Factors Influencing Consumers’ Perceptions, Intention to Purchase and Realised Purchase Behaviour for Organic Food in South Korea

BY

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A DISSERTATION SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY

2009

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Declaration

I hereby declare that this thesis has been composed by myself and has not been presented or accepted in any previous application for a degree. The research, of which this is a record, has been completed by myself unless otherwise stated and, where the work is mine, it reflects my personal view and values. All quotations have been distinguished by quotation marks and all sources of information have been acknowledged by means of references, including those from the Internet.

Bo Won Suh

September, 2009
Abstract

With high concern about food safety and health issues, South Korean's have become interested in organic products, which are perceived to be healthier than conventional food products. However, the value of the organic market has not increased to the same degree as their interest in organic products. Moreover, there is no organic food research related to consumer behaviour in South Korea. Therefore, the aim of this study is to identify consumers’ perception, purchasing intention and realised purchasing behaviour for organic food, and to investigate determinants of the relationship between intended and realised purchase behaviour in South Korea by adopting an extended version of the Theory of Planned Behaviour (TPB) Model.

This study used both a quantitative survey and qualitative interview approach. South Korean Consumers (n=303) who do most of the food shopping provided the data for the quantitative research. Among them, 20 participants also provided information for the qualitative research.

The research resulted in several significant findings. South Koreans generally had positive perceptions towards organic food, and their general intention to purchase organic food was high. Attitude, subjective norm and perceived behavioural control, main variables of the original TPB, and trust of information source and past experience, additional variables in this study, were found to have a positively significant influence on purchasing intention for organic food with past experience having the greatest influence. Price, trust and past experience of organic food influenced consumers’ realised purchase behaviour. Unexpected circumstances, living circumstances and price of organic food were found as the main determinants of the discrepancies between intended and realised purchase behaviour.

The key contribution of this research is that it not only predicted food choice behaviour through behavioural intention, but also directly examined realised purchase behaviour. Moreover, this research identified a number of potentially important determinants of the relationship between intended and realised purchase behaviour.
Thus, the results of this research offer valuable information Korean consumers’ perception about organic food that can be used by managers in organic markets at both the policy level and at the industry level. This study is the first step in developing a research model of food choice behaviour regarding the relationship between intention to purchase and realised purchase behaviour, and future research should build upon this proposed model and subject it to further examination.
Acknowledgements

The completion of this thesis owes its importance to all the people who have provided guidance and instruction during period of my study.

I would love to extend my heartfelt appreciation to my supervisors, Dr. Anita Eves and Dr. Margaret Lumbers, for their time and effort in supervising me throughout the research, and for pushing me to maintain motivation and ambition to the optimal level through both good times and bad. Without their guidance and support, I would not have been able to complete this thesis.

The greatest “thank you and love” go to my parents for their unconditional love and support in South Korea. Also, I can never forget the love and support from my English parents, Paul and Fran. In the meantime, I would like to give many thanks to my sisters, brother-in-law, and sister-in-law. And, I want to say “love lots” to my lovely nephew, Dong-ku.

Last but not the least, I would like to say many “loves and thanks” to my endless love, my husband Kim, Yeong Gug who gives endless love and warm support to me, for this would not have been possible without him.
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CHAPTER ONE
Chapter 1 Introduction

1.1 Background of the Research

In recent years, growing awareness of health issues in combination with concerns about food safety has led consumers to question modern agricultural practices. This has been reflected in an increasing demand for organic produce, which is perceived as less damaging to the environment and to be healthier than conventionally grown foods (Hamm and Michelsen, 1996).

In South Korea, concern about food safety among consumers is very high at the moment, because, in the past, Kimchi (a traditional fermented cabbage dish) containing parasites was sold, and many problems related to food safety have also occurred, such as Bovine Spongiform Encephalopathy (BSE), rotten dumpling and bird flu (Food bank, 2005). Although the Korean government has tried to set consumers at ease about their diet, for instance, prohibiting the import of Kimchi from China and beef from U.S.A, consumers still have a fear of food safety. Korean consumers’ concern about healthy food has become very high (Ko and Ko, 2005).

With increasing health concerns, Korean consumers have become interested in organic food. Mass media (TV and radio) informs audiences of the benefits and effects of organic food, and most department stores and super stores have special sale points for organic products (Seoul Economy, 2006; Suh, 2008). In 1981, Pulmuone (Ltd.), the first special organic food manufacturing company, sold organic processed food including tofu and bean sprout. There are five large enterprises producing organic processed food, and ‘Marche’, a family restaurant, has offered an organic salad bar since 2000. There were over 50 online organic food shopping malls in 2007 (Food in Korea, 2008; Jung, 2006; Marche, 2008; Pulmuone, 2008).
However, although consumers are interested in organic food and recognise its benefits, and the numbers of special processing companies and special shopping malls have increased, the value of the organic market is still very low, and organic food consumption has not increased to the same degree as consumers' interest in organic food in South Korea (Food bank, 2005). There are no official statistical data of market value for organic food in South Korea, hence the market value of organic food is estimated using data for environmentally friendly agricultural products of which organic food is one part (Keum, 2006; Kim et al., 2005). In 2006, the total sales of organic agricultural products was estimated as 0.4% of total agricultural products (Environment Friendly Agricultural Products, 2007a; Ministry of Agriculture and Forestry, 2007b). This can be compared with market share of organic food in other countries. For instance, in 2006, the market value of organic food held 5.2% of the total value of the food market in the UK, approximately 2.5% of the U.S.A food market, and 2.2% of the food market in Japan (Mintel Report, 2008; Organic Trade Association, 2007; Research and Market, 2008; United States Department of Agriculture, 2008; Figure 1.1)

**Figure 1.1 Organic Market Share in Countries in 2006**

Source: Summarised by Author based on Mintel Report, 2008; Organic Trade Association, 2007; Research and Market, 2008; United States Department of Agriculture, 2008
There are only a few studies related to organic food in Korea, and because organic products are classified as a type of environmentally friendly agricultural products in South Korea, most studies regarding consumer behaviour have investigated environmentally friendly agricultural products (Keum, 2006). In addition, most organic food research has focused on nutrition, such as comparing nutrition quality of organic products and normal products (Lee et al., 2006; Sung and Chung et al., 2006), or researching the function and nutrition of organic products (Sung and Park et al., 2006), or the content of components in organic vegetables (Kim et al., 2004). Keum (2006) examined production and consumption prospects of organic milk.

1.2 Organic Food and the Organic Food Market

The following section is concerned with the concepts underpinning the research. Firstly, it outlines and discusses the meaning of organic food, by discussing the various definitions of organic and organic food from previous literature. It further reviews the definition of organic food in South Korea. Secondly, it deals with the concept of the organic food market, in the world and in South Korea.

1.2.1 What is Organic?

Organic is defined as “a fertilizer or manure: produced from natural substances, usually without the addition of chemicals” in the Oxford English Dictionary (Oxford English Dictionary, 2007). In answer to an open-ended question asking respondents to give their interpretations of the term “organic farming”, consumers have replied that it means “without chemicals”. In addition, other terms given were “without growth hormones”, “not intensively” and “naturally”. Thus, consumers are mostly correct in their interpretation according to this definition. (Hutchins and Greenhalgh, 1997).

On a holistic view point, the concept of organic farming means that nature is perceived to be more than just the separate individual elements into which it may be
split. Its principles are found in ecology which is a science concerned with the inter
relationship of living organisms and their environments. In practical terms, this means
that organic farmers find their inspiration and learn from natural eco-systems.
Farmers try to imitate at farm level the basic characteristics of relevant eco-systems,
for example by working towards the maximal use and recycling of on-farm resources
including fodder, manure, and organic waste (International Trade Centre, 1999).
Organic food is the output of organic farming techniques or ecological agriculture
methods. The organic farming technique is an agricultural method where by crops are
cultivated using organic matter, without using agriculture medicines or chemical
fertilizers, thus reducing environmental pollution (Vindigni et al., 2002).

In organic farming, the aim is to support and strengthen biological processes without
recourse to technical cures such as synthetic fertilizers and pesticides and the genetic
modification of organisms. It is based on the enrichment of the structure and the
fertility of the soil, a balanced choice of crops, and the implementation of diversified
crop rotation systems. Therefore, the number of animals kept on a farm and the
available land area are correlated so that farm units can cover their need for feed and
soil nutrients from within the system. This approach can help to protect
environmental systems (International Trade Centre, 1999). Hamm and Michelsen
(1996), in their research, stated that organic food is perceived as being healthier and
less damaging to the environment.

“Organic” has been used to describe diverse products ranging from fruit and
vegetables to dairy and animal products, as well as cereals, pulses and grains; indeed,
in today’s marketplace new organic ranges are regularly introduced (Hau and Joaris,
2000). The range of organic produce now not only covers food, but has proliferated,
extending to non-foods such as shampoos and cosmetics. This may in part be
attributable not only to consumers’ concern about the health aspects of food and food
safety but also to other products absorbed by the body (Opinion Research, 1990).
produced foods, and food products made from organic agricultural products (Korea Organic Farming Association, 2007).

1.2.2.1 History of Organic Food in South Korea

In South Korea, organic technology was traditionally used for agriculture, because farmers had utilised animal manures and compost as manure without any chemical addition. However, in the late 1950s, cultivation technology was established using chemical fertilizers by development of the chemical fertilizer industry. Since then, most cultivation, in South Korea, has depended on chemical fertilizer (National Agricultural Products Quality Management, 2007).

In the late 1970s, organic agriculture again showed very small movement. At this time, only a few farmers tried to reduce their use of chemical fertilizer and to increase use of natural manures. Jung Nong Hwei, a consumer organisation for organic products established in 1976, was the first user of the word ‘organic agriculture’ in South Korea. In 1978, Dr. Ryu Dal Young and his colleagues built the Korean Organic Natural Agriculture Institute, and started to promote organic agriculture techniques to farmers and consumers. This Institute changed its name to the Korea Organic Farming Association in 1987, and is one of the biggest organic organisations in South Korea (Kim et al., 2005).

Movement related to organic agriculture started in the late 1980s, led by consumer organisations. In 1986, the Korea Natural Agriculture Cooperative Federation, a national basis organisation of production, was founded, and it provided education about environmentally friendly agriculture to farmers. Han Sal Lim, a consumer organisation, was established in 1986, and Kwang Lok Hwei, an environmental protection organisation, was built in 1987 (National Agricultural Products Quality Management, 2007).
1.2.2 Political Development in South Korea

In the 1990s, political development was regularised by government. The Ministry of Agriculture and Forestry set up the ‘Organic Agriculture Development Planning Department’ in May of 1991. In December of 1991, the Korea Organic Agriculture Society was established, and it developed the theory of organic agriculture. In 1994, ‘a standard of quality certification of organic agricultural products’ was developed by the National Agricultural Product Inspection Centre in May, and the ‘Environment Agriculture Department’ was set up in the Ministry of Agriculture and Forestry in December (Ministry of Agriculture and Forestry, 2007a).

In 1996, the Ministry of Agriculture and Forestry set up the ‘Agricultural and Environmental Policy towards 21st Century’, the policy was divided into 3 steps. In the first step, from 1995 to 2000, basic elements of environmental agriculture, such as processing system and complete equipment of environment agriculture, were established. In the second step, from 2001 to 2005, new techniques of environmental agriculture were developed and taught to farmers, and the environmental agriculture system was settled in each farm area. In the last step, from 2006 to 2010, new technology and material are being developed with the aim that environmental agriculture will be carried out in all areas of agriculture (Ministry of Agriculture and Forestry, 2007a).

In 2001, in order to reduce confusion and inconvenience faced by consumers and manufacturers, the government revised its ‘Environmental Friendly Agriculture Rearing Act’, and unified ‘the Indication Report System’ by the Environment Agriculture Rearing Act and ‘the Quality Certification System’ by the Agricultural and Marine products Processing Industry Rearing Act into the revised ‘Environmental Friendly Agriculture Rearing Act’. Since 2001, the government has updated the criteria of organic products and tried to correspond with international standards such as Codex (Kim et al., 2005).
1.2.3 Organic Market in the World

Organic agriculture has developed rapidly worldwide during the last few years and is now practiced in approximately 120 countries of the world. Its share of agricultural land and farms continues to grow. Furthermore, it can reasonably be assumed that uncertified organic farming is practiced in even more countries (Willer and Yussefi, 2006). According to the Research Institute of Organic Agriculture FiBL survey (2007), almost 31 million hectares are currently managed organically by more than 600,000 farms worldwide. This constitutes 0.7 percent of the agricultural land of the countries covered by the survey. The continent with most organic land is Australia/Oceania with almost 11.9 million hectares, followed by Europe with almost 7 million hectares, Latin America (5.8 million hectares), Asia (almost 2.9 million hectares), North America (2.2 million hectares) and Africa (almost 0.9 million hectares). On a continent level, the share of organic land in proportion to all agricultural land is highest in Australia/Oceania (2.6 percent), followed by Europe, see Table 1.2 (Research Institute of Organic Agriculture FiBL, 2007).

### Table 1.2 Organic Land and Farms by Continent 2007

<table>
<thead>
<tr>
<th>Continent</th>
<th>Organic land area (Hectares)</th>
<th>Share of total agricultural area</th>
<th>Organic Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>890,504</td>
<td>0.11</td>
<td>124,805</td>
</tr>
<tr>
<td>Asia</td>
<td>2,893,572</td>
<td>0.21</td>
<td>129,927</td>
</tr>
<tr>
<td>Europe</td>
<td>6,920,462</td>
<td>1.38</td>
<td>187,697</td>
</tr>
<tr>
<td>Latin America</td>
<td>5,809,320</td>
<td>0.93</td>
<td>176,710</td>
</tr>
<tr>
<td>North America</td>
<td>2,199,225</td>
<td>0.56</td>
<td>12,063</td>
</tr>
<tr>
<td>Oceania</td>
<td>11,845,100</td>
<td>2.59</td>
<td>2,689</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30,558,183</strong></td>
<td><strong>0.74</strong></td>
<td><strong>633,891</strong></td>
</tr>
</tbody>
</table>

*Source: The Research Institute of Organic Agriculture FiBL, 2007*

In most of the countries, there has been an increase of organic land. In 2007, the two continents of Europe and North America gained approximately half a million hectares each compared with the previous year. This corresponds to an increase of 8 % in Europe and of 29 % in North America, representing exceptional growth (Research Institute of Organic Agriculture FiBL, 2007).
More than 31 million hectares are currently managed organically by at least 623,174 farms worldwide. The area of certified forest and ‘wild harvested plants’ are added at least another 19.7 million hectares, and it is now adding up to more than 51 million hectares in total (Willer and Yussefi, 2006). Figure 1.2 shows the organically managed land in the world.

![Figure 1.2 Area of Organic Agriculture and Wild Harvested plants worldwide 2000-2006](image)

The worldwide market size of organic products can not be exactly estimated because of a lack of official statistical data for international trade. Thus, it has been estimated by the turnover of the retail market in each country (Yussefi and Sohn, 2006). In 2004, the market value of organic products worldwide was estimated at nearly US$ 27.8 billion (GBP 20.3 billion), and the largest share of organic products being marketed in Europe and North America. In 2004, Germany was by far the largest market in Europe, accounting for over one third of total sales, valued at about EUR 3.5 billion (GBP 3 billion), and the USA had the world’s largest market for organic food, valued at about US$ 12.2 billion (GBP 7.5 billion) (Willer and Yussefi, 2006). Although home to about 60 percent of the world population, Asia has a small market for organic products. The production of organic crops is increasing in the Asian region, however most products are exported to other countries. The total market value for organic food in Asia was valued at about US$ 750 million (GBP 459.8 million) in
2004. In Asia, the largest market was Japan, which is estimated at US$ 400 million (GBP 242.4 million) (Willer and Yussefi, 2006).

Table 1.3 presents world market size of organic products in 1997 and 2003 to 2005. The market size for 2003 to 2005 is an estimated value.

**Table 1.3 World Markets for Organic Food and Beverages**

<table>
<thead>
<tr>
<th>Market</th>
<th>1997 Retail Sales (US$ million)</th>
<th>% of Total Food Sales</th>
<th>Expected growth rate (%) over the medium term</th>
<th>2003 - 2005 (Forecast)</th>
<th>% of Total Food Sales</th>
<th>Annual growth rate (%) in 2003-2005</th>
<th>Retail Sales 2005 (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1,800</td>
<td>1.2</td>
<td>5-10</td>
<td>2,800-3,100</td>
<td>1.7-2.2</td>
<td>5-10</td>
<td>-</td>
</tr>
<tr>
<td>U.K</td>
<td>450</td>
<td>0.4</td>
<td>25-35</td>
<td>1,550-1,750</td>
<td>1.5-2.0</td>
<td>10-15</td>
<td>-</td>
</tr>
<tr>
<td>Italy</td>
<td>750</td>
<td>0.6</td>
<td>20</td>
<td>1,250-1,400</td>
<td>1.0-1.5</td>
<td>5-15</td>
<td>-</td>
</tr>
<tr>
<td>France</td>
<td>720</td>
<td>0.5</td>
<td>20</td>
<td>1,200-1,300</td>
<td>1.0-1.5</td>
<td>5-10</td>
<td>-</td>
</tr>
<tr>
<td>Switzerland</td>
<td>350</td>
<td>2.0</td>
<td>20-30</td>
<td>725-775</td>
<td>3.2-3.7</td>
<td>5-15</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands</td>
<td>350</td>
<td>1</td>
<td>10-15</td>
<td>425-475</td>
<td>1.0-1.5</td>
<td>5-10</td>
<td>-</td>
</tr>
<tr>
<td>Sweden</td>
<td>110</td>
<td>0.6</td>
<td>30-40</td>
<td>350-400</td>
<td>1.5-2.0</td>
<td>10-15</td>
<td>-</td>
</tr>
<tr>
<td>Denmark</td>
<td>300</td>
<td>2.5</td>
<td>30-40</td>
<td>325-375</td>
<td>2.2-2.7</td>
<td>0-5</td>
<td>-</td>
</tr>
<tr>
<td>Austria</td>
<td>225</td>
<td>2</td>
<td>10-15</td>
<td>325-375</td>
<td>2.2-2.7</td>
<td>0-5</td>
<td>-</td>
</tr>
<tr>
<td>Other Europe*</td>
<td>200</td>
<td>-</td>
<td>-</td>
<td>990-1,150</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Europe</td>
<td>5,255</td>
<td>-</td>
<td>-</td>
<td>10,000-11,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>U.S.A</td>
<td>4,200</td>
<td>1.25</td>
<td>20-30</td>
<td>11,000-13,000</td>
<td>2.0-2.5</td>
<td>15-20</td>
<td>-</td>
</tr>
<tr>
<td>Canada</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>850-1,000</td>
<td>1.5-2.0</td>
<td>10-20</td>
<td>-</td>
</tr>
<tr>
<td>Japan</td>
<td>1,000</td>
<td>-</td>
<td>-</td>
<td>350-450</td>
<td>&lt; 0.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oceania</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>75-100</td>
<td>&lt; 0.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>10,455</td>
<td>-</td>
<td>-</td>
<td>23,000-25,000</td>
<td>-</td>
<td>-</td>
<td>29,000-31,000</td>
</tr>
</tbody>
</table>

Source: International Trade Centre, 1999; Yussefi and Sohn, 2006
Note: * Belgium, Finland, Greece, Ireland, Portugal, Spain, and Norway

### 1.2.4 Organic Market in South Korea

Unfortunately, there are no official statistical data for the market value for environmentally friendly agricultural products in South Korea. Thus, the market value is estimated under some assumptions (Kim et al., 2005). Kim et al. (2005) have estimated the market value of environmental friendly agricultural products by the total output, the volume in circulation, commission of distribution company and transaction cost (Table 1.4).
A market for environmentally friendly agricultural products has developed rapidly in South Korea since 2000. Estimated from this trend, the total market value is estimated as W 860 billion in 2007, including grains (W 270 billion), vegetables (W 417 billion) and fruits (W 105 billion). On the basis of this trend, the market value in 2010 can be estimated to be W 1,570 billion, raised 3.3 times since 2004, and is projected to be W 2,990 billion in 2014 (6.3 times since 2004) (Kim et al., 2005).

