especially nutritional value of products they ingest, moreover this trend was further fuelled by global pandemic outbreak which further increased demand for healthy local food, shaping buying intentions and rising awareness of sustainable farming practices that are not detrimental for environment

(Vicente-Molina et al. 2013; Bavorova et al. 2016; Curvelo et al. 2019; Costa et al. 2021).

Farmers' markets allow the consumer to experience a unique atmosphere where they can interact directly with producers and bargain. Consumers may ask about various aspects of farming, harvesting methods and process and location where products were grown. They can touch and even taste the products, what is usually impossible at supermarkets or local shops and can positively influence the final buying intention and relationship development between customers and producers (Andreatta & Wickliffe 2002; Hoppe et al. 2013; Carson et al. 2016; Polimeni et al. 2018; Phuong et al. 2022). This kind of interaction with the seller and other market participants facilitate social capital building and foster friendly relationships between them. This may create a sense of trust among people which can positively influence consumers' experiences and perception of particular farmers and farmers' market as a whole. In context of this study, trust was included in the list of factors as it may provide insights into the importance of social interaction and tendency to buy from sellers' consumers know personally and trust (Mazzocchi et al. 2008; Giampietri et al. 2018; Kumar et al. 2021; Phuong et al. 2022).

As the TPB identified, family members and friends' attitudes can have a key role in the intention to purchase from farmers' markets. For example, family can influence a person attitudes and perceptions, behavioural norms and values. Similarly, friends can influence norms, attitudes and perceptions about farmers' markets. This is particularly important in the context of the younger generation, who are more likely to listen to friends' advice and information they receive (De Cannière et al. 2009; Shin 2014; Carson et al. 2016; Curvelo et al. 2019).

The availability and variety in stock impact consumers selection of shopping outlet. Farmers' markets are known for their variety of products, offering seasonal and sometimes exotic produces, for example regional herbs or wild honey. Limited variety in stock is a barrier and influence the selection of place of shopping (Conner et al. 2010; Elepu & Mazzocco 2010; Bavorova et al. 2018; Radulescu et al. 2021).

Long distances to travel between home and farmers' market can also affect the desire and intention to buy. Long distances in the first place can be a significant

obstacle if the market is located on the outskirts of the city or for those who do not possess a private car and cannot make it to the venue. Also lack of personal time may hinder consumers from buying at farmers markets, this factor can be considered as a separate barrier or as a consequence deriving from previous obstacle. Due to long travel distances, people may choose more convenient options like supermarkets or online grocery shopping because they lack the time or cannot get to the market at all (Berruto & Busato 2009; Conner et al. 2010; Bavorova et al. 2016, 2018).

Gender is an important factor to consider as it influences all three major TPB constructs and overall buying intention. Studies suggest that women have always been more attentive to their diet and have different priorities in buying food than men. Women are also responsible for most family dietary choices, cooking and are more environmentally concerned then men when it comes to organic and healthy food choices for the whole family (Tonsor et al. 2009; Elepu & Mazzocco 2010; Fehrenbach and Wharton 2012; Ma and Chang 2022).

Age was found in previous studies to influence buying intention from farmers' markets (Maró et al. 2023). Middle-aged people are usually seen at farmers' markets due to their increased health concerns thus they consider products from farmers' markets of higher quality and fresher, on the other hand younger generation is usually less sensitive to deterioration or maintenance of their health (Tung et al. 2015). However, exceptions of younger age groups are also present, this may be due to a better-informed generation that is more concerned about starting a healthy lifestyle from an early age in order to preserve their health in the future (Ma & Chang 2022). Age can be correlated to another factor that potentially influences buying intention which is household size. Literature affirms the lower the age of the respondent, the higher the chance of children being present in the household thus raising the intention to buy from farmers' markets (Tung et al. 2015). Vice versa, the older is respondent the chances that children are still present in the household are lower, lowering the buying intention at farmers market (Pascucci et al. 2011).

2. Aims of the thesis

The main objective of this thesis is to identify and analyse what factors influence buying behaviour of costumers from farmers' markets in Moldova.

2.1. Specific objectives

1. To investigate which factors, influence buying intention from farmers' markets.
2. To identify the socio-economic characteristics of Moldovans' consumers.
3. To test how TPB explain buying intention among consumers who visit farmers' markets.

2.2. Research questions

1. Which factor influence buying intention?
2. What are the socio-economic characteristics of Moldovans' consumers?
3. How TPB explain buying intention at farmers' markets among consumers?

2.3. Hypotheses

1. The attitude toward farmers' markets affects the buying intention.
2. Subjective norms affect the buying intention.
3. Perceived behavioral control affect the buying intention.

3.   Research methodology

3.1.   Study area

The research took place at the one of the largest and crowded farmers' market in Moldova, Central Market (Piața Centrala), which is located in the heart of Moldova's capital city (Figure 5), Chișinău, where people can find high variety of products, from fresh vegetables and fruits to meat, fish, locally made cheese to sweets. In the vicinity of Central Market there are local markets, supermarkets and other smaller but not less important farmers' markets. Some of them were also selected within the given research as study sites.
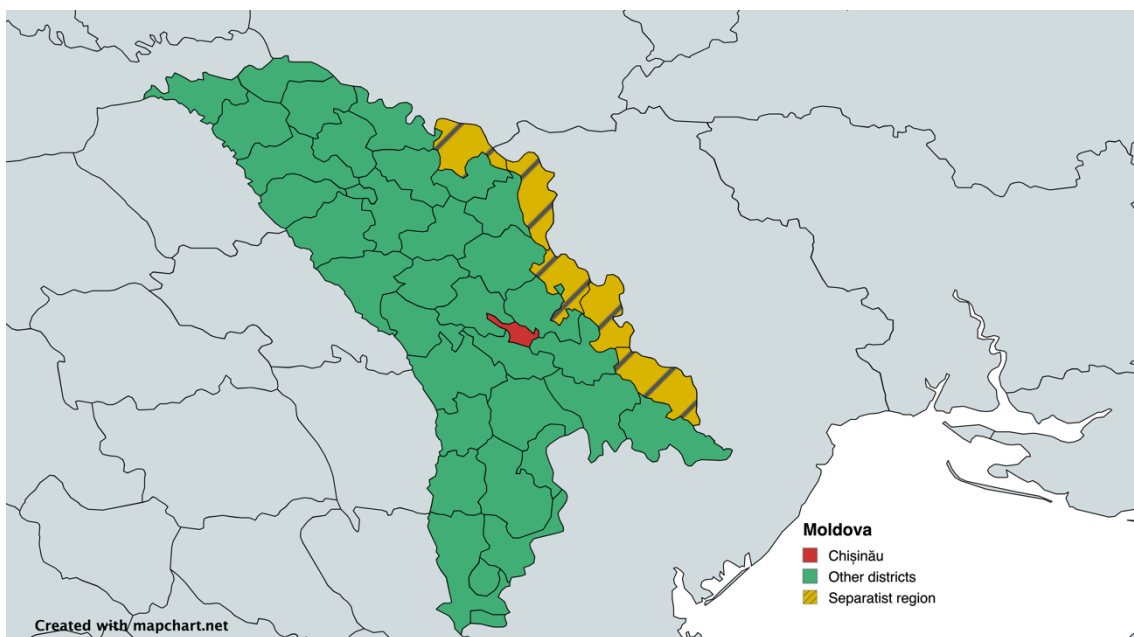

Figure 5. Study site, Moldova.
Source: mapchart.net

3.2.   Sample selection

The purposive sample was used to select the study site Chișinău as here the consumers have the choice to buy food in various outlets including farmers markets and supermarkets. The study was conducted on buying intention from farmers'

markets thus the targeted group of respondents were people that would visit those markets and purchase different products. To investigate the differences in drivers on non-buyers in farmers markets the objective was to also include them.

The quota sampling was used to select the respondent. In the sampling process preferences were given to women (80%) as they usually make the food choice decisions in Moldovan households. Regarding age, quota sampling was not employed. The aim was to capture all possible age ranges, from 18 to 65 years old to see what would be the average age of Moldovan visitors at farmers' markets in comparation to other studies. Also, the main site it is located in close proximity of city centre of Chișinău, near the most crowded and important streets, near are located other farmers' markets, local mini-markets and supermarkets that people usually visit and make groceries, thus a large majority of people were given a chance to participate in interview.

3.3. Data collection

Primary data was collected using a structured questionnaire. Initially it was decided to use Google Forms online service to collect the data and also in person pen and paper interviews. Online data collection was chosen due to convenient way of questionnaire distribution and potentially higher number of respondents. This method would allow us to reduce the time used for data coding and data analysis afterwards, however it was dropped later due to low response rate, making in-person pen and paper interview data collection the way to collect primary data.

A pilot test questionnaire was launched within a limited group of people to see if the questions were understandable and easy to answer. Th pilot test was launched a week before the main data collection.

Main data was collected during the summer from 3 July 2023 to 31 August 2023, during that time I visited alone the research sites several times per week on the daily basis and performed in-person pen and paper interviews ultimately receiving 150 responses. The total numbers of interviews were obtained by using a 95 % confidence

interval, population proportion of 0.5 and 8 % margin of error. The required number was calculated with an online sample size calculator (calculator.net).

3.3.1. Questionnaire

The questionnaire was developed in accordance to findings from literature review, it consists of 36 questions and was divided into six main blocks: questions regarding buying intention from farmers' markets, attitudes, subjective norms, perceived behavioural control, alongside with socio-economic characteristics and background.

The questionnaire was constructed on the basis Ajzen's (2006) article which describes briefly the main principles of TPB and give insights on how to formulate questions that would be appropriate for each main aspects of the theory. Guided by the article we employed a five-point Likert scale, where 1 was fully agree, 3 was neutral and 5 was fully disagree, this type of Likert scale was used throughout the whole questionnaire, however in order to assess socio-economic and background information, different answers were formulated. Before question formulation an experiment was performed to evoke people's beliefs, control factors and norms, a small group of individuals were selected by the author of this study and interviewed individually using a set of open-questions. The questionnaire was developed in English and later translated into Romanian.

3.4. Data analysis

The data was analysed using IBM SPSS Statistics 29.0.0 mainly used for descriptive statistics and SmartPLS 4 software for structural equation model to test and verify the hypotheses.

3.4.1. PLS-SEM and SEM

All hypotheses were verified and tested using Partial Least Squares Structural Equation Model (PLS-SEM).

Structural Equation Model (SEM), a statistical tool, the successor of first generation of statistical methods previously used to test relationships between variables, such as logistic regression and multiple regression. However, with the emergence of new theories, new frameworks were also developed and researchers were eager to test new, more complex relationships between variables. Unfortunately, it was difficult or even no longer possible to use the same statistical methods because of the limitations that arose in the process (Hair et al. 2021).

First of all, first generation statistical methods required only a basic model and could explain single layer relationship between dependent variable, the one we are trying to explain and independent variables, that we think might influence the outcome, thus making difficult to explain more complex relationships or chain of cause and effect where for example first variable influence the second and subsequently it influences the third variable, partial estimation was possible by breaking in parts the relationship chain (Sarstedt et al. 2020).

Secondly, regression type methods could analyse only real variables, meaning that the chosen variables can be measured in any types of units or currency, leaving abstract ideas aside, however advanced theories proposed a series of less observable and tangible variables, for example personal and social attributes such as risk, motivation, family role, trust, etc. The use of such concepts was possible only by beforehand validation through other means (Bagozzi & Philipps 1982).

The last but not the least important limitation was bound to errors. The application range of first-generation statistical methods ends when measurement errors appear as they do not tolerate any type of it, consistent or random, although it is near impossible in reality to encounter observations without errors, moreover in the field of social sciences where attitudes, perceptions and intentions cannot be directly measured without an error degree.

SEM, as mentioned earlier is the successor of those statistical methods that could not efficiently explain new theoretical concepts anymore. SEM allowed simultaneous analysis of multiple dependent and independent variables as well as relations between them at a multi-layered level, dealing with concepts that could not be measured directly and automatically taking in account possible measurement errors for a more precise result (Cole & Preacher 2014).

PLS is an extension of SEM that deals with causal relationships, which tend to explain and predict why certain outcomes occurred (Chin et al. 2020).

3.4.2. PLS-SEM main concepts

Latent variables are abstract concepts that vary from the nature of research. In the context of this thesis, latent variables are the components of TPB: attitudes toward buying from farmers' markets, buying intention, subjective norms, and perceived behavioral control. As mentioned already latent variables are usually abstract concepts that cannot be observed or measured directly and explained by underlying factors. When building a PLS-SEM model, latent variables are depicted as circles or ovals (Garson 2016).

Observed variables, also known as indicators are variables that contain raw data on the basis of questionnaires that are tangible and measurable, unlike latent variables. The linkage between indicators and latent variables is represented by arrows that are one-way headed and express a dictionary relationship between them. In most cases, arrows are headed from the indicators toward the latent variables. In a PLS-SEM model indicators usually take form of rectangles (Garson 2016).

Exogenous variables or independent variables are regarded to have an independent influence on the inner model, usually, they are the cause of something, and arrows are directed from them toward endogenous variables (Garson 2016).

Endogenous variables or dependent variables, are the ones we are trying to measure, explain, and predict. As the name implies, dependent variables are dependent on exogenous variables, thus when changes occur in exogenous variables, we also expect variations in endogenous (Garson 2016).

Error terms reflect the difference between real and theoretical data, between observed and predicted data. These errors are considered to be random differences that the model could not explain and attributed only to endogenous variables because exogenous variables are expected to be collected without any errors as their values are presumed to be influenced by factors outside the model (Garson 2016).

Control variables are not always included when building SEM models, it depends on the nature of the research, however, they are used to find alternative explanations for certain outcomes and amplify the statistical power of the whole model (Battisti & Siletti 2023). In this study control variables are illustrated as circles (age and gender) in Figure 7.

The full model is represented by a mix of measurement models and a complex relationship between latent variables and observed variables. In the context of this study, measurement model takes the nature of confirmatory factor analysis which is suitable for complex measurement concepts like intentions, satisfaction, or intelligence and is particularly useful to validate and test the structure of the model based on theoretical expectancies (Garson 2016). The designed model for this study can be seen in Figures 6 and 7. The following symbols were used to depict individual parts of the model: (A_1; A_2 to A_X) are indicators items that belong to the latent variable of attitudes toward buying from farmers' markets, (N_1; N_2 to N_X) are indicators belonging to the latent variable that represent norms, (C_1; C_2 to C_X) are items that belong to the latent variable of perceived behavioural control, (I_1; I_2 to I_X) are items that belong to the latent variable of intention to buy from farmers' markets, (E_1; E_2 to E_X) are error terms.
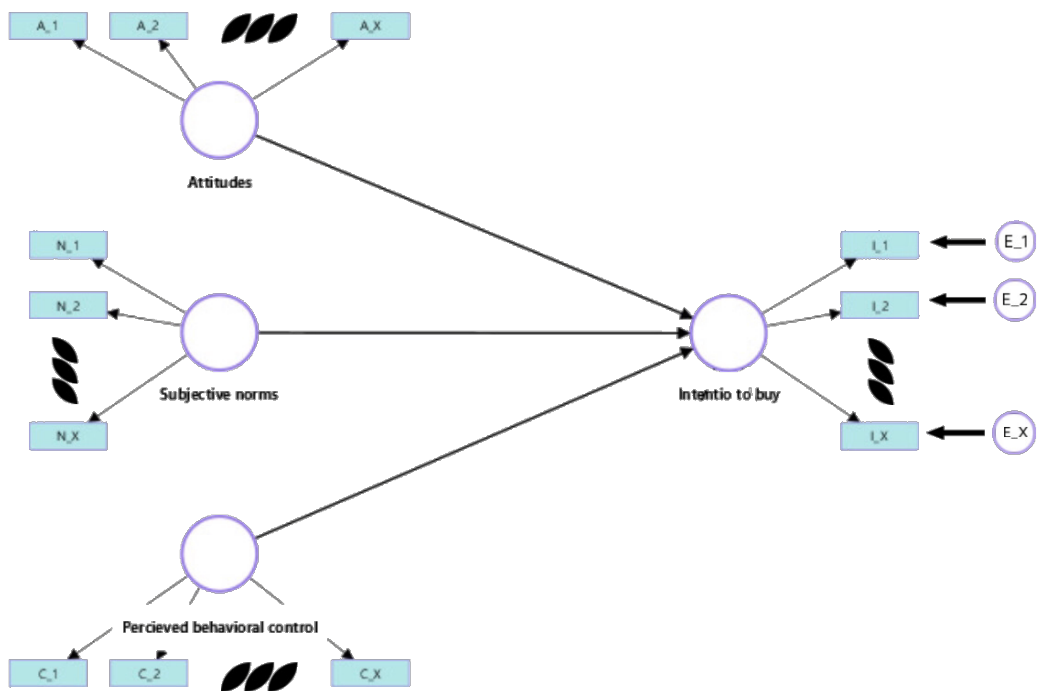
Figure 6. PLS-SEM for TPB to explain buying intention from farmers' market.
**Source: own compilation.**
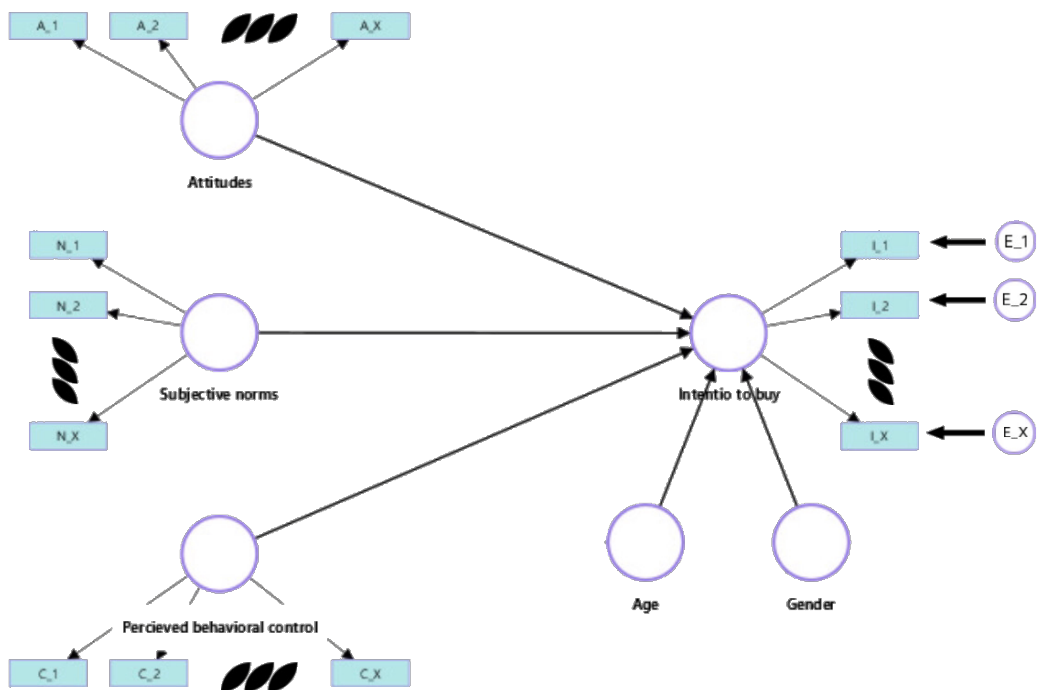
Figure 7. PLS-SEM for TPB to explain buying intention from farmers' market with age and gender as control variables.
Source: own compilation.

3.4.3. Factor analysis

Specific fields of study such as psychology or social sciences often explore complex causal relationships and correlations among underlying factors, this involves a large number of variables to analyse. Factor analysis helps to reduce the time needed for the analysis as it identifies groups of latent factors that explain the shared variance of all factors it contains thus factors analysis was performed as part of PLS-SEM calculation as it handles the complex concept of TPB and gains insight into the latent structure of data.

3.4.4. Outer loadings

Outer loadings are standardized weights in the model that represent the strength and direction between an indicator and a latent variable, the absolute contribution of it. These outer loadings strictly take values from 0 to 1, a closer value to 1 means high significance making the measurement model more reliable, a value close to 0 shows no sign of significance for the model. In the academic field there is no clear value threshold for outer loadings however many studies imply values of $0.6 - 0.7$ as acceptable, and drop those with lower values (Garson 2016), although values as low as 0.4 can be counted as acceptable if they do not decrease composite reliability (Chin 1998; Hair et al. 2021).

3.4.5. Reliability, validity and multicollinearity

Reliability and validity analysis are crucial steps to be considered in any research as they measure the quality of items used and ensure that measurements are significant, consistent and precise. Some of the most widespread and accepted validity and reliability indicators were used in this study to empathise the significance of the whole model.

Cronbach's alpha coefficient show how closely multiple indicators are related to each other as a group. The internal consistency of the model is assessed using this

coefficient. It takes values from -∞ to 1, and the closer it is situated to 1, the more it is considered reliable. Most accepted thresholds are 0.80 to 0.70, however 0.60 is also acceptable (Garson 2016).

Cronbach's alpha coefficient's formula is as following (Cronbach 1951):

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^{k} \sigma_i^2}{\sigma_t^2} \right),$$

where k is the number of items in the measure, σ_i^2 is the variance of the *i*-th item, σ_t^2 is the total variance of the scale (Cronbach 1951).

Composite reliability is another method to assess internal consistency used in SEM and represents an alternative to Cronbach's alpha. Its values range from 0 to 1, with values close to 1 being the most significant, indicating higher reliability. Accepted values for an adequate model are 0.6 to 0.7 or even higher for better confirmatory research (Chin 1998; Daskalakis & Mantas 2008; Henseler et al. 2015). Composite reliability can be calculated using the following formula:

$$CR = \frac{(\sum_{i=1}^{n} FL_i)^2}{(\sum_{i=1}^{n} FL_i)^2 + (\sum_{i=1}^{n} ME_i)},$$

where FL_i is standardized factor loading, ME_i is variance in measurement error, and n is number of items (Netemeyer 2003).

Average Variance Extracted (AVE) is a useful metric that explains the commonality between the latent variable and its indicators. AVE is used as a test for both convergent and divergent validity. Accepted values start above the 0.5-point mark, meaning that at least 50 % of the indicator's variance is explained by the latent variable (Chin, 1998; Garson 2016). Based on Hair et al. (2021) we can calculate AVE using the following formula:

$$AVE = \frac{\sum_{i=1}^{n} FL_i^2}{n},$$

Variance Inflation Factor (VIF) is a good measure in regression analysis to assess the presence of high multicollinearity which might alter independent variables and their reliability and assure that indicators fully capture the specific aspect of the

construct. As a general rule, VIF takes values from 1 to +∞ and the general threshold for VIF values should be less then 5.0 or 4.0 to exclude problematic multicollinearity (Garson 2016).

The Fornell-Larcker method is used to assess discriminant validity within a measurement model, basically, it evaluates if the construct in the model is distinct and if each of them calculates a unique aspect of the studied topic. Fornell-Larker criterion is calculated based on Average Variance Extracted (AVE) by comparing the square root of AVE of each construct with correlations between that specific construct and all others in the model. There is no specific threshold for this indicator as it may change depending on the studied model and concepts, however, as a rule of thumb, the square root of the AVE value should be higher than the correlation value (Garson 2016).

Heterotrait-Monotrait Ratio (HTMT). HTMT ratio determines if the factors calculated in the model are different or similar to each other by comparing monotrait correlations to heterotrait correlations. Although Fornell-Larcker is also a good method to assess discriminant validity, Hensler et al. (2015) detected shortcomings that were diminished by the use of HTMT which better detects discriminant validity (Hensler et al. 2015). In an adequate model, heterotrait correlations should be smaller than monotrait, as a rule of thumb HTMT ratio should be below 1.0 value, however, researchers from different fields choose more stringent values such as 0.90 or 0.85 to asses if discriminant validity was established between chosen constructs (Gold et al. 2001; Kline 2016).

3.4.6. Model estimation

The model estimation will be conducted using PLS bootstrapping and a conclusion drawn from the P-values derived from the analysis. Bootstrapping is a robustness and reliability resampling method that analyses relationships between latent constructs and observed variables. Bootstrapping involves taking random samples with replacements to create bootstrap samples, leading to differences in standard errors.

4. Results

4.1. Socio economic characteristic of respondents

The results of descriptive statistics (Table 1) show the prevalence of women respondents over men which correspond to quota sampling technique. About 82 % of the respondents interviewed were women and 18 % were men. The minimum age of the respondents was 18 and the maximum 65. About 55 % had a bachelor's degree and 22 % achieved higher academic results such as master or PhD, such big proportion of high educated people can be explained by the fact that the data was collected in capital city where everybody has access to education and money for it. The majority of those who participated, more than 40 % stated that their household consists of 4 people and about 30 % mentioned higher number of family members. Nearly 37 % of all respondents mentioned that their monthly household income is somewhere between 1000 $ and 2000 $ however most of them, approximately 49 % stated that they have incomes less than 1000 %.

Table 1. Socio economic characteristic of respondents.

Item	Options	Frequency (no. of respondents)	%
Gender	Male	27	18
	Female	123	82
Age	Mean	33.83	
	Standard deviation	11.631	
	Maximum	65	
	Minimum	18	
Education	Certificate of secondary education	7	4.7
	Vocational training	13	8.7
	High school diploma	15	10
	Bachelor	82	54.7
	Other (Master; PhD)	33	22
Household size	1	4	2.7
	2	17	11.3

	3	21	14
	4	64	42.7
	>4	44	29.3
Household income (per month)	<1000 $	73	48.7
	Between 1000 $ and 2000 $	55	36.7
	>2000 $	22	14.6

Source: own compilation

4.2. Background characteristics of respondent

Table 2 shows the behavioural characteristics of respondents. The share of food products from their own gardens is 0 % for nearly half of respondents, meaning that they do not get any products from it. A substantial number of respondents, 74 %, stated that they do not visit a fitness club or a gym at all. More than 70 % of respondents say their household prepares salads at least 3 days a week. Results show that respondents buy organic products as the most popular answer was "1-2" days in a week. Cooking enjoyment was assessed on a scale from 0 % to 100%. A significant majority of respondents, 29 % and 36 % indicated that their pleasure in cooking are more than 51 % and respectively more than 76 %.

Table 2. Behavioural characteristic of respondents.

Item	Options	Frequency (no. of respondents)	%
The amount of fruits/vegetables/other I get from my garden is… %	0 %	69	46
	1 % to 10%	38	25.3
	11 % to 20 %	23	15.3
	21 % to 30 %	10	6.7
	>30 %	10	6.7
I go to a fitness club/gym …days per week	0	111	74
	1-2	22	14.6
	3-4	13	8.7
	5-6	3	2
	7	1	0.7

29

My household prepare salad …days per week	0	2	1.3
	1-2	33	22
	3-4	61	40.7
	5-6	36	24
	7	18	12
I buy organic products …days per week	0	16	10.7
	1-2	78	52
	3-4	44	29.3
	5-6	7	4.7
	7	5	3.3
I enjoy cooking (in %)	0 %	8	5.3
	1 % to 25 %	13	8.7
	26 % to 50 %	30	20
	51 % to 75 %	44	29.3
	76 % to 100 %	55	36.7

Source: own compilation

4.3. TPB construct related characteristics

This section contains descriptive results of TBP constructs such as attitudes, norms, and perceived behavioural control factors that were used for model estimation.

Table 3 reflects factors related to the attitudes of respondents in regard to different aspects of the farmers' markets. The freshness of products from farmers' market was considered important by respondents as more than 60 % stated that they believe that at farmers' markets, they can find fresher products in comparison to other types of retailers. Consumers also believe that those products are healthier compared to those from supermarkets or other type of retailer, with this statement agreed nearly 60 % of respondents and only 17 % said otherwise. Derived from healthiness, environmentally friendly factor was also seen as essential by respondents as more than 50 % of them considered that products brought from farmers' markets were more environmentally friendly produced compared to other retailers. Price was also

crucial to understand respondent's attitudes however here results are controversial, as both the agreement rate and disagreement rate are at about 40 %. Last but not least important factor, is pleasant interaction with the seller at the farmers' markets, about 60 % of respondents mentioned that they like to interact with the seller when buying products from the farmers' markets.

Table 3. Factors related to attitudes.

Item	Options	Frequency (no. of respondents)	%
I believe that products from farmers' markets are fresher compared to products from other retailers	Strongly agree	26	17.3
	Agree	68	45.3
	Undecided	30	20
	Disagree	24	16
	Strongly disagree	2	1.3
I believe products from farmers' markets to be healthier than products from other retailers	Strongly agree	26	17.3
	Agree	59	39.3
	Undecided	40	26.7
	Disagree	24	16
	Strongly disagree	1	0.7
I think that products from farmers' markets to be more environmentally friendly produced compared to products from other retailers	Strongly agree	27	18
	Agree	51	34
	Undecided	43	28.7
	Disagree	27	18
	Strongly disagree	2	1.3
I find pleasant interacting with the shop assistant when buying products directly from farmers' markets	Strongly agree	19	12.7
	Agree	71	47.3
	Undecided	35	23.3
	Disagree	21	14
	Strongly disagree	4	2.7
I believe products from farmers' markets to be cheaper than products from other retailers	Strongly agree	16	10.7

	Agree	46	30.7
	Undecided	33	22
	Disagree	48	32
	Strongly disagree	7	4.7

Table 4 reflects factors related to subjective norms. Family and friend support although significant but controversial at the same time in those two cases respondents had different opinions, 55 % and 39 % respectively answered positively when asked if their family and friends support their decision to buy from farmers' markets. The majority of respondents, nearly 80 % mentioned that their family opinion is important for them. Trust is also essential in commercial relationships, in this research trust in farmers' markets had more than 45 % of respondents and 34 % doubts to answer, however, higher results were observed when asked about the tendency to buy from sellers they personally know, with more than 85 % affirming responses.

Table 4. Factors related to subjective norms.

Item	Options	Frequency (no. of respondents)	%
My family think I should buy products from farmers' markets	Strongly agree	17	11.3
	Agree	67	44.7
	Undecided	47	31.3
	Disagree	18	12
	Strongly disagree	1	0.7
My friends think I should buy products from farmers' markets	Strongly agree	8	5.3
	Agree	50	33.3
	Undecided	64	42.7
	Disagree	25	16.7
	Strongly disagree	3	2
My family opinion is important for me	Strongly agree	26	17.3
	Agree	92	61.3
	Undecided	17	11.3
	Disagree	13	8.7
	Strongly disagree	2	1.3
I trust farmers' markets more than other types of retailers	Strongly agree	17	11.3

	Agree	55	36.7
	Undecided	51	34.0
	Disagree	24	16
	Strongly disagree	3	2
I tend to buy more products from the seller i know personally at the farmers' markets	Strongly agree	61	40.7
	Agree	70	46.7
	Undecided	11	7.3
	Disagree	6	4
	Strongly disagree	2	1.3

Source: own compilation

Table 5 reflects factors related to perceived behavioural control consisting of potential barriers that may affect buying intention. Distrust in the seller seems not to be a barrier for the respondents to buy from farmers' markets where about 40 % disagree and 26 % remain neutral. Limited variety in stock was not considered as a barrier by the respondents as only 16 % agreed that they cannot buy from farmers' markets due to low variety in stock, and more than 60 % disagreed with the statement. This indicates that visitors are satisfied by the displayed variety. Long travel distances resulted in near-balanced results, with 40 % seeing this factor as a barrier and more than 45 % thinking the opposite. The only barrier that was acknowledged by most of the respondents was lack of time, more than 50 % agreed that lack of time stops them from coming to farmer's market and making groceries at other types of vendors.

Table 5. Factors related to perceived behavioural control.

Item	Options	Frequency (no. of respondents)	%
I can't purchase at the farmers' markets because I don't trust the seller	Strongly agree	12	8
	Agree	37	24.7
	Undecided	40	26.7
	Disagree	50	33.3
	Strongly disagree	11	7.3
I can't purchase at the farmers' markets because of limited variety in stock	Strongly agree	3	2
	Agree	24	16

	Undecided	31	20.7
	Disagree	78	52
	Strongly disagree	14	9.3
I am unable to purchase at the farmers' markets due to the long travel distance	Strongly agree	21	14
	Agree	39	26
	Undecided	18	12
	Disagree	58	38.7
	Strongly disagree	14	9.3
I'm unable to purchase at the farmers' markets due to a lack of time	Strongly agree	23	15.3
	Agree	56	37.3
	Undecided	17	11.3
	Disagree	42	28
	Strongly disagree	12	8

Source: own compilation

Table 6 reflects consumers' intention to buy from farmers' markets statistics. First is general intention to buy from farmers' markets in the future, measured on a five-point Likert scale, from fully agree to fully disagree. Second factor reflecting intention was the intended visiting frequency, meaning how often they would be visiting farmers' markets. The answer was divided into five categories weekly, every two weeks, monthly, occasionally and prefer not to say/never.

Table 6. Factors related to intention to buy from farmers' markets.

Item	Options	Frequency (no. of respondents)	%
I intend to buy from farmers' market (future)	Strongly agree	24	16
	Agree	72	48
	Undecided	35	23.3
	Disagree	17	11.3
	Strongly disagree	2	1.3
How often do you intend to buy from farmers' market	Weekly	55	36.7
	Every two weeks	24	16
	Monthly	16	10.7
	Occasionally	51	34

	Prefer not to say/Never	4	2.7

Source: own compilation

4.4. SEM result

In this study we used structural equation model and performed partial least square modelling to test the main study hypothesis as previously mentioned, moreover, I designed two models to also test if the inclusion of two control variables such as age and gender would affect the estimation of buying intention and which of these two models will have higher explanatory power.

