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ORGANIC FOOD BUYING BEHAVIOR OF LOW INCOME CONSUMERS WITH HIGH EDUCATION
– Focus on students in Turku
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Purpose: This thesis examines how many low income consumers with high education buy organic food and what motivates them to buy.

Methodology: This thesis applies sequential exploratory method design, that is, both qualitative data collection and quantitative data collection are used.

Findings: 98% of respondents buy organic food. Majority of respondents, who buy organic food, consider themselves as being ethical and were interested in ethical issues. Self-identity plays more remarkable role than subjective norm in organic food purchase among the respondents, that is low income with high education. Food safety concern is the most important factor which motivates respondents to buy organic food, followed by environmental concern. Healthy eating and animal welfare concern are also found to affect organic food purchases. Appearance concern, however, has the least impact to the organic food consumption among the low income consumers with high education. The high price of organic food is bigger barrier of organic food consumption than the availability of organic food. Furthermore, organic egg is the most popular bought organic food, followed by organic banana, organic milk and organic carrot.

Research limitations: The sample may have been partly biased and the questionnaire had some weaknesses.

KEYWORDS:

Organic food, low income, high education, self-identity, subjective norm, theory of planned behavior
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1 INTRODUCTION

1.1 Background

This research focuses on low income consumers with high education: it examines how many buy organic food and what motivates them to buy. The choice of my topic comes from a personal observation: I am a student at Turku University of Applied Sciences and I come from low income level and tight food budget, but I do spend money on organic food products although they are typically more expensive than non-organic food products. I have noticed the similar behavior among people around me: they are consumers with low income who have budget constraints choosing organic food products.

The existing literature suggests that people who have high education buy more organic food than those with lower education and that high-income people buy more organic food than low income people. For instance, Pearson et al. (2013, 50-63) argue that consumers, who have postgraduate qualification, would be keener on buying organic foods. Pearson et al. (2013, 50-63) explain that consumers with high education would have better knowledge of how organic food could contribute to their lives. The review by Gracia and de Magistris (2007, 446) about the organic purchase behavior of Italian consumers discusses that consumers, who have low income, consume less organic foods than consumers who have high income. Gracia and de Magistris (2007, 446) consider the low income as the reason which reduced the probability of buying greater level of organic foods. However, there is not much research to show how much low income people with high education buy organic food products. My personal experience suggests that they buy plenty of them. This research is an attempt to fill a gap in the research of organic food products and to satisfy a personal business curiosity.

The knowledge gained in this research would be beneficial to companies that aim to extend their business of organic products to different market segments. It explores the buying motivations of low income consumers who attain high education. It also studies about the perceived barriers when it comes to organic purchase of low income consumers with high education.
1.2 Research questions and structure

The research tries to answer the following questions:

1) How many low income consumers with high education buy organic food?

2) Which of the following factor plays more important role when low income consumers with high education buy organic food: self-identity or subjective norm?

3) Which factors motivate low income consumers with high education to buy organic food?

4) Which of the following factor play more significant role in hindering organic food purchase of low income consumers with high education: price or availability?

5) Which are the most popular organic food choices for low income consumers with high education?

This thesis applied sequential exploratory method design. This means that the qualitative method is used before the quantitative method is conducted (Saunders et al., 2016, 171). The qualitative method was used to develop the content of the questionnaire. The quantitative method was used to collect the data by using the questionnaire. Research subjects, that is, low-income customers with high education, were students in Turku region such as University of Applied Sciences, Åbo Akademi University as well as Turku University.

The first chapter of this research provides general information about background of the topic and research questions. The second chapter of this thesis reviews previous studies of the demographic profile of organic consumers in general, organic consumers’ motivations of buying organic product as well as barriers for purchase. The second chapter also emphasizes the findings of previous studies of low income consumers and the role of education in the consumption. Furthermore, the planned behavioral theory, the role of self-identity as well as subjective norm are also stated in the second chapter. The third chapter focuses on the methodology, the questionnaire design and the process of collecting the data. The fourth chapter presents findings. The fifth chapter covers discussion, conclusion of the research and suggestion for further research. The sixth chapter is about the limitations of the research.
2 LITERATURE REVIEW

2.1 The theory of planned behavior

Previous similar studies applied the theory of planned behavior as their theoretical framework. The theoretical framework of this thesis is, thus, the theory of planned behavior which is illustrated in the Figure 1. The theory of planned behavior (Ajzen, 1991) predicts the behavior of human beings by linking determinant factors such as attitude, subjective norm, intention and perceived behavioral control. The theory of planned behavior is the extended version of the theory of reasoned action (Fishbein and Ajzen, 1975) by integrating the importance of perceived behavioral control in the model. Principally, the theory of planned behavior suggests that the behavior of a person is affected by the intention to perform the behavior and the perceived behavioral control towards the behavior. In the theory of planned behavior, the intention implies the readiness of a person to perform the behavior or in other way it shows “how hard people are willing to try, how much of an effort they are planning to exert, in order to perform the behavior” (Azjen, 1991, 181). Intention factor has strong relationship with the behavior since it affects directly the performance of behavior. This means the greater the intention is; the more likelihood the behavior would be performed (Ajzen, 1991). Additionally, the review of Conner and Sparks (2005, 172) cites the relationship between behavior and intention as the reflector of the point which is “people tend to engage in behaviors they intend to perform”. The perceived behavioral control refers to “resources and opportunities available to a person” to perform the behavior (Ajzen, 1991, 183). The perceived behavioral control, in contrast, has complicated impact on the performance of the behavior. It has interactive effects, which impacts through the behavioral intention, towards the behavior as well as direct impact on the performance of the behavior (Conner and Sparks, 2005). The perceived behavioral control is also considered as “a substitute for a measure of actual control" when it has direct influence on the behavior (Ajzen, 1991). It means that the behavior would be forecasted directly by the perceived behavioral control to the degree which the measure equivalents actual control (Ajzen, 1991).

Furthermore, the theory explains the intention of human itself is affected by three determinants which are attitudes, subjective norms and perceived behavioral control (Ajzen, 1991). Conner and Sparks (2005, 173) mention that “behavioral intention is a
linear regression function of attitudes, subjective norms and perceived behavioral control”. Ajzen (1991) explained in more detail that the attitude toward the behavior indicates “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991, 188). Armitage and Conner (2001) explain that attitude and intention have correlation which a great attitude would lead to a strong intention of performing the behavior. In the model of the planned behavior theory, the attitude toward the behavior is determined by the behavioral beliefs. As reported by Ajzen (1991, 188), the perceived social pressure or in another way so called subjective norm is defined as “the perceived social pressure to perform or not to perform the behavior”. In the model of planned behavior theory, the subjective norm is caused by the normal beliefs. As mentioned above, the perceived behavioral control concerns the resources as well as opportunities a person has access to perform the behavior. The perceived behavioral control shows “the perceived ease or difficulty of performing the behavior” and “it is assumed to reflect past experience as well as anticipated impediments and obstacles” (Ajzen, 1991, 188). In the model of planned behavior theory, the perceived behavioral control is results from the control beliefs. The likelihood which a person would have strong intention towards a behavior would be low if there is a shortage of resources or chances to accomplish the behavior (Vermeir and Verbeke, 2008). According to the model of planned behavior theory, the perceived behavioral control is determined by the control beliefs.

Figure 1. The theory of planned behavior (Ajzen, 2006)
The theory of planned behavior has been recognized to be a successful theory model for “conceptualizing, measuring and empirically identifying factors that determine behavior and behavior intention and to offer a systematic approach to information campaign development” (Vermeir and Verbeke, 2007, 3). The theory of planned behavior has been applied broadly in many researches explaining the behavior of consumers in various context such as health, food consumption, exercising practice, hotel choice, etc (Kim et al., 2014; Chen and Tung, 2014; Gerend and Shepherd, 2012). Despite the wide use of the planned behavior theory, it stills has some arguments of the completion of the model. The theory of planned behavior is reported to be lack of considering other psychological factors which might have the influence over the intention and behavior (Bagozzi and Kimmel, 1995; Conner and Abraham, 2001; Conner and Armitage, 1998). There are, for example, some arguments concerning the integrating of factors which are self-related variables in the context of food buying as said by Sparks and Shepherd (1992) or Robinson and Smith (2002).

Of self-related variables, self-identity has been mentioned in past studies concerning its influence over predicting the intention (Sparks and Guthrie, 1998; Conner and Abraham, 2001). Terry et al. (1991, 229) argued about the role of self-identity over the intention by mentioning that “people are motivated to engage in identity-related behaviors – to do so serves to validate an important component of self-concept”. The review by Ries et al. (2012) confirms the significant role of self-identity in predicting the intention and the performance of behavior in the context of physical activities. Lau et al. (2005) also shared similar agreement over the predicting role of self-identity in the model of planned behavior theory. Fishbein and Ajzen (2011), however, disagreed with integrating self-identity as a variable into the model of the planned behavior theory. Fishbein and Ajzen (2011) considered negatively self-identity as the predictor of future behavior. The reason for the decision was explained that self-identity reflects better the current and the past behavior according to Fishbein and Ajzen (2011).

2.2 Self-identity and subjective norm

Self-identity is defined as the way people perceive or identify about themselves (Grubb and Grathwohl, 1967, 24). Biddle et al. (1987, 326), however, considered self-identity as the “labels people use to describe themselves”. In the review by Sparks (2000, 35), self-identity was described as “the relatively enduring characteristics people ascribe to
themselves”. Callero (1985) explicated that people have the tendency of performing the action in keeping with their self-identity.

Self-identity is considered to have strong influence in consumers’ buying behavior. Correctly, self-identity is reflected to be one of predictors of consumers’ buying behavior besides factors besides subjective norm, attitude and perceived behavioral control as mentioned by Shaw and Shiu (2002, 109-116). Consumers, whose self-identity as ethical consumers, believe that the decision of buying a product would show how ethical they are (Rodriguez, 2011, 59). As stated by Rodriguez (2011, 59), foods, which are labeled fair trade or organic, are, therefore, considered to be ethical choice for consumers, who identify themselves as ethical consumers. The study by Laroche et al. (2001) also confirmed that consumers, who perceive themselves as green consumers or ethical consumers, are ecologically sensible and would therefore buy environmentally friendly products. In connection with organic food consumption, Hustvedt and Dickson (2009, 49) concluded that consumers, who buy organic cotton apparel, have “strong self-identity as environment, organic and socially responsible consumers”. Likewise, Michaelidou and Hassan (2008) found out that ethical self-identity is one of the strong predictors of consuming organic food.

The subjective norm is defined by Ajzen (1991, 188) as “the perceived social pressure to perform or not to perform the behavior”. The subjective norm reflects the significant role of how people would view the consumers if they perform the behavior. According to the theory of planned behavior (Ajzen, 1991), the subjective norm is considered to have direct relationship with the intention of performing an action besides factors such as attitude towards the behavior and the perceived behavioral control. The subjective norm, thus, could contribute in predicting the intention of performing an action. Subjective norm has been mentioned as a factor of affecting the intention in many studies related to technology adaption, green consumption (Baker et al., 2007; Han et al., 2010; Whitmarsh and O’Neill, 2010). In the context of organic food consumption, subjective norm is argued to have positive role affecting the organic purchase of consumers (Kim and Chung, 2011, 42). Tarkiainen and Sundqvist (2005) shared similar conclusion that subjective norm affects the attitude as well as the intention of buying organic bread and flour by studying 200 respondents. The review by Tarkiainen and Sundqvist (2005), however, shows the contract with the theory of planned behavior (Ajzen, 1991). Particularly, subjective norm is seen to affect the intention of buying organic flour and bread indirectly through the attitude (Tarkiainen and Sundqvist 2005).
2.3 Low income

According to Nielsen (2012), low income consumers account for 30 percentage of the population of the United States and this segment of consumers is expanding in the future. In Finland, Statistic Finland defines low income people as persons at risk of poverty. These persons are “those whose household’s disposable money income per consumption unit is lower than 60 percent of the equivalent median money income of all households” (Statistics Finland). This means that the low income threshold in Finland may vary every year and is dependent on the change of the median money income of all households. Particularly, in 2011, earner, who had the income per month lower than 1140 euros, was considered to be low income earner (Statistics Finland, 2011). During 2012, the threshold of being low income earner was 1170 euros per month, 30 euros higher than the previous year (Statistics Finland, 2012). The year 2013 and 2014 shared the similar threshold which was about 1190 euros per month (Statistics Finland, 2014).

Low income families have difficulties to purchase healthy food because of the tight food budget. As stated by Ward et al. (2013), low income families have to spend as a minimum three times their income to be able to buy healthy foods compared with higher income ones in Adelaide, Australia. Particularly, a typical low income family with two adults and two children would have to spend up to 28.3 percentage of its income in order to eat healthily (Ward et al., 2013). Meanwhile higher income family would use only 8.9 percentage of it income to consume healthy food (Ward et al., 2013).

Low income earners are reported to consume lesser food quality compared with the higher income earners (Drewnowski and Eichelsdoerfer, 2010). Especially, low income earners have the tendency of consuming more “cereals, pasta, potatoes, legumes, and fatty meats” while higher income earners consume more “whole grains, seafood, lean meats, low-fat milk” (Drewnowski and Eichelsdoerfer, 2010, 246). In addition, low income earners were stated to buy lower quality of vegetables and fruits in contrast to higher income earners. Drewnowski and Eichelsdoerfer (2010, 246) mention in their study that the choice of lower income earners concerning vegetables and fruits regularly focuses on “iceberg lettuce, potatoes, canned corn, bananas, and frozen orange juice”. Meanwhile, higher income earners spend more money on fresh vegetables and fruits (Drewnowski and Eichelsdoerfer, 2010). The analysis of Blisard et al. (2004) concluded that the weekly budget for vegetables and fruits of low income
families is lower than the budget of higher income families. Low income families' consumption of vegetables and fruits would not be more improved if their income would rise more (Blisard et al., 2004). As mentioned by Blisard et al. (2004), the low consumption in vegetables and fruits of low income families could be explained that the constraint finance of low income earners is used for spending in necessity expenditures like renting or meat.

The limited access to healthy food source is considered as one of the barrier of healthy food consumption of low income consumers (Larson et al., 2009). Kumanyika and Grier (2006) mentioned in their research that low income neighborhoods have limited healthy food access than compared with the higher income one. They stated that “minority and low income communities have fewer than average supermarkets and convenience stores that stock fresh, good-quality, affordable foods such as whole grains or low-fat dairy products and meats” (Kumanyika and Grier, 2006, 193). For example, in 2007 there was only one supermarket in the low income neighborhood of 30,000 people in West Oakland, America while the number of liquor shops and convenience shops was about 36 (Freeman, 2007, 2221-2222). Moreover, fast food was available everywhere in the area (Freeman, 2007, 2221-2222). This means that low income earners in West Oakland, America did not have the flexible access to the healthy food source but are surrounded by unhealthy food source. In addition to the lack of access to healthy food, the easy accessibility of fast food chains in low income neighborhoods also contributed to the low diet quality of low income earners. Taking South Los Angeles, California, America for example, neighborhoods, where the low income population lived, had more fast food restaurants than compared with neighborhoods where the wealthier population live (Lewis et al., 2005). Correspondingly, the study of Pearce et al. (2007) showed that the accessibility of the low income neighborhoods to giant fast food chains as well as local fast food shops is significantly superior compared with the higher income areas in New Zealand.

In relation to organic food consumption, low income consumers are reported to buy less organic food than the wealthier ones in many researches. Gracia and de Magistris (2007, 446) indicated in their study concerning the organic purchase behavior of Italian consumers that low income Italian consumers consume less organic foods. They also cited that it is the low income that reduces the probability of purchasing greater level of organic food goods (Gracia and de Magistris, 2007, 446). Low income consumers also have been found to have lower intention of buying organic product. Wee et al. (2014,
391) found out in their research about the behavior of buying organic foods in Malaysia that respondents with lower monthly income have lower buying intention for organic food products.

However, sometimes the willingness of low income consumers for organic products could be as same as the willingness of the high income ones. Diaz et al (2012) proposed that the willingness of paying for organic food is positively influenced by the level of knowledge of Organic Food. Considering this idea, it would be that low income consumers, who have high knowledge of organically produced products, could be willing to buy those products. Lockie et al. (2002) debated that the high premium of organic products does not essentially prevent the buying interest of low income customers. Particularly, in the study of Lockie et al. (2002, 31) of Australian consumers, whose income was lower than 20,000 dollars per year, one third bought organic foods despite the high price of organic foods as well as their tight finance. Similarly, Loo et al. (2011) also justified that in some cases lower income household were willing to pay more for organic products than higher income households. It is clear that the willingness of buying organic products of low income consumers should be taken into consideration. And low income consumers could be important market segment which companies should pay attention more.

2.4 High education

According to Statistic Finland (2016), the educational level in Finland includes six different classifications based on the how long the education lasts, which are: basic level, upper secondary level, lowest level tertiary, lower-degree level tertiary, higher-degree level tertiary and doctorate or equivalent level. The four tertiary levels, which are lowest level tertiary, lower-degree level tertiary, higher-degree level tertiary and doctorate or equivalent level, represent high educational in Finland (Statistic Finland). Approximately 30 percentage of Finnish population was reported to have tertiary educational level, which was 1,166,000 individuals (Statistic Finland 2012).

The study by Boztepe (2012) confirmed that education level does affect the green purchasing behavior of consumers. Particularly, the study found that group of consumers, who have college degree or higher degree, has higher environment consciousness (Boztepe, 2012, 19). Sharing the similar idea concerning the impact of
education towards green consumption, Zhu et al. (2013, 285) concluded that the high level of education drives consumer’s intention to purchase green product.

In relation to green products, consumers with high education were reported to have higher levels of knowledge on organic food (Gracia and de Magistris, 2007, 447). Dimitri and Venezia (2007) emphasized the impact of education to the knowledge of organic products. Particularly, Dimitri and Venezia (2007, 11) explained that consumers’ knowledge concerning the influence of organic farming to the environment could be increased by education. This leads to the increase in the likelihood that consumers with higher knowledge of organic buy more organic food than consumers with lower knowledge of it. This is shown in the research by Tsakiridou et al. (2008) that it is the knowledge of consumers about the organically produced process as well as the organic food that surged the organic food consumption. In addition, Tsakiridou et al. (2008, 164) also found out that consumers, who have advanced education than just elementary or high school level, have the trust in the organic product’s value. Especially, even non-organics buyers, who have university degree, also favored organics more (Tsakiridou et al., 2008). The positive relationship between the high level of education and the high level of purchasing organic food is also confirmed in the research of Pearson et al. (2013, 50-63). Consumers who had high education would be keen on buying organic food since they have better knowledge of how organic food could contribute to their lives (Pearson et al., 2013, 50-63). Of respondents in the study of Pearson et al. (2013, 50-63), around 60 percentages of them who had post graduate degree were organic buyers with the frequency of buying either regularly or often. Likewise, Detmann and Dimitri (2009, 79-91) argued that education level and the consumption of organic vegetables have positive relationship. The study by Van Doorn and Verhoef (2011), however, revealed that consumers with high education would not necessary consider organic products to be better in term of healthiness.

2.5 Organic products

European Commission (2016) defines the method producing organic products as “a way of producing food that respects natural life cycles. It minimies the human impact on the environment and operates as naturally as possible”. Organic product is produced in a way that the environment is respected and natural resources are preserved by using natural elements and procedures (European Commission, 2016). In
addition, the use of pesticides, fertilizers and antibiotics is kept extremely minimal in the production of organic product as mentioned by European Commission (2016). Organic product is, thus, recognized as being safer for health in the aspect of pesticide residue. In particular, organic fruits and vegetables have higher degrees of antioxidant and not as much of pesticide excess compared with the conventional ones (Chang, 2016). Furthermore, the animal welfare is also respected in the production of organic products. European Commission (2016) explains about the welfare of animal in organic farming that “livestock are raised in a free-range, open-air environment and are fed on organic fodder”.

Due to growing demand for organic products, many companies have started introducing organic products beside their conventional products. Taking the clothing industry for example, Monki, a brand concept belongs to H&M parents company, started producing all its jeans products by using organic cotton recently (Monki, 2016). Having the same direction like Monki, Zara has also started introducing its clothes collection named Join Life in the Autumn 2016 by using sustainable material such as organic cotton (Zara, 2016). The fast food industry also caught the trend. McDonald served organic hamburger in Germany market in 2015 with the meat from cattle that were raised in organic way (Peterson, 2015). Wendy’s, the big US burger chain, teamed up with The Honest Tea to exclusively provide customers with organic teas from its menu so that it could adapt to the sprouting flavors and preferences of customers (Wendy’s, 2015). In Finland, Valio, the giant diary company, also provides organic milk and yoghurt to meet the growing demand of the market (Valio, 2016).

The market size of organic products could illustrate well the mentioned trend. Recently, the sale of organic products has been surged considerably. According to the organic trade association (2015), there was a jump in the sales of organic products in the United States in 2014, about 11.3 % higher compared with the previous year. Organic market in Finland also witnesses the expansion of the market in terms of sales and the market share. Specially, the trade of Finnish organic food was about 163 million euros in the year 2011 (Pro Luomu, 2016). In 2012, the sales increased significantly with the money which was about 202 million euros, 39 million euros more than the previous year (Pro Luomu, 2016). The following years after 2012 also viewed the steady increase in sales. Noticeably, the sales in 2015 was 240 million euros, 7 percentages higher compared with the sales of the year 2014 (Pro Luomu, 2016). Finnish organic food market is expected to continually grow in sales revenue, which would be about
410 million euros by the year 2020 (Pro Luomu, 2016). Additionally, the share of Finnish organic food products account for 1.8 percentages of the food market according to the report of Pro Luomu (2016).

2.6 Organic products consumers

There have been many researches concerning who buys organically produced products and what their attitude and intention are towards the organic product. Concerning the demographic profile of organic consumers, the consumers of organic product is reported to be females in many studies. Byrne et al. (1991) found that the females with high school or less happen to buy more organic product. Bellows et al. (2008) argue that women have the tendency to buy organic frequently in their study. Curl et al. (2013) also shared the same idea that women consume more organic food than men in their study. Padel and Foster (2005) mentioned more detail in their study that the core organic food consumers are young working women and middle aged women.

Besides that, the existence of children in the household is also likely to increase the consumption of organically produced products by many researchers. In particular, Smith et al. (2009) brought out that the possibility of consuming organic vegetables and fruits would be higher with the presence of kids. They deemed that organic vegetables and fruits would be considered to be healthier compared with conventional ones as a way of getting children eating healthy (Smith et al., 2009). Kriwy and Mecking (2012) also shared similar conclusion that the consideration for young children boosts the consumption of organic product.

Education and income also affects the decision of consuming organic product. Many studies have found that consumers with high level of education and high income would be expected buy more organic. Bellows et al. (2008, 11) mentioned in their study that consumers who have higher income and education level would buy organic food more in the regular aspect. Dimitri and Dettmann (2012, 1173) also came to similar conclusion that income and education have positive relationship with organic food purchase.

Age is another factor which is reported to have the effect on the consumption of organic product. In the study by Smith et al. (2009), it is indicated that the older the
household head of the family, the higher the likelihood of buying organic product. In particular, Smith et al. (2009) revealed that the head of the family whose age is over 54 years old would purchase more organic product compared with the one whose age is younger. On the contrary, Curl et al. (2013) stated that consumers, who are older than middle age, likely to consume less organic food compared with those middle aged consumers. In accordance with Curl et al. (2013), the increase of the age by 10 years would make the expenditure of organic product decrease by 13%. In some studies, many scholars, however, deny the consequence of the age aspect. The study by Lockie et al. (2004) concerning Australian consumers’ organic food choice reckoned that age has little effect on the purchasing of the organic food.

2.7 Motivations to buy organic products

Environmental concern is defined as the level of consciousness of consumers about the environment problem as well as their energy supporting the environment protection (Dunlap and Jones, 2002, 485). Chase (1991), as cited by Kim and Chung (2011), stated that consumers, who are environmental concisions, would be more interested in changing their buying action in order to support and protect the environment. For 74.1 percentage of respondents in a study with the participation of 660 Greek consumers, buying organic food was an approach to keep the environment undestroyed by (Tsakiridou et al., 2008). Environmental concern is reported to stimulate consumers to purchase organic products. Hughner et al. (2007) commented that concern for the environment is considered to be among the organic purchasing motivations. Tsakiridou et al. (2008, 172) concluded that consumers, who buy organic food frequently, consider organic food purchase as an approach of environment protection. Padel and Foster (2005) discussed that environment awareness is an important reason of buying organic product. The relationship between the consumption of organic product and environment awareness could be associated with the organic method of producing. According to the European Commision (2016), organic product is grown in a way that pesticides, antibiotics as well as other materials, which are considered to be toxic and harmful for the health and the environment, are severly regulated. While, Laroche et al. (2001) discussed that consumers, who support environment protection activities, would buy more products which are considered to be green as well as are not related to the environment destruction. Consumers, who have high environment concern, would consider that consuming organic product would be better for the environment. The
study by Van Doorn and Verhoef (2011) showed that respondents, who have high level of environmental consideration, are keen on spend more money for the organic products, around 13 percentages higher.