Table 1.4 Market Value of Environmentally Friendly Agricultural Products in South Korea

<table>
<thead>
<tr>
<th>Type</th>
<th>2004</th>
<th>2005</th>
<th>2007</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>1,560</td>
<td>1,872</td>
<td>2,696</td>
<td>4,658</td>
<td>8,147</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2,138</td>
<td>2,672</td>
<td>4,175</td>
<td>8,154</td>
<td>16,908</td>
</tr>
<tr>
<td>Fruits</td>
<td>612</td>
<td>734</td>
<td>1,058</td>
<td>1,827</td>
<td>3,196</td>
</tr>
<tr>
<td>Beans</td>
<td>107</td>
<td>128</td>
<td>185</td>
<td>319</td>
<td>558</td>
</tr>
<tr>
<td>Special Products</td>
<td>322</td>
<td>370</td>
<td>490</td>
<td>745</td>
<td>1,090</td>
</tr>
<tr>
<td>Total</td>
<td>4,738</td>
<td>5,777</td>
<td>8,602</td>
<td>15,703</td>
<td>29,899</td>
</tr>
</tbody>
</table>

Source: Kim et al., 2005
Note: W 1,880 = £ 1

1.2.4.1 Current Circulation of Organic Food Products in South Korea

With increasing of output and demand for environmentally friendly agricultural products, there are many kinds of sales networks. Generally, sales networks of environmentally friendly agricultural product are classified into 1) direct transaction between producers and consumers, 2) transaction through consumer or producer organisation, 3) transaction through the special distributive company and retail shop (department store, off-price store, superstore, specialist environmentally friendly agriculture products shop and internet shopping mall) (Kim et al., 2005). Figure 1.3 shows the distribution channels of environmentally friendly agricultural products.
Table 1.5 presents the ratio of distribution channels of environmentally friendly agricultural products. In 2004, transaction through producer organisations forms 36%. Transaction through special distributive company comes next with 28.9%, followed by direct transaction with 19.9% and transaction through consumer organisation with 15.2%. However, with increasing market sales recently, transaction through consumer organisation and direct transaction has slowed down, and transaction through producer organisation and special distributive company has grown rapidly (Kim et al., 2005).
Table 1.5 The Ratio of Distribution Channels of Environmentally Friendly Agricultural Products in South Korea (2004)

<table>
<thead>
<tr>
<th>Type</th>
<th>The Consignee</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Transaction</td>
<td>Direct Transaction with Consumers</td>
<td>19.9</td>
</tr>
<tr>
<td>Producer Organisation</td>
<td>National Agriculture Cooperative Federation, Korea Organic Farming Association</td>
<td>36.0</td>
</tr>
<tr>
<td>Consumer Organisation</td>
<td>Han Sal Lim, Korea Consumers’ Cooperative Federation</td>
<td>15.2</td>
</tr>
<tr>
<td>Special Distributive Company</td>
<td>Department Store, Off-price Store, Superstore</td>
<td>28.9</td>
</tr>
</tbody>
</table>

*Source: Kim et al., 2005*

The distribution channels of environmentally friendly agricultural products can be classified by types of shop. There are environmentally friendly agricultural product stands in large sized retail shops managed by producer organisation, special shops managed by the National Agriculture Cooperative Federation and NGO (Korea Consumers’ Cooperation Federation and Woorinong), franchises managed by special distributive companies and internet shopping malls (Jung, 2006). The range of environmentally friendly agricultural product outlets is shown in Table 1.6.

There were 93 environmentally friendly agricultural product stands in department stores, 266 stands in off-price store and 292 stands in supermarket. The total sales (forms total 651 stands) was estimated at ₩170 billion – 190 billion, constructing 34.4% of total market value of environmentally friendly agricultural product in 2004. There were 421 special shops managed by franchise, and sales were estimated at ₩100 billion – 120 billion, and 145 special shops managed by private management (₩15 billion sales). NGO also managed some special shops for environmentally friendly agricultural product. There were over 150 specialist shops managed by the Korea Consumers’ Cooperation Federation (KCCF) and Woorinong, a non-profit group that is actively promoting the concept of the protection of environment and development of rural economy. Their sales were estimated at ₩40 billion (KCCF) and ₩25 billion (Woorinong). In addition, online shopping malls have been increasing, the sales forming 1.2% of the total volumes of environmentally friendly agricultural product in 2004 (Jung, 2006).
Table 1.6 Type of Shop of Environmentally Friendly Agricultural Products 2004

<table>
<thead>
<tr>
<th>Shop Type</th>
<th>No. of Shop</th>
<th>No. of Products</th>
<th>The Sales (a billion Won)</th>
<th>Feature of Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large sized Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Store</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-price Market</td>
<td>266</td>
<td>20 - 50</td>
<td>170 - 190</td>
<td>Sale for Vegetables and Fruits</td>
</tr>
<tr>
<td>Supermarket</td>
<td>292</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>651</td>
<td></td>
<td>34.4%*</td>
<td></td>
</tr>
<tr>
<td>Special Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Franchises</td>
<td>421</td>
<td>600 - 1600</td>
<td>100 - 120</td>
<td>Sale for processed organic food</td>
</tr>
<tr>
<td>NGO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea Consumers' Cooperation Federation (KCCF)</td>
<td>96</td>
<td>600 - 1200</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Woorinong</td>
<td>55</td>
<td>300 - 600</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Private Management</td>
<td>145</td>
<td>900 - 1200</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td></td>
<td>35.3%*</td>
<td></td>
</tr>
<tr>
<td>Online Shopping Mall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Shopping Mall</td>
<td>17</td>
<td>50 - 100</td>
<td>5</td>
<td>Products are supplied by manufacturing company</td>
</tr>
<tr>
<td>Special Shopping Mall</td>
<td>8</td>
<td>300 - 600</td>
<td>1</td>
<td>Franchise online shopping mall</td>
</tr>
<tr>
<td>Producer Organisation</td>
<td>13</td>
<td>5 - 10</td>
<td>1</td>
<td>Sales for Rice and Fruits</td>
</tr>
<tr>
<td>Owner</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td></td>
<td>1.2%*</td>
<td></td>
</tr>
</tbody>
</table>

Source: Jung, 2006
Note: ₩1,880 = £1
* percentage of total volumes of Environmental Friendly Agricultural Products

The price of environmentally friendly agricultural product is set differently depending on distribution channels. For instance, in terms of direct transaction, the price is set by mutual agreement between producers and consumers (normally 10 - 20 % higher than the level of production cost). The price in large sized retail shops is set by producers, and producers pay 15 - 30 % of the total sales to retail shops (Jung, 2006).

In practice, price comparisons between environmentally friendly agricultural products and normal agricultural products are very difficult, because conditions (product types, appearance and quality) are different depending on the shops (Kim et al., 2005). In
the present study, the price of environmentally friendly agricultural product and normal agricultural product is compared based on price information of Environment Friendly Agricultural Products (2007b). Table 1.7 compares average prices in Seoul, on 29th November, 2007.

Table 1.7 The Market Price of Environmentally Friendly Agricultural and Normal Products in Seoul

<table>
<thead>
<tr>
<th>Products</th>
<th>Organic</th>
<th>Chemical Free</th>
<th>Low Chemical</th>
<th>Normal (First Rate Quality)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (1kg)</td>
<td>-</td>
<td>3,320 (154%)</td>
<td>-</td>
<td>2,160</td>
</tr>
<tr>
<td>Sweet Potato (1kg)</td>
<td>-</td>
<td>4,970 (148%)</td>
<td>-</td>
<td>3,354</td>
</tr>
<tr>
<td>Potato (1kg)</td>
<td>3,720 (134%)</td>
<td>3,930 (142%)</td>
<td>-</td>
<td>2,777</td>
</tr>
<tr>
<td>Cabbage (1 root)</td>
<td>5,580 (137%)</td>
<td>3,240 (80%)</td>
<td>-</td>
<td>4,047</td>
</tr>
<tr>
<td>Spinach (1kg)</td>
<td>11,350 (256%)</td>
<td>12,350 (279%)</td>
<td>-</td>
<td>4,428</td>
</tr>
<tr>
<td>Lettuce (1kg)</td>
<td>11,340 (152%)</td>
<td>-</td>
<td>-</td>
<td>7,450</td>
</tr>
<tr>
<td>10 Cucumbers</td>
<td>10,367 (169%)</td>
<td>13,400 (219%)</td>
<td>-</td>
<td>6,122</td>
</tr>
<tr>
<td>A green Pumpkin</td>
<td>-</td>
<td>2,055 (145%)</td>
<td>-</td>
<td>1,418</td>
</tr>
<tr>
<td>Tomato (1kg)</td>
<td>-</td>
<td>6,650 (129%)</td>
<td>-</td>
<td>5,146</td>
</tr>
<tr>
<td>Mooli (1 root)</td>
<td>1,980 (70%)</td>
<td>2,250 (82%)</td>
<td>-</td>
<td>2,740</td>
</tr>
<tr>
<td>Carrot (1kg)</td>
<td>5,580 (192%)</td>
<td>5,960 (205%)</td>
<td>-</td>
<td>2,906</td>
</tr>
<tr>
<td>Hackberry Mushroom (1kg)</td>
<td>-</td>
<td>3,200 (96%)</td>
<td>-</td>
<td>3,350</td>
</tr>
<tr>
<td>10 Apples</td>
<td>-</td>
<td>-</td>
<td>16,450 (102%)</td>
<td>16,058</td>
</tr>
<tr>
<td>10 Pears</td>
<td>-</td>
<td>-</td>
<td>18,675 (105%)</td>
<td>17,811</td>
</tr>
<tr>
<td>10 Tangerines</td>
<td>-</td>
<td>3,417 (183%)</td>
<td>-</td>
<td>1,863</td>
</tr>
<tr>
<td>Cherry Tomato (1kg)</td>
<td>9,960 (146%)</td>
<td>9,160 (135%)</td>
<td>-</td>
<td>6,804</td>
</tr>
</tbody>
</table>

Source: Environment Friendly Agricultural Products, 2007b
Note: $1,880 \equiv £1

(%) is the rate compared with the price of Normal Product

The average price of environmentally friendly agricultural products was 1.8 times higher than normal product. The price differential differed between products. Spinach showed the most significant price differential with organic 2.6 times and chemical free 2.8 times the cost of normal products. Cucumber came next with organic 1.7 times and chemical free 2.2 times, followed by carrot with organic 1.92 times, chemical free 2.05 times and rice with chemical free 1.5 times the cost of normal products. However, in terms of Mooli and Hackberry mushroom, normal product was more expensive than environmentally friendly agricultural product. Generally, price
differential of culinary vegetables was significant, and price differential of fruits was not significant compared with other products.

There is a lack of official data about organic food products, thus it was difficult to find the types or price of organic products, other than agricultural products as shown above. However, other organic products are also sold in South Korea. Thus, to illustrate the kinds of other organic products are currently sold in South Korea, other organic products were found through online shopping malls for organic products (Hanmaum Yuginong Shopping Mall, 2009; YugiStore, 2009). Table 1.8 shows the types of other organic products currently sold in South Korea.

<table>
<thead>
<tr>
<th>Type</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diary</td>
<td>Milk, Yogurt, Cheese, Butter, Spread etc.</td>
</tr>
<tr>
<td>Meat / Fish</td>
<td>Beef, Pork, Chicken, Fish, Ham, Sausage etc.</td>
</tr>
<tr>
<td>Soy Bean</td>
<td>Soy milk, Tofu, Bean sprouts etc.</td>
</tr>
<tr>
<td>Food Products</td>
<td>Chilli powder, Chilli paste, Soy bean source, Soy bean paste, Salt, Sugar, Flour, Pancake powder, Vegetable oil, Sesame oil, Vinegar, Fish source etc.</td>
</tr>
<tr>
<td>Bread / Noodle</td>
<td>Dried noodle, Wet noodle, Instant noodle, Bread etc.</td>
</tr>
<tr>
<td>Tea</td>
<td>Korean green tea, Brown rice tea, Corn tea, Barley tea, Grain powder etc.</td>
</tr>
<tr>
<td>Snacks / Biscuits</td>
<td>Cereals, Cookies, Candy, Rice jelly etc.</td>
</tr>
<tr>
<td>Others</td>
<td>Fruit Juice, Jam, Mayonnaise, Dressing etc.</td>
</tr>
<tr>
<td>Industrial Products</td>
<td>Baby products Body wash, Skin cream (lotion), Nappy, Water tissue etc.</td>
</tr>
<tr>
<td></td>
<td>Kitchen or Laundry Cleaning material</td>
</tr>
</tbody>
</table>

Source: Hanmaum Yuginong Shopping Mall (2009); YugiStore (2009)

Therefore, a wide range of organic food products are currently available in South Korea, including processed products.

1.2.4.2 The Output and Consumption

Farming of environmentally friendly agricultural products has developed rapidly since 2000, with the area certified rising from 2,039 hectares in 2000 to 124,369 hectares (61 times since 2000) in 2006. By the end of 2006, 57,932 hectares were
managed organically by 7,167 farms. Almost nineteen thousands hectares were under chemical free management (21,656 farms), and 48,371 hectares were under low chemical free management (50,812 farms) (Environment Friendly Agriculture Producis, 2007a). Figure 1.4 presents the output of environmentally friendly agricultural product and Table 1.9 shows the output of organic products.

Figure 1.4 The Total Output of Environmentally Friendly Agricultural Products by Years

Source: Environment Friendly Agricultural Products, 2007a
Note*: July, 2007
Table 1.9 The Output of Organic Products by Types

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Organic</th>
<th>Organic in Transition Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Farm</td>
<td>Hectare</td>
</tr>
<tr>
<td>2007*</td>
<td>Producer</td>
<td>7,188</td>
<td>9,169</td>
</tr>
<tr>
<td></td>
<td>Importer</td>
<td>62</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7,250</td>
<td>9,169</td>
</tr>
<tr>
<td>2006</td>
<td>Producer</td>
<td>3,235</td>
<td>4,374</td>
</tr>
<tr>
<td></td>
<td>Importer</td>
<td>-</td>
<td>49,373</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3,235</td>
<td>53,748</td>
</tr>
<tr>
<td>2005</td>
<td>Producer</td>
<td>2,039</td>
<td>2,743</td>
</tr>
<tr>
<td></td>
<td>Importer</td>
<td>44</td>
<td>32,187</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2,083</td>
<td>34,930</td>
</tr>
<tr>
<td>2004</td>
<td>Producer</td>
<td>1,458</td>
<td>2,516</td>
</tr>
<tr>
<td></td>
<td>Importer</td>
<td>34</td>
<td>10,742</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,492</td>
<td>13,258</td>
</tr>
<tr>
<td>2003</td>
<td>Producer</td>
<td>1,451</td>
<td>1,894</td>
</tr>
<tr>
<td></td>
<td>Importer</td>
<td>8</td>
<td>2,327</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,459</td>
<td>4,221</td>
</tr>
<tr>
<td>2002</td>
<td>Producer</td>
<td>877</td>
<td>1,062</td>
</tr>
<tr>
<td>2001</td>
<td>Producer</td>
<td>439</td>
<td>448</td>
</tr>
<tr>
<td>2000</td>
<td>Producer</td>
<td>355</td>
<td>296</td>
</tr>
<tr>
<td>1999</td>
<td>Producer</td>
<td>355</td>
<td>230</td>
</tr>
</tbody>
</table>

Source: Environment Friendly Agricultural Producis, 2007a
Note: *July, 2007
**Combined with Organic Products by Environment Agriculture Rearing Act at 28th March, 2007

Because there are no official data for consumption of environmentally friendly agricultural products, consumption has to be estimated by the volume of environmentally friendly agricultural products in circulation (Kim et al., 2005). According to Environment Friendly Agricultural Producis (2007a), the volume of environmentally friendly agricultural products in circulation was almost 27 thousands tons in 1999, and it was 1.1 million tons (raised 42 times since 1999) in 2006 (Figure 1.5).

The consumption of environmentally friendly agricultural products estimated by the volume in circulation has increased rapidly since 1999. This tendency is thought to be due to increasing of consumers' income, interest in health and food safety, and a demand for development of the environment (Kim et al., 2005).
Figure 1.5 The Volume of Environmentally Friendly Agricultural Products in Circulation by Year

![Graph showing the volume of environmentally friendly agricultural products by year. The graph includes categories such as Organic**, Chemical Free, Low Chemical, and Total.]

Source: Environment Friendly Agricultural Products, 2007a  
Note*: July, 2007 **: Combined with Organic in Transition Period Products

Table 1.10 presents the volume of organic products in circulation by product type. The volume of organic products in circulation classified by types in July, 2007, grains are sold 7,922 tons, fruits (2,836 tons), vegetables (41,965 tons), Potatoes (3,471 tons), special products (2,128 tons), and others (172 tons). Organic products form 6.2% (58,494 tons) of total of the volume of environmentally friendly agricultural products (EFAP) in circulation in 2007.
Table 1.10 The Volume of Organic Products in Circulation

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Organic</th>
<th>Organic in Transition Period</th>
<th>EFAP Total</th>
<th>Normal Products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grains</td>
<td>7,922</td>
<td>70,370</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Fruits</td>
<td>2,836</td>
<td>263,394</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td>41,965</td>
<td>481,447</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potatoes</td>
<td>3,471</td>
<td>*</td>
<td>20,750</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Special Products**</td>
<td>2,128</td>
<td>100,926</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>172</td>
<td>434</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>58,494</td>
<td>937,321</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>Grains</td>
<td>10,935.9</td>
<td>11,801.0</td>
<td>172,079.3</td>
<td>5,085,000</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>2,817.8</td>
<td>2,511.9</td>
<td>390,293.4</td>
<td>2,504,000</td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td>37,969.5</td>
<td>21,243.0</td>
<td>423,567.1</td>
<td>9,994,000</td>
</tr>
<tr>
<td></td>
<td>Potatoes</td>
<td>2,584.2</td>
<td>3,001.7</td>
<td>25,220.6</td>
<td>215,000</td>
</tr>
<tr>
<td></td>
<td>Special Products</td>
<td>1,481.7</td>
<td>770.3</td>
<td>116,428.5</td>
<td>161,317</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>184.6</td>
<td>102.9</td>
<td>504.3</td>
<td>15,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>55,973</td>
<td>39,430</td>
<td>1,128,093</td>
<td>17,974,817</td>
</tr>
<tr>
<td>2005</td>
<td>Grains</td>
<td>8,022</td>
<td>8,783</td>
<td>93,654</td>
<td>5,254,000</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>1,480</td>
<td>2,575</td>
<td>288,518</td>
<td>2,593,000</td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td>26,634</td>
<td>16,268</td>
<td>326,020</td>
<td>9,584,000</td>
</tr>
<tr>
<td></td>
<td>Potatoes</td>
<td>1,479</td>
<td>1,847</td>
<td>15,651</td>
<td>266,000</td>
</tr>
<tr>
<td></td>
<td>Special Products</td>
<td>387</td>
<td>519</td>
<td>73,562</td>
<td>176,650</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>56</td>
<td>41</td>
<td>342</td>
<td>23,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>38,058</td>
<td>30,033</td>
<td>797,747</td>
<td>17,897,150</td>
</tr>
<tr>
<td>2004</td>
<td>Grains</td>
<td>3,032</td>
<td>3,769</td>
<td>45,980</td>
<td>5,433,000</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>786</td>
<td>1,695</td>
<td>151,074</td>
<td>2,411,000</td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td>18,505</td>
<td>6,571</td>
<td>199,159</td>
<td>10,468,000</td>
</tr>
<tr>
<td></td>
<td>Potatoes</td>
<td>840</td>
<td>1,216</td>
<td>11,117</td>
<td>236,000</td>
</tr>
<tr>
<td></td>
<td>Special Products</td>
<td>14</td>
<td>4</td>
<td>9,499</td>
<td>171,267</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>269</td>
<td>45</td>
<td>43,906</td>
<td>20,900</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23,446</td>
<td>13,300</td>
<td>460,735</td>
<td>18,740,167</td>
</tr>
<tr>
<td>2003</td>
<td>Grains</td>
<td>3,211</td>
<td>3,665</td>
<td>29,533</td>
<td>4,821,000</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>583</td>
<td>1,178</td>
<td>120,195</td>
<td>2,275,000</td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td>19,845</td>
<td>3,639</td>
<td>174,514</td>
<td>10,068,000</td>
</tr>
<tr>
<td></td>
<td>Potatoes</td>
<td>1,314</td>
<td>322</td>
<td>7,868</td>
<td>183,000</td>
</tr>
<tr>
<td></td>
<td>Special Products</td>
<td>389</td>
<td>45</td>
<td>33,800</td>
<td>160,484</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>7</td>
<td>356</td>
<td>197</td>
<td>12,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25,342</td>
<td>8,849</td>
<td>366,107</td>
<td>17,519,484</td>
</tr>
<tr>
<td>1999</td>
<td>Grains</td>
<td>264</td>
<td>-</td>
<td>818</td>
<td>5,732,000</td>
</tr>
<tr>
<td></td>
<td>Fruits</td>
<td>428</td>
<td>-</td>
<td>3,034</td>
<td>2,385,000</td>
</tr>
<tr>
<td></td>
<td>Vegetables</td>
<td>6,216</td>
<td>-</td>
<td>21,611</td>
<td>10,219,000</td>
</tr>
<tr>
<td></td>
<td>Potatoes</td>
<td>81</td>
<td>-</td>
<td>822</td>
<td>268,000</td>
</tr>
<tr>
<td></td>
<td>Special Products</td>
<td>7</td>
<td>-</td>
<td>359</td>
<td>137,771</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>-</td>
<td>-</td>
<td>24,100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6,990</td>
<td>-</td>
<td>26,643</td>
<td>18,765,771</td>
</tr>
</tbody>
</table>

Source: Environment Friendly Agricultural Products, 2007a; Ministry of Agriculture and Forestry, 2007b
Note: * Combined with Organic Products by Environment Agriculture Rearing Act at 28th March, 2007
** Ginseng and Mushroom
Despite increases in the environmentally friendly agricultural products market, in 2006, 94 percent of the total volume of agricultural products in circulation were normal products, and the total volume of environmentally friendly agricultural products formed less than 6 percent, organic products (0.4%), chemical free products (1.6%) and low chemical products (4%) as shown in Figure 1.6.

