

CONSUMERS INTENTION AND PERCEPTION OF BUYING ORGANIC FOOD PRODUCTS IN JAKARTA, INDONESIA

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Abstract. In spring of 2013, a survey was conducted to examine the intention and perception of consumers towards buying organic food products in Jakarta, Indonesia, and to identify the influence of gender, age and monthly income to consumers' intention and perception towards these products. Organic food products are a niche product in Indonesia, mostly offered in Jakarta. The survey data were gathered from 223 consumers in five different districts of Jakarta using a standardized questionnaire. Rice and vegetables were the most chosen organic products. The results show no significant correlations between gender, age and monthly income towards the consumers' intention to purchase organic food products. The agreement to several statements towards organic food products indicated relatively high knowledge and perception but benefits of organic products were less recognised. Better knowledge and information about organic food products in Indonesia are necessary.

Key words: consumer behaviour, organic food, buying intention, perception

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Introduction

Organic food is defined as 'food that is produced according to certain criteria [...]. Materials and methods that enhance the ecological balance of natural systems are used in the production. For example, organic food is produced without pesticides, herbicides, inorganic fertilisers, antibiotics and growth hormones. Animal welfare is important, and bioengineering and genetically modified foods are not accepted' (Honkanen P., et al, 2006, p.420). Organic food should be produced from organic agriculture or organic farming. According to Willer (2012) in 2010 about 160 countries had certified organic agriculture (Willer, H., 2012, p.45). In 2010, the worldwide distribution of 6.1 million hectares of arable organic land was as follows: 66.9% in Europe, 21.6% in North America, 6.8% in Latin America, 3.1% in Asia and 1.7% in Africa (Willer, H., 2012, p.15).

The organic agriculture development in Indonesia began in the 1980s, and was concentrated in Java Island. In 2010, more than 50,000 hectares or 0.2% of agricultural land

in Indonesia were organically managed. The most important crop was coffee, among the arable crops vegetables, mainly grown for the domestic market (Ariesusanty, L., 2011, p.138).

Seven organizations provide the organic certification based on the local government regulations about organic products. Biocert is the only certification body that can certify both local and exported organic products to Asian countries. Biocert requires the farmer to provide annual production plans in every inspection cycle and randomly check on the finished goods in the market without announcements (Fathallah, H., et al., 2011, p.5).

The highest demand is for vegetables and rice. In two types of markets organic products will be found normally: mainstream supermarkets and specialized organic stores, selling only organic products (Ariesusanty, L., 2011, p.138). In supermarkets, organic products will be presented in separate locations.

One research about Indonesian consumers' behaviour in organic products was done by Deliana (2012) in Bandung (West Java). The results of this study show that organic products were perceived as products which are free from synthetic pesticide, synthetic fertilizer and chemicals, environmentally friendly and also more expensive than other products. Otherwise, the common understanding of organic food was that organic food has no pesticides, no artificial fertilizers and residue-free safe product. Furthermore, some consumers assumed that organic food has a higher vitamin and mineral content than conventional products and is also healthier (Deliana, Y., 2012, p.51).

According to Kotler (2002), perception is the process to choose, organize and interpret the information about the value of a product or service. Perception is an interaction between the stimuli from the surrounding condition that influence consumers' feeling towards something (Kotler, P., 2002, in: Gantina, A., 2006, p.8).

There are several factors that influence consumer perception according to Kotler (2002):

- 1) stimuli factor, it includes the sensory element of a product (colour, texture, size, and other attributes of a product);
- 2) individual factor, which is defined as the individual characteristic towards an attribute of a product, and also the knowledge and experience about this. Motivation of buying product and the condition of a consumer (depressed, happy) while being exposed to the product will bring impact to their perception (Kotler, P., 2002, in: Gantina, A., 2006, p.8).

Demographic factors are part of individual factors, for instance, education level, economic condition, ethnic, nationality, historical experience, size of family and job. These all will influence the individual perception about a product (Mowen, J.C. and Minor, M., 2002, in: Gantina, A., 2006, p.12).

A study of the influence of gender on organic food purchase was done by Yi (Yi, L. K., 2009, p. 16) in Hong Kong. This study indicates that women tended to buy organic food products more often than men. In contrary, a study by Mohamed et al (Mohamed, M.A., et al, 2012,

p.186) shows that in Egypt, more men tended to buy organic food products than women do. This result may differ due to the social aspects where in Egypt, most of the households depend on men to manage the home's need in food consumption. The study by Yi (Yi, L. K., 2009, p.18) also shows that in Hong Kong, the age groups between 36-45 years indicated more interest in buying organic food products than younger or older age groups. This happened due to the income of these age groups which was relatively higher than in other age groups. Hence, this will increase their willingness to buy organic food products which usually are more expensive than regular products. In regard of income and organic food purchase, the study also points out that higher income groups in Hong Kong tended to have interest in purchasing organic food product than lower income groups. This result is in line with the study by Lončarić et al (Lončarić, R., et al, 2009, p.422) in Croatia which indicates that higher income groups were willing to buy organic food products more often than lower income people. This is also indicated because the organic food products in this country are relatively more expensive.

The main objectives of this study are to give information about the intention and perception of people towards organic food products in Jakarta, Indonesia, and also to identify whether there is influence of gender, age and monthly income to people's intention towards organic products. Also, the study is expected to give information that can be used for the producers of organic products to segment their products in Jakarta and to give additional information about consumer behaviour and the development of organic food products in Indonesia. The hypothesis is tested if gender, age and monthly income influence the intention towards buying organic food products.

The sampling method in this research is nonprobability convenience sampling. Nonprobability sampling is the sampling in which the personal judgment dominates in selecting the samples (Shao, A. T., 2002, p. 369). In this sampling, the costs and barrier in figuring the sample frame can be ignored. Nonprobability sampling is usually used in the explanatory stage, survey with questionnaire, and when researcher has lack knowledge in statistics (Aaker, D. A., et al, 2003, p.387). This sampling method is often used by researchers in order to reduce the cost of sampling or even limited time (Shao, A. T., 2002, p.369). In this study respondents were chosen from all over Jakarta area and were randomly selected from several institutions that might represent their social category (gender, age and monthly income). They were spread from five different areas in Jakarta (North Jakarta, East Jakarta, South Jakarta, West Jakarta and Central Jakarta).

Jakarta is the capital and the largest city of Indonesia with 9.6 million people based on survey in 2010. The city of Jakarta is located in Java island which is one of the most populous islands. Jakarta is the centre of the economy and the government. Jakarta is divided into five different administrative regions. Central Jakarta (also the administrative region) with 47.90 km² area, North Jakarta 142.20 km², West Jakarta 126.15 km², South Jakarta 145.73 km² and East Jakarta 187.73 km² (BPS, 2012).

Jakarta is the city in Indonesia which has a higher ratio of people from middle and up economic classes than any other cities in Indonesia, more numbers of big retailers, both foreign and local retailers. Carefour (big retailer chain from France) has about 24 stores in Jakarta and hundreds of other big, medium or small retailers. Some food retail chains also provide many imported foods and usually offer more organic products, e.g. Ranch Market and Food Hall.

A self-administered questionnaire was used to reduce the costs (Aaker, D.A., et al. 2003, p.245). Before the primary data collection, the questionnaire was tested with 20 respondents. There was no change of the questionnaire after the pretest.

The questionnaire in Indonesian language with two pages included 18 closed questions. Eight questions were oriented to the knowledge and the buying behaviour of organic products, eight to the perception, two to demographics. Multiple answers were possible in the case of three questions. The survey was carried out in February and March 2013 in Jakarta.

The data collections were held in several places. About 85% of 223 respondents filled the questionnaires in institutional places, such as church, social gathering ceremony, offices and also some others organizational places all over Jakarta. About 15% of the respondents filled the questionnaires at their homes.

The results were analysed using SPSS Version 17.0.

Research results and discussion

Two hundred and twenty questionnaires could be interpreted from 223, three were not valid. Among the respondents, 35.5% were female, 64.50% male. The ages of the people ranged from under 26 over 55 years (Table 1).

Table 1

Age of the respondents (n=220)

Age	< 26	26 - 35	36 - 45	46 - 55	> 55
%	24.10	25.00	19.10	25.00	6.80

Source: author's construction

A majority of 37.70% had an income between 1.250.000 and 3.000.000 Rupiah (Table 2).

Table 2

Monthly income (n=220)

Rupiah	<1,250,000	1,250,000 - 3,000,000	3,000,000 - 5,000,000	5,000,000 - 10,000,000	> 10,000,000
%	22.30	37.70	27.30	8.20	4.50

Source: author's construction

The term 'organic' had been heard or seen in any food product by 98.65% of the respondents.

Most of the respondents had found organic products in supermarkets (79.40%), followed by traditional market (31.90%) (Table 3).

Table 3

Contribution of the places to find organic food products, multiple answers possible (n=204)

Supermarkets	Traditional market	Restaurant	Special organic shop
79.40%	31.90%	20.10%	10.80%

Source: author's construction

Table 4 illustrates the contribution of how the respondents noticed that a food product is an organic product. Most of the respondents identified the organic products by the organic label (35.90%) and by the label/product (34.50%) and followed by advertisement (19.10%), about 7.70% from other resources, for instance from friends, brands and brochures.

Table 4

Contribution of how the respondents noticed a food as an organic food (n=220)

Organic Logo	Mentioned on Label/Product	Advertisement	Others	Sales promotion girl
35.90%	34.50%	19.10%	7.70%	2.70%

Source: author's construction

Having experiences with purchasing any organic product was stated by 84.50% of the respondents. Table 5 shows types of organic products the respondents had purchased. Organic rice was the product which most of the respondents had purchased (53.70%) followed by organic vegetables (51.10%) and organic fruits (47.90%).

Table 5

Purchased types of organic food products in %, multiple answers possible (n=190)

Rice	Vegetables	Fruits	Milk	Eggs	Tea	Coffee	Baby Food
53.70	51.10	47.90	13.70	10.00	10.00	7.40	4.70

Source: author's construction

The respondents were asked about their interest to buy organic food products in the future. Almost three-fourths (73.60%) were strongly and somewhat interested to buy organic products in the future, 24.50% neutral, only 1.90% were not interested. The respondents were interested to buy organic rice (52.60%), organic vegetables (50.70%) and organic fruits (41.10%) (Table 6).

Table 6

Purchasing types of organic food products in the future in %, multiple answers possible
(n=209)

Rice	Vegetables	Fruits	Baby Food	Milk	Eggs	Coffee	Tea
52.60	50.70	41.10	16.70	13.90	12.40	4.80	4.30

Eight questions were oriented towards perception of attributes and knowledge with a five-level scale. Three-fourths agreed or strongly agreed organic product is more expensive, 79.50% organic product is environmentally friendly, 70.0% free from pesticides and synthetic fertilizer, 66.8% organic product has higher nutrition content, 64.40% the freshness is better. Only 38.10% could agree or strongly agree to more concern about animal welfare by organic product. The relation of organic product to imported product from US or Europe was (strongly) agreed by 61.30%. Noticeable is the neutral position of 62.30% to the statement about the benefits of organic product (Table 7).

Table 7

Perception of organic food product in % (n= 220)

Statement	Strongly agree, agree	neutral	Disagree, strongly disagree
Organic product is more expensive	75.90	20.90	3.20
Organic product is always related with imported product (US/Europe)	61.30	16.80	21.90
The freshness of organic product is better	64.40	24.50	10.90
Organic product has higher nutrition content (vitamin/mineral)	66.80	19.10	14.10
Organic product is environmentally friendly	79.50	17.30	3.20
Organic product is free from pesticide and synthetic fertilizer	70.00	17.70	12.30
Organic product has more concern about animal welfare	38.10	34.10	27.70
Just don't see any benefits of organic product	36.40	62.30	1.40

Source: author's construction

Cross tabulation analysis showed no significant correlations between gender, monthly income, age and the consumers' intention to buy organic food products. These results are not in line with the literature based on Deliana (Deliana, Y., 2012, p. 51) and Wansink et al (Wansink, B., et al., 2003, p.741) which stated organic product is considered as healthier product and female usually prefer healthier products than male respondents. Also, there is no accordance with the study by Yi (Yi, L. K., 2009, p.18) and Lonbariü et al (Lonbariü, R., et al, 2009, p.422) which indicated that consumers with higher income are willing to buy organic food products more often than lower income groups. This is inferred that higher income consumers have better perceptions that make them have a higher willingness to buy organic products. Yi (2009) indicated older people tend to have higher willingness to buy organic food products than younger consumers (Yi, L.K. 2009, p.18). The study by Wansink et al (Wansink, B., et al, 2003, p.741) also indicated that older people tend to be more health concerned than younger people.

Conclusions, proposals, recommendations

The hypothesis is not confirmed. Gender, monthly income and age have no influences on the intention to buy organic food products in this survey. Limitations are comprised due to the biased respondents.

The awareness of the respondents to organic food products in Jakarta is relatively high. Retailers or supermarkets are the places where consumers usually find organic products. Most of the respondents had purchased and consumed different organic food products before, hence, it emerged that they were familiar with organic products. Rice and vegetables are the most chosen organic products which have been purchased by them. The consumers' intention to buy organic foods in the future exists (73.60%). The results show relatively high agreement to several positive statements about organic food products but the benefits of them are less recognised.

Following recommendations are given for Indonesia

1. Education about organic products and organic farming is needed to enhance the awareness and knowledge of consumers about organic food products.
2. Proper information, especially in the traditional markets is necessary to differentiate organic products.
3. Support and assistance of the government to the farmers can help in development of organic farming in Indonesia.

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