In Figures 8 and 9 we can find designed models in context of this particular study and results of confirmatory composite analysis.
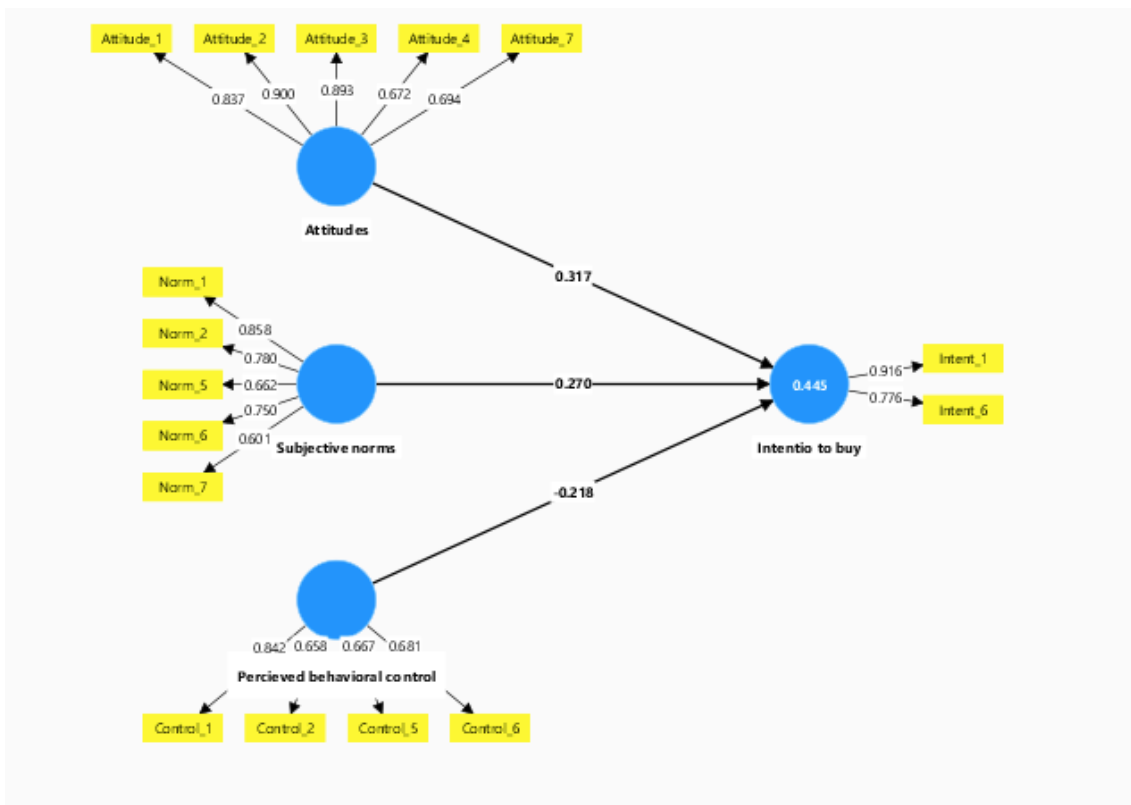
Figure 8. First model representation.
Source: own compilation
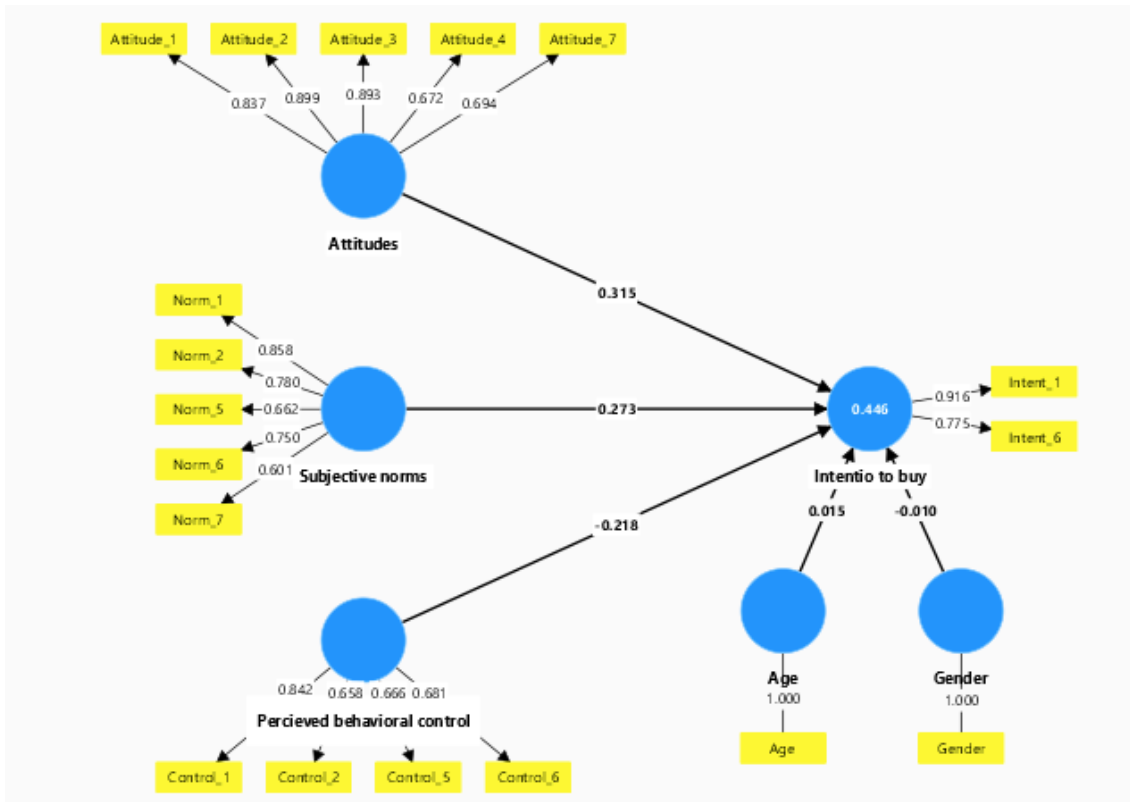
Figure 9. Second model representation.
Source: own compilation.

Table 7 below presents measurement items and their reliability for first and second model. Full question content can be seen in in the questionnaire in Appendix 1.

Table 7. Factor loadings.

Constructs and their respective items	Factor loadings Model 1	Factor loadings Model 2
Q27 <- Gender	N/A	1
Q28 <- Age	N/A	1
Q1 <- Intent_1	0.916	0.916
Q2 <- Intent_2	Dropped	Dropped
Q3 <- Intent_3	Dropped	Dropped
Q4 <- Intent_4	Dropped	Dropped
Q5 <- Intent_5	Dropped	Dropped
Q6 <- Intent_6	0.776	0.775
Q7 <- Attitude_1	0.837	0.837
Q8 <- Attitude_2	0.900	0.899

Q9 <- Attitude_3	0.893	0.893
Q10 <- Attitude_4	0.672	0.672
Q11 <- Attitude_5	Dropped	Dropped
Q12 <- Attitude_6	Dropped	Dropped
Q13 <- Attitude_7	0.694	0.694
Q14 <- Norm_1	0.858	0.858
Q15 <- Norm_2	0.780	0.780
Q16 <- Norm_3	Dropped	Dropped
Q17 <- Norm_4	Dropped	Dropped
Q18 <- Norm_5	0.662	0.662
Q19 <- Norm_6	0.750	0.750
Q20 <- Norm_7	0.601	0.601
Q21 <- Control_1	0.842	0.842
Q22 <- Control_2	0.658	0.658
Q23 <- Control_3	Dropped	Dropped
Q24 <- Control_4	Dropped	Dropped
Q25 <- Control_5	0.667	0.666
Q26 <- Control_6	0.681	0.681

Source: own compilation

After the analysis of factor loadings, we excluded some variables that did not fell under the accepted threshold of 0.6-0.7 mentioned earlier, those variables were labelled as "dropped" and were not included in the models for further analysis.

Remaining variables that meet the requirements has been gathered and formed latent variables, whose descriptive statistics can be seen in Table 8 and 9.

Table 8. Description of the latent variables in first model.

	Mean	Median	Observed min	Observed max	Standard deviation
Attitude toward buying	0.000	-0.147	-1.867	3.070	1.000
Buying intention	0.000	-0.094	-1.532	2.881	1.000

	Mean	Median	Observed min	Observed max	Standard deviation
Perceived behavioral control	0.000	-0.111	-2.244	2.299	1.000
Subjective norms	0.000	-0.098	-2.132	3.999	1.000

Source: own compilation

Table 9. Description of the latent variables in second model.

	Mean	Median	Observed min	Observed max	Standard deviation
Age	0.000	0.014	-1.366	2.689	1.000
Attitude toward buying	0.000	-0.147	-1.867	3.070	1.000
Buying intention	0.000	-0.095	-1.532	2.882	1.000
Gender	0.000	0.469	-2.134	0.469	1.000
Perceived behavioral control	0.000	-0.111	-2.245	2.299	1.000
Subjective norms	0.000	-0.098	-0.098	3.999	1.000

Source: own compilation

Aside from descriptive statistics of latent variables, we may highlight the R-squared value for both models from Figure 8 and Figure 9, which is represented by the number inside the latent variable of intention to buy, respectively 0.445 and 0.446, meaning that 44.5 % and 44.6 % of the variance in intention variable is explained by the model. Various values of R-square may be taken into consideration and considered as good or bad indicators, guided by Chin's (1998) work where he describes results above 0.66, 0.33, and 0,19 to be "substantial", "moderate" and "weak" respectively, we may describe the strength of our results as moderate. Höck and Ringle's (2010) research also supports the above threshold values for R-square and further empathize that values considered to have substantial strength vary depending on the field of study, if previous research in that field had particularly low results then even R-squared value of 0.25 may be considered high.

4.5. Construct reliability, validity and multicollinearity

Coefficients and values of reliability, validity and multicollinearity were calculated and displayed in Tables 10 and 11. Composite reliability and Cronbach's alpha values are above the accepted threshold of 0.6-0.7 also AVE values of latent variables are acceptable, above 0.5, meaning that factors are reliable and valid. VIF

values for items are also within the accepted range of less than 5.0 or even 4.0 meaning that we do not have cases of high multicollinearity (Table 12).

Table 10. Construct reliability and validity of the first model.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Attitudes toward buying	0.859	0.867	0.901	0.648
Buying intention	0.628	0.714	0.837	0.721
Perceived behavioural control	0.709	0.851	0.806	0.512
Subjective norms	0.785	0.812	0.853	0.541

Source: own compilation

Table 11. Construct reliability and validity of the second model.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Attitudes toward buying	0.859	0.867	0.901	0.648
Buying intention	0.628	0.716	0.837	0.720
Perceived behavioural control	0.709	0.851	0.806	0.512
Subjective norms	0.785	0.812	0.853	0.541

Source: own compilation

Table 12. VIF values of the first and second model.

First model	VIF	Second model	VIF
Attitudes_1	2.245	Attitudes_1	2.245
Attitudes_2	3.941	Attitudes_2	3.941
Attitudes_3	3.819	Attitudes_3	3.819
Attitudes_4	1.323	Attitudes_4	1.323
Attitudes_7	1.508	Attitudes_7	1.508
Intent_6	1.265	Intent_6	1.265

Control_1	1.477	**Control_1**	1.477
Control_2	1.464	**Control_2**	1.464
Control_5	2.116	**Control_5**	2.116
Control_6	2.117	**Control_6**	2.117
Intent_1	1.265	**Intent_1**	1.265
Norm_1	2.349	**Norm_1**	2.349
Norm_2	2.032	**Norm_2**	2.032
Norm_5	1.377	**Norm_5**	1.377
Norm_6	1.614	**Norm_6**	1.614
Norm_7	1.276	**Norm_7**	1.276
N/A	-	**Age**	1.000
N/A	-	**Gender**	1.000

Source: own compilation

The Fornell-Larker criterion and HTMT ratio were additionally calculated to further empathize discriminant validity presence in the models. The Fornell-Larker criterion was deducted using the AVE square root which appears as absolute values on the main diagonal (Tables 13 and 14), and correlation values below them. All correlation values do not exceed the AVE square roots implying discriminant validity.

Table 13. Fornell-Larcker criterion results for the first model.

	Attitudes toward buying	Buying intention	Perceived behavioural control	Subjective norms
Attitudes toward buying	0.805			
Buying intention	0.598	0.849		
Perceived behavioural control	-0.387	-0.446	0.716	
Subjective norms	0.731	0.587	-0.392	0.736

Source: own compilation

Table 14. Fornell-Larcker criterion results for the second model.

	Age	Attitudes toward buying	Buying intention	Gender	Perceived behavioural control	Subjective norms
Age	1.000					
Attitudes toward buying	0.102	0.805				
Buying intention	0.254	0.177	1.000			
Gender	0.032	0.599	0.087	0.849		
Perceived behavioural control	0.077	-0.387	0.054	-0.446	0.716	
Subjective norms	0.014	0.731	0.180	0.587	-0.392	0.736

Source: own compilation

Heterotrait-Monotrait Ratio (HTMT) is another method used to assess the discriminant validity of PLS model. Results shown in Tables 15 and 16 imply the presence of discriminant validity and a good fit of the model as the values in the tables do not exceed the accepted threshold of 1.00 or even 0.90 as suggested by previous research.

Table 15. HTMT matrix, first model.

	Attitudes toward buying	Buying intention	Perceived behavioural control	Subjective norms
Attitudes toward buying				
Buying intention	0.769			
Perceived behavioural control	0.412	0.564		

Subjective norms	0.886	0.787	0.424

Table 16. HTMT matrix, second model.

	Age	Attitudes toward buying	Gender	Buying intention	Perceived behavioural control	Subjective norms
Age						
Attitudes toward buying	0.165					
Gender	0.254	0.195				
Buying intention	0.133	0.769	0.114			
Perceived behavioural control	0.111	0.412	0.096	0.564		
Subjective norms	0.090	0.886	0.197	0.787	0.424	

5. Model estimation results and discussions

Model estimation was done using bootstrapping. Results were displayed in Table 17 alongside the T-statistics values and P-values for each hypothesised relationship in the construct. T-statistics value greater than 1.96 in the case of two-tailed hypotheses and 1.64 in the case of one-tailed hypotheses indicate that calculated indicators are significant at a 95 % significance level (α=0.5). In the below table (O) – original sample, (M) – sample mean, and (STDEV) – standard deviation. In both models the main concepts of TPB, attitudes, subjective norms, and perceived behaviour control toward intention were found significant based on the T-statistics test, also inclusion of control variables were not found statistically significant. Based on P-values the same conclusion can be drawn with further emphasis on perceived behavioural control toward intention in the first model which has a P-value of 0.000, meaning significance at better than the 0.001 probability level.

Table 17. Model estimation results (T-statistics; P-value).

Indicators	First model					Second model				
	(O)	(M)	(STDEV)	T-statistics	P-values	(O)	(M)	(STDEV)	T-statistics	P-values
Attitudes toward buying → Buying intention	0.317	0.307	0.106	2.996	0.003	0.315	0.305	0.105	2.996	0.003
Perceived behavioral control → Buying intention	-0.218	-0.226	0.062	3.493	0.000	-0.218	-0.227	0.063	3.462	0.001

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Subjective norms → Buying intention	0.270	0.279	0.102	2.649	0.008	0.273	0.282	0.106	2.585	0.010
Age → Buying intention	N/A					0.015	0.014	0.058	0.258	0.796
Gender → Buying intention	N/A					-0.010	-0.011	0.067	0.147	0.883

Source: own compilation

Based on the results of model estimation and significance results from table above we may say that all hypotheses were accepted and supported (Table 18) as all three TPB main concepts manifest statistically significant influence on intention.

Table 18. Visualization of hypotheses.

	Hypothesis	Decision
1.	The attitude toward farmers' markets affects the buying intention	Accepted
2.	Subjective norms affect the buying intention.	Accepted
3.	Perceived behavioural control affect the buying intention	Accepted

Source: own compilation

Similar results were found by Hoppe et al. (2013), who studied consumer's behaviour toward products from farmers' markets, more specific toward organic products from those farmers' markets. The study took place in Porto Alegre, Brazil and similarly to present study data was collected not only at farmers' markets but also at supermarkets. TPB was integrated as part of their study in order to understand better how people decide to buy products from farmers' markets. Their results show that attitudes, subjective norms and perceived behavioural control all have a significant influence over people's intention to buy from farmers' markets which aligns with results we received in this study. This study highlights the role of key TPB components

consumers behaviour and show how this theory can be applied to a specific category of products within the farmer's market context.

Comparable results were found by Bavorova et al. (2018), who conducted research in Naumburg, Germany. The focus of their work was at finding the main direct and indirect determinants of buying intention from farmers' markets using an extended version of Theory of Planned Behaviour framework. The final results however are not entirely matching ours as the most powerful explanatory construct was perceived behaviour control, attitudes were found statistically insignificant and norms only partially significant, such results may be caused by the geographical specificity of the study itself. The farmers' markets where pedestrians were interviewed may be the reason for such results since they are not very close to the centre. The fact that there was other more convinient, closer to centre of Naumburg, shopping opportunities could also be the reason why long-distance factor in their work had the highest significance and coefficient. Factor of long travel distance was found significant in present study with a coefficient value similar to one of Bavorova et al. (2018), however only a part of respondents from Moldova faced it as a significant barrier (40 % agreed) (Table 5). The others probably live or work nearby the market or have a car or other transportation means to reach it rather easily.

Similar results come from Vietnam, where Phuong et al. (2022) used an extensive version of TPB to study Vietnamize consumers intention to purchase local food from farmers in context of COVID-19 pandemic. The included two additional concepts beside the main one, author argued that trust is an important factor that can shape consumers intention and relationship between consumer and producers, thus it was added as an extension of TPB. COVID-19 pandemic was believed to have an effect on consumers behaviour and also included as an edition to the original TPB. Results shows that subjective norms, perceived behavioural control, trust, and attitudes were found significant, which align with results from Moldova. However, trust toward the behaviour was not included as a separate concept of TPB in present study but as factors representing subjective norms, trust in farmers' markets and tendency to buy from products from sellers that consumers personally know (Table 4). About 45 % of Moldovans agreed that they trust in farmers' markets more than other type of

retailers and more than 85 % of them mentioned that they buy from sellers they already know, this indicates a strong influence of trust factor which facilitate creation of good relationship between consumers and producers as Giampietri et al. (2018) and Mazzocchi et al. (2008) mentioned in their research. COVID-19 influence on the behaviour however was found statistically insignificant, meaning that perception of pandemic outbreak did not influenced intention of Vietnamize consumers which contradicts previous researches of Kumar et al. (2021).

Another study that come from Brazil by Costa et al. (2021), was focused on purchase intention of green products that usually can be found at farmer's market. Their results show that attitudes influence purchase intention, which also align with our findings. Costa et al. (2021) used a modified framework of TPB in order to analyse consumers intention to buy products based on previous experiences and attitudes and found that there is a statistical significance between attitudes and intentions to buy green products. Positive attitudes toward green products and overall impact of attitudes toward intention to buy were also proven significant in present study as the environmentally friendly and healthiness of products (Table 3) showed great coefficient value. Moreover, more than 50 % respondents believed that products from farmers' markets were healthier and more environmentally friendly produced in comparation to other retailers. Also, at least 50 % mentioned that they buy organic products at least one or twice per week, and about 30 % do it 3 to 4 times a week, which indicates a high degree of environmental consciousness and its influence over the purchasing decisions, also confirmed in other studies (Vicente-Molina et al. 2013; Curvelo et al. 2019).

Another study from a neighbourhood country, Romania, explored attitudes, behaviour and intentions of consumers to buy organic food from local farmers employing a TPB framework (Radulescu et al. 2021). Similarities with our results were found regarding attitudes and consumption barriers. The attitudes of Romanian consumers seem to correspond to Moldovans as it was found statistically significant, highlighting that a lot of external factors contribute to buying intention. For instance, perceived product healthiness and environmental impact of it, as well as product freshness (Table 3), where more than 60 % of our respondents believed that products

from farmers are fresher. These factors may be the cause why Radulescu et al. (2021) did not manage to support the hypothesis that barriers significantly influence buying intention. Due to the very traditions of Romania or even a common tendency of Eastern European countries to eat fruits or vegetables as natural and healthy as possible from farmer's markets/agri-food markets despite higher prices they may not perceive it as barriers (Canavari et al. 2005). In present study, barriers included in PBC were found significant in spite of results from Romania, although we did not have the factor of higher prices as a barrier but rather as an attitude, it can potentially be tested in future researches as part of PBC. Perceived product price could become one of the main barriers as only 40 % of respondents agreed that they could find cheaper products at farmers' markets, these results imply that respondents from Moldova do not see farmers' markets products cheap however still willing to buy. These findings may be argued by other researches which states that in some regions product prices from farmers are high in correlation to buying power of consumers and in most of cases people declare their willingness to pay more, however during real situation they restrain themselves from paying additionally (Feldmann and Hamm 2015; Cetina et al. 2018).

Comprehensive research from USA, focused on intention to buy local food from various sources including farmers' markets (Shin 2014). He used an extension of TPB framework which looks at how much one's beliefs align with behaviour and real actions. Findings suggest a significant influence of attitude and perceived behavioural control on intention to buy local food which align with our findings, in contrast subjective norms were not supported. Difference in subjective norms can be the consequence of multiple factors, for instance differences in mentality and values of consumers. Subjective norms partly resonate with the expectations and approval from exterior. Respondents mentioned this to be important, about half of them feel influenced from their friends and family to buy from farmers' markets (Curvelo et al. 2019), also family opinion was found to be significant as about 80 % of respondents agreed to this statement (Table 4). For some people purchasing products from farmers' markets is a simple matter of self-decision that has nothing to do with others. Interestingly Shin (2014) studied the effect of intention toward the real behaviour and

it was proven significant, this suggest that such relationship may be possible in our study which may serve base for different researches in this field or as an extension to our present research that would give us new perspective on buying intention from farmers' market.

There is a need to mention control variables which were part of second model however were not found to have a significant impact on overall intention, nevertheless studies from other countries show opposite results in regard to age and gender. Polimeni et al. (2018) find age as an important factor that shapes consumers intention to buy at farmers' markets, as the age of consumer increase the chance of a positive change in intention also rises, it may be explained by the fact that as people live longer their values changes and they start to acknowledge the importance of farmers' markets and visit it more often. Additionally, household size was also found to be an important characteristic and can be linked to age, usually middle age respondents tend to have young children with whom they live in the household, with more children the probability of a positive change in buying intention from farmers' markets also increases Tung et al. (2015), and vice versa, the older respondents are, the chance that they still have minor children who live household falls, thus changes in intention to buy from farmers' markets also falls (Pascucci et al. 2011).

Gender was another control variable that was found insignificant, we expected that due to historical distribution of roles and tradition where women held primary responsibility for meal preparation and overall dietary regime of the household, results would be substantial. Previous researches also suggest that the average proportion at the farmers' markets is between 50 % and 75 % (Elepu & Mazzocco 2010; Fehrenbach and Wharton 2012; Ma and Chang 2022), which align with numbers of female respondent in present paper (Table 1). Women are more concern about the quality of the food as some studies suggest they are more risk-averse then men, also sometimes women are more concerned with the ethical part of the product, environmental impact, carbon footprint and other related factors (Baker 2003; Tonsor et al. 2009). Further research of gender influence on buying intention from farmers' markets in other countries would aid in understanding if gender stereotype that was created long

ago is still valid or men started to show their significant involvement in grocery shopping and dietary preferences on behalf of the household.

6. Conclusions, limitations and recommendations

6.1. General conclusions

The main objective of this study was to determine which factors influence the consumers' intention to buy from farmers' markets in Moldova within the framework of the Theory of Planned Behaviour. Data was collected at one of the most popular farmers' markets in Chișinău, the capital city of Moldova, and other less popular farmers' markets and supermarkets in proximity, using a well-structured questionnaire designed in English and translated into Romanian. A total of 150 responses were collected and further analysed in IBM SPSS Statistics 28.0 and Smart PLS 4 software.

Results from bootstrapping lead us to conclude that all three hypotheses are supported meaning that attitudes, subjective norms, and perceived behavioural control have a significant influence on intention to buy from farmers' markets. Furthermore, present results describe the average consumer as a middle-aged, educated person with the majority of them having at least a bachelor's degree, a big family, and a low to medium household income. We discovered that most people believe they may find cheaper, healthier, and more environmentally produced products at farmers' markets in comparison to other types of retailers, also trust and personal preferences in choosing a seller at the farmers' markets were found also important for respondents. Support from friends and family for their plan to purchase from farmers was also found to be significant in influencing purchasing intentions. Nevertheless, this study revealed results that could not be supported such as age and gender, two control variables could not be supported, meaning that they do not play a significant role in determining the buying intentions of Moldovan consumers.

6.2. Study limitations

There are a number of limitations in this Master's thesis that should be mentioned.

One possible limitation of this study could be the lack of national/local statistical data about farmers' markets, their number, consumer profile data (age,

gender, origin, etc), and also the lack of studies on the same or related topic from Moldova. Potential previous literature from the country could help support our results or raise interesting discussions within the frame of one country.

Last but not least, although not studied in this research, the presence of an intention to buy from farmers' markets does not necessarily mean that it will result in the real behaviour of respondents. In this kind of research, this kind of results represent only the preferences of consumers but not a certain behaviour. Also, there might occur a change in attitudes, and norms due to some external factors or appearance of others, not included in this particular study barriers that would influence the final intention to buy. However, for the purposes of this study, we consider our data valid as the data received from respondents is considered reliable.

6.3. Recommendations

6.3.1. Policy and projects recommendations

Based on the results of the study, they could be used for the development and implementation of major national policies which might enhance market visibility and accessibility, particularly in an urban area where the study took place particularly because of low interest in farmers' markets by the younger generation (Warsaw et al. 2021), however, the likelihood of such event is low due to lack of studies on this topic in Moldova, thus the development of smaller local projects or policies is recommended.

Potential projects with a focus on the digital dimension would be beneficial for both consumers and farmers. Pesci et al. (2023) explain how farmers' markets from the USA encountered the lockdown created by COVID-19 and the long-term economic consequences of it. However, they were able to somehow minimize the side effects, even when the farmers' markets were completely shut down, the possibility of online grocery shopping and its delivery to the customer was a great decision as the demand was reported to be the same and, in some cases, even higher than the traditional way of shopping from farmers' markets. A similar project would be advisable for Moldovan farmers, e-commerce would be an efficient tool to increase their sales and range of

services. The creation of a website dedicated to specific farmers' markets would bring more transparency and ease for customers.

Local projects to increase farmers' awareness about the main factors and motivations that influence consumers' intention to buy from them, might positively affect farmers' marketing strategies and better target consumers to increase their income, overall economic development, and increase social capital and trust. In the end, farmers would become more financially secure and self-sufficient, which would boost the use of sustainable agricultural practices (Polimeni et al. 2018).

Potential educational campaigns or projects among farmers regarding labelling importance and product placement, right advertisement practices so consumers can easily understand what kind of product they buy. This might increase market penetration, customer retention, and the advancement to new farming practices (Sica & Franco 2024).

6.3.2. Recommendations for further researches

Based on the results of this study we can affirm that TPB is a useful theoretical framework that efficiently explains consumers' intentions to buy from farmers' markets in Moldova by examining various potential factors that might influence the intention.

However due to the lack of similar studies in the country, the applicability of TPB should be further researched and tested in the context of various socio-economical environments, with the use of different factors, other than those used in the present study and with a focus on rural and urban respondents' perspective which can bring useful insights regarding factors that may be significant for a group of people but insignificant for other.

In addition, a more comprehensive study could be carried out, involving also the extension of the TPB framework, focusing not only on intention but also on actual behaviour, how the main concepts of TPB influence intention to buy, and if the presence of intention leads to actual behaviour. Also, the next studies could focus more on the responses of people interviewed at farmers' markets and those at

supermarkets or other types of retailers, with further division and comparison between them.

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Appendices

List of the Appendices:

Appendix 1: Study Questionnaire.

Appendix 2: Socio-economic and background characteristics of respondent

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Appendix 1: Study Questionnaire.

Consumers' buying intention from farmers' markets questionnaire

Dear Sir / Madam,

I am a student at the Czech University of Life Sciences in Prague, Czech Republic and I am conducting a study in which I want to learn more about "Factors influencing the intention to buy food products from farmers' markets". All data is collected anonymously. I will be grateful if you fill in the questionnaire as you would help me enormously in this research. Completing the questionnaire only takes a few minutes. Thank you!

Section A: Intention				
Q1 <- Intent_1 I intend to buy from farmers' market				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q2 <- Intent_2 I intend to buy products from farmers' market … days next week				
0	1-2	3-4	5-6	7
Q3 <- Intent_3 I intend to support farmers by buying products from farmers' market				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q4 <- Intent_4 Last week I purchased products from farmers' market … days				
0	1-2	3-4	5-6	7
Q5 <- Intent_5 I intend to recommend my family to buy from farmers' market				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q6 <- Intent_6 How often do you intend to buy from farmers' market				
Weekly	Fortnightly	Monthly	Occasionally	Don't know/Undecided
Section B: Attitudes				
Q7 <- Attitude_1 I believe that products from farmer's market are fresher compared to products from other retailers				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q8 <- Attitude_2 I believe products from farmers' market to be healthier than products from other retailers				

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q9 <- Attitude_3 I think that products from farmers' market to be more environmentally friendly produced compared to products from other retailers

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q10 <- Attitude_4 I find pleasant interacting with the shop assistant when buying products directly from farmers' market

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q11 <- Attitude_5 I think it is important to support farmers by buying from farmers' market

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q12 <- Attitude_6 I think it is important to know the origin of products

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q13 <- Attitude_7 I believe products from farmers' market to be cheaper than products from other retailers

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Section C: Subjective Norms

Q14 <- Norm_1 My family think I should buy products from farmers' market

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q15 <- Norm_2 My friends think I should buy products from farmers' market

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q16 <- Norm_3 I have had positive experiences with products from farmers market in the past

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q17 <- Norm_4 My friends' opinion is important for me

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q18 <- Norm_5 My family opinion is important for me

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q19 <- Norm_6 I trust farmers' market more than other types of retailers

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Q20 <- Norm_7 I tend to buy more products from the seller i know personally at the farmers market

Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Section D: Perceived Behavioural Control				
Q21 <- Control_1 I can't purchase at the farmers market because i don't trust the seller				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q22 <- Control_2 I can't purchase at the farmers outlet because of limited variety in stock				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q23 <- Control_3 I am unable to purchase at the farmers outlet due to lack of motivation (laziness)				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q24 <- Control_4 I am unable to purchase at the farmers outlet due to the short operation time of farmers' market				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q25 <- Control_5 I am unable to purchase at the farmers outlet due to the long travel distance				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Q26 <- Control_6 I'm unable to purchase at the farmers outlet due to a lack of time				
Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Section E: Socio-economic characteristics				
Q27 <- Gender				
Male			Female	
Q28 <- Age				
...				
Q29 <- Household size				
1	2	3	4	>4
Q30 <- Education				
Certificate of secondary education	Vocational training	High school diploma	Bachelor	Other (Master; PhD)
Q31 <- Household income (per month)				
<1000 $	between 1000 $ and 2000 $		>2000 $	
Section F: Background				

Q32 <- The amount of fruits/vegetables/other I get from my garden is... %				
0 %	between 1 and 10 %	between 11 and 20 %	between 21 and 30 %	>30 %
Q33 <- I go to a fitness club/gym ...days per week				
0	1-2	3-4	5-6	7
Q34 <- My household prepare salad ...days per week				
0	1-2	3-4	5-6	7
Q35 <- I buy organic products ...days per week				
0	1-2	3-4	5-6	7
Q36 <- I enjoy cooking (in %)				
0 %	between 1 and 25 %	between 26 and 50 %	between 51 and 75 %	between 76 and 100 %

Appendix 2: Socio-economic and background characteristics of respondent

Table 1. Socio-economic characteristics of respondents.

Item	Options	Frequency (no. of respondents)	%
Gender	Male	27	18
	Female	123	82
Age	Mean	33.83	
	Standard deviation	11.631	
	Maximum	65	
	Minimum	18	
Education	Certificate of secondary education	7	4.7
	Vocational training	13	8.7
	High school diploma	15	10
	Bachelor	82	54.7
	Other (Master; PhD)	33	22
Household size	1	4	2.7
	2	17	11.3
	3	21	14
	4	64	42.7
	>4	44	29.3
Household income (per month)	<1000 $	73	48.7
	Between 1000 $ and 2000 $	55	36.7
	>2000 $	22	14.6

Source: own compilation

Table 2. Behavioural characteristics of respondents.

Item	Options	Frequency (no. of respondents)	%
The amount of fruits/vegetables/other I get from my garden is… %	0 %	69	46
	1 % to 10%	38	25.3
	11 % to 20 %	23	15.3
	21 % to 30 %	10	6.7

	>30 %	10	6.7
I go to a fitness club/gym …days per week	0	111	74
	1-2	22	14.6
	3-4	13	8.7
	5-6	3	2
	7	1	0.7
My household prepare salad …days per week	0	2	1.3
	1-2	33	22
	3-4	61	40.7
	5-6	36	24
	7	18	12
I buy organic products …days per week	0	16	10.7
	1-2	78	52
	3-4	44	29.3
	5-6	7	4.7
	7	5	3.3
I enjoy cooking (in %)	0 %	8	5.3
	1 % to 25 %	13	8.7
	26 % to 50 %	30	20
	51 % to 75 %	44	29.3
	76 % to 100 %	55	36.7

Source: own compilation

Appendix 3: TPB construct related characteristics

Table 3. Factors related to attitudes.

Item	Options	Frequency (no. of respondents)	%
I believe that products from farmers' markets are fresher compared to products from other retailers	Strongly agree	26	17.3
	Agree	68	45.3
	Undecided	30	20
	Disagree	24	16
	Strongly disagree	2	1.3
I believe products from farmers' markets to be healthier than products from other retailers	Strongly agree	26	17.3
	Agree	59	39.3
	Undecided	40	26.7
	Disagree	24	16
	Strongly disagree	1	0.7
I think that products from farmers' markets to be more environmentally friendly produced compared to products from other retailers	Strongly agree	27	18
	Agree	51	34
	Undecided	43	28.7
	Disagree	27	18
	Strongly disagree	2	1.3
I find pleasant interacting with the shop assistant when buying products directly from farmers' markets	Strongly agree	19	12.7
	Agree	71	47.3
	Undecided	35	23.3
	Disagree	21	14
	Strongly disagree	4	2.7
I believe products from farmers' markets to be cheaper than products from other retailers	Strongly agree	16	10.7
	Agree	46	30.7
	Undecided	33	22
	Disagree	48	32
	Strongly disagree	7	4.7

Source: own compilation

Table 4. Factors related to subjective norms.

Item	Options	Frequency (no. of respondents)	%
My family think I should buy products from farmers' markets	Strongly agree	17	11.3
	Agree	67	44.7
	Undecided	47	31.3
	Disagree	18	12
	Strongly disagree	1	0.7
My friends think I should buy products from farmers' markets	Strongly agree	8	5.3
	Agree	50	33.3
	Undecided	64	42.7
	Disagree	25	16.7
	Strongly disagree	3	2
My family opinion is important for me	Strongly agree	26	17.3
	Agree	92	61.3
	Undecided	17	11.3
	Disagree	13	8.7
	Strongly disagree	2	1.3
I trust farmers' markets more than other types of retailers	Strongly agree	17	11.3
	Agree	55	36.7
	Undecided	51	34.0
	Disagree	24	16
	Strongly disagree	3	2
I tend to buy more products from the seller i know personally at the farmers' markets	Strongly agree	61	40.7
	Agree	70	46.7
	Undecided	11	7.3
	Disagree	6	4
	Strongly disagree	2	1.3

Source: own compilation

Table 5. Factors related to perceived behavioural control.

Item	Options	Frequency (no. of respondents)	%
I can't purchase at the farmers' markets because I don't trust the seller	Strongly agree	12	8
	Agree	37	24.7
	Undecided	40	26.7
	Disagree	50	33.3

	Strongly disagree	11	7.3
I can't purchase at the farmers' markets because of limited variety in stock	Strongly agree	3	2
	Agree	24	16
	Undecided	31	20.7
	Disagree	78	52
	Strongly disagree	14	9.3
I am unable to purchase at the farmers' markets due to the long travel distance	Strongly agree	21	14
	Agree	39	26
	Undecided	18	12
	Disagree	58	38.7
	Strongly disagree	14	9.3
I'm unable to purchase at the farmers' markets due to a lack of time	Strongly agree	23	15.3
	Agree	56	37.3
	Undecided	17	11.3
	Disagree	42	28
	Strongly disagree	12	8

Source: own compilation

Table 6. Factors related to intention to buy from farmers' markets.

Item	Options	Frequency (no. of respondents)	%
I intend to buy from farmers' market (future)	Strongly agree	24	16
	Agree	72	48
	Undecided	35	23.3
	Disagree	17	11.3
	Strongly disagree	2	1.3
How often do you intend to buy from farmers' market	Weekly	55	36.7
	Every two weeks	24	16
	Monthly	16	10.7
	Occasionally	51	34
	Prefer not to say/Never	4	2.7

Source: own compilation