Figure 1.6 The Volume of Agricultural Products in Circulation 2006

Source: Environment Friendly Agricultural Products, 2007a; Ministry of Agriculture and Forestry, 2007b

1.3 Objective of the Research

The main aim of this study is to define consumers’ perception, purchasing intention and realised purchasing behaviour for organic food, and to investigate determinants of the relationship between consumers’ intention to purchase and realised purchase behaviour for organic food in South Korea. In order to achieve this goal, this research adopted Ajzen’s the Theory of Planned Behaviour (TPB) Model as the basis of the proposed research.

Fishbein and Ajzen (1975) proposed a model known as the Theory of Reasoned Action (TRA). This model regards a consumer’s behaviour as being determined by the consumer’s behavioural intention, where behavioural intention is a function of
The theory predicts intention to perform a behaviour by consumer's attitude toward that behaviour rather than by a consumer's attitude toward a product or service. A consumer's intention to perform a certain behaviour may also be influenced by the normative social beliefs held by the consumer (Fishbein and Ajzen, 1975; Madden et al., 1992).

However, a consumer may be prevented from performing a behaviour if the consumer perceives the purchase process as too complex or if the consumer does not possess the resources necessary to perform the considered behaviour (Ajzen, 1985, 1991). Thus, Ajzen (1985) developed the Theory of Planned Behaviour (TPB) model by introducing a third predictor of behaviour, perceived behavioural control (PBC). Perceived behavioural control can be conceptualized as the consumer's subjective belief about how difficult it will be for that consumer to perform the behaviour in question (Posthuma and Dworkin, 2000). Many attitude-based studies on food choice have applied Ajzen's Theory of Planned Behaviour to predict a person's intention and behaviour to consume a particular food or set of foods (e.g. Arvola et al., 2008; Brinberg et al., 2000; Chase et al., 2003; Guàrdia et al., 2006; Lobb et al., 2007; McCarthy et al., 2003).

Thus, the present study aims to define consumers' intention to purchase and factors affecting purchasing intention towards organic food using a research model based on the TPB model.

Although the original theory of planned behaviour (TPB) model has been used to measure intention to perform in many studies, people do not always enact their intentions, despite the fact that an intention may be strongly held (Verplanken and Faes, 1999). In order to increase the predictive power, many researchers have expanded its range by adding new variables into the original TPB, such as self-identity in relation to people's concern about the health consequences of what they eat (Spark et al., 1995), the relationship between risk and trust perception of food...
safety and food purchasing intention (Lobb et al., 2007), and the influence of past experience (Sørensen et al., 1996).

Therefore, the study also aims to define factors affecting consumers’ realised behaviour for organic food choice by adding some variables into the original TPB model, and explaining the relationship between consumers’ intention to purchase and realised purchase behaviour for organic food.

The specific objectives are as follows:

1) To investigate South Korean consumers’ perceptions of organic food

2) To determine the relative influence of factors affecting consumers’ intention to purchase organic food in South Korea

3) To identify factors affecting consumers’ realised purchase behaviour for organic food in South Korea

4) To investigate the determinants of discrepancies between consumers’ purchase intention and realised purchase behaviour for organic food in South Korea

1.4 Structure of the Thesis

The thesis consists of eight chapters. Figure 1.7 shows the structure of the thesis.
Chapter 2 reviews the literature on factors affecting general food choice and organic food choice. The chapter starts by introducing general food choice models. Factors affecting general food choice and organic food choice will be compared based on the literature reviews.
Chapter 3 presents the literature on the theory of the research approaches. In this chapter, the Theory of Planned Behaviour, which is the adopted model for the present study, and other alternative theoretical methods are critically reviewed in relation to their ability to meet research objectives.

Chapter 4 describes the methodology of the current research, explaining how the research problems were identified and operationalised. Data analysis methods selected for this study are discussed.

Chapter 5 deals with the process of development questionnaire used in the main survey. This chapter will be started with the process of the elicitation survey aims to set a conceptual framework of the research model and to help to design the questionnaire for the main survey. A pilot study will be conducted to determine if there are any problems with the questionnaire.

Chapter 6 presents the major findings and a discussion of quantitative research of the main study.

Chapter 7 describes findings obtained through qualitative research of the main study. Research findings are discussed by comparison with prior studies.

Finally, Chapter 8 provides an overall discussion and conclusion of the empirical outcomes obtained from the previous chapters and makes suggestions for further research in this area.
CHAPTER TWO
Chapter 2 Literature Review I: Food Choice and Organic Food Choice

2.1. Introduction
Consumers’ choices concerning the selection, consumption, and disposal of products can often be difficult and are important to the consumer and producers. As a result, the study of consumer decision processes has been a focal interest in consumer behaviour, and researchers have identified the factors influencing the process of consumers’ choice (Bettman et al., 1998).

This chapter presents three food choice models explaining main factors related to the current study, and explains the theories of these three models. Secondly, based on the presented food choice models, how each factor affects consumers’ general food choice and organic food choice will be explained through a review of previous studies.

2.2 Food Choice Models
There are numerous factors that influence the choices consumers make, and people’s food choice is a complex function of a multitude of influence (Furst et al., 1996). The models show compatibility in many of the influences on food choice that are incorporated, although frequently there is a difference in emphasis and approach. Many food choice models reflect the complexity of understanding behaviour in relation to choice of food (Furst et al., 1996; Khan, 1981; Radder and Roux, 2005).
In the following section, these models of food choice are discussed, those of Khan (1981), Furst et al. (1996) and Radder and Roux (2005). These three models are selected for discussion in this study because they explain the main factors of the Theory of Planned Behaviour (TPB) theory, which is the proposed basis of the research model for the current study. Purchase intention, based on the TPB theory, is basically determined by three factors: the attitude that the person holds toward engaging in the behaviour (purchasing attitude), the degree of social pressure felt by the person with regard to the behaviour (subjective norm), and the degree of control that people feel they have over performing the behaviour (perceived behavioural control). The first two factors reflect the perceived desirability of performing the behaviour, while the third reflects perceptions of whether the behaviour is personally controllable or not. These three factors predict intention and intention predicts behaviour (Ajzen, 1991).

Personality is noticed to play an important role in predicting and explaining human behaviour (Ajzen, 2005). Similarly, people's personal interests play a part in establishing personal food choice criteria through the values and attitude held by the individual (Chen, 2007). These values include sensory perceptions, monetary considerations, health and nutrition beliefs, weight control concerns and convenience (Furst et al., 1996). People appear to have different food styles and often express themselves as having food adventurousness or pickiness (Furst et al., 1996) and a person's low vegetable or meat intake has been predicted by his or her level of food preferences (Khan, 1981).

Furst et al. (1996) pointed out that an individual's food choice decision is influenced by the composition and behaviour of his/her social framework. Cultural, religious and regional environments of people also have significant influence on their food consumption behaviour by establishing people in their social life (Khan, 1981). Khan (1981) also stated that a person's personal preference could influence other people's preference. Radder and Roux (2005) addressed that social interaction is defined as an important factor on food choice behaviour of people. In the TPB model, the subjective norm is the perceived social pressure (Ajzen, 1991), and consumers' food
choice behaviours are influenced by the social norm from the people who present in a person’s social life (Leek et al., 2000).

Perceived behavioural control in the TPB covers the effects of external factors, such as time, availability, price and information (labelling) (Sparks et al., 1997). Radder and Roux (2005) defined price, distribution and promotion as market related forces in choice of food, and pointed out that these factors influence consumers’ judgment of risks and benefits of food in a purchase situation. According to Furst et al. (1996), availability of food in the food system had influence on people’s food choice process. Khan (1981) showed ‘Extrinsic factors’ in his food choice model, which include time, advertisement and merchandising.

Secondly, these three papers present important factors affecting organic food choice which were identified through literature reviews. Many researchers have found main factors influencing organic food choice behaviour which are health (e.g. Chryssohoidis and Krystallis, 2005; Harper and Makatouni, 2002; Saba and Messina, 2003; Zanoli and Naspetti, 2002), nutritional quality and efficacy (e.g. Davies et al., 1995; Makatouni, 2002; Sondergaard and Edelenbos, 2007), food safety and chemical free (e.g. Canavari et al., 2002; Fotopoulos et al., 2003; Lockie et al., 2004; O’Donovan and McCarty, 2002; Saher et al., 2006; Williams and Hammitt, 2000), taste and fresh (e.g. Fotopoulos et al., 2003) and appearance (e.g. Dransfield et al., 2005; O’Donovan and McCarthy, 2002; Thompson and Kidwell, 1998). Khan (1981) pointed out that appetites, appearance, odour, temperature, flavour, texture, and quality have influence on consumers’ food choice. Furst et al. (1996) explained sensory perception, health and nutrition, and quality in their food choice process model. Radder and Roux (2005) also stated that health consideration and sensory variables play important role in consumers’ food choice behaviour as consumer related forces.

Khan’s model (1981) is the one of very early models that explains main influences and one of the most comprehensive on food choice. Furst et al.’s model (1996) addresses how food choice behaviour is influenced by people’s life course. Life
course indicates the changes in the way which social and physical experiences influence how people will make and perform their food choice behaviour. This explicit recognition that food choice is dynamic process over the life course is unique amongst models, whereby the importance of various factors are weighed amongst each other. It implies that choice is unlikely to be influenced by one factor alone and that different factors will dominate in different situation. Thus, people’s personal past life experiences may affect later food choice behaviour. One of the more recent models, Radder and Roux’s (2005) model, explains food choice behaviour by introducing market related factors (price, distribution, promotion and demographics) along with personal related factors of previous models. Radder and Roux (2005) stated that in market related communications with consumers environments, such as retail outlets relevant to the current study could considerably influence consumers’ food choice. The present study investigates South Korean consumers’ food choice behaviour in the organic food market. Thus, the market related forces of the Radder and Roux’s model are relevant and important variables for food choice behaviour in this study.

2.2.1 Khan’s Model

Food carries symbolic meanings and has psychological importance beyond its nutritive value, which becomes secondary for many consumers. Therefore, it is essential to understand completely the values attributed to food and the reason for its choice (Khan, 1981). Food is an area about which consumers have previous knowledge and experience, no matter how poor that may be from the nutritional point of view. This makes people highly critical of food and leads one’s biases and beliefs. This is further influenced by the environment in which people live. On the other hand, variety in food not only offers various selections, but indirectly guarantees nutritional capability (Khan, 1981).

Khan (1981) classified these factors that influence on food preference indicating that they are not only complexes, but are also highly variable.
Khan (1981) pointed out that people select food rather than nutrients for their diet. Choice at this individual level is a function of several interrelated aspects of personality and mental health. Khan’s personal factors include expectation of food, familiarity, personality, influence of others, appetites, moods and emotions and meanings attached to food. Socio-economic factors such as household income, cost of food, meaning and status of food, security and society can affect food choice both on a societal and individual level. Khan indicated that socio-economic factors determine various aspects of people’s lifestyle, including nutritional intake, physical activity, standards of health and hygiene, and the levels of health and welfare services. One study, specifically investigating socio-economic status and fruit and vegetable consumption, concluded that a less healthy dietary pattern exists in consumers in
lower socio-economic levels. This dietary pattern included lower consumption levels of fruit and vegetables (De Irala-Estevez et al., 2000).

The third factor in Khan’s model is educational factor. People are unwilling to change long held beliefs about food, this has led to the assumption that consumers have poor nutrition knowledge, are not expert in identifying sources of nutrients, do not read labels they cannot understand and therefore, cannot differentiate healthy foods from the huge range of products on offer. Thus, Khan stated that education which is not only general but also nutritional has an important role to play in emphasizing to people that diet can still have an influence on their state of health and thus promote dietary change. Herne (1995) stated that there is a natural link between the levels of educational level, the type of employment which follows and the level of income brought by this employment. In simple terms, better educated people move into higher status and more lucrative employment. Their eating behaviour could be a function of the wealth and class differences in eating habits. Probart et al. (1989) suggested that people with comparatively high levels of knowledge were more oriented towards seeking out further information about food. They showed a tendency to use this information to purchase more healthy food.

Khan indicated that biological, physiological and psychological factors, including sex and age, also influence consumers’ food choice. Although the relationship between gender and food choice is intricate, operating at two conflicting extremes, many researches have pointed out definite differences between males and females for food choice. The influence of ageing related changes in income, social status, beliefs and motivations is also very important to food choice. The study of Pollard et al. (2001) investigated lifestyle factors affecting fruit and vegetable consumption. A woman’s marital status was significantly associated with her fruit and vegetable intake, with married women consuming more fruit and vegetables. Another study has found marital status to be associated with fruit and vegetable consumption, but mainly in men, with single men consuming less fruit and vegetables than their married counterparts (Donkin et al., 1998).
Khan’s fifth factor is cultural, religious and regional influences. Culture in its broadest entity has a great influence on all aspects of food consumption which food is regarded as acceptable, when they may be eaten, who should prepare and cook them, cooking methods, slaughter and food etiquette. Religion and religious beliefs connected to food are an expression of the cultural values associated with their country of origin and are often resistant to change even in migrant populations. Mennell et al. (1992) stated that geographical differences could lead different food choice to people, and Askegaard and Madsen (1998) pointed out that religion also could influence on people’s eating behaviour such as cookery, ingredients, and eating method.

Extrinsic factors such as environment and situation, advertising, time and seasonal variation also play a significant role in consumers’ food choice in Khan’s model. A few literatures exists on the influence of environment and situation, but it is the basic premise for food choice that the quality expected of a food is a function of where it is eaten and the circumstances under which it is to be consumed. Food habits can be changed how resistant they are to changes in season, temperature and week day. The advertising informs consumers of what is considered both appropriate and inappropriate to eat by simple conditioning and also through more sophisticated learning processes. It also gives visual, oral and written details of when and with whom various foods should be eaten. According to Vickers (1993), brand has a larger influence on buying intent. His research found that brand names served primarily as indicators of sensory quality. Cheng et al. (1990) conducted a conjoint analysis with restructured beef steaks and were able to show how three attributes product-preference, packaging and brand identification - influenced the consumer’s hedonic responses. Product preference, packaging and brand had significant impacted on hedonic scores for raw products. Price was an additional important factor in purchase intent. For cooked products, only product preference was important for both hedonic rating and purchase intent. When products were not present, conjoint measurement indicated that nutritional information, price and brand influenced hedonic responses.
Intrinsic factors are those which can be attributed directly to food. These include sensorial characteristics such as appearance, colour, odour, texture, temperature, flavour, quality, and quantity of food. The frequency of serving or consuming and the manner in which they are presented are also included in intrinsic factors. The most general factors associated with food preferences consist of (1) quality of the food, (2) quantity of the food or the size of the serving, and (3) the temperature at which a particular food is served. All these factors are significant and may have wide individual variability. In addition, the manner in which food is presented also has an effect on its acceptance. Moskowitz (1994) showed in a product concept test with fat-reduced cheese, how other information, can modify consumer acceptance. Consumer’s stated purchase intent could be increased by incorporating a health concern. Vickers (1993) examined some considerations arising from incorporating tasting into a conjoint analysis procedure studying the effects of taste, brand, price and health claim on the buying intent for strawberry yogurt. Respondents considered the sensory qualities important for purchasing strawberry yogurt.

Kahn (1981) concluded that food preferences can be an important indicator of food consumption. Food preference was found to be an expression of the degree of likes or dislikes of a specific food item. Also, it was found that the more a food was altered in preparation, for example, addition of vegetables or cream sauce, the less it was liked. People construct preferences on the spot when needed, such as when they must make a choice, and these consumers’ preferences are directly connected with their choice behaviour (Gregory et al., 1993). The more detailed food choice determinants of Furst et al. (1996) and Radder and Roux (2005) follow in the next sections.

2.2.2 Furst et al.’s Model

Furst et al. (1996) illustrated several attributes of the food choice process by using a funnel shape framework. The model represented the types of factors and the process involved in a single choice event. Factors involved in food choice were grouped into three major components: (1) life course, (2) influences and (3) personal system. The
relationship of these components to one another generated the process or pathway leading to the point of choice.

Figure 2.2 shows that a single food choice event results from the mixing and separating of the diverse set of personal and environmental inputs. The life course, a major ingredient in the process, offers rise to and shapes the influences that emerge in a food choice situation as well as the manner and extent to which the social and physical settings affect how people construct and execute personal systems of food choice. The value negotiation process within such a personal system is very dynamic, while strategies are more routine. Finally, the boundaries between components and processes are highly permeable, and much mutual shaping arises between and within components.

The life course includes the personal roles and the social, cultural and physical environments to which people have been and are exposed. People are influenced by past influences of personal experiences and historical eras, culture, current involvement in trends and transitions and anticipations of future events on their food choice.
The model includes the five major categories of influences on food choice: ideals, personal factors, resources, social framework and food context. These influences on food choice communally shaped one another, and also served to reinforce, interact and compete with one another. Boundaries between influences often were unclear. Nevertheless, the central themes of each influence were clearly noticeable. Each influence appeared to affect the choice process to the degree that it was salient to a given food choice. Influences also affected the paradigms people brought to food
situations, as evidenced by the uniqueness of consumers’ food choice perceptions to their individual situations, different food settings, social situations and life stages.

*Ideals* including expectations, standards, hopes and beliefs are most pervasive influence. Ideals were derived from cultural and symbolic factors. When mentioning to ideals, people refer to abstractions such as “the right way”, or “a proper meal”, or “what I should be eating”, and often felt the need to explain why they were not meeting ideal standards.

*Personal factors* is another influence to come out as central to food choice, and reflect what is salient and meaningful to individuals based on needs and preferences derived from psychological and physiological features.

*Resources* are tangible, such as money, equipment and space, and intangible, in the form of skills, knowledge and time. Resources are perceived as available or unavailable depending on individual outlooks and situations, and these perceptions distinguished the boundaries in food choice situations.

When making food choices, people are influenced by the composition and dynamics of their *social framework* such as their status in their family or a social group, and their household situations.

*The food context* includes the physical surroundings and social climate of the choice setting, and specific food supply factors in the environment such as types of food, food sources and availability of food in the food system, including seasonal or market factors.

Rappoport et al. (1992) suggested that people have general categories of food meaning which help them think about and evaluate food situations, including: pleasure, health, tradition and convenience. General categories of influences on food choice were also studied by Connors et al. (2001), who examined the ways that people managed values in making food choices in various contexts. Participants used
categories for food as a means of organizing food for simplicity in food selection. Categories were the interface between personal values and the food itself, with participants largely using value driven categories for food choices. Food categories were organized as value continuums ranging from foods that were close to ideal in meeting a value to others that were far from the ideal in meeting that value. People had categories based on the major values of taste, cost, convenience, and healthfulness of food, as well as fitting in with the social eating relationships. Participants typically categorized foods on multiple dimensions so that a particular food could be expensive but also tasty and unhealthy, or convenient but expensive and a suitable food to fit social eating relationships.

The habitual experience of making food choices over the life course led to people's developing personal systems for food choice. Personal systems have two major components: (1) value negotiations (2) strategies.

The model describes the interconnectedness of the values in the negotiation process, with the spiral pattern at the centre of the value negotiation configuration depicting the process' highly dynamic nature. Values are compared with each other and juggled according to their significance for a particular food choice. For food choice, most frequently emerged values are sensory perceptions, monetary considerations, convenience, health/nutrition, managing relationships and quality.

Values were also classified as the enduring beliefs which lead and motivate behaviour and were important in self definition (Kahle and Timmer, 1983). Values were often defined as significant in food choices (Lennernäs et al., 1997), and provided some standard scripts for food choice behaviours (Grunert, 1993). Rokeach (1986) stated that a person's value system is a learned organisation of rules for making choices and for resolving conflicts, which is consonant with the personal food system of strategies that people thought up for managing conflicting values in food choice decisions.

In the last step, people develop strategies for making food choices. These strategies are formed according to principles and recognized procedures used in negotiating
with the larger societal food system and the factors perceived as central for a particular food choice event. Although individuals’ personal strategies should be considered unique for each food choice event, people generally incorporated similar patterns and rules for making food selections. Thus, strategies tend to be generally stable while allowing for flexibility.

Janas et al. (1996) explained strategies, called personal dietary guidelines, which were individualized strategies to change eating behaviours for improved cardiac health. Bettman et al. (1998) also defined consumer decision-making as inherently constructive with people using a repertoire of context dependent strategies. Allowing one value to predominate in a food choice situation often influenced which value would lead in the next situation involving value conflict. People reported expectations about reasonable food choice behaviour over time frames such as within a meal, day, week, year or lifetime. People kept track of past value negotiations and food choices and used this information in future decisions. Self-monitoring influenced current as well as future food choices. This finding is consistent with a research of Bell and Meiselman (1995) which suggested that the environment of a food-choice event includes not only current and future expectations, but also prior experiences and habits, emphasizing the dimension of time as an influence on food-choice decisions.

People develop their ideas to simplify choices among the array of various food choices. Decision studies have shown that the more complex the decision problem, the more people would use simplifying decision heuristics (Payne and Bettman, 1992). When faced with decisions of increasing complexity, other research supported the idea that organizing processes into rational, coordinated systems facilitates adaptation to change (Onken et al., 1985). Furst et al. (1996) recognized that food choice processes are complex, evolving, dynamic and situational. They suggested that understanding of the adaptive systems that people develop to help organise, simplify and feel comfortable with their food choices are important for developing theories related to food and eating behaviour.
2.2.3 Radder and Roux’s Model

Radder and Roux (2005) described a proposed framework for understanding possible factors that could influence food consumers’ preference for food. These factors were grouped into two interrelated dimensions, namely, consumer-related forces and market-related forces (Figure 2.3).

**Figure 2.3 Radder and Roux’s Consumer Food Choice Model**

Variables within the consumer-related group, there are health consideration, social interactions, familiarity and habit, psychographics, and demographics. Health is an important consideration when choosing which food to eat (Pollard et al., 2002).
According to Radder and Roux, it is thus clear that health consideration will be an important factor in making a food choice.

Sensory variables, such as colour, taste, texture and smell are also the most influential factors in the perception and choice of food and in consumers’ eating behaviour. The main sensory channels are visual, auditory, olfactory, and textural. Colours, sounds, smell, and textures in the environment may directly arouse visceral reactions that contribute favourably to eating behaviour. Various components of these can prompt sensations in the consumer that might increase or decrease food intake. In other words, these situational and sensory factors might help convert behavioural intentions into actual eating behaviour (Stroebele and De Castro, 2004).

In Radder and Roux’s framework, social interaction is identified as a social influence on food preference, including pleasure, enjoyable experiences and comfort. An individual’s social status and group membership often reflect his or her food choice behaviour, such as eating only vegetarian meal or specific cuisine, and dining at an exotic restaurant (Pollard et al., 2002). Sociological factors such as ethics, politics and culture are line with people’s food choice behaviour (Lindeman and Stark, 1999), as well as people are influenced by the social norm from family and friends about their food consumption (Leek et al., 2000).

The fourth consumer-related force is that of familiarity and habit. Familiarity with specific food types result from previous exposure to and experience with the product and from the influences of family members and other reference groups. Pliner and Hobden (1992) defined it as the extent to which individuals are reluctant to try novel foods because of its unfamiliarity. Peoples’ willingness to eat familiar foods rather than novel foods from different food categories was related to the frequency of eating and intake quantity and to both anticipated and actual liking of the foods (Pliner et al., 1998).

Psychographics in terms of lifestyle and personality such as concern about food safety, perceptions and knowledge about food products also influence consumers’
food choice. As freedom of choice in the area of nutrition has expanded, dietary practices seem to have evolved into psychologically complex processes, no longer dictated by hunger, pleasure or practical issues. Among people, food choice has increasingly become a stage for expressing personality, that is, a domain within which one expresses one’s ideals and identity. For instance, for most vegetarians, their diet signifies much more than just what one is allowed to eat and what one is not. It is rather a question of an ideology of how life ought to be lived (Lindeman and Sirelius, 2001).

The last consumer-related force is demographics such as age, gender, education and occupational status. According to Roininen et al. (1999), demographic characteristics affected peoples’ food choice. For instance, females were more interested in the health and taste aspects of food than were males. Younger respondents were less concerned with health but more interested in taste than were older respondents.

Since the objective of marketing is to create profitable exchanges, marketing activities will influence the consumer buying process (Churchill and Iacobucci, 2004), food choice is thus also influenced by the market-related forces (Radder and Roux, 2005). Garber et al. (2003) asserted similar opinions to Radder and Roux. Food scientists have only tested consumer related factors such as sensory appeals, preferences, and demographic characters to predict consumers’ food choice. However, for their experiments to have the needed external validity to achieve such marketing objectives, food scientists must incorporate into their experiments certain elements of consumer purchase behaviour and the marketing context in which food products are considered for purchase (Garber et al., 2003).

Figure 2.3 shows that the effects of market related variables are interrelated with demographic issues. The price of food, place of purchase and availability are significant factors in determining food choice. Consumers’ continued experience of a wide range of messages originating from various commercial and non-commercial sources also influences their product preferences.
However, Radder and Roux's framework could be distinguished with other theoretical knowledge because they divided these factors in two categories, market related force and consumer related force, and concerned that these factors could also substantially influence on consumers' food choice when market related variables communicating with consumer related variables. In addition, Radder and Roux suggested the complexity of the food choice process. Identified each categories can effect on food choice by itself but it could also associated with other factors.

2.3 General Nature of Food Choice

Definitions of factors influencing food choice are fairly consistent between researchers albeit with different emphases. For instance, Radder and Roux (2005) defined health as a very important food choice factor, and Khan (1981) identified health as a type of intrinsic factors. Furst et al. (1996) focused on value negotiation including health and nutrition as determinants of food choice. Sensory appeals and psychological issues have also located an important place in three food choice models. Khan (1981) emphasised the importance of culture, and Furst et al. (1996) and Radder and Roux (2005) explained the influence of social frameworks on food choice. External factors can also influence food choice behaviours. Khan (1981) stressed advertising, Furst et al. (1996) included resources, and Radder and Roux (2005) identified distribution and promotion as crucial influencing factors for food choice.

In the following sections, factors influencing food choice will be discussed include list of all here. Issues around health include issues around nutrient content and issues around food safety.

2.3.1 Health and Nutrient Considerations

Health has been found to be an important influencing factor for food acceptance in many studies, principally as far as it relates to nutrition. Many researchers have investigated the relationship between health and food choice (Pollard et al., 2002).
Pollard et al. (1998) found that British college students who cared about natural food content, weight control, and health reported eating healthier food than the average student, while those who valued convenience reported eating more potato chips. These results were confirmed by Zandstra et al. (2001) who found that people who cared about their health were more likely to pick a healthy snack while people who indicate a preference for sweet food also report a higher consumption of sweet and high-fat snacks. Relationships between self-reported dietary behaviour and food attitudes were also established by Mooney and Walbourn (2001), who found that the avoidance of certain food can be explained by concerns about weight, health and unnatural ingredients. Pettinger et al. (2004) investigated the nature of attitudes to diet and health in a northern European country (Nottingham, UK) and a southern European country (Montpellier, France). The French were most likely to agree that there was ‘nothing more important than good health’ and that ‘if you do not have your health you do not have anything’. More English than French subjects agreed that ‘good health is only of minor importance in a happy life’. This finding suggested that the French place a stronger value on health than the English in their food choices. Glanz et al. (1998) examined how a variety of factors, including demographics and healthy lifestyle orientation, were related to the importance of taste, nutrition, cost, convenience, and weight control, and investigated whether particular factors, in turn, affect peoples’ food choices. In terms of food consumption, healthy lifestyle orientation played an important role in determining food consumption, in ways beyond what could be predicted directly on the basis of the demographics of the respondents.

Health consideration has also been identified as the most important reason for organic food choice in many research studies. Saba and Messina (2003) studied consumers’ attitudes and beliefs towards the consumption of organic fruits and vegetables in Italy. Findings indicated that consumers tended to hold positive attitudes towards eating organic fruits and vegetables because they agreed that organic fruits and vegetables are good for their health. Zotos et al. (1999) investigated consumers’ awareness of and intention to purchase organic products and reasons that hindered purchase of organic products in Greece. Consumers’ attitudes towards the consumption of organic
products were strongly positive, because consumers believed they had health benefits. Another later Greek study also established that health consciousness was an important motive of organic food purchase. Eighty eight percent of respondents answered that their main reason for organic purchasing was its health protection (Chryssohoibidis and Krystallis, 2005). The German umbrella association of the organic food sector (BNN) has also concluded that health is the central motivation for buying organic products. In a German organic consumer poll conducted in 1999, 67% of the people interviewed named health aspects as their main reason for buying organic (Worner and Meier-Ploeger, 1999).

Schifferstein and Oude Ophius (1998) examined the determinants of organic food consumption and their interrelationships in the Netherlands. A two stage cluster sampling was carried out in 272 respondents, who were customers of 30 different health and natural food stores, and compared with the general population, 576 respondents completed the interview. Ninety three percent of health store customers bought organic food because they believed it is healthier. Seventy percent of the alternative group answered that if organic food was healthier than conventional food, they would buy organic food. Thus, Schifferstein and Oude Ophius (1998) suggested that health is a more important motive for potential buyers of organic food. Harper and Makatouni (2002) investigated organic buyers’ and non-buyers’ perception of organic production. There were no significant differences in the level of consumers’ concern about health and food contamination for organic products amongst those that did buy organic food and those that did not. Consumers had positive perceptions of organic food and the main motivator for purchasing organic food was health. Similarly Zanoli and Naspetti (2002) found no difference in perception of organic buyers and non-buyers in Italy, using laddering interviews with 30 buyers and 30 non-buyers of organic good. Health was the most important determinant factor for organic food choice. This result did not discriminate between the choices of the two groups of respondents.

People, especially women, who have the higher level of responsibility for feeding children and other family members, often had more concerns about what their
children eat than about what they eat themselves (Cunningham, 2001). Søndergaard and Edelenbos (2007) conducted two empirical studies on how parents and children perceive four vegetable-based food products for children and subsequently how children evaluate the taste of these products. The main outcome from the laddering interviews conducted with parents was four hierarchical value maps. The central positive benefit in all four hierarchical value maps was healthiness and healthy eating habits. Parents answered that quality of food, including taste, health and convenience was most important factor when choosing food. The taste and health factors were interrelated in the sense that if the taste was good, then eating habits will be healthy because of wholesome ingredients. Important negative consequences were overweight caused by deep-frying and the fact that children will not eat a product if they do not like the ingredients (Figure 2.4). Thus, it is important that the product has ‘wholesome ingredients’ and looks ‘appetizing’ so that a ‘desire to eat’ is prompted by the expectations of tastiness, because a desire to eat is also related to the health/healthiness factor.

**Figure 2.4 Hierarchical Value Map: Spinach Lasagne**

Source: Søndergaard and Edelenbos, 2007, 957p
In terms of organic food, Davies et al. (1995) carried out a study of Northern Ireland consumers investigating their purchasing behaviour in respect of organic food in the three year period 1989-1990, 1992 and 1993. In common with other studies, they found that health was a dominant factor for buying organic food, with women aged 30-45 years with children being the more committed purchasers in relation to perceived health benefits. Makatouni (2002) studied organic food purchasing behaviour amongst 40 British parents with children (ages 4 to 12 years) who bought organic food regularly. Values regarding human health included responsibility for health and well-being of self and family. These values can focus either on the individuals (longer life, feel relaxed and satisfaction) or on the family unit (responsible for family health and well-being) or on the society unit as a whole (egalitarian). In other words, these consumers perceived organic food as a means of satisfying individual and social values, of which the most important was centred around the health of either themselves or their families.

However, not all research has confirmed healthiness as a motivator for choice, even when consumers were knowledgeable regarding healthy eating, and their actual food consumption patterns. For example, in a survey conducted by the American Dietetic Association (2000) 40% of respondents indicated that they knew they should be eating a healthy diet, but they did not do it. Biloukha and Utermohlen (2000) examined the correlations among taste, healthfulness and cost for consumption of a number of foods. Results showed that healthfulness was the salient factor in the choice of only three foods for males and no foods for females. In particular, the consumption of fat and oil products, such as vegetable oil, margarine and lard, and dietary products, such as cheese were more correlated with taste and less correlated with health. Radder and Roux (2005) determined South African consumers' perceptions and opinions on a number of issues related to food choice factors including health considerations, sensory variables, social interactions, familiarity and habit, psychographics and demographics. They concluded that, as red meat was a popular choice amongst consumers, and venison less popular despite a lower fat content and similar tastiness to livestock, South African consumers were not very
concerned about the health implications of their meat consumption. Radder and Roux (2005) conclude that this result might be due to "optimistic bias", which arises where individuals believe they are less at risk than a comparable member of society (Pollard et al., 2002), or to the belief that they already eat healthily enough, for example, by cutting away all visible fat on red meat (Radder and Roux, 2005).

2.3.1.1 Food Safety and Health

Food safety has been found to be motivator of food choices, including choice of organic food. Fotopoulos et al. (2003) focusing on wines produced from organically grown grapes, found that 35 percent of 28 organic buyers interviewed gave the second most important reason for choosing organically produced wine to be safety for buyers and non-buyers. Roddy et al. (1996), using cluster analysis of consumer survey data (n = 900 from the Republic of Ireland and Northern Ireland) carried out on attitudes to organic food, showed that consumers who tended to be more concerned about food safety had more positive attitudes towards organic food. Similarly An and Kang (2006) investigated Korean housewives’ recognition and consumption of organic and instant food. Over 60 percent of the 300 respondents bought organic food because of its safety. Kim et al. (2006) found similar result in Korea. They studied the importance of the consumers’ purchasing attributes for environmentally friendly agricultural products, and showed that in the case of organic vegetables, 'safety' was the most important purchasing attribute for organic food.

Some researchers have investigated food safety and health issue for food choice by focusing on meat consumption. Krystallis et al. (2007) investigated how Greek meat supply chain realise the pressing consumer demand for certified meat quality related to meat safety. The survey conducted in the Athens area, involved a sample of 268 participants responsible for food purchasing decisions. Although there were few differences between clusters of respondents, overall, most respondents assigned the highest importance to food safety, visual quality, healthiness and nutritional value for their meat choice. Kubberod et al. (2002) stated that consumers’ general knowledge of the health problems related to ‘diseases of affluence’ has had a considerable negative effect on meat consumption over the last decades. However, the result of
Krystallis et al. (2007)’s study was not consistent with Kubberod et al. (2002). Although consumers recognised that safety was very significant reason to intake meat, pleasure derived from eating meat seemed to be the most important reason behind the almost unanimous preference disclosed in their survey.

Recent food safety scandals related to meat, such as the BSE crisis have also lead to an increasing positive attitude towards organic food choices (O'Donovan and McCarthy, 2002). Saher et al. (2006) investigated the potential role that field of education, thinking style, values, meat avoidance, magical thinking, behavioural avoidance and gender play in GM food and organic food attitudes. Finnish students (N=3261) completed a questionnaire on attitudes towards genetically modified and organic food, and their eating of meat. The results showed a complex pattern of personality effects on GM and organic food attitudes, combining direct and indirect influences of fundamental personality dimensions on the one hand, and behavioural and belief factors on the other. GM attitudes in this study were mostly negative, while organic food attitudes were outspokenly positive. A number of factors affecting organic food attitudes could be identified, the most important ones being meat avoidance, magical thinking about food and health, intuitive thinking style and self-transcendence values. In particular, intuitive thinkers were likely to hold magical beliefs about food and health, which were related to positive organic food attitudes. O'Donovan and McCarthy (2002) set out to investigate how Irish consumers form their purchase intention for organic meat. It was revealed that respondents who purchased or had intention to purchase organic meat placed higher levels of importance on health compared with those who did not purchase or had no intention to purchase organic meat. Seventy four percent of respondents expressed concern in relation to the safety of conventional meat relating to issues such as BSE, E.coli, and salmonella. Sixty percent of these consumers expressed willingness to buy organic meat because they believed that it was safer than conventional meat. Thus, they suggested that health consciousness was one of the main factors affecting consumer demand for organic meat. According to Magnusson et al. (2003) who studied for 1,154 consumers ages 18-65 years in Sweden, a majority of respondents perceived it to be quite or very likely and important that the stated health consequence was an
influence on their choice of organic food. Health was the most important predictor of attitudes and purchase intention for four organic products, milk, meat, potato and bread, as well as an important predictor of the purchase frequency of those four target foods. Another Swedish research also found that a higher relative frequency in the purchase of organic food is associated with more importance attached to personal health (Grankvist and Biel, 2001).

In addition, organic food's lower pesticides and fertiliser residues play an important role to increasing consumption of organic food (Canavari et al., 2002; Lockie et al., 2004; Williams and Hammitt, 2000). Williams and Hammitt (2000) aimed to better understand how American consumers of organically grown produce differed from buyers of conventional produce. The survey findings indicated that organic buyers did not trust the safety of conventional food. Only 45% of organic buyers, for example, agreed that the current U.S conventional food supply is safe. In addition, organic buyers were found to perceive higher pesticide-residue risks than buyers for conventionally grown food. They were also willing to pay a higher price for organic food, if it is could be confirmed to reduce perceived food safety risks. Similarly Canavari et al. (2002) found that over 90 percent of customers were willing to pay for organic food which was free of chemical pesticides, using interviewing with questionnaire in Italy. People who were not willing to pay for pesticide elimination were not very confident about the real possibility of eliminating pesticides or considered it a matter of principle that consumers already have the right to be guaranteed safe food, so they should not have to pay anything more. This study suggested that issues related to food safety have a positive effect on consumer behaviour toward organic food choice, but to increase actual consumption for organic food, confidence in organic food safety has to be guaranteed. Lockie et al. (2004) investigated factors underlying the selection of organic food amongst Australian consumers. The healthy food factor related to the necessity for food to be free of artificial ingredients, pesticide and other chemical residues, preservatives and hormones and antibiotics. Amongst those who considered health as an important factor for selecting organic food, using industrial technologies such as genetic engineering and irradiation caused consumers to worry about significant perceived
health risks. Women and who took responsibility for shopping were more likely to be concerned about the naturalness of food. In other words, consumers' level of participation in the acquisition and consumption of food that they perceived to be healthy was the major direct determinant of increasing rates of consumption of organic food.

2.3.1.2 Environmental Concerns and Health
The trend towards increased consumption of organic food considered with health can be linked to a broader concern with environmental issues, such as to reduce the use of pesticides or other chemical fertilisers in agriculture, and the use of environmentally friendly product (Canavan et al., 2002; Grankvist and Biel, 2001; Lockie et al., 2004; Magnusson et al., 2003).

Magnusson et al. (2003) investigated the importance of perceived environmental consequences of organic food purchase in relation to consumer attitudes and self-reported purchase of organic food in Sweden. With health concerns, environmental concerns were the most important predictors of attitude and purchase intention for organically produced food. Factors related to the environment, such as pollution of the soil, using artificial fertilisers in agriculture, and use of herbicides and pesticides in agriculture were perceived to have a bad influence on not only the environment but also human health. These results confirmed the findings from another recent Swedish study (Grankvist and Biel, 2001) that found a positive and moderately strong correlation between the purchase frequency of eco-labelled food and the perceived importance of environmental consequences as a purchase criterion. Research in Italy showed a similar result. Canavari et al. (2002) investigated the attitude to and consumption patterns for organic food in four supermarkets located in the provinces of Bologna and Reggio Emilia in Italy. Over 97 percent of respondents assumed that organic agriculture is a feasible way to reduce the impact of pesticides on the environment, thus they choose organic food because they wanted to reduce the perceived health risks and pollution related to pesticide residues. In addition, Lockie et al. (2004) found that green consumption related to the frequency with which Australian respondents engaged in other environmentally friendly activities, including
recycling, composting and the use of environmentally friendly cleaning products and also influenced on organic food consumption. Those people more likely to engage in green consumption included those who were more concerned about ecological values, more concerned about natural food, less concerned about sensory and emotional appeal and less concerned about convenience. They had a high level of awareness of the environmental attributes of organic production and its implications for human health. Therefore, it appeared that consumers who were committed to green consumption would incorporate a significant amount of organic food in their diet.

2.3.2 Sensory Appeal

Sensory appeals, such as appearance or colour, texture and taste or smell are some of important influencing factors on the acceptance of food and in eating behaviour for consumers (Radder and Roux, 2005).

2.3.2.1 Taste

People are most likely to consume food that they evaluate as tasty. Therefore, taste can be considered a minimal standard for food consumption (Glanz et al., 1998). Often the prevailing value, sensory perceptions were driven mostly by taste, and varied widely among people. In describing why they choose a particular food, individuals would often say "taste" and "flavour" with no further explanation or elaboration, apparently expecting that their first priority would be understood by everyone (Furst et al., 1996). Radder and Roux (2005) determined consumers' perceptions and opinions that could influence consumers' preference for wild venison. Taste could influence consumers' product preference for venison. South African consumers' perceived tenderness, juiciness and flavour as primary indicators of the taste of red meat. Biloukha and Utermohlen (2000) found predictors of food choices in Ukrainian consumers who were 303 males and 616 females, ages 18-60. Taste was the most significant predictor of food choice for this population. Taste was the factor most highly correlated with the frequency of consumption for 20 foods for males and 23 foods for females. Specifically, taste was correlated with the consumption of vegetable oil, margarine and lard. Aaron et al. (1994) also found consumers'
preferences of spreads. Consumers had more preference towards more spreadable and better mouth feel spreads. Lavin and Lawless (1998) examined the effect of adding an aroma on sweetness, creaminess and hedonic ratings using American children and adolescents aged 5 to 14 years and adults aged 18 to 31 years. The strongest and most consistent effect across age groups was the enhancement of rated sweetness by added vanilla flavour in milk. All age groups rated the vanilla flavoured milk higher for the liking rating.

The view that organic produce is more tasty and fresh than conventional is not widely confirmed. The attitude of a better sensory appeal is probably connoted indirectly, as result of the view that the organic fruits and vegetables are produced in small quantities and are of more tasty varieties (Davies et al., 1995). However, some researchers indicated the importance of sensory appeal including taste for choosing organic food. Fotopoulos et al. (2003) analysed consumers' purchasing motive with Greek organic wine and found that quality such as colour, aroma, taste and finesse constituted the main advantages of the product. Although consumers indicated satisfaction with, and the importance of, the health aspect of organic wine, this aspect also played an important role between the purchase motives of organic buyers and non-buyers.

2.3.2.2 Appearance

Because the first encounter with food is often visual, appearance will determine how consumers perceive quality and thus significantly influence purchasing behaviour. An appealing appearance is reflected in basic sensory attributes such as colour, opacity, gloss, visual structure and texture (Imram, 1999). Visual impressions will affect subsequent willingness to accept a food product. The effect of visual feelings should not be underestimated. Consumers' perception of food quality is dependent on these visual images (Hetherington and MacDougall, 1992). Colour is also believed to provide a code by which people label and rank perceived texture and taste properties within general types of food, or in cases where the products are primarily sold through appearance properties rather than through packaging (Imram, 1999). Food and beverage intakes are influenced by people's colour preferences. For example,
coloured beverages were expected to be more refreshing when clear, red, or orange than when green or purple (Zellner and Durlach, 2002). Rolls et al. (1982) offered sweets of different colours to children to examine the influence of food appearance on intake. Children consumed similar amounts under all conditions. The result showed that the taste of the favourite colour of the foods eaten was rated higher than the taste of the other colours, and a significant decline in pleasantness of the colours eaten in comparison with the colours not eaten was reported. Lavin and Lawless (1998) investigated the effect of colour change in a fruit beverage on sweetness judgements and liking of milk. Three groups of American children were tested, in age groups of 5 to 7, 8 to 10 and 11 to 14-years-old, and their responses and contextual effects were compared to those of adults. Children did not show the expected effect of darker red colours raising sweetness judgments in the fruit beverage, and the 11 to 14-years-old group judged lighter red colour as sweeter. This result was the opposite direction from adults.

Perceptions towards intrinsic and sensory attributes were examined through a series of questions by Mannion et al. (2000). Respondents were asked to indicate the importance of a series of eight intrinsic and sensory attributes for assessing the eating quality of beef at the point of consumption, namely flavour, tenderness, colour, smell, leanness, juiciness, texture, and beef free of gristle. The helpfulness of a series of intrinsic attributes for predicting the eating quality at the point of purchase was also examined, namely colour, marbling and leanness. In all factors accounting for 58 percent of the variance were derived. These intrinsic and sensory attributes of meat had an effect on Irish consumers' beef choice.

Thompson and Kidwell (1998) investigated the effects of individual cosmetic defects on the choice of organic produce. The effects of selected cosmetic defects on choice of organic produce were uniform but relatively small. The cosmetic defects influenced the probability of purchasing organic products. More consumers purchased organic products such as flowering bud clusters in broccoli. However, some organic meat studies found that appearance had no significant influence on purchase intention to organic food. Reactions of consumers to the appearance and
taste of organic pork were tested in France, Denmark, Sweden and UK by Dransfield et al. (2005). There were significant differences between countries for colour, fat cover and marbling. More Swedish than other consumers gave inconsistent choices for colour, fatness and marbling. In all four countries, the choice concerning ‘drip’ was chosen inconsistently by two thirds of the people. Although there were differences of preference for appearance between each country, appearance had no conclusive effect on purchase of organic meat in all countries. In another Irish study, appearance had no significant effect to purchase intention for organic meat. O'Donovan and McCarthy (2002) examined Irish consumer perceptions and purchase intention of organic meat. The importance of appearance was similar for both groups those who purchased or had intention to purchase organic meat and who had no intention to purchase organic meat. Thus, this finding suggested that appearance is an important factor for food choice but not organic meat.

Each sensory factor can not only influence food choice by itself, but it is associated with many other sensorial characters. According to the result of Radder and Roux (2005)'s study investigating factors affecting food choice in relation to wild venison, the sensory variable was an important factor to choose meat. Fifty two percent of the respondents regarded colour as an extremely important indicator of red meat quality, and smell and texture were regarded as important quality indicators. Fifty nine percent of the respondents labelled smell as extremely important in judging red meat quality, and 41% regarded it as important to slightly important.

2.3.3 Psychological Issues

The majority of research on the food industry has established a relationship between psychological aspects such as preferences and conveniences and food choice (Furst et al., 1996).

2.3.3.1 Preference

Individuals' preferences shape the boundaries of food choices that a person was willing to make, and included likes/dislikes, individual food styles, food centeredness
and emotions. Individuals' personal preferences or traits play a role in establishing personal food choice parameters. For example, people appeared to have different food styles that often expressed themselves as food adventurousness or pickiness (Furst et al., 1996). Pollard et al. (2001) investigated the health and lifestyle factors that affect fruit and vegetable consumption within a particular cohort of women. Although it was a natural outcome, vegetarians and vegans were over twice as likely as non-vegetarians or non-vegans to be high fruit and vegetable consumers.

Familiarity with a food product may lead to its preference, non-familiarity may result in prejudice. The conditions under which a consumer first experiences a food shapes its future acceptability is established (Herne, 1995). Consumers' lack of interest in venison related to their unfamiliarity with the product leads to their unwillingness to try out new meats (Radder and Roux, 2005). A survey of retailers in the United States of America showed similar results. One of the problems that exotic foods have encountered was consumers' lack of familiarity with them. Not enough people have tried them. There was no comfort level (Zimmerman, 1997). A study compared food consumption between France and England (Pettinger et al., 2004), and French respondents were most likely to agree that it would be difficult for them to change their eating habits. In line with this, English respondents were more likely to report being confident that they could change certain aspects of their eating habits. English people agreed to adopt unfamiliar food if it is good choice for their healthy eating. In sum, more French respondents agreed that their choice of food was generally influenced by their familiar eating behaviour.

2.3.3.2 Convenience

Convenience as a concept may depend on the individual's cooking skills and whether they enjoy preparing certain food. Convenience is positively correlated with the use of food material such as vegetables, meats or flours. A change in their perceived convenience would directly affect the frequency of their usage (Herne, 1995). Convenience has also become an important influence on food choice due to changes in working patterns and increased time pressure in daily lives (Pettinger et al., 2004). Pettinger et al. (2004) explained some of the differences in attitudes to food of two
nations, Central England and Southern France. More respondents in France than England agreed that making time for food shopping was a priority in their life, as was making time in the day to cook healthy and nutritious meals. Compared to France, England had a higher convenience score. In other words, convenience was more important factor when choosing food for English people than French people.

Bove et al. (2003) highlighted the influence of convenience on food choices particularly among young couples. They note that 'ease of preparation' for the sake of 'convenience', and because of 'time' constraints, given employment schedules and other responsibilities, were often volunteered as principal factors determining couples' food choices. Rappoport et al. (1993) showed that consumers' preferences for meals and snacks are significantly correlated with consumers' perception of these products along the convenience dimension. Demand for convenience has actually been increasing since the late 19th century. It is widely recognised that the increase of women in the paid labour market following World War II has been a major driving force of the increased consumer demand for convenience (Traill, 1997). This demand is so strong that convenience is one of the essential innovation drivers in the food industry (Mermelstein, 2001), and many convenient products have emerged for example, ready-to-eat meals, packets of pre-cooked beef mince and grape-sized kiwifruit with edible skin. These convenient products including cooking sauces and pre-boiled rice allow consumers to prepare an evening meal very quickly (Jaeger, 2003).

2.3.3.3 Environmental Friendly Concern
The environmentally concerned and socially conscious food consumers appeared in the late 60's, early 70's, partly as a consequence of a general distrust in society, industry, and modern technology, partly as a by-product of the first oil-crisis. People have known the production, distribution, use and disposal of products in modern society have a negative influence on environment. Environmental concerns of people have effected on consumers food choice behaviour (Grunert and Juhl, 1995).
Davies et al. (1995) explained the factor influencing consumers’ purchasing of organic food in Northern Ireland. Ninety four percent of organic food buyers demonstrated that their environmental concerns played an important role in their choice of organic food, because they were worried about the future of the planet and their children. Makatouni (2002) found a similar result in Davies et al. (1995). Consumers regarded values related to the environment as a very significant factor in their organic food choice. By protecting the environment, consumers believed that they protected their families’ well-being, as they wanted their children to be brought up on a healthy planet and later inherit it. Hartman and Wright (1999) also stated that organic consumers actively prioritise the purchase of ‘earth friendly’ products and are prepared to pay premium prices for organic food.

Grunert and Juhl (1995) also studied the relationships between values and a specific aspect of consumer behaviour, namely environmental attitudes and buying of organic food, for a sample of 174 Danish teachers. The results clearly indicated that the more environmentally concerned consumers were more likely to buy organic food. Ninety nine (76%) respondents answered that they would buy organic food because of its environmentally friendly attributes. Dreezens et al. (2005) addressed which specific values played a role in predicting consumers’ attitudes toward genetically modified food (GMF) and organically grown food (OGF). The questionnaire was divided into two parts. The first part was whether the attitudes towards GMF and OGF are influenced by specific values and beliefs. The second part was whether the attitudes towards GMF and OGF were related to each other, and whether the specific values underlying these two attitudes were also related to each other. A total of 100 participants responded to the Schwartz Value Survey and two questionnaires about GMF and organically grown food. Respondents rated the value for welfare for all people and environmental concern as high, rated OGF as positive. Hutchins and Greenhalg (1997) addressed the fundamental problems of a marketing strategy which is based on finding markets for organic products. Around thirty percent of respondents stated that they purchased organic food a because of its environmental friendliness. They suggested that it seemed that consumers have a rather general idea concerning the meaning of “organic” and from that point on the views diverge from
reality. Kim et al. (2006) found a similar result in Korea. They studied the determinants of consumers' purchase decision making for organic products. Findings pointed out that the second most important factor for organic food purchase was its environmentally friendly attributes.

2.3.4 Social Interactions

People use food to differentiate themselves from others and express their membership of a particular social group. Ordering a vegetarian meal, dining at a trendy restaurant, or eating exotic cuisine may be used and interpreted as a social symbol of the individual's social status and group membership. Food is thus a major focus for social interactions (Pollard et al., 2002).

2.3.4.1 Region and Culture

Regional patterns are particularly relevant for food products. Tourists may wish to try the 'local specialities' in the different parts of foreign countries. It might be telling us that 'to familiarize oneself with the local culture' something very important for food products. Although a biological need that people have to consume a certain amount of calories and liquid is a very important factor for food consumption, what to eat, how it is to be cooked, when it is to be eaten and under what social circumstances could be more important to food consumption (Askegaard and Madsen, 1998).

From an anthropological point of view, food culture can be defined as a culinary order whose characteristics are prevailing among a certain group of people. Food cultures may be distinguished from the micro-level (family) to the macro level (countries, regions, social classes) (Askegaard and Madsen, 1998). The most basic distinction in the culinary order is the categorization of what is edible and what is not from a cultural point of view. However, other factors such as taste criteria, the relationship between certain food items and certain consumption situations, timing of meals and eating situations, the associations pertaining to food products also contribute to constitute a food culture. The more specific term 'cuisine' is often used to denote special typical ingredients, combinations of ingredients and preparation
methods belonging to a certain country, region or ethnic group (Askegaard and Madsen, 1998; Fieldhouse, 1998).

Culture, thus, can be an important factor to choose certain food product by itself, as well as culture or a regional characteristic can lead to another factor which plays a significant role in food choice. Comparing variations between cultures in factors involved in food choice may have important implications for the food industry. A number of studies in recent years have addressed such cultural differences (Prescott et al., 2002). Mennell et al. (1992) discussed on geographical differences in food cultures. One of their points was a difference in the historical development of different food cultures. While the UK and France were characterized by national food cultures where the most significant differences were defined in terms of social class, Germany on the contrary showed rather distinguished regional food cultures, which makes it hard to speak of one German food culture. Nielsen et al. (1998) used a laddering interview technique to elicit food choice motives of consumers from UK, Denmark and France for a selection of vegetable oils. There were cross cultural differences in the degree to which health aspects, country of origin, and sensory characteristics, amongst others, were seen as important reasons for the preference of one oil over another. At the attribute level, country of origin was mostly a Danish attribute, whereas odour and hints at sunshine, summer and the south were mostly important to French. Family eating together was an almost exclusively Danish consequence, and protect identity, culture and food traditions were an almost exclusively French value. The English group named values considerably less, indicating a lower degree of involvement. Baker et al. (2004) also found different organic food choice behaviour between the UK and Germany. They explored the reasons why the behaviour of consumers in these two countries has been so divergent despite both groups of consumers holding similar attitudes about organic foods. Although similarities merged with respect to values concerned with health, well-being and the enjoyment of life, product attributes sought in order to achieve these values were different between the groups. A major difference was found in the absence among the UK groups of any connection between organic food and the environment.
2.3.4.2 Social Relationship

The managing social relationships value may appear to be different than the other primary values such as health, taste, and preference because it does not refer to particular food attributes. However, social relationship refers to the properties of a food choice behaviour that influence how well it is accepted by other people with whom one shares eating. People often weighed the social properties of a food choice with other value considerations as they tried to preserve eating relationships and find household harmony regarding food issues (Connors et al., 2001). Furst et al. (1996) indicated that important dimensions of the social framework were the nature of interpersonal relationships, social roles and meaning when making food choices. Families and households provided one of the most important sets of interpersonal relationships influencing food choice. People reported enacting or being assigned particular household food roles. For example, one or more persons were usually responsible for providing food to a household. The food provider's role was to interact and negotiate with the larger food system to acquire food that would meet the needs and desires of the other members of the household. Lindeman and Stark's (1999) study into the meat eating habits of women found that food choice was the result of multiple motives rather than single motive. Psychological factors were lined with non-meat consumption, these included motives such as ethics, politics and culture. Findings showed that non-meat consumption was driven by a desire to be part of a social group more than any other reason. Leek et al. (2000) found that the social norm from the family had a significant impact on the consumption frequency of fat and lean fish.

Concerns for social and political issues can also play a role in food choice and consumption behaviours. The Economist (2004a) reported how across the Middle East, America’s war on terror and its threats to Iraq have inspired Arab shoppers to boycott American brands for local alternatives. Arab manufacturers were also capitalising on demand for ‘political food’ among consumers in Western countries. Britain’s Muslim grocery stores now stock a number of Islamic soft drinks (Parmar, 2004). In a similar view, those moved by the plight of Palestinian farmers can chose
to buy Zaytoun olive oil harvested from the groves of the West Bank (The Economist, 2004b).

2.3.5 External Factors

Besides the previously mentioned factors related with the individual, effects of external factors such as price, availability and promotion or branding influencing on consumers’ food selection have also been found (Radder and Roux, 2005).

2.3.5.1 Price

The cost of food plays a significant role in the choice of food for many people, particularly in the lower socioeconomic groups, such as unemployed or retired subjects, or for those who are responsible for the household food shopping. Reasonably priced food is a concern throughout the world (Radder and Roux, 2005).

Perceived value for money has considerable influence on consumers’ purchasing intention and their future consumption behaviour, because consumers aim to balance the benefits (e.g. quality) of the consumption against the money paid (Al-Sabbahy et al, 2004). In line with this, the price of food must also agree with other values such as taste, quality, origin and personal preferences, and has been found to be an especially important factor in selecting certain types of foods (Furst et al., 1996). Price is often used as an indicator of perceived product quality and may influence whether consumers are willing to pay for specific foods (Myers, 2003). For instance, consumer awareness of the existence of particular wine brand elements represents a requirement for generating these consumers’ enhanced willingness to pay for wines for which relevant brand elements are emphasised. Variations in such awareness levels may serve to generate differences in consumers’ willingness to pay premium prices for particular wines (Quester and Smart, 1998). Giskes et al. (2007) examined the relative contribution of the perceived and objectively measured price of recommended food to household income differences in food purchasing. Consumers’ perceptions of price differences were associated with purchase of some food items. Respondents who perceived that recommended choices of bread, milk, cheese,
yoghurt, chicken or tinned fish were more expensive were less likely to purchase them.

Price has been identified as the main barrier towards purchasing organic products in many studies (An and Kang, 2006; Cunningham, 2001; Jolly, 1991; Fotopoulos and Krystallis, 2002; Kihlberg and Risvik, 2007; O’Donovan and McCarthy, 2002; Zanoli and Naspetti, 2002).

The numbers of organic buyers are probably growing as a consequence of the increasing availability and selection of organic and other ‘green’ products. However, despite the identification of a number of consumers interested in ‘green’ products, this categorisation supports the popular perception that price premiums associated with organic products still restrict their consumption (Cunningham, 2001). O’Donovan and McCarthy (2002) studied Irish consumers’ preference for organic meat. A total of 94 percent of respondents who did not purchase organic food indicated that they were non-buyers because organic meat was too expensive. Findings also identified that these consumers would be willing to purchase organic food if it became affordable. An and Kang (2006) examined housewives’ perception and consumption of organic food in Seoul and Kyunggi-do, South Korea. Over 94 percent of respondents were aware of organic food and 71.7 percent were consuming it. However, most of respondents (95.9%) thought the price was too expensive, and the biggest reason why they did not buy organic food was the high price (43.8%). According to Jolly (1991), high price is the most significant factor limiting increased consumption of organic products. This study assessed the market penetration of organic food among Californian consumers. The most significant constraint identified by 57 percent of consumers that have not continued to buy organic products was high price. Fotopoulos and Krystallis (2002) concluded a similar result to Jolly (1991). They investigated the reason for rejection of organic products in Greece. A random stratified sample of 1,612 respondents who were females, food purchase decision makers, and aged from 18 to 70 years was used. Nearly half of the respondents agreed that the main reason for not purchasing organic food was its high price.
Zanoli and Naspetti (2002) aimed at evaluating and connecting product knowledge and product experience, as relevant determinants of the consumer information base for organic food in Italy. A written questionnaire was used as an instrument to administer the laddering task to the respondents. The de-motivating parts of the laddering maps were always related to cost aspects. In detail, eighty seven percent of non-buyers and 66 percent of buyers answered that higher price of organic food make them hesitate to choose organic food. Kihlberg and Risvik (2007) characterized the main value segments of Swedish consumers with special interest in organic products and investigated possible differences in their sensory-specific liking of white bread in two age groups, under 30 and over 30 years. Slightly less than half (45.6%) of consumers under 30 years and 46.7 percent of consumers over 30 years declared that they would not buy organic food if the price was notably higher. In other words, the result showed that not even organic consumers were ready to pay more for organic food than for conventional. Thus, this study concluded that higher prices for organic food than for conventional were thought to be an obstacle to choosing organic food.

A part of this price problem of organic food is due to the many links between producers, importers, wholesalers, distributors and retailers. A more direct link between producer and retailer could reduce prices (Yussefi and Sohn, 2006). Sylvander’s (1995) study of the French market referred to costs at the wholesale level as being important for explaining the higher prices of organic produce, because organic goods require higher transport, processing and packaging costs than conventional goods. This is because organic products are only handled and turned over in small volumes. Sylvander (1995) indicated that when organic sales grow to volumes comparable to conventional sales, price premiums would fall substantially, due to reduced costs in the marketing and transport stage. Michelsen et al. (1999) suggested that the average price premium is reduced by increasing volumes and sales through supermarkets. Finally, freshness, a key quality indicator for consumers (Melton et al., 1996), will be ensured as turnover rates increase, improving the quality of organic products and thus giving consumers more value for money.
Some studies have estimated the premiums consumers would be willing to pay for organic products based on the interactions of quality and information attributes (Meuwissen et al., 2004; Dransfield et al., 2005; Gil et al. 2000; Scholderer et al., 2004). Dransfield et al. (2005) found a more consistent effect of labelling than appearance characteristics on the price offered for organic pig production. Respondents appeared to be prepared to pay, on average, about 3 percent extra even when all characteristics of appearance and labelling were available. After tasting labelled pork, consumers were prepared to pay between 4 and 10 percent extra for the labelled pork. Tasting pork with commercial symbols, Danish consumers gave a 12 percent premium to the information (Scholderer et al., 2004). In France and The Netherlands, questionnaire responses suggested (Meuwissen et al., 2004) that almost half of consumers would pay 20 percent more for pork from pigs raised organically. Using questionnaires on organic foods in Spain, consumers appeared to be prepared to pay about 12% more for organic red meats and a similar premium for organically-produced vegetables, cereals and chicken because they thought organic products are fresher and better quality than normal food (Gil et al. 2000). Meier-Ploeger and Woodward (1999) stated that 52 percent of the German consumers of their sample were willing to pay more for organic fruits and vegetables, 34 percent for animal products and 39 percent for grain products.

However, the specific magnitude of the importance of price in consumers’ purchase decisions has been debated by some researchers. Tustin and Lockshin (2001) found that region of origin was more important than price in purchase decisions made by consumers who were highly-involved with wine. A study looked at the price consumers were willing to pay for a product where a desired convenience benefit had been brought about by genetically modifying (GM) mango (Jaeger et al, 2003). Participants were asked if given a choice they would buy a GM or GM-free mango. Data were collected from two consumer samples (A and B). In Sample A, 22% of those consumers who had initially chosen the GM free mango opted for the GM mango when it was sold at a 10% discount. On the contrary, just under half (45%) of those participants who had chosen the GM mango initially were willing to pay a 10% premium for the benefit of longer storage life. Therefore, consumers in Sample A
appeared price sensitive. In Sample B, it appeared that technology and convenience considerations were more important than price. Among those who initially had chosen the GM mango, only a small minority (5%) showed price sensitivity and chose to buy the discounted GM mango. Similarly, the vast majority (83%) of those who had chosen the GM mango initially did so again when it was more expensive. In terms of the trade-offs between price, convenience and technology, this study illustrated that some consumers were price sensitive. Among other people, however, price was less important than concerns over the use of GM technology in food production.

2.3.5.2 Availability
Consumers of food products also attach high levels of importance to place of purchase and availability. Availability of certain food throughout the year at conveniently located outlets will similarly affect consumers’ interest in the product and their search behaviour, purchasing and continued adoption decisions (Du Toit and Crafford, 2003). A study about food availability and adolescents’ eating behaviour indicated that the availability and accessibility of fruits and vegetables at home was significantly positively associated with adolescents’ fruit and vegetable consumption (Story and Neumark-Sztainer, 1999). According to Radder and Roux (2005), consumers of venison preferred to buy venison from butcheries, followed by supermarkets and lastly from farmers. Some consumers indicated a negative opinion about venison based on its seasonal availability, therefore highlighting the importance of adequate distribution and supply at conveniently located outlets. Giskes et al. (2007) examined the relative contribution of perceived and objective availability of suggested food to household income differences in food consumption. Results showed that participants who perceived that recommended choices were available were more likely to purchase them. Fur ey et al. (2002) investigated the role of availability of food items on food purchase in rural and urban areas of Northern Ireland. Research methods included a comparative shopping exercise (shopping basket analysis) in 109 stores across two urban and two rural areas (Ballymena, Coleraine, Londonderry and Strabane). Store type included multiples (major supermarket chains) and symbol group stores (those stores operating under a
franchise from one main buying group). Results indicated that multiples were found
to be the most comprehensive store from which to shop in relation to availability,
whereas symbol group stores faired poorly in the availability of fresh green
vegetables, carcass meat and wholemeal breads. This was an important issue because
it played an integral part in the health inequality debate and also related to social
exclusion.

The availability problem of organic products also seems to be an important limit to
the expansion of the organic food market. Many consumers among the actual non-
buyers consider that the availability is the most important factor limiting growth of
the organic products market, and there are many consumers with problems of finding
organic food (An and Kang, 2006; Chryssohoidis and Krystallis, 2005; Davies et al.,
1995; Fotopoulos and Krystallis, 2002; Jolly, 1991; O’Donovan and McCarthy, 2002;
Tregear et al., 1994; Zanoli and Naspetti, 2002; Zotos et al., 1999).

O’Donovan and McCarthy (2002) employed a questionnaire survey methodology for
250 Irish consumers to examine consumer demand for organic meat. A total of 98
percent of respondents did not purchase organic meat because it was not available,
but would consider purchasing if it became available. Thus, this finding suggested
that the availability problem of organic products was the most significant factor
restricting organic market growth. Davies et al. (1995) also found availability to be
clearly the major reason for not purchasing organic food in Northern Ireland. Non-
buyers of organic food were asked what would make them purchase organic food,
and one-third said that they would buy it if it were more available. Tregear et al.
(1994) studied demand for organic food in the UK. The study used a telephone survey
amongst 242 randomly selected people in the Edinburgh and Lothian district. The
findings identified that among non-buyers, lack of availability was commonly cited as
the reason for avoiding organic food next to the relative expense. In previous research,
43.4 percent of consumers who had never purchased organic food pointed out that the
most significant obstacle to choosing organic food was its availability (Jolly, 1991).
In the research of Zanoli and Naspetti (2002), the means-end chain model was finalized to have deeper insight into barriers that still prevent a larger demand of organic products in the Italian market. Non-buyers for organic food were particularly concerned about 'not easily available' and 'inconvenient location of point of sale', though an identical answer existed for organic buyer, non-buyers' concerns were relatively much stronger. Non-buyers perceived that the lack of availability played an important role in keeping away consumers from organic food choice. Fotopoulos and Krystallis (2002) investigated the organic non-buyers by identifying why they do not buy organic products in Greece. Most respondents (80.6 percent) agreed that the main reason why they do not purchase organic food was its very low availability. This result was in line with another Greek study (Zotos et al., 1999) which suggested marketing strategies for organically produced food. Over 80 percent of respondents answered that low availability was the most significant factor to reduce organic food consumption. In a more recent Greek study, availability was a most important obstacle for organic products purchasing. Sixty four percent of respondents answered that main problem with organic food purchasing is its low availability (Chryssohoidis and Krystallis, 2005). A Korean study also showed a similar result that although respondents recognised organic food, they did not purchase because it is not easy to find (27.5%) (An and Kang, 2006).

2.3.5.3 Market Forces

In addition, information through experts or advertising, promotion and branding also effects on consumers' food related decision. Commercial sources of information resulted from promotional efforts by members of the supply chain and can take the form of advertisements, commissioned articles in magazines or newspapers, demonstrations and information sessions at supermarket play essential role in food choice for consumers (Radder and Roux, 2005). According to Keller (2008), branding is identifying the origin of the product, defining the responsibility of the manufacturer, diminishing risk, diminishing the cost of searching for a product, a promise, a guarantee or contract with the manufacturer, a symbolic means and sign of quality. Thus, in aiming to understand consumers' trade offs between different factors in food related decisions, branding also needs to taken into consideration. Garber et al. (2003)
emphasized the importance of branding in terms of food and drink market by illustrating the failure of New Coke. They suggested that the Coca-Cola Company erred by concentrating on good taste, particularly levels of sweetness and effervescence, to the exclusion of all other elements of the marketing plan, such as brand name and image, packaging, price, promotion or aspects of physical distribution, which are known to interact with product performance to provide the overall product perception on which consumer preference and choice are largely based. Hedonic motives, relating to pleasure resulting from using a particular brand, also play an important role in food selection of consumers (Radder and Roux, 2005). In the case of fast food restaurants Miller and Ginter (1979) expressed situational variation in choice of fast food restaurant. Specifically, frequency of visits to fast food restaurants vary significantly across situations such as lunch on a weekday, snack during a shopping trip, evening meal when rushed for time and evening meal with family when not rushed for time. As awareness of the role of contextual effects increases, branding was but one of the factors for which these effects need to be better understood.

2.3.5.4 Trust

Consumers have become more concerned about the risk from food scares in recent years. It has become difficult for the general public to assess risks using traditional methods such as smell, taste or other physical attributes of food. The food safety issue is now commonly recognised as a credence attribute, and consumers have to rely on the trust they have towards producers, retailers and regulators to ensure potential food scares impacts are minimised (Lobb et al., 2007; Miles and Frewer, 2001; Senauer, 1992). Trust, with respect to food safety issues, has been found as an important factor to have influence on consumers’ food choice in the literature (Chen and Li, 2007; Dean and Shepherd, 2007; Hunt and Frewer, 2001; Lappalainen et al., 1998; Liu et al., 1998; Lobb et al., 2007).

Lobb et al. (2007) used the TPB framework to examine the effects of risk perception and trust on the intention to purchase chicken by UK consumers. They found that when a food scare occurs, trust in information provided by media enlarges the
probability of reduction in purchase, while trust in public authorities (such as the Food Standard Agency) mitigated the scare impact, especially for consumers with higher education levels. Liu et al. (1998) examined the consumer's "trust" effects by extending the prospective reference theory (Viscusi, 1989) to include a dynamic adjustment process of risk perception. The proposed model described a general updating process of risk perceptions to media coverage and could be applied to explain the temporal impact of media coverage on consumption of milk. The results suggested that the distrust had led to a divergence of consumers' perceived risk from the risk stated by the public authorities. Effects of positive and negative information to adjustment of consumption and risk perception were asymmetric over time. In other words, the reaction to positive information was longer than to negative information. Lappalainen et al. (1998) investigated attitudes to food, nutrition and health among nationally representative samples of adults from each member state of the European Union. Overall, 14,331 subjects completed the face-to-face interviewer-assisted questionnaire. Among EU subjects there was general agreement about the sources of information on healthy eating which they use and trust. Health professionals were the most trusted source across all member states. These trusted sources could influence eating behaviour.

Hunt and Frewer (2001) established the degree of trust the general public had in various possible sources of information about the health effects associated with consuming genetically modified food (GM food). Participants were asked directly about the degree to which they would trust information about the health effects associated with consuming GM food from a variety of sources. They were also asked about the degree to which they believed each source had a vested interest in misinforming the public about the possible health effects associated with such consumption, and the degree of knowledge they believed each source had about any possible health effects. The results indicated that perceptions of "vested interest" and "degree of knowledge" were important elements in determining levels of trust. Dean and Shepherd (2007) explored the impact of presenting messages on genetically modified food (GM food) either from a government agency alone or in consensus or conflicting with other stakeholders. Some stakeholders, such as consumer
organisations, collaborating with a government agency lowers the trust placed in them and affects the confidence with which consumers would use them in the future as information source for GM food choice. Chen and Li (2007) examined the factors that have influences on benefit and risk perceptions of applying gene technology to food production, perceptions that may in turn determine the consumer’s attitude toward genetically modified (GM) foods in Taiwan. Results showed that general attitude toward and trust in institutes and scientists performing gene manipulation had positive effects on the perceived benefits, but knowledge had negative impacts on the perceived risks of applying gene technology to produce food products.

Harper and Makatouni (2002) revealed the underlying values which motivate consumers to substitute or reduce their consumption of organic products. Despite the fact that consumers purchase organic product for health and animal welfare issues, some criticisms with regard to the way food is regulated and licensed was apparent throughout their focus groups. Respondents were very sceptical about certification systems following a programme on TV. Lack of trust in sources of information, especially the Government and the food industry, was identified as a key barrier to purchasing organic products. Whereas, if there is official trusted information that is consumers purchase organic products (Magnusson et al., 2001). In Sweden, the organic food labelling system is administered mainly by a third-party organisation, KRAV, which develops the standards for organic produce, ensures that the standards are followed and promotes the KRAV label. A Swedish survey found that 73 percent respondents (of 1,042) purchased KRAV-labelled organic products because they trusted they are produced by officially approved organic production methods (Statens offentliga utredningar, 1999, cited in Magnusson et al., 2001).

2.3.5.5 Past Experience

Past experience and habit can be included as substantive predictors of later behaviour, equivalent to the other independent variables (Bamberg and Schmidt, 2001). Past experience has been found as an important factor to influence on food choice (Haller et al., 1999; Köster, 2009; Nicklaus et al., 2005; Saba and Di Natale, 1999; Sørensen et al., 1996; Verbeke and Vackier, 2005).
People's daily life is full of behaviour that people have not consciously and intentionally experienced and individuals' food preference is one of example of this (Köster, 2009). These preferences persist for many years (Nicklaus et al., 2005) and even influence people's behaviour in relation to food (Haller et al., 1999). Even when people explicitly and consciously try to remember the specific taste of a previously eaten food, people usually do not succeed in finding the right food at a better than chance level. Sometimes people are also able to indicate better than chance whether an alternative of a food differs from the previously encountered food. However, this new experience does not seem to satisfy people as much as finding the original food, because people feel that it is too different in taste to what they already know (Köster, 2009).

Saba and Di Natale (1999) investigated the role of attitudes, habit and intention in predicting the actual consumption of meat and found the mediating role of intention in the impact of attitude and habit on consumption of meat. Consumption had higher correlations with habit than with purchase intention for red and white meat. Habit had been shown to be more correlated to intention of consuming than the attitude component was for each type of meat. The purchase habit was more important than attitude in the impact on intention of consuming meat. Intention was found to have a good and significant effect on actual consumption of meat.

Sørensen et al. (1996) identified differences between two groups of fish consumers based on their experience with fish. They found that more experienced consumers have a more positive attitude towards fish healthiness and taste. For the less experienced consumers, the health factor was less important and the negative aspects were more explicitly mentioned. Another Belgium study found a similar result with this research. Verbeke and Vackier (2005) investigated consumers' behaviour towards fish consumption in Belgium using the theory of planned behaviour (TPB) as a conceptual framework. They found that the highest correlations were identified for the items of habit. The correlations with the items of past experience were on average much higher in comparison with the items of facilitating conditions. In other words,
experience in buying and preparing fish was identified as a factor particularly important for a strong intention to eat fish and obstacles were less important for not intending to eat fish.

2.3.6 Demographic Characteristics

Demographics include aspects such as age, gender, education, occupational status and family style. Demographic characters can be a major influencing factor for food purchasing. These factors are sometimes correlated with each other, for instance assuming that people with more education and better jobs are likely to be older (Khan, 1981; Radder and Roux, 2005).

2.3.6.1 Gender

Gender could have some influence on food choice and eating behaviour (Ares and Gámbaro, 2007). Marquis (2005) explored the effect of convenience on students' food choices and the effect of gender, time and energy on these choices. Data were collected using a self-administered questionnaire filled by 319 students living alone in residence halls. Analyses of variance were used to compare food motivations based on gender. Pearson’s correlation coefficient was used to compare associations in the quest for convenience between time and energy. Results showed that females having learned from their parents to be autonomous in the kitchen, did not correlate with convenience orientation whereas a stronger negative correlation was obtained for males. Moreover, for females, lack of space did not correlate with convenience orientation, whereas a positive correlation was obtained for male. Lack of space in residences can be understood as lack of food storage area and limited possibilities for cooking for women. Specifically, the more convenience-oriented males were, the less they perceived that they eat well and that they could maintain their weight. For females, the more convenience-oriented they were, the more difficulty they had in eating enough.

Ares and Gámbaro (2007) investigated the effect of different carriers and enrichments on the perceived healthiness and willingness to try functional food. Regarding
differences between gender, women had a more positive attitude towards functional food with yogurt and marmalade as carrier products than men, as these products showed a higher score for women than for men for perceived healthiness. Men had a more positive attitude towards functional food with honey and cream soup as carriers than women, as they gave higher scores for willingness to try. These results suggested that differences in the perception of healthiness and willingness to try functional food exist between male and female, and that different products might be attractive for one or the other gender. Zalloua et al. (2007) also found differences between males and females when evaluating the effect of different food types on bone status in a large population sample. In their study, seafood was a large dietary component and was significantly associated with increased bone mineral density in women. More women consumed more seafood that men, especially those consuming more than 250g per week of seafood.

Regarding organic product consumers, these are mainly women, who buy larger quantities and more frequently than men. Lockie et al. (2004) indicated that women and those who task responsibility for shopping are most likely to be motivated by sensory and emotional appeal. Women are more likely to choose organic food that made the respondent feel good, physically and emotionally, as well as to the enjoyment of the act of eating itself. This is consistent with the findings of Lawrence et al. (2001) that women were more likely to consume organic food and more likely to express concerns about genetically modified food. The difference between the two genders is observed to be slight with regard to their willingness to pay price premiums for organic food (Davies et al., 1995). Forty one percent of men would pay more compared to 44 percent of women. These rates are close to those reported by Lockie et al. (2002) for Australia. There was a clear gender dimension to organic consumption with 44.1 percent of women respondents claiming to have consumed certified organic food compared to only 33.8 percent of men. Reicks et al. (1997) report that, however, males have been more likely to indicate that they had purchased organic products six months prior to the survey.
2.3.6.2 Age

There were several reasons to justify a division into age groups for food choice behaviour. People differ in cognitive styles and abilities at different ages. Thus, looking across age groups provides the possibility for detection of possible cohort effects and developmental trends for food choice (Lavin and Lawless, 1998). In a study on fresh beef, chicken and pork, Verbeke (2000) found that older people and the presence of young children limited favourable decision-making towards fresh meat consumption. Oram et al. (1995) also suggested differences between the adults and younger age groups for food selection. Visual character was the most important factor among children as opposed to gustatory and olfactory for adults, when seeking information for drinking. Food choice differences between ages were also found in a study focused on functional food (Ares and Gámbaro, 2007). Younger consumers seemed to have a more positive attitude towards dulce de leche (a type of sweetened condensed milk) and marmalade as carriers, as perceived healthiness scores for concepts with dulce de leche and willingness to try scores for concepts with marmalade were significantly higher for consumers between 18 and 29 years than for those over 45 years. Thus, this result suggested that sugary foods with functional ingredients might be targeted to young people, and the type of enrichment might be selected considering only this population. This segment of consumers gave high scores for yogurt functional products, showing that they might accept functional dairy products. Regarding intention to try, older people (more than 45 years) were less positive to enrichment with iron than the younger age group, showing that this segment was less interested in increasing their iron intake.

In terms of organic food choice, the age factor plays an important role. According to Reicks et al. (1997) younger people seem slightly more willing to buy (more and expensive) due to a greater environmental consciousness, which, however, does not translate into demand because of their lower purchasing power. Whereas Australian research found a different result. Lea and Worsley (2008) examined Australians' food-related environmental beliefs and behaviours. Older people were more likely to perform food-related environmental behaviours. They were more likely to purchase local foods and purchase organic foods.
Kihlberg and Risvik (2007) characterized the main value segments of consumers with special interest in organic products. They investigated possible differences in their sensory-specific liking of white breads baked with wheat originating from conventional versus organic farming systems with different treatments among consumer groups ≤ 30 and > 30 years. Results showed that age was related to values and that consumer groups differed in bread acceptance. The white bread A300 (baked with conventional wheat, different treatment) was liked to a significantly greater degree by consumer group ≤ 30. Bread A300, like bread A199 (baked with conventional wheat, different treatment), was characterized by significantly higher intensity of attributes such as smoothness, elasticity and juiciness than was bread sample C99 (baked with biodynamic wheat), D99 (baked with organic wheat, different treatment) and E00 (baked with organic wheat, different treatment). The present results indicated that flavour is important to consumers and is used by them as a discriminating factor independent of food type and the consumer group ≤ 30 differed to a high degree from the group >30 in their rating of samples in relation to taste (flavour).

2.3.6.3 Family Constitution

Personal relationships with family members, relatives, and friends influence people to try food. Individuals were found to accept food advice best from those they consider as family or friends. Other influences may include opinions of reference groups or extension advisors (Khan, 1981). Pollard et al. (2001) found factors that affect fruit and vegetable consumption in the UK women. There were significant differences in fruit and vegetable consumption, when the two variables were considered individually. Women with children under the age of 16 years consumed significantly more vegetables than women without children under 16 years. Whereas women with no children under the age of 16 years consumed more fruit than those women with children under the age of 16 years. Søndergaard and Edelenbos (2007) studied family’s decision making for food choice regarding vegetable based food choice for children. Results indicated that decision making regarding food for families and especially food for children cannot be investigated relying solely on traditional
individual decision-making models. The influence and the role of children on parents' decision making must be taken into account. Findings suggested that parents choose food products with expected child preferences in mind, and it was different with a family without children.

The presence of children in the family plays a significant role, influencing positively the organic purchase, although more attention should be paid to the children’s age as an organic purchase factor (Thompson and Kidwell, 1998). Batte et al. (2007) supported with Thompson and Kidwell (1998). They found that the presence of children in the household had no impact on the probability of being willing to pay a premium for multi-ingredient food. However, conditioned on a willingness to pay a premium price, families with children were willing to pay higher premium for food with 70–95% and 95–99% organic ingredients than were consumers without children. Finch (2005) investigated that the impact of personal values and beliefs on organic food consumption between organic buyers and non-buyers. Both buyers and non-buyers groups stated that they were more likely to purchase organic foods if a family member became pregnant.

2.3.6.4 Education and Occupational Status

Education plays a central role in shaping food selection, and sometimes education and occupation have indirect links with each other. People with more education can get better jobs (Khan, 1981). Binkley and Golub (2007) compared grocery purchase patterns of regular and diet soft drink consumers and investigated whether differences in purchased quantity of diet soft drinks were associated with differences in purchases of other food categories. Results indicated that consumers of diet soda tended to have somewhat more education and to have higher incomes. The higher educated consumers were more interested in healthiness for their eating behaviour. Lappalainen et al. (1998) explored the degree of variability which exists geographically in peoples’ attitudes towards and beliefs about nutrition and health and their perceptions of a healthy diet. Results indicated that respondents with lower education level mentioned resistance to change more often as a barrier compared to those with higher education level (university background). Those with higher
education level, more frequently answered barriers related to lack of time, self-control and food preparation, but level of education was not associated with the categories, cost of food, unpleasant foods, influences of other people, knowledge or expert consensus and selection influences. Practically ‘irregular working hours’ was a more frequently cited difficulty by the highly educated than by the less educated people.

Occupational status seems to also be crucial influence on food choice. Not only is the number of women in the labour force increasing worldwide, but also the time that women work is moving beyond the traditional eight hours, leading to a “time crunch” (Assael, 1995). The working time of people also can have an effect on their eating behaviour. For example, in shift workers, irregular sleep and eating patterns are common and these patterns might disrupt biological rhythms. These irregular daily patterns could have a negative influence on people’s eating behaviour and seem to lead to bad dietary lifestyle such as loss of appetite or obesity, increased alcohol intake, and problems with digestion (Lennernäs et al., 1995).

Available income affects mainly the quantity of organic products bought and not the general willingness to buy (Finch, 2005). Finch (2005) examined the nature of the consumption values that differentiate organic food buyers from non-buyers. Each groups indicated that they would reduce their consumption of organic food, if the family faced a significant decline in household income. However, despite high price premiums for organic food, higher household incomes do not necessarily indicate higher likelihood of organic purchases. Some lower income segments seem to be more entrenched buyers (Krissoff, 1998). Lockie et al. (2002) found a similar result for organic food consumption amongst Australian consumers. They stated that income had an effect, but not enough to confirm the ‘organic consumer as yuppie stereotype’. The number of people consuming organic food did increase with income, but only until income reached about A$ 35,000 (GBP 17,567) per annum. A third of those earning less than A$ 20,000 (GBP 10,038) per annum still consumed organic food. This suggested that while the premiums associated with organic food may make them less affordable for low income earners, low income earners are not necessarily less interested in consuming organic food. However, education had a more consistent
impact on organic food consumption (Lockie et al., 2002). The number of people consuming organic food increased with both general and science education.

2.4 Summary

There are numerous factors affecting consumers' food choice, and many food choice models have explained food choice behaviour, and three food choice models were presented and reviewed in this chapter.

Khan (1981) indicated that food preference is a significant indicator of food choice, and Furst et al. (1996) stressed the importance of sensory perception, price, health, and convenience for food choice, and Radder and Roux (2005) concluded that external factors such as time, availability and cost have also significant effect on people's food choice.

Each of the three models explains essential variables in the TPB theory, and each factor in these three models was reviewed in this chapter through prior food studies. Other organic food studies were also reviewed, however, because of a lack of prior organic food studies in South Korea, not enough Korean consumers' organic food choice studies could be reviewed in this chapter.

In chapter 3, the TPB model adopted in the present study and other alternative approaches relating to intention to purchase will be reviewed. In the chapter 4, research design and hypotheses of the study set based on food choice factors reviewed in this chapter will be presented.
CHAPTER THREE
Chapter 3 Literature Review II: Background to The Theory of The Research Approaches

3.1 Introduction

Different researchers have developed models to explain consumers’ behavioural intention and behaviour in the food choice process and many theories have been proposed to explain consumers’ behavioural intention to purchase food (Ajzen and Fishbein, 1980; Ajzen, 2005; Wierenga, 1983). Within these various models to explain intention and behaviour, the Theory of Planned Behaviour model, which is adopted as a basic research framework in this study, and the Self-efficacy theory, which is an alternative approach to explain consumer behaviour, will be reviewed in this chapter. Three of methodological techniques used to indentify behavioural intention will be also presented.

3.2 Research Theories related to Behavioural Intention

Researchers have tried to understand the reasons why people intend to perform and perform a variety of behaviours, and social cognition models have been widely used to understand the factors influencing various ‘social’ behaviours (Conner and Norman, 2005). Social cognition is concerned with how people make sense of social situations, and models describing the important cognitions and their interrelationships in the regulation of behaviour have been developed and extensively applied to the understanding of specific behaviours (Bandura, 1986).
In the following section, four of the most commonly used social cognition models will be reviewed. Two of them will be briefly explained: Health belief model and Protection motivation theory. Two other social cognition models closely related to the objectives of the current research will be more specifically outlined: Theory of Planned Behaviour (TPB) and Self-efficacy theory. In addition, the advantages or disadvantages and usefulness of each approach related to this study will be reviewed.

3.2.1 Social Cognition Models

3.2.1.1 Health Belief Model

The health belief model (HBM) (Rosenstock, 1966, 1974) focuses on two aspects of health behaviour: Threat perception and behavioural evaluation. Threat perception involves two key beliefs: the susceptibility to and the consequences of contracting a health condition. Behavioural evaluation comprises the benefits of performing health behaviours and barriers impeding performance. Additional factors, including demographic characteristics, act as modifiers of behaviour by influencing motivation and perceptions rather than having a direct influence (Clark and Becker, 1998). The strengths of the HBM lie in the fact that it was developed by researchers directly working with health behaviours and many of the concepts possess face-validity to those working in the field of health behaviour, thus it has been applied successfully to health behaviour studies (Connor and Norman, 2005). However, the weakness of HBM is that intention to perform a behaviour and social pressure, are not explained in the HBM (Connor and Norman, 2005; Rosenstock, 1966, 1974).

3.2.1.2 Protection Motivation Theory

Protection motivation theory (PMT) was originally proposed to provide conceptual clarity to the understanding of fear appeals (Rogers, 1975). Rogers (1983) revised it, and the revised PMT has the potential to account for the cognitive mediation process of behavioural change in terms of threat and coping appraisal. ‘Threat appraisal’ component includes: (1) the person’s estimation of the severity of consequences
coming conventional disease (perceived severity); and (2) the person's estimation of the probability of contracting the disease (perceived vulnerability). 'Coping appraisal' incorporates: (1) the individual's expectancy that implementing the recommendations can remove the threat (response efficacy); and (2) belief in one's ability to carry out the recommended plan of action successfully (self-efficacy). Together these two appraisal processes results in the intention to perform adaptive behaviours (protection motivation) (Conner and Norman, 2005). The strength of PMT was initially assessed through measuring intentions to adopt recommended behaviours (Rogers, 1983), however recent attention has been given to measuring observed or self-reported behaviour as the outcome variable (Floyd et al., 2000; Milne et al., 2000; Conner and Norman, 2005). This attention is based on the Theory of Planned Behaviour which stipulates that intention is a major precursor to behaviour (Ajzen, 1985). Although the PMT appears to incorporate many of the important cognitive variables underlying the performance of health behaviours, variation in the way the theory has been conceived and operationalised has detracted from its explanatory power (Conner and Norman, 2005).

3.2.2 Self-Efficacy Theory

The concepts of self-efficacy and outcome expectations were developed in the social cognitive theory of Bandura (1977). Self-efficacy refers to expectations of capability, the control that subjects expect to exercise over the generation and implementation of their own behaviour. Outcome expectations refer to predicted contingencies, cause effect relationships between the emission and non-emission of one or several behaviours, and the appearance or not of stimuli with distinct reinforcing intensity. The reciprocal relationship held by these two aspects of specific perceived control, particularly of self-efficacy, with other psychological processes, has principally been studied in relation to motivation and emotion (Bandura, 1997). Through the basis of the concepts of self-efficacy and outcome expectations, Bandura (1997) developed the Self-Efficacy Theory (Conner and Norman, 2005). In the Self-Efficacy Theory, people's motivation and action are assumed to be based upon three types of expectancies: situation-outcome, action-outcome and perceived self-efficacy.
Situation-outcome expectancies represent beliefs about what consequences will occur without interfering personal action. For instance, susceptibility to a health threat represents one such situation-outcome expectancy. Action-outcome expectancy is the belief that a certain behaviour will or will not lead to a given outcome. For example, the belief that quitting smoking could lead to a reduced risk of lung cancer would represent an action-outcome expectancy. Self-efficacy expectancy is the belief that a behaviour is or is not under an individual's control. The belief that people are or are not capable of performing a particular behaviour, such as exercising regularly, would constitute such a self-efficacy expectancy (Bandura, 1997).

Several studies have researched the role of self-efficacy theory (Heuven et al., 2006; Sanz and Villamarin, 2001). Sanz and Villamarin (2001) verified the influence of self-efficacy on cardiovascular reactivity. Ninety six subjects were assigned to four experimental groups in which the self-efficacy (high or low) were modified in relation to a mental arithmetic task. Subjects were led to believe that failure in the behaviour would result in the appearance of an aversive stimulus. Heart rate, systolic and diastolic blood pressure, pulse pressure and skin temperature were all recorded throughout task performance, and at two given moments prior to the task, in order to found baseline values. Subjects with high self-efficacy experienced a smaller increase in heart rate and systolic pressure, a greater increase in diastolic pressure, greater reduction in skin temperature and a reduction in pulse pressure during task performance. Sanz and Villamarin (2001) conclude that the effect of self-efficacy on cardiovascular reactivity is non-linear, there being only one interval in which a little change in self-efficacy could produce a strong variation in physiological, behavioural and cognitive functioning. They also noted that the clue explaining the results of the study possibly be the choice of an optimal distance between performance feedbacks provided to experimental groups, slightly over or under the reference group. Heuven et al., (2006) examined the role of self-efficacy in the performance of emotion work with a sample of 154 cabin attendants. The research hypothesised that self-efficacy would have a moderating influence on the relationship between emotional job demands and emotional dissonance, and on the relationship between emotional dissonance and well-being. The research also predicted that emotional dissonance
mediates the relationship between emotional job demands and well-being. Results confirmed that emotionally charged interactions with passengers are related to emotional exhaustion and engagement through their influence on emotional dissonance. Self-efficacy moderated the relationship between emotional job demands and emotional dissonance, and the relationship between emotional dissonance and work engagement but not exhaustion.

Some previous studies have examined the validity and reliability of the self-efficacy theory in application to dietary research (Chang et al., 2003; Öunpuu et al., 1999; Thompson et al., 2007). Öunpuu et al. (1999) validated the situational self-efficacy scales. Applied to dietary fat reduction, self-efficacy was conceptualised as confidence in the ability to avoid consuming high-fat foods in three situations: positive / social, negative / affective, and difficult / inconvenient. The validity of a 12-item situational self-efficacy scale designed to measure confidence for dietary fat reduction was established in a random sample of 491 adult women living in the Guelph, Ontario area. Respondents were recruited by telephone and completed a mailed, self-administered questionnaire. Findings showed that self-efficacy scale scores were significantly higher among subjects assigned to action and maintenance than among those assigned to pre-contemplation, contemplation, and preparation, providing evidence of construct validity. The study also found the high internal consistency reliability that is indicative of acceptable levels for convergent validity for each of the subscales. Thompson et al. (2007) examined the reliability and validity of a questionnaire that measured self-efficacy and social norms for consuming fruits and vegetables during school lunch among fifth grade students when they were first introduced to alternatives to the National School Lunch Program (NSLP) such as the school snack bar. The results identified three scales: fruit self-efficacy, vegetable self-efficacy, and fruit and vegetable social norms. Fruit and vegetable self-efficacy were positively correlated with low-fat vegetable and fruit intake. Social norms were positively correlated with total vegetable, low-fat vegetable, fruit and total fruit and vegetable intake. Thus, the study concluded that self-efficacy and norms for eating fruits and vegetables at school lunch are related to lunch fruit and vegetable consumption. Increasing self-efficacy and social norms about consuming fruits and
vegetables at school appeared to be important targets to improve fruits and vegetables consumption. Chang et al. (2003) developed a valid self-efficacy measure for eating low-fat diets in low-income women. Two hundred and six black and white women who were not pregnant participated in Head Start and the Special Supplemental Nutrition Program for Women, Infants and Children in Wisconsin completed. A 13 item self-efficacy instrumented relating to eating low-fat diets. The results confirmed the validity of instrument and also found the high internal consistency. Thus, Chang et al. (2003) suggested that results obtained from this revised instrument can be used among low-income women to measure self-efficacy for eating low-fat diets.

The concept of self-efficacy has also been used in weight loss related research (Reicks et al., 2004; Roach et al., 2003). Reicks et al. (2004) examined by qualitative research how spirituality affects intrapersonal characteristics associated with a weight loss program. A series of 5 focus group interviews were conducted with women who were past participants of the Weigh Down Workshop, a spiritually based weight loss program. Findings showed that major changes in self-reported eating behaviours included eating only when experiencing true physiological hunger and stopping when sensing a feeling of fullness. Self efficacy for these behaviours was reported to be enhanced by observing weight loss for themselves or others. Support from other group members, the simplicity of the program, and spiritual benefits through prayer and scripture reading were also reported to enhance confidence. Participants indicated that they relied on an internal locus of control based on a sense of self-discipline. Reicks et al. (2004) concluded that traditional means to enhance self-efficacy were important for all women, however, for some women, spirituality was also an important aspect of adhering to program principles. Roach et al. (2003) used the concept of self-efficacy to predict self-efficacy for weight loss incorporated into a 12-week program designed for weight loss promotion in young adults. Results found that as self-efficacy improved, eating habits improved and weight loss was greater. This study supports the hypothesis that using behavioural techniques to improve self-efficacy can be effective in weight loss promotion and can produce positive outcomes.
The self-efficacy theory has been generally applied to predict health related behaviour such as low-fat diets (Chang et al., 2003; Öunpuu et al., 1999), fruit and vegetable consumptions (Thompson et al., 2007) and weight loss (Reicks et al., 2004; Roach et al., 2003) as previously reviewed. Despite constant recommendations to examine the association between self-efficacy and food related behaviours (Crawford, 1995), only a few studies have approached the food related behaviours. The self efficacy theory has been judged as a theory specific to the particular task and situation in which the task occurs, such as health related behaviour (Abusabha and Achtermeg, 1997). This specific feature of the self-efficacy theory is based on the basic concept of the self-efficacy theory (Abusabha and Achtermeg, 1997; Bandura, 1997). Bandura (1986) based the concept of self-efficacy theory on two central theories: self-efficacy and outcome expectations. According to Bandura (1986, 1997), people may agree that there are health benefits to doing exercise in general (outcome expectations), whereas they may judge themselves incapable of including regular exercise in their daily life (self-efficacy) due to time constraints. The inconsistency between self-efficacy and outcome expectations may result from the lack of knowledge and the level of skills in relation to each specific behaviour. Namely, self-efficacy theory understands a person's sense of confidence in his or her ability to perform a particular behaviour in a variety of circumstances (Bandura, 1997) rather than seeking related variables influencing behavioural intention (Abusabha and Achtermeg, 1997).

The main objective of this study is to determine the relative influence of factors affecting Korean consumers' intention to purchase organic food and identify factors affecting their realised purchase behaviour for organic food. Therefore, considering the nature of objectives of the study, the self efficacy theory is not adopted as a basic approach method in the current study.

3.3 Theory of Planned Behaviour
3.3.1 The Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is a revision of the earlier Theory of Reasoned Action (TRA), with the addition of perceived and actual control as factors in both behavioural intention and behaviour (Ajzen, 1985). According to the Theory of Reasoned Action (Figure 3.1), the principal predictor of a person's behaviour is behavioural intention. People tend to act in accordance with their intention to engage in a behaviour. Intention can be regarded as a motivation to engage in a particular behaviour and represents an individual's expectancies about his/her behaviour in a given setting (Ajzen, 1985). Behavioural intention is jointly determined by the person's attitudes and subjective norms. Attitudes towards the behaviour measure the extent to which an individual has a favourable or unfavourable evaluation of the behaviour in question (Fishbein and Ajzen, 1975; Thompson and Thompson, 1996) while the subjective norm refers to a person's perception that most people who are important to him or her think he or she should or should not perform the behaviour in question. In other words, the subjective norm is the perceived social pressure to perform or not to perform the behaviour (Fishbein and Ajzen, 1975; Madden et al., 1992). In addition, according to the TRA, a person's attitude towards a behaviour is influenced by his or her behavioural beliefs and evaluations. Behavioural Belief is one's belief in performing a specific behaviour that will lead to a specific consequence, and evaluation of outcome is one's assessment of the specific consequence (Lam and Hsu, 2006).

Therefore, the TRA assumes that attitude to the behaviour \( A_B \) is determined by the sum of a person's behavioural belief strength \( b_i \) about the consequences of performing the behaviour multiplied by the person's evaluation \( e_i \) of those consequences (Ajzen, 1985; Fishbein and Ajzen, 1975). Formally, this can be written as:

\[
A_B \propto \sum b_i e_i
\]

An individual's subjective norm is determined by a multiplicative function of his or her normative beliefs and motivation to comply with perceived expectations (Brewer
Normative beliefs refer to an individual’s perception of other relevant persons' opinions on whether or not he or she should perform a particular behaviour, whereas motivation to comply with others represents the relative importance of the referent person to the actor (Ajzen, 1985; Wiethoff, 2004). For example, a consumer might have a very favourable attitude toward having a drink before dinner at a restaurant. However, the intention to actually order the drink may be influenced by the consumer’s beliefs about the appropriateness (the perceived social norm) of ordering a drink in the current situation (with friends for a fun meal or on a job interview) and her/his motivation to comply with those normative beliefs (Hawkins et al., 2001).

In other words, the subjective norm (SN) is determined by the sum of the person’s normative beliefs \( (n_i) \), that is, beliefs concerning the particular behaviour multiplied by the person’s motivation to comply with the wishes of those important people \( (m_i) \) (Ajzen, 1985; Fishbein and Ajzen, 1975). The TRA express this relationship as follows:

\[
SN \propto \sum n_i m_i
\]

**Figure 3.1 Theory of Reasoned Action**

Source: Fishbein and Ajzen, 1975
However, the TRA has been criticised, because, it is concerned with rational, volitional, and systematic behaviour (Fishbein and Ajzen, 1975; Chang, 1998) and it does not take into account situations where a behaviour is not completely under an individual’s control (Thompson et al., 1994). Sheppard et al. (1988) argue that researchers are often interested in situations in which the target behaviour is not completely under the consumer’s control. However, Sheppard et al. also stated that actions that are at least in part determined by factors beyond individuals volitional control fall outside the boundary conditions established for the model. For example, a consumer may be prevented from buying groceries online if the consumer perceives the purchase process as too complex or if the consumer does not possess the resources necessary to perform the considered behaviour. To address this consideration, Ajzen (1985) developed the TPB by introducing a third predictor of behaviour, perceived behavioural control (Mahon et al., 2006; Posthuma and Dworkin, 2000).

In both of the TRA and TPB, attitude towards the target behaviours and subjective norms about engaging in the behaviours are thought to influence intention, but TPB adds perceived behavioural control over engaging in the behaviours as an additional factor influencing intention (Ajzen, 1985; George, 2002). According to Ajzen (1985), an individual’s behaviour can be explained by his or her behavioural intention, which is jointly influenced by attitude, subjective norms, and perceived behavioural control (Figure 3.2). Perceived behavioural control has a direct effect on behavioural intention, too. Perceived behavioural control is a construct unique to TPB, and it refers to an individual’s perceptions of the presence or absence of the requisite resources or opportunities necessary for performing a behaviour (Ajzen and Madden, 1986; Chau and Hu, 2001). Ajzen (1991) defined perceived behavioural control as people’s perception of the ease or difficulty of performing the behaviour. Behaviours are more likely to result from intention when people believe they have the resources to perform the behaviour and are likely to be successful in doing so. Perceived behavioural control is caused by control beliefs, or the belief that the required resources and opportunities are available to carry out the behaviour, and perceived facilitation, or the assessment of the importance of those resources to successfully
complete the behaviour (Ajzen, 1991; Conner et al., 1999; Wiethoff, 2004). Thus, control beliefs may be based on past experience with the behaviour, but they will usually also be influenced by second-hand information about the behaviour, by experiences of acquaintances and friends, and by other factors that increase or reduce the perceived difficulty of performing the behaviour in question (Chiou, 1998; Verbeke and Vackier, 2005).

Control beliefs consisted of two components: (1) frequency of occurrence of the facilitators of inhibitors of the behaviour ($c_i$), and (2) perception of the strength of the facilitators or inhibitors ($p_i$). Statement of these two components were again multiplied and combined to obtain the overall level of control beliefs (Ajzen, 1991).

$$PBC \propto \sum c_i p_i$$

Figure 3.2 Theory of Planned Behaviour

Source: Ajzen, 1991
3.3.2 The Theory of Planned Behaviour Research

The Theory of Planned Behaviour has been widely applied to food studies related to consumers' intention and has been shown to have good predictive power (Bogers et al., 2004; Chase et al., 2003; Guàrdia et al., 2006; Lobb et al., 2007; Mahon et al., 2006).

Mahon et al. (2006) assessed the efficacy of the Theory of Planned Behaviour as a predictor of ready meal and takeaway consumption, and established the salient and normative factors associated with these foods and finally demonstrated the application of the method to developing marketing strategies. Results showed that for both food products, ready meal and takeaway, attitudes were the best predictor of behavioural intention. Subjective norm was important for ready meals but not for takeaways while perceived control was not a predictor for either food products. An additional variable, habit, was included in the study. This increased predictive power but reduced the influence of attitudes. For both food products, behavioural intentions were the best predictor of behaviour for a model including behavioural intentions, perceived behavioural control and habit. The difficulties caused with the inclusion of habit were found. In a separate analysis, value for money was the most important of three beliefs investigated for each product for those who intended to consume ready meals or purchase takeaways over the course of the following week (intenders) and those who had no intention of doing so (non-intenders). Beliefs differed significantly between the two groups with intenders having more positive beliefs about the convenience products.

Guàrdia et al. (2006) investigated consumer attitudes towards reduced salt meat products using the Theory of Planned Behaviour model. In addition, and taking into account that sometimes consumers tend to behave in a different way from what they believe the acceptability and preference for reduced salt fermented sausages was checked with the same consumers. Findings indicated that majority of consumers had a positive attitude towards low salt meat products, being higher for women than for men. This positive attitude agreed with the sensorial acceptability and preference for some of the manufactured low salt meat products. Women showed stronger ideas and
higher perceived control on the behaviour towards reduced sodium meat products than men. Smokers showed lower intense beliefs than non-smokers. Consumers with a basic level of education were more affected by what other people important for them thought they should do. Generally, the TPB was efficient on predicting the behavioural intention in this study, although one should bear in mind that these results should be confirmed regarding real consumer's behaviour, because sometimes, consumers tend to behave in a different way from what they believe. In fact, the results of the attitude questionnaire showed a positive attitude of the consumers towards this kind of meat products.

Lobb et al. (2007) suggested a modelling strategy, based on the Theory of Planned Behaviour, for explaining how purchasing intentions are influenced by different levels of risk perception and trust in food safety information. In addition, the relevance of differences in consumers' socio-demographic characteristics was taken into account. Integrating risk perception and trust into the TPB framework led to the development of the SPARTA Model. The model investigated the role of those additional factors in explaining intention to purchase chicken in the UK. The main findings showed that trust in food safety information as provided by media, alternative sources and independent authorities significantly reduced the likelihood to purchase. Education was a key variable in developing a communication strategy after a food scare. While higher education levels were associated with a higher probability of avoiding the product, education acted in the opposite direction by enhancing the positive effect of trust in information provided by public authorities and reversing the negative role of subjective norm. Trust in information provided by media and independent sources increased risk perception, whilst trust in public authorities decreased it. While risk perception did not influence behavioural intentions directly, it negatively affected attitudes. Results indicated that although it was unclear whether the SPARTA results can be generalised to food products other than chicken, the statistical approach suggested in this study increased the explanatory and predictive power of models based on the TPB. Inter-relationship between risk perception and trust was not fully demonstrative in the case of intention to purchase chicken, however it gave hope for further development of such work in the TPB framework.
Bogers et al. (2004) used the TPB to investigate the influence of an optimistic bias in self-rated fruit and vegetable intake on the strength of the relations between fruit and vegetable consumption and its determinants. Consumption of fruit and vegetable was assessed using a self-rated measure and more objectively with a food-frequency questionnaire. Both measures were combined to classify participants according to the accuracy of their self-assessed intake levels (‘realists’ vs. ‘over-estimators’). Results showed that about half of the variation in the intention to eat fruit or vegetable could be explained by the model. Of the variation in self-rated consumption, 46% could be explained for fruits and 33% for vegetable. When fruit and vegetable intake was measured with a food frequency questionnaire, the explained variance was considerably lower, especially for vegetables. However, stratified analyses showed that the model was better able to explain variation in food frequency questionnaire based fruit and vegetable intake in realists than in over-estimators. Perceived behavioural control seemed the most important predictor of both intentions and fruit and vegetables consumption. When biomarkers were used as an alternative measure of fruit and vegetables intake, the explanatory value of the TPB was very low, but again the explained variance was higher in realists than in over-estimators.

Chase et al. (2003) explained dieticians’ intentions to promote whole-grain food by applying the Theory of Planned Behaviour model. Result showed that attitudes toward the benefits of whole grains were very positive. Almost all (97%) of the dieticians believed that it was likely or very likely that health professionals thought they should promote whole grains. A majority (89%) wanted to comply with this normative belief, suggesting that the influence of other dieticians and health professionals is highly predictive of intention. In the model, normative beliefs were the strongest predictor of intention. Perceived behavioural control (self-efficacy and barriers to promotion) was the second strongest predictor of intention. Confidence in the ability to help clients incorporate whole-grain foods into diets was low and could be addressed with continuing education. Few dieticians perceived barriers to promoting whole grains: prefer to focus on fibre (17%), other dietary changes are more important (11%), too little time (6%), and lack of materials to use with clients.
(6%). In general, knowledge related to correctly identifying a whole-grain product was low. Only 60% were correct in identifying whole-grain products according to a corresponding sample food label. In this study, the theory was significant in explaining 27% of the variance in intention but significant variance was not additionally explained by variables external to the TPB: knowledge, exposure to whole-grain information, or experience as a dietician.

3.3.3 Additional Variables in TPB

Although the original Theory of Planned Behaviour model has been used to measure consumers’ intention to purchase food in many research studies, many researchers have expanded its scope by adding new variables into the original TPB. Ajzen (2001) states, regarding the inclusion of variables other than attitude, subjective norm and perceived behavioural control in the TPB, that “even when improvements were found, for the most part the improvements in prediction of intentions or behaviours were relatively minor” (p. 45). Ajzen (2005) also notes that the effect of variables other than the TPB variables on behavioural intention was likely to be mediated by the variables included in the TPB.

Sparks et al. (1995) included measures assessing each subject’s self-identity in relation to as someone concerned about the health consequences of what they eat and as someone who enjoys the pleasures of eating. According to Sparks and Shepherd (2002), the role of moral concerns, which may involve a concern for others’ welfare, in people’s judgments and choices, questions the descriptive validity of such models. In addition, increasing evidence of a role for perceived moral obligation within the expectancy-value-based theory of reasoned action and the Theory of Planned Behaviour indicates the importance of moral-normative influences in social behaviour. Thus, the influence of moral judgments on attitudes toward food produced with the use of genetic engineering techniques and toward meat consumption was addressed in their study. Lobb et al. (2007) suggested a statistical strategy for explaining how food purchasing intentions are influenced by different levels of risk perception and trust in food safety information by including trust and risk perception as additional
explanatory factors in TPB model. The application explores chicken purchasing intentions both in a standard situation and conditional to a hypothetical salmonella scare. Data were collected through a nationally representative UK wide survey of 533 UK respondents in face-to-face, in-home interviews. Empirical findings showed that interactions exist among the determinants of planned behaviour and that socio-demographic variables improved the model's performance. Attitudes emerged as the key determinant of intention to purchase chicken, while trust in food safety information provided by media reduced the likelihood to purchase.

The addition of moral norms to studies has increased the predictive power of the TPB model in many non-food areas such as bone marrow donation (Schwartz and Tessler, 1972), shoplifting and exam-cheating (Beck and Ajzen, 1991), traffic violations (Raats et al., 1995; Sparks and Shepherd, 2002), energy conservation (Black et al., 1985), recycling (Guagnano et al., 1995; Thøgersen, 1996), and littering (Heberlein, 1972).

3.3.3.1 Past Experience in TPB

In this research, new variables will be added into the original TPB model. Firstly, past experience will be added into original TPB. Because when added to the Theory of Planned Behaviour model, measures relating to past behaviour are typically found to improve significantly the prediction of later behaviour (Ajzen, 2005; Leone et al., 1999). Researchers have proven that past experience as an additional variable in the TPB help explain its predictability in their studies. Leone et al. (1999) demonstrated that the inclusion of past behaviour in the TPB could help explain a substantial portion of additional variance in behavioural intention. Ouellette and Wood (1998) also state that past experience and behaviour can explain more of the variance in behavioural intention than can attitude and subjective norm individually. According to the learning theory (Howard, 1977), behaviour is a function of prior learning. As such, experiences gained from past complaint behaviours provide dissatisfied customers with information on consumer rights and complaint channels, which could help consolidate their behavioural and normative beliefs, help them evaluate behavioural outcome, and manipulate the perceived behavioural control of various
dissatisfaction responses. Ajzen (2005) claimed that frequent performance of a behaviour leads to the formation of a habit, and that that habit can increase a person's perceived control of a particular behaviour. Ajzen also suggested that the effect of past behaviour on behavioural intention is mediated by the variables included in the TPB (i.e., attitude, subjective norm, and perceived behavioural control).

Moreover, past experience is an important factor affecting to the relationship between intention and actual behaviour (Fodness and Murray, 1999; Lee and Rhee, 1998; March and Woodside, 2005; Verbeke and Vackier, 2005). Lee and Rhee (1998) investigated the relationship between consumers' purchase intention and purchase behaviour of apparel products. According to their research, there were significant differences for realized purchase behaviour among respondents who have purchase intention, and it was shown that previous purchase experiences had an effect on these results. More consumers who have previous purchase experiences bought apparel products than non-experienced consumers. March and Woodside (2005) probed how well one's plan for doing, buying and consuming discretionary tourism services relate to what is actually done. The findings stated that greater experience of consumer reflects significantly smaller differences between planned and realized consumption behaviour. This result supported the prior study that past experience affects the relationship between intention and realized behaviour. Tourists who vacation at the same place regularly are likely to engage in little pre-arrival planning, relying instead on their accumulated knowledge and experience from previous visits (Fodness and Murray, 1999). Sørensen et al. (1996) distinguished two groups of fish consumers based on their experience with fish. They reported that more experienced consumers have a more positive attitude towards fish healthiness and taste. For the less experienced consumers, the health factor is less important and the negative aspects are more explicitly mentioned. Verbeke and Vackier (2005) investigated individual determinants of fish consumption behaviour based on cross-sectional data collected in Belgium using TPB. Habit, past experience, was included as an additional variable. Favourable attitude, high subjective norm and high perceived behavioural control had a positive impact on fish consumption decisions. Habit also emerged as a strong
determinant of behaviour in the strict sense, which indicated that fish consumption is strongly habituated.

3.3.3.2 Trust in TPB

Trust will be added into original TPB model as a dependent variable with past experience. Researches have shown that trust is one of main determinants of relationship between intention and behaviour for consumers (Bendapudi and Berry, 1997; Singh and Sirdeshmukh, 2000). Even though behavioural intentions may not always lead to actual behaviours, they are good predictors of performing a specific behaviour (Ajzen, 1991; Bolton et al., 2000; Ruyter et al., 2001). Trust increases the probability that customers’ intention will engage in the behaviours that are favourable to and cooperative with the service and products (Hennig-Thurau and Klee, 1997; Singh and Sirdeshmukh, 2000).

The relationship between trust and TPB can be examined in a variety of aspects in which trust is hypothesized as the common antecedent of attitude, perceive behavioural control, and subjective norm (Wu and Chen, 2005). For attitude construct, trust in seller is viewed as a salient behavioural belief that directly affects customer’s attitude toward the purchase behaviour. If a seller is trustworthy, it is more possible that the consumer will gain benefits and avoid possible risks from adopting service from that seller (McKnight and Chervany 2002; Pavlou, 2003). As cost-benefit paradigm greatly influences people’s attitudinal beliefs and outcome judgments, trust can be a direct influencer that determines people’s attitude toward behaviour (Bandura, 1986; Davis et al., 1989). Besides, research has shown that trust definitely increases the confidentiality of business relationship and determines the quality of transaction between buyers and sellers as well as people’s outcome expectation on many commerce activities (Lewis and Weigert, 1985; Hosmer, 1995). Therefore, trust is apparently an important antecedent of attitude toward consumers’ purchasing behaviour. For subjective norm construct, researchers have found that mutual trust and mutual influence between buyer and products are highly correlated to each other based on a study concerning the performance of information system group (Nelson and Cooprider, 1996). Furthermore, decomposed TPB revealed that there are peer and
superior influences on consumers for determining subjective norm toward products (Taylor and Todd, 1995). Therefore, it can be predicted that trust in peers and superiors about their beliefs of products should play a significant role in determining subjective norm. In the same way, trust in sellers about their reputation, brand name, and service may positively influence subjective norm over the behaviour for shopping. In addition, they may indicate certain relationship between trust in peers and superiors and trust in sellers. As the opinions from the referents of peers and superiors are positive for certain sellers in the market, trust in peers and superiors in this situation can enhance consumers beliefs in trusting these sellers and in turn, subjective norm toward the shopping behaviour. Therefore, whatever types of trust are with direct and indirect influences on subjective norm, they are all the important antecedents of subjective norm in behavioural intention theory (Wu and Chen, 2005).

For perceived behavioural control construct, trust can increase perceived behavioural control since the virtual interactions between consumers and sellers become more expectable (Pavlou, 2003). Trust influences perceived behavioural control through control factors of self-efficacy and facilitating favourable conditions. According to the psychological reports, self-efficacy in personal relationships is constructed from self-confidence and mutual trust in friendships (Matsushima and Shiomi, 2003). Thus, mutual trust in the relationship between consumers and sellers should increase consumers' self-efficacy and in turn, increase perceived behavioural control. On the other hand, trust can be a perceptual resource that facilitates consumers to gain control over shopping behaviour. When consumers trust a seller that behaves in accordance with their expectation, the trust beliefs are likely to increase consumers' perceived behavioural control over shopping behaviour (Pavlou, 2003).

Lobb et al. (2007) suggested a statistical strategy for explaining how food purchasing intentions are influenced by different levels of risk perception and trust in food safety information. The modelling process was based on TPB and included trust and risk perception as additional variables. Findings showed that trust in media and alternative sources has a negative correlation with purchasing intentions, indicating that information provided by those sources tended to have a negative impact on intention to purchase. On the other hand, trust in the food chain and independent sources

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showed a positive though non-significant, impact. Thus, Lobb et al. suggested that trust plays an important role as a factor to determine consumers’ behavioural intention. Wu and Chen (2005) proposed an extension of Trust and TAM (Technology Acceptance Model) with TPB would give more comprehensive understanding of the acceptance behaviour toward on-line tax. Findings showed that recognizing both technological and trust-based issues were important in increasing citizen’s behavioural intention to use this service. The TAM beliefs and trust were shown to be two sets of underlying antecedents in determining behavioural intention to use, each contributing its significant influence on behavioural intention to use through a number of mediators such as attitude, perceived behavioural control, and subjective norm. This means that to effectively attract citