

CONSUMERS' BEHAVIORS IN ORGANIC PRODUCT MARKET: AN EMPIRICAL APPLICATION

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ABSTRACT

Purpose- The purpose of this research is to determine whether gender, civil status, age, number of children in the family, education level of consumers, their cosmetic concerns, packaging of organic foods and reliability of certification process affect organic product purchase or not. It was also aimed to determine whether any modification ensuring the authenticity of organic products would convince the consumers to purchase / purchase more organic products.

Methodology- To determine and test the hypothesis of the research a survey composed of 41 questions, divided into three main sections and a final section, is published on line during 26 days. The survey was replied by 556 respondents.

Findings- The hypothesis which are tested and it is revealed that being female, an elder, having higher education or being a parent is not a reason to purchase organic products. On the other hand being married is a reason for purchase. Consumers do not consider cosmetic defects of organic products as a deterrent for not purchasing. Assured reliability on certification will increase organic product purchase, while packaging of organic products is important for consumers.

Conclusion- The outputs of the research prove that the awareness on the benefits of organic products is increased among male and young consumers as well. People who have not a higher education degree also purchase organic products as the awareness is increases. Conscious consumers are paying attention to the packaging of organic products. The purchase rates and frequency shall increase when and if the reliability on certification is ensured and the increase on purchase can make organic product farming an economic resource for local farmers.

Keywords: Organic product, buying reasons, certification, economic resource.

JEL Codes: M30, M38, Q10

1. INTRODUCTION

Without any doubt consumers' interest on safety of the food they are consuming has been increasing since mid80s. Being far from a trend or a nine-day wonder, interest on organically produced foods (OPFs) is proved to be the result of consumers' developed consciousness and awareness on health and environmental concerns as well as the welfare of animals and the sustainability of the world they are going to legate to their children and grandchildren (Mintu-Wimsatt et al., 1995). Based on the studies and researches that are conducted, since more than three decades now, we can divide consumers' OPF buying reasons into two sections; sensory reasons and non-sensory reasons. Sensory reasons are to be cited as the most significant and important reasons for consumers to prefer purchasing OPF. The taste, the smell and the aroma of the food, the taste there are remembering from their childhood are among sensory reasons (Magnusson et al., 2001; Roddy et al., 1996; Schifferstein, H.N.J., Ophuis, O., 1998; Torjusen et al., 2001; Hill and Lynchehaun, 2002). Non-sensory reasons can be classified as consuming healthy food by avoiding chemicals and additives contained in conventionally produced food (CPF), supporting local economy, concerns about animal welfare and preserving environment, wanting to be sure of the food's nutritional value and of the production methods (Ott, 1990; Jolly, 1991; Hill and Lynchehaun, 2002; Zanolli and Naspetti, 2002; Chinnici et al., 2002; Hutchins and Greenhalgh, 1997; Hughner et al. 2007). There are remarkably less researches and studies performed on the reasons and/or motives which are preventing consumers to purchase OPF. The studies on "why not purchasing" have pointed out that lack of trust in organic origin of the foods is another significant deterrent (Ott,1990; Canavari et al., 2002; Aertsens et al., 2011). Consumers do not trust in the control and certification systems and they are therefore, reluctant in buying OPFs, believing that they can be cheated very easily. Another weak but efficient reason refraining consumers from purchasing OPFs is "cosmetic concerns" which are described as the appearance of OPF which has blemishes, the existence of worms inside, the imperfection in their shapes (Thompson and Kindwell, 1998; Ott,1990). The study by the hypothesis, is trying to determine the changes in the point of view of the consumers with regard to OPs and the main deterrent for not purchasing and providing a mean in increasing the purchase of OPs thereof.

2. LITERATURE REVIEW

Studies conducted since more than two decades now, provided some clues about the demographic aspects of the consumers when it comes to OPF purchase. Wandel and Bugge (1997), Davies et al. (1995) and Lea and Worsley (2005) stated that the interest towards OPF is higher than men in women consumers. These studies also stated that women's attitude towards OPF is more positive than men. Davies et al. (1995) also pointed out that women between 30-45 years old, with a considerably higher income and who are having children are more inclined to purchase OPF. Onyango et al. (2006) indicated that OPFs are purchased on regular basis by females and young people. And finally, although this one can be due to the "who is making the food shopping for the house" fact, men do not purchase OPF as often as women. Studies indicated also that education level is a factor that is affecting OPF purchase behavior. Dettmann and Dimitri (2012) stated that consumers who had an education in higher levels are more inclined to purchase and consume OPFs when compared to consumers who had an education not as high as them. On the other hand Yin et al. (2010) indicated that education level has no significant effect on OPF purchase behavior. Paul and Rana (2012) conducted a survey and indicated that the test they have performed on the results shows positive effect of higher education on OPs purchase. Researchers have worked on the age effect of OPF purchase on consumers. Jolly and Norris (1991) stated that OPF consumers are younger than non-buying consumers. On the other hand, Wandel and Bugge (1997), Fotopoulos and Krystallis (2002) stated that as older consumers' awareness is higher on health, they are more willing to pay for OPF, then younger consumers. On the other hand, younger consumers are more sensitive on environmental issues but as their income is generally more limited than older consumers, they are not willing to and cannot afford paying high prices for organic food. The study of Kafka and von Alvensleben (1998) cites based on the result of the study they have conducted among German consumers that the age group which is between 30 and 50 years old has the highest concern about food safety and that the oldest age group is the less concerned about the matter. They also cite that their results are consistent with the studies conducted previously by Fricke and von Alvensleben in 1997. Researchers have also studied to determine whether the number of children in the household affects the OPF purchase of the consumers. Reicks et al. (1997) and Thompson and Kidwell (1998) pointed out that consumers having children are affected positively in purchase of OPF. They also stated that the age of the children is another factor that is affecting the OPF purchase behavior. On the other hand Magnusson et al. (2001) didn't find any correlation between the existence of a child and the purchase of OPF. Govindasamy and Italia (1999) indicated that females with children are more inclined to buy OPF. Laroche et al. (2001) made a point on female and married consumers having children as more inclined to buy OPF. Dimitri and Dettmann (2012) conducted a study in the USA and stated that civil status is affecting the behavior of OPF purchase. Their research results showed that married people are more likely to purchase OPF when compared with single people. Curl et al. (2013) on the other hand, stated that civil status is not affecting OPF purchase behavior among consumers. Some researchers (Ott, 1990; Thompson and Kidwell, 1998) indicated that consumers who don't buy OPF have negative perception because of cosmetic concerns (such as blemishes, worms, imperfect shapes, dirt not removed from the root vegetables). In the literature there are few studies about the importance of packaging in the purchase/marketing of OPFs. The study of Sarikaya (2007), conducted among Turkish consumers indicated the weight of the "importance of a well packaging" as 2,78. In another study conducted for a Master thesis it is stated that consumers are purchasing OPFs considering the quality of the packaging as well as its ability to provide well storage, being healthy, facilitating its transportation and due to its safety (Ongun, 2016). According to Birinci and Er (2006), lack of packaging is an important factor affecting the local market sales for OPFs.

3. METHODOLOGY, DATA AND RESULTS

To test the hypotheses a questionnaire composed of 41 questions is prepared and made available on line for respondents during 26 days. A total of 556 respondents from 30 cities of Turkey and from 4 foreign countries replied to the questionnaire. 5-Likert Scale is used to measure the perception of buyers and non-buyers about Ops as well as their purchase reasons and the deterrents which are preventing them from purchasing OPs. After eliminating not completely filled in replies, remaining 543 replies are tested using chi-square test. The replies given to the questions aiming to determine the demographic profile of respondents gave below results: 52% of the respondents were females while 48% were males. 61% of "Non-buyers" respondents are married and 39% are single, while 72% of "Buyers" are married and 28% are single. 2% of the respondents are younger than 20 years old. 2% are between 21-30 years old, 15% are between 31-40 years old, 33% are between 41-50 years old, 31% are between 51-60 years old and 17% are older than 60 years old. 1% of the respondents have elementary or secondary school level education, 7% have high school education, 54% have undergraduate education, 25% have graduate education and 13% of them have PhD degrees. 38% of Buyers have no children, 28% have one child only while 31% have two children and 3% have 3 three children. On the other hand, 46% of Non-buyers have no children, 26% have one child, 26% have two children, while 1% have 3 children and 1% have four children. 56% of the respondents live in Istanbul, 2% abroad and remaining 42% live in 29 other cities of Turkey.

The testing of hypotheses revealed following results:

HYPOTHESIS H1₁ is "Females are more inclined to purchase organic food" making the H1₀ "Females are not more inclined to purchase organic food".

According to the replies of the respondents χ^2 and χ^2 are computed as ; χ^2 h = 0.003353 and χ^2 = 3.84

Hence χ^2 h < χ^2 is accepting H1₀ "Females are not more inclined to purchase organic food", rejecting the H1₁ "Females are more inclined to purchase organic food".

HYPOTHESIS H2₁ is "Consumers with higher education level are more inclined to purchase organic food". Hypothesis null H2₀ is "Consumers with higher education level are not more inclined to purchase organic food".

According to the replies of the respondents χ^2 h and χ^2 are computed as χ^2 h = 2,5363 and χ^2 = 9,48

Hence χ^2 h < χ^2 is accepting H2₀ "Consumers with higher education level are not more inclined to purchase organic food"; rejecting H2₁ "Consumers with higher education level are more inclined to purchase organic food".

HYPOTHESIS H3₁ is "Older consumers are more inclined to purchase organic foods"; Hypothesis H3₀ is "Older consumers are not more inclined to purchase organic foods";

According to the replies of the respondents χ^2 and χ^2 are computed as $\chi^2 = 2,19$ and $\chi^2 = 11.07$

Hence $\chi^2 < \chi^2$ is accepting H3₀ being "Older consumers are not more inclined to purchase organic foods" and rejecting H3₁ being "Older consumers are more inclined to purchase organic foods".

HYPOTHESIS H4₁ is "Consumers with children are more inclined to purchase organic food". Hypothesis H3₀ is "Consumers with children are not more inclined to purchase organic food".

According to the replies of the respondents χ^2 and χ^2 are computed as $\chi^2 = 5.81$ and $\chi^2 = 9.48$

Hence $\chi^2 < \chi^2$ is accepting H4₀ which is "Consumers with children are not more inclined to purchase organic food" and rejecting H4₁ being "Consumers with children are more inclined to purchase organic food".

HYPOTHESIS H5₁ is "Married people are more inclined to purchase organic foods", null H5₀ is "Married people are not more inclined to purchase organic foods";

According to the replies of the respondents χ^2 and χ^2 are computed as $\chi^2 = 5.53$ and $\chi^2 = 3.84$

Hence $\chi^2 > \chi^2$ is accepting H5₁ "Married people are more inclined to purchase organic foods" and rejecting H5₀ "Married people are not more inclined to purchase organic foods".

HYPOTHESIS H6₁ is "cosmetic concerns deter consumers to purchase organically produced food", H6₀ is "cosmetic concerns do not deter consumers to purchase organically produced food"

According to the replies of the respondents χ^2 and χ^2 are computed as $\chi^2 = 4.43$ and $\chi^2 = 9.48$

Hence $\chi^2 < \chi^2$ is accepting H6₀ which is "cosmetic concerns do not deter consumers to purchase organically produced food" and rejecting H6₁ "cosmetic concerns deter consumers to purchase organically produced food".

HYPOTHESIS H7₁ "Packaging of the food is important for OPF buyers" hypothesis H7₀ is "Packaging of the food is not important for OPF buyers"

According to the replies of the respondents χ^2 and χ^2 are computed as $\chi^2 = 42.97$ and $\chi^2 = 9$.

Hence $\chi^2 > \chi^2$ is rejecting H7₀ which is "Packaging of the food is not important for OPF buyers" and is accepting H7₁ "Packaging of the food is important for OPF buyers".

4. CONCLUSION

The study revealed outcomes that differ by the results obtained from previous studies carried out since 1990s. For instance gender effect on OPF purchase behavior seems to be changing. Previous studies indicated that females were more inclined to purchase OPFs. The survey and its analysis conducted for this study revealed that this is not the case anymore. Apparently passing years have raised the awareness and conscious of men regarding environmental and health issues. The same situation goes for education level of consumers. Despite previous studies indicating OPF consumption to be related with higher education levels of consumers, the survey conducted for this study indicated that consumers who have no higher education also are interested now in OPFs. This result may be due to broad telecommunication facilities which help knowledge to spread. Age factor seems to have been changed also as per the outcomes of the survey conducted for this study. Although previous studies indicate that consumers with older ages were more inclined to purchase OPF, the survey indicated the contrary. This situation can be explained by raised awareness and consciousness of younger consumers on environmental and health issues which can be explained in turn by broad telecommunication facilities spreading the news all around the world in a jiffy. The effects of becoming a parent or getting married on the purchase of OPFs were inconclusive based on previous studies. Some indicated a correlation between OPF purchase and being married or having children, while some indicated the opposite. Analysis of the survey indicated that consumers with children or married consumers are not more inclined to purchase OPFs. These results can be the reflection of conscious consumers who consider purchasing OPF before getting married or having children as they are concerned about the environment, their health or animal welfare. One of the most important factors obtained by the survey with regard to raised awareness and conscious of consumers on OPFs is that they do not see imperfect shapes, blemishes and bugs that exist on OPFs as a deterrent for not purchasing them. They do consider them as a natural consequence of OA.

As the survey indicated, packaging of OPFs is important for consumers. They are paying attention to how the OPF is packaged. Therefore proper packaging must be studied regarding OPFs together with consumers' raised concern on environmental issues in regulating marketing activities of OPFs to increase the demand.

The study also revealed that increased trust to the authenticity of OPFs can increase the demand of consumers for OPFs.

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