Health concern is reported to be the major driver for purchasing organic product. Kriwy and Mecking (2012) suggested that consumers’ consideration of their health or their motivation of having healthy diet have strong relationship towards the consumption of organic product. In their study, the health consideration is seen to win through the deliberation of the environment (Kriwy and Mecking, 2012, 35). Padel and Foster (2005, 618) emphasized that personal healthiness is the leading cause for getting organic food. Padel and Foster (2005, 615) went into depth on the topic of the health concern about the reason of buying organic food which are “personal illness, food allergies and the desire to reduce the exposure to residues in a more preventive way”.

The study by Tsakiridou et al. (2008, 171) argued that “Health concerns are the driving force behind organics consumption for older consumers and pensioners as well as families with children (four people) who also indicate an apprehension about environmental issues”. The review by Kim and Chung (2011, 46) explained the positive relationship between the consumption of organic food and the health concern: Consumers who have high health concern would search for actions which would make the healthy life stimulated and continuous. This would direct to the act of looking for products which comprise good components for the body (Kim and Chung, 2011, 46).

Concern for safety of food or product is an additional aspect which is considered to drive consumers to buy organic product. Hwang (2015, 286) described food safety concern as “related to issues regarding the residue of pesticides, chemical sprays and artificial additives”. There are contradicting results concerning the important of food safety towards the consumption of organic product. Many researches do not mention the importance of safety concern in relation with the attitude of consumers towards organic product. While, Michaelidou and Hassan (2008) mention that food safety is considered to play most significant role in predicting consumers’ attitude towards organic food. Consumers have become more anxious when making food purchase decision resulted from many food scandals which happen recently. The worry of consumers in term of the safety of food or product could come from the doubt in them considering the physical risks while consuming the product or food (Michaelidou and Hassan, 2008). Taking China for example, rice is reported to include arsenic or the used oil for many times is collected and sold as new with cheaper price (Duggan,
2015). Or the case that Chinese consumers are cheated by the seller by rat meat instead of lamb meat (Duggan, 2015). Wang Jing stated that “food safety is definitely among the top concerns of Chinese people” (Duggan, 2015). Chinese’s concern of food safety could be shown through the result of the survey, which was conducted by Horizon Research and Horizonkey stating that 80% of Chinese respondents reported that food safety were their top concern” (Dan and Hongyi, 2014). This makes urban residents look for alternative food sources and organic food is considered to be an approach which is secure (Duggan, 2015). Organic food makes the safe sense conjured towards consumers (Lockie et al., 2004).

Animal welfare consideration is another feature that triggers the demand for organic products which are produced with the animal relevant such as egg or milk. Honkanen et al. (2006) found out that animal welfare has positive relationship with the attitude of consumers towards organic food. Taking German market for example, Mintel (2015) discussed that in terms of the popularity, organic eggs are accounted for the second biggest share in the German egg market just after the label related to the animal welfare such as free range. Particularly, Mintel (2015) stated that “more than four in 10 (44%) of all egg and egg products launched in Germany between August and July 2015 carried an organic claim”. Mintel (2015) mentioned that the reason for this increasing organic egg demand in Germany is the increasing animal welfare concern from the consumers. Especially, in Mintel’s research about seafood, poultry and meat consumers in Germany, 67 percentage of German respondents considered the animal welfare as a significant criterion for making decision when buying products related to seafood, poultry or meat (Mintel, 2015). In addition, of those 67 percentage of those mentioned consumers, 32 percentage respondents considered organic attribute as substantial in making purchase choice (Mintel, 2015). Moreover, consumers also think that the quality as well as the safety of the products are reflected by the animal welfare (Harper and Makatouni, 2002). These claims could be related to the organic producing method which highly appreciates the well-being of the animal such as the absent of antibiotic or the living condition of the animal.

The quality of organic product is also recognized to be a motivational factor for buying organically produced product. The study by Van Loo et al. (2011) showed that consumers who buy organic chicken share that the quality of organic version motivates them to purchase. It was found that the product, which has organic label, would receive very positive feedbacks from consumers in term of quality. This could be shown
in the study by Lee et al. (2013) that consumers evaluate chips, cookies and yogurt, which are said to be organic to have better quality. In detail, 115 people participating in the study of Lee et al. (2013) were said to evaluate pairs of chips, cookies and yogurt. According to Lee et al. (2013), of each pair, one product was marked to be organic and the other one was labeled to be conventional. The result was that the products, which were marked organic, were recognized to have superior nutrition as well as lower calories than ones, which were marked to be conventional (Lee et al., 2013).

In addition, the taste of organic product makes consumers who are organic oriented strive to buy organic. Kihlberg and Risvik (2007) stated that organic food is noticed to be superior in the aspect of taste compared with the nonorganic by consumers who are organic oriented. Around 87% of consumers who buy organic products frequently in the United States agree that the better taste of organic chicken compared with the conventional one motivates them to buy in the study by Van Loo et al. (2011). In the same study by Van Loo et al. (2011), 65% of consumers who buy organic occasionally similarly state that the taste of organic chicken stimulates them to make the purchasing. Organic orange juice was also considered of a superior in the taste aspect compared with the conventional one (Fillion and Arazi, 2002). It was found that consumers have positive evaluation of the taste of the food when it is mentioned to be organically produced. In the study by Sörqvist et al. (2013) about the taste and willingness of to pay for eco-friendly coffee of consumers, it was found that coffee is tastier when the coffee is mentioned to be organic by participants who took part in the study. Particularly, Sörqvist et al. (2013) asked 44 participants to test 2 different cups of coffee which were of same in quality and brand. Participants were told that one cup of coffee was organic and they were also shown which cup contained the organic (Sörqvist et al., 2013). The result was that 27 out of 44 participants chose the organic cup of coffee to be overwhelm the conventional one in the aspect of the taste (Sörqvist et al. 2013). The difference in the taste of organic product and the conventional one would be explained by the association of high price with the organic product. According to the study by Hill and Lynchehaun (2002) about the taste of organic milk compared with the conventional one, the high price premium of organic milk makes consumers perceive it to be better in taste than the nonorganic one.
2.8 Barriers of organic products purchase

It was found in many studies that major obstacles towards the consumption of organic product are the premium price of organic product and the availability of the organic choice (Padel and Foster, 2005; Lea and Worsley, 2005; Aschemann-Witzel and Zielke, 2015).

The high price of organic product leads to the low repeat action of purchasing (Marian et al., 2014). Premium price, therefore, was reported to be the major element which demotivates consumers to buy organic (Padel and Foster, 2005; Tsakiridou et al., 2008; Hughner et al., 2007; Aschemann-Witzel and Zielke, 2015). In the study by Aschemann-Witzel and Zielke (2014), young Danish consumers who buy organic occasionally discuss that the main force preventing them purchasing organic is the price. Tsakiridou et al. (2008) shared the similar view as Aschemann-Witzel and Zielke (2014) that consumers, who are young within the age from 18 to 30 years old, consider the price premium of organics hindering them from purchasing organics because of their unstable income. The study of Padel and Foster (2005) brought a different point of view concerning the price barrier of organic product under the eyes of regular organic consumers and occasional organic consumers. Precisely, regular organic consumers admit the price as the obstacle but consider them less important aspect than compared with the occasional organic consumers (Padel and Foster, 2005, 619). Alike, Schröck (2012) also concluded that the price sensitive level of regular organic consumers is lower than the price sensitive level of occasional organic ones as well as the non-organic purchasers. Regular organic consumers are reported to be less price sensitive but they still react to the price (Aschemann-Witzel and Zielke, 2015, 30). According to Aschemann-Witzel and Zielke (2015), the reason that consumers perceive the price to be the barrier of buying organic product is related to the willing to pay of consumers. When the perceived price of consumers exceeds the willing to pay of consumer, the perceived price will hinder the consumer from purchasing organic (Aschemann-Witzel and Zielke, 2015, 4). Noticeably, the high price of organic product, in some cases, would not distress the purchase decision of consumers. Voon et al. (2011, 114) argued that the high price of organic product does not affect the buying decision of consumers who are organic food oriented. Voon et al. (2011, 114) explained that those organic oriented consumers are fine with the excessive cost of organic product. Marian et al. (2014) shared similar conclusion in their research that shoppers, who purchase organic
product, that are, from superior price class would not be willing to buy products from other price levels compared with those who buy organic product with lower price class.

Availability is another major reason which demotivates consumers to make the purchase of organic product. Availability is explained to be related to the volume of organic products provided, the diversity of organic products as well as the places selling organics in the research of Tsakiridou et al. (2008). Paul and Rana (2012) concluded in their study that availability affects the consumption of organic food and poor availability leads to the choice of nonorganic version. The study by Padel and Foster (2005) revealed that regular organic consumers as well as occasional organic consumers consider the lack of availability of organic product as the demotivate aspect. Particularly, regular consumers complain that the lack of availability of the organic product makes their purchases effort taking (Padel and Foster, 2005). While, occasional consumers report that their organic choice is limited and dependent on the available stocks in the shop (Padel and Foster, 2005). The study by Tsakiridou et al. (2008) also confirmed that non-organic buyers complain about the limited availability to be the barrier of buying organics.

In addition to those demotivating aspects mentioned above, Hughner et al. (2007) also mentioned that skepticism towards organic labels, inadequate marketing, sufficient satisfaction with conventional alternatives and cosmetic imperfections among organic products are additional hurdles of consuming organic product.
3 RESEARCH METHODOLOGY

3.1 Research methodology

This study applies the sequential exploratory methods design. Saunders et al. (2016, 727) describes sequential exploratory research design as “mixed method research design where initial phase of exploratory qualitative data collection is followed by second phase of quantitative data collection”. Qualitative method and quantitative method are, thus, used in this study. The qualitative method was used when the content of the questionnaire was developed. In detail, the author conducted several interviews with her friends who regularly purchased organic food. The purpose was to understand how author’s friends comes up with the idea of buying organic food, what motivated them to buy organic food products as well as which difficulties they meet in relation to organic food purchase. The quantitative method was used later to collect data by using the questionnaire. Saunders et al. (2016, 496) explained that a quantitative method “help us to explore, present, describe and examine relationships and trends within our data”.

A pilot questionnaire was conducted before the official questionnaire was sent. The purpose of the pilot questionnaire is to test if the questionnaire would contain any defects (Saunders et al., 2016, 473). Moreover, the pilot questionnaire would be useful to understand if respondents would understand the questions as well as would have no difficulty in completing the survey (Saunders et al., 2016, 473). Saunders et al. (2016, 473) also suggest that pilot questionnaire could help “to obtain some assessment of the questions’ validity and the likely reliability of the data that will be collected both for individual questions and, where appropriate, scales comprising a number of questions”. The pilot survey was sent to 10 people by email and they all responded. These respondents were asked to fill out the survey and to report the time which it took to complete it. The author also asked their feedback concerning the content of the pilot survey. Based on those feedbacks, the author adjusted the questionnaire to avoid possible confusion later.
3.2 Sampling

The sampling method applied in this research is the homogeneous sampling. Saunders et al. (2016) describe homogeneous sampling as a purposive sampling where the sample cases are selected non-randomly. Moreover, the purposive sampling is mentioned to focus on “one particular subgroup in which all the sample members are similar, such as a particular occupation or level in an organization’s hierarchy” as stated by Saunders et al. (2016, 302). This sampling method will help to understand the samples profoundly according to Saunders et al. (2016).

The sample were students from high educational institutes in Turku region including Turku University of Applied Sciences, Turku University as well as Åbo Akademi University. This approach helped to gather students’ opinion from different educational levels since different high educational institutes in Turku focus on different levels of education. For example, students from Turku University of Applied Sciences majority have bachelor level. Students from Turku University as well as Åbo Akademi University, however, could have higher educational levels such as master level as well as Ph.D. besides bachelor level. In addition, respondents of this study needed to have the current net income lower than 1190 euros per month to be considered as low income earners as mentioned in the literature review chapter.

3.3 Data collection

Secondary data as well as primary data were gathered to analyze the motivations of buying organic food and barriers of consuming organic food of low income consumers with high education. Saunders et al. (2016, 727) defined secondary data as “data that were originally collected for some other purpose. They can be further analyzed to provide additional or different knowledge, interpretations or conclusions”. In this thesis, secondary data was collected from articles published from international journals, issued reports from organizations, statistics concerning organic markets and trends. Saunders et al. (2016, 724) defined primary data as “data collected specially for the research project being undertaken”. This thesis’s primary data was collected by using questionnaires internet based which were sent by emails as well as through Facebook messages.
The questionnaire was developed only in English. The reason for applying English as the language of the survey rather than Finnish was related to the potential respondents who are not so good in Finnish since they could come from different countries. Additionally, the English language should not be the barrier for respondents for completing the questionnaire since the sample of this study is highly educated and the English level of respondents was expected to be high enough. Further, the author used quite simple English vocabulary for the questionnaire so that respondents would easily understand.

The official questionnaire was delivered using two methods, emails and Facebook messages. The author sent the questionnaire to students who were studying different majors in Turku University of Applied Sciences, in Turku University as well as Åbo Akademi University. Notably, to spread the survey to Turku University students, the author emailed to 20 student associations in Turku University to ask their representatives to forward the survey to their members. The author also asked friends who were studying in Turku University to fill the questionnaire. To spread the survey to Åbo Akademi University, the author asked friends, strangers who were studying there through social medias. To collect the opinions of students from Turku University of Applied Sciences, the author sent emails to several groups of students from different campuses randomly.

The questionnaire was opened for data collection on October 27th, 2016 and was closed on November 2nd, 2016. It meant that respondents had about 1 week to complete the questionnaire. 71 people responded to the questionnaire and 50 of these respondents qualified for further data analysis. The qualified respondents were chosen based on two criteria: being current student and having net income per month lower than 1,190 euros. Of the 50 respondents, 49 respondents were qualified for analyzing their answers for questions from 7 to 12.

3.4 Questionnaire design

The questionnaire consisted of 13 questions. The questionnaire was planned by utilizing items which were modified from earlier published studies together with items which were designed exclusively for this research. Feedback, which was collected from the pilot survey, was also used in completing the official questionnaire. The official
questionnaire was designed by using the service provided by Webropol, an online survey service provider.

The first section of the questionnaire was designed to measure demographic characteristics of respondents. The purpose of this section was to have a general view of respondents’ profile. In addition, this first section was also designed in a way that respondents, who were not low income earners, or who never bought organic foods before, would be eliminated from further answering the second section of the survey. Moreover, respondents, who had other educational level than bachelor or master or Ph.D., were disqualified for the survey. Since the questionnaire was sent to student associations in Turku University or Åbo Akademi University, the author could not know if some members of those association were student or not. Some could be Post Doctor or Researcher, which means they were not student currently, their answers, hence, should be excluded from the data analysis. The question number 3, therefore, was designed to select respondents who were still student as well as to understand the level of respondents’ education level. Also, since some students would have jobs and have the study at the same time, they, thus, would have net income more than 1190 euros per month. This means that they have higher income than the threshold of low income in Finland as mentioned in the literature review section. Those were, therefore, not eligible for the sample of this study. The question numbered 4 which asked about the net income of respondents, thus, was designed to select eligible respondents whose net income were less than 1190 euros per month. Those respondents whose answer was “more than 1190 euros per month” were able to finish and submit their answers for the questionnaire. Their answers, consequently, were not considered for the further analysis. Moreover, the question numbered 6 was also used as the screening question asking about the frequency of buying organic foods of respondents with the four-point scale ranging from “never” to “always buying”. If the answer of the respondents was “never”, respondents were not deemed suitable for answering the second section of the questionnaire. Those respondents, whose answer was “never buy organic foods”, were led to the question which was aimed to understand the reasons explaining their answers of “never buy organic foods”.

The second section of the questionnaire contains the number of distinctive measures to comprehend respondents’ opinion concerning motivations of buying organic foods as well as role of self-identity or role of other people’s opinion over the buying organic foods. In details, there were 5 questions, which were 5-point Likert-scaled ranging from
“strongly disagree” to “strongly agree”, asking respondents to rate statements which describe their situation best. They were built based on the model of the planned behavior theory (Ajzen, 1991). Particularly, question numbered 7 asked respondents about their concern of self-identity to understand if there was a relationship between self-identity and organic food consumption. The question about the self-identity aspect was planned by adapting an item measure from the study of Shaw et al. (2000, 894). This question was also adjusted from an item measure, which was “I think of myself as a green consumer”, in the review by Sparks and Shepherd (1992, 392) by changing “a green consumer” to “an ethical consumer”. The question numbered 8 was designed to study about the importance of subjective norm to test if there was the relationship between subjective norm and organic food consumption. The measurement item in question 8 was adapted from a measurement item in the study by Tarkiainen and Sundqvist (2005, 813) as well as from concerning an item measure from the review by Sparks and Shepherd (1992, 392). The question 9, which was about to understand motivations which encouraged respondents to buy organic foods, was developed from objects mentioned previously in the literature review section such as food safety, health concern, taste, etc. The author also consulted the author’s friends in order to test if they understood the question. Question 10 concerning the availability of organic foods in the shops, where respondents usually buy, was designed to understand if it was difficult to buy organic foods from the shops. The measurement of question 10 was adapted from an item, which was “I would buy more organic food if it were more available”, in the research by Lea and Worsley (2005, 860) by adding “in the shops that I typically use” to the previously mentioned statement. Similarly, the measurement of question 11 considering the price of organic foods was also amended from an item from the review by Lea and Worsley (2005, 860). Also, the last question of the questionnaire was meant to grasp the respondents’ choice regarding distinctive organic food products which they usually buy. Items in this last question were adapted from the report of Saarnivaara (2015, 62) concerning organic food consumers in Finland. Answers of respondents concerning their choice of organic food products, which they usually buy, could also reveal the price gap between organic version and the conventional version.
4 DATA ANALYSIS

Data analysis in this thesis was conducted by using Webropol service. The findings for each question are presented in the following sections.

4.1 Socio-demographic profile of respondents

The table 5 (see in the appendix 2) shows the socio-demographic profile of this study’s sample consisting of 50 respondents. Collectively, 74% of respondents are female while the number of males taking part in the study is 26%, accounted for over one fourth of the responses. Majority of the respondents of this study were under 35 years old. 58% of respondents who completed the questionnaire belong in the age group ranging from 18 to 25. Next, 32% of respondents are in the age from 26 to 35. Respondents, who are over 35 years old, are accounted for only 10%. Concerning the educational level of respondents, 64% of them are bachelor students, followed by 30% of respondents who are master students. As shown in the table 5, the Ph.D. students cover only 6% of respondents. In the context of respondents’ income, half of eligible respondents has the current net income per month less than 600 euros, whereas the other half has the net income per month from 600 euros to 1190 euros. Of 50 respondents, only 8 respondents have children in the household which occupy 16% of respondents.

The table 5 (see in the appendix 2) displays that there are up to 98% of respondents who buy organic food. Especially, roughly 44% of respondents who buy organic food sometimes. The number of respondents who buy organic food often is approximately 24%. Another 24% of respondents rarely buy organic food. The number of respondents, who always buy organic food, covers only 6%. Specially, there are only 2% of respondents who reported to never buy organic food. The reason for not consuming organic food was mentioned to be the high price of the organic food. These respondents were, thus, not asked to complete the second part of this study’s questionnaire concerning the respondent’s opinion of buying organic food motivation. The number of eligible respondents, whose answers for questions from 7 to 12 were analysed, hence, were reduced to 49 only.
4.2 The role of self-identity and subjective norm

**Question 7: self-identity**

The statistics extracted from the table 1 shows that 41 out of 45 respondents (91%) agreed with the self-identity item, which was “I think of myself as someone who is concerned about ethical issues”. Moreover, 30 out of 37 respondents (81%) agreed with the second self-identity item, which was “I think of myself as an ethical consumer”. Thus, most respondents agreed that they were worried about the ethical issues and that they considered themselves as ethical consumer. It seems that self-identity plays significant role in organic food consumption of low income consumers with high education.

Table 1. Respondents’ self-identity assessment (n=49)

<table>
<thead>
<tr>
<th></th>
<th>I think of myself as someone who is concerned about ethical issues</th>
<th>I think of myself as an ethical consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mildly disagree</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Neutral</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Mildly agree</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>49</td>
</tr>
</tbody>
</table>

**Question 8: subjective norm**

The result withdrawn from the table 2 indicates that 16 out of 28 respondents (57%) disagreed with the variable, named subjective norm, which was reflected by the item “people, who are important to me, think that I should buy organic food”. In other words, 12 out of 28 respondents (43%) agreed with the subjective norm item. This result suggests that over half of respondents denied the impact of subjective norm over their organic food purchase. In another way, it seems that the opinion of the people, who are important to low income consumers with high education, does not play a significant role in their organic food purchase.
Table 2. Respondents’ subjective norm assessment (n=49)

<table>
<thead>
<tr>
<th>People, who are important to me, think that I should buy organic food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Mildly disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Mildly agree</td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Combining the data from table 1 and table 2, it seems that self-identity plays more significant role than subjective norm in organic food consumption of low income consumers with high education. The number of people who agreed with the self-identity items, is much bigger than the people who agreed with the subjective norm item.

4.3 Respondents’ motivations of organic food purchase

**Question 9: motivations of organic food purchase**

From the table 6 (see the appendix 2), it could be seen that the most significant reason for respondents’ decision of organic food purchase is the food safety concern related to the lack of pesticide residues, antibiotics, hormones and GM ingredient, followed by the environment concern. In detail, 34 out of 38 respondents (89.5%) agreed that the food safety concern, which was implied by the item “I buy organic food because I think that organic food contains no pesticide residues, antibiotics, hormones and GM ingredient”, was their motivation to purchase organic food. Meanwhile, 34 out of 41 respondents (around 83%) considered the environment concern, which was illustrated through the item “I buy organic food because I think that organic farming does not harm the environment”, as their motivation to buy organic food.

As shown in the table 6, 34 out of 43 respondents (79%) showed their agreement that healthy eating concern, which was measured by the item “I buy organic food because I want to eat healthily”, was the motivation for their organic food consumption. The third most significant reason which affects respondents’ decision of buying organic food is,
thus, the healthy eating desire. The animal welfare consideration is the fourth reason that makes respondents to buy organic food. There were 29 out of 39 respondents (74%) who agreed with the item in relation to animal welfare concern, which was “I buy organic food because I think that animal welfare is considered in organic production”.

The statistic from the table 6 also suggests that the nutrition content (around 69.4 % of respondents agreed) and the taste of organic food (accounted for 60 % of respondents agreed) are additionally other reasons which motivate respondents to buy organic food. Interestingly, the appearance of organic food seems to have least effect on the buying decision of respondents. 21 out of 34 (61.8%) respondents disagreed with the item concerning organic food’s appearance, which was “I buy organic food because their appearance is attractive for me”. In other words, there were quite small number of respondents (38.2%) who agreed that the food appearance concern motivated them to buy organic food. It indicates that appearance of organic food was not a strong motivation for respondents to buy the food.

4.4 Barriers of organic food purchase

**Question 10: availability**

As one can see in the table 3, 32 out of 46 respondents (69.6%) agreed with the item “I would buy more organic food if it were more available in the shops that I typical use”. This result indicates that majority of respondents approved that they could buy more organic food if the availability of organic food is more. This could imply that the limited availability of organic food hinders respondents’ consumption.

Table 3. Respondents’ organic food availability assessment (n=49)

<table>
<thead>
<tr>
<th>I would buy more organic food if it were more available in the shops that I typical use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Mildly disagree</td>
</tr>
<tr>
<td>Neutral</td>
</tr>
<tr>
<td>Mildly agree</td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

| 7 |
| 7 |
| 3 |
| 23 |
| 9 |
| 49 |
Question 11: price

The data, extracted from the table 4, illustrated that 42 out of 47 respondents (89%) showed their agreement with price barrier of organic food, which was measured by the item “I would buy more organic food if it were less expensive”. This means majority of respondents agreed that their organic food purchase would be increased if the price of organic food would be cheaper. This indicates that respondents in this study considered the high price of organic food as the hurdle of their purchase.

Table 4. Respondents’ organic food price assessment (n=49)

<table>
<thead>
<tr>
<th></th>
<th>I would buy more organic food if it were less expensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>4</td>
</tr>
<tr>
<td>Mildly disagree</td>
<td>1</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
</tr>
<tr>
<td>Mildly agree</td>
<td>13</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
</tr>
</tbody>
</table>

Furthermore, as shown from the data of table 3 and table 4, the high price of organic food seems to be the bigger perceived barrier of purchase than the availability of it. In specific, the number of people who considered the price as barrier of organic food consumption (89%), was higher than the number of people who considered the availability as a barrier of organic food purchase (69.6%).

4.5 Respondents’ popular organic food choice

Question 12: Organic choice

The statistic from the figure 2 explains the most popular organic food which respondents usually buy. As shown from the figure 2, the most popular choice is organic egg with the result of over 73% respondents. Moreover, the figure 2 also mentions banana as the second most popular organic product which respondents usually buy with over 53% of respondents. Furthermore, it could be seen that milk and
carrot are among the most common choice when it comes to organic purchase with the percentage of around 45% and 41% respectively.

![Figure 2. Respondents' organic food choice (n=49)](image)

In addition, respondents were asked to specify other organic food products which they usually buy in the questionnaire. According to the result of the questionnaire, other organic food products which respondents usually purchase are fresh meat; beans; lentils; honey; vinegar; coffee; tea; cocoa; nuts; potato; chocolate; coconut; cucumber; and bell pepper. Some respondents mentioned that they usually buy organic version of vegetables and fruits which are eaten without pealing. Some respondents indicated that they plant some fruits and vegetables themselves and they buy the organic versions of fruits and vegetables which they do not plant themselves.
5 DISCUSSION AND CONCLUSION

5.1 Discussion

In summary, respondents, who consumed organic food in this study, consider themselves as being ethical and are worried about ethical issues. This finding supports the research by Hustvedt and Dickson (2009) which proposed that consumers, who are fond of consuming organic products, have the self-identity as being ethical consumers. Moreover, the subjective norm was found to have no significant role in the organic food purchase of respondents in this study. A likely explanation is that respondents in this study have high level of education and they are conscious of their actions. They, thus, are not affected by the opinion of people, who are important to them. Additional or alternative explanation is that the questionnaire of this study was conducted in a self-reported way. It could be that respondents did not want to show that they depend on the opinion of people who are important to them.

This study revealed that the food safety concern in relation to the lack of pesticide residues, antibiotics, hormones and GM ingredient in organic food was the most significant motivation of consuming organic food products for the respondents. Previous researches suggested that the food safety concern plays important role in the context of organic food purchase. The study by Michaelidou and Hassan (2008, 13) reckoned food safety concern as one of the most significant factor which predicts the attitude of organic food buying. Pino et al. (2012) indicated that food safety concern would predict the intention of organic food purchase. Hwang (2015) also mentioned food safety concern as the influence which affects older consumers' intention of buying organic food. There are, however, limited number of researches concerning the food safety concern and its relationship with the consumption of organic food (Michaelidou and Hassan, 2008, 13). This study further suggests that there is a noteworthy connection between the food safety feature and the consumption of organic food.

Moreover, environmental concern was found to be the second most significant influence to the organic food purchase of respondents in this study. Likewise, respondents in the study by Aertsens et al. (2011) considered environmental concern as one of the most important reasons to buy organic food. This finding also supports the review by Lea and Worsley (2005) which implies that typically, environmental
concern is the essential predictor of organic food purchase. Additionally, the finding of this study is in line with the study by Smith and Paladino (2010) which stated the relationship between environmental concern and organic food consumption.

Healthy eating motivation was important factor which affects the consumption of organic food for respondents of this study. This finding is similar with the result of the study by Aertsens et al. (2011). Furthermore, respondents of this study mentioned animal welfare as a great factor of motivating their organic food purchase. The relationship between animal welfare and organic food purchase was also confirmed in the study by Lee and Yun (2015). Interestingly, appearance of organic food was found to have little influence in motivating this study’s respondents to buy organic food. The importance of food safety concern, environmental concern, animal welfare and the healthy eating could come from the practice of organic farming method that “chemical pesticides, synthetic fertilizers, antibiotics and other substances are severely restricted” and “genetically modified organisms are banned” (European Commission, 2016).

The availability and the price of organic food were perceived to be barriers of consuming more organic food for respondents. The high price of organic food is considered to play weightier role in hindering the consumption of organic food. This finding is consistent with study by Aschemann-Witzel and Zielke (2014) which mentioned price as the leading hurdle of organic food purchase.

Organic egg was the most popular product which respondents usually buy, followed by banana, milk and carrot. This finding is consistent with Pro Luomu (2016) which stated that egg, banana and semi-skimmed milk are the most sold organic products in Finland from June 1st, 2015 to May 30th, 2016. Surprisingly, the price of organic egg per kilogram is significantly higher than the price per kilogram of normal egg in the market. Taking the organic egg from the brand named Kotimaista for example, its price per kilogram is about 2.4 times higher than the nonorganic egg sold in Prisma. There are numerous possibilities to speculate why consumers buy organic eggs that are twice as expensive as nonorganic eggs. Let us look closer one of those speculations by the author. The Kotimaista organic egg is usually sold in the package of 6 eggs with the price of 1.75 euros. In comparison, the Kotimaista nonorganic egg is usually sold in the package of 10 eggs with the cost of 1.19 euros. Many consumers may feel that they are not paying double the price because the package of organic eggs is only 50 cents more expensive than the package of non-organic eggs. This approach, thus, could partly explain the reason why organic egg is the most popular choice for respondents.
In relation to organic milk, the price gap of organic milk and nonorganic milk is usually low. Taking Valio fat free milk sold in Prisma for example, the organic version costs 0.95 euros per liter. While, the price per liter of Valio fat free nonorganic milk is 0.88 euros, 7 cents lower. This low-price gap makes organic milk to be the most popular sold organic product (Pro Luomu, 2015). In addition, the sales of organic milk represent roughly 15% of the Finnish organic market (Pro Luomu, 2015). The reason, why organic milk was not the most popular choice for respondents in this study, could be that respondents considered the item "milk" exclusively as "cow milk". Many consumers might use nuts milk or soya milk instead of cow milk. This may have led to the lower percentage of the item "milk". Similarly, the price gap of organic banana and nonorganic banana is also low. In Prisma, the price of organic banana is around 1.79 euros per kilogram while the price of nonorganic banana from Chiquita brand is around 1.29 euros per kilogram, 50 cents lower only. It could be seen that consumers have the tendency to buy organic food which has small price gap compared to nonorganic food.

Surprisingly, in this study, respondents, who never buy organic food, cover only 2%. While, 98% of respondents in this study, that is, low income customers with high education, buy organic food products. According to the report of Saarnivaara (2015, 20), Finnish consumers, who had high education (tertiary level education) and never buy organic food products, however, accounted for 6%. Meanwhile, Finnish consumers, who had the income lower than 20,000 € per year and never buy organic food, represented for 18% (Saarnivaara 2015, 21). In the author’s opinion, it would be expectable that in this study the number of high education low income people, who never buy organic food, would be between 6% and 18%. The reason for the low percentage of respondents, who never buy organic food, could be the partly bias sample of this study. In detail, the questionnaire of this study was sent by emails as well as messages through social medias to students. This means that students, who responded to the questionnaire, would be ones who are interested in organic food topic or are heavy organic food consumers. Moreover, small sample could be also the reason which leads to the small percentage of respondents, who never buy organic food. Specifically, the number of eligible respondents in this study was only 49 people. Meanwhile, the total respondents in the study of Saarnivaara (2015) were up to 1,000 people, which is 20 times as much as this study’s sample. To confirm the findings of this study, further research, therefore, should be conducted.
5.2 Conclusion

This study attempted to understand motivations and barriers of organic food purchase among low income consumers with high education by answering five research questions:

1) How many low income consumers with high education buy organic food?

The study found that 98% of respondents buy organic food while only 2% of respondents never buy organic food. These 2% of respondents reported that the price of organic food was too high for them. Majority of respondents considered themselves as being ethical consumers as well as concerning about ethical practices.

2) Which of the following factor plays more important role when low income consumers with high education buy organic food: self-identity or subjective norm?

Self-identity was found to have more significant role than subjective norm in organic food purchase of low income consumers.

3) Which factors motivate low income consumers with high education to buy organic food?

Food safety concern was indicated as the most significant factor that motivate low income consumers with high education to buy organic food, followed by environmental concern. Healthy eating and animal welfare concern were also found to affect organic food purchases. Appearance concern, however, has the least impact to the organic food consumption among the low income consumers with high education in this study.

4) Which of the following factor play more significant role in hindering organic food purchase of low income consumers with high education: price or availability?

Availability and high price were considered as barriers of organic food purchase. High price of organic food was found to play more significant role than the availability in hindering organic food consumption.

5) Which are the most popular organic food choices for low income consumers with high education?

Organic egg was the most popular organic food which respondents usually buy, followed by banana, milk and carrot.
6 RESEARCH LIMITATION AND SUGGESTIONS FOR FUTURE STUDIES

A limitation of this thesis is that the sample may be partly biased for several reasons. First, people, who already consume and buy organic food, were more likely to respond the questionnaire than those who do not consume or buy organic food. Second, the respondents included more women than men. Third, the sample was intended to contain only students, but it is possible that some non-students may have also responded. Fourth, the number of responses, which the questionnaire got, was small, and thus the result might not reflect well the real trend.

Another limitation of this thesis is the language used in the questionnaire for collecting data. Some respondents sent the author several feedbacks concerning the expression of items used in Likert-scaled questions. Considering, for example, the item “I buy organic food because I think that organic farming does not harm the environment”, it was controversial to state that organic farming does not affect the environment. The result of this item would be higher if the expression would have been “I buy organic food because I think that organic farming is environmental friendly”. Future studies should try to avoid similar language issues.

Moreover, the author used qualitative data collection to develop the content of the survey by interviewing the author’s friends who buy organic food. The content of the survey, however, could reflect better the nuances in the opinions of low income consumers with high education if the author would have randomly interviewed organic consumers in the supermarket while they were shopping, for instance.

Further, the pilot survey was sent to the author’s friends who, mainly, were not enthusiasts as users of organic food. It would have been more fruitful to send the pilot survey to groups of enthusiastic organic food users to test the survey. Enthusiasts in organic users might interpret the survey from a different point of view. Their feedback, thus, could help to adjust the survey better before the official survey would be sent. Future studies should take into account groups of enthusiastic organic users for their pilot survey.

To summarize, the results of this study are not highly generalizable. Further research, thus, is needed to understand better low income consumers with high education.
REFERENCES

Add references used by using the Source material text style.


Appendix 1: Questionnaire

Hi,

I am Anh Nguyen, student of international business at Turun ammattikorkeakoulu. I am writing my thesis about consumption of organic food. I would be grateful if you could have time to answer my survey. The language of survey is English and answering the survey will take approximately 3–5 minutes. The last day for answering the survey is 2nd of November, 2016.

Link for the survey: https://www.webropolsurveys.com/S/1B6BDE82A872946A.par

Thank you for sharing your time!

Best Regards,

Anh Nguyen

anh.nguyen1@edu.turkuamk.fi

Organic Food Consumption
1. Please specify your gender *
   - Female
   - Male
   - Others

2. Please specify your age *
   - 18-25
   - 26-35
   - Over 35

3. Please specify your educational level *
4. Please specify your current net income per month *

- Less than 600 euros
- 600-1190 euros
- More than 1190 euros

5. Please specify if there are children in your household *
6. Please specify how often you buy organic food *

- Always buy organic food
- Very often buy organic food
- Sometimes buy organic food
- Rarely buy organic food
- Never

7. The following statements concern your self-identity. Please rate how well each statement describes you *
Appendix 1

I think of myself as someone who is concerned about ethical issues

I think of myself as an ethical consumer

8. The following statement concerns the opinion of people who are important to you. Please rate how well the following statement describes you *

People, who are important to me, think that I should buy organic food

9. The following statements aim to map out what motivates you to buy organic food. Please rate how well each statement describes
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Neutral</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I buy organic food because I think that organic food is nutritionally</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>rich, for example, they contain vitamins and minerals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I buy organic food because I want to eat healthily</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I buy organic food because I think that organic farming does not harm the</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I buy organic food because I think that organic food contains no pesticide</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>residues, antibiotics, hormones and GM ingredient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I buy organic food because I think that organic food is tasty</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I buy organic food because their appearance is attractive for me</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I buy organic food because I think that animal welfare is considered in</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
10. The following statement aims to map out the availability of organic food. Please rate how well it describes your situation *

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Neutral</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
I would buy more organic food if it were more available in the shops that I typically use. | ○ | ○ | ○ | ○ | ○ |

11. The following statement aims to map out the price of organic food. Please rate how well it describes your situation *

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Neutral</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
I would buy more organic food if it were less expensive | ○ | ○ | ○ | ○ | ○ |
12. Please specify the organic food products which you usually buy. You may choose more than one option *

☐ Banana

☐ Egg

☐ Milk

☐ Apple

☐ Minced meat

☐ Carrot

☐ Tomato

☐ Cabbage

☐ Salad
Appendix 1

☐ Bread

☐ Flour

☐ Other (Please specify, you may write your answer in English or in Finnish)
☐

7. Please specify the reasons why you have never bought organic food before. You may choose more than one option. *

☐ Organic food is too expensive to afford

☐ I have never heard of organic food

☐ I am satisfied with conventional foods

☐ Other (please specify)
☐

_________________________
Appendix 2: Tables

Table 5. Socio-demographic of respondents (n=50)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>74 %</td>
</tr>
<tr>
<td>Male</td>
<td>13</td>
<td>26 %</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>29</td>
<td>58 %</td>
</tr>
<tr>
<td>26-35</td>
<td>16</td>
<td>32 %</td>
</tr>
<tr>
<td>Over 35</td>
<td>5</td>
<td>10 %</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor student</td>
<td>32</td>
<td>64 %</td>
</tr>
<tr>
<td>Master student</td>
<td>15</td>
<td>30 %</td>
</tr>
<tr>
<td>Ph.D. student</td>
<td>3</td>
<td>6 %</td>
</tr>
<tr>
<td><strong>Current net income per month</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 600 euros</td>
<td>25</td>
<td>50 %</td>
</tr>
<tr>
<td>600-1190 euros</td>
<td>25</td>
<td>50 %</td>
</tr>
<tr>
<td><strong>Children in the household</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>16 %</td>
</tr>
<tr>
<td>No</td>
<td>42</td>
<td>84 %</td>
</tr>
<tr>
<td><strong>Frequency of buying organic food</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>3</td>
<td>6 %</td>
</tr>
<tr>
<td>Very often</td>
<td>12</td>
<td>24 %</td>
</tr>
<tr>
<td>Sometimes</td>
<td>22</td>
<td>44 %</td>
</tr>
<tr>
<td>Rarely</td>
<td>12</td>
<td>24 %</td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>2 %</td>
</tr>
</tbody>
</table>
Table 6. Respondents’ motivation of buying organic food (n=49)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Neutral</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I buy organic food because I think that organic food is nutritionally rich, for example, they contain vitamins and minerals</td>
<td>3</td>
<td>8</td>
<td>13</td>
<td>16</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td>I buy organic food because I want to eat healthily</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>20</td>
<td>14</td>
<td>49</td>
</tr>
<tr>
<td>I buy organic food because I think that organic farming does not harm the environment</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>17</td>
<td>17</td>
<td>49</td>
</tr>
<tr>
<td>I buy organic food because I think that organic food contains no pesticide residues, antibiotics, hormones and GM ingredient</td>
<td>3</td>
<td>1</td>
<td>11</td>
<td>18</td>
<td>16</td>
<td>49</td>
</tr>
<tr>
<td>I buy organic food because I think that organic food is tasty</td>
<td>3</td>
<td>13</td>
<td>9</td>
<td>13</td>
<td>11</td>
<td>49</td>
</tr>
<tr>
<td>I buy organic food because their appearance is attractive for me</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>8</td>
<td>5</td>
<td>49</td>
</tr>
<tr>
<td>I buy organic food because I think that animal welfare is considered in organic production</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>17</td>
<td>12</td>
<td>49</td>
</tr>
</tbody>
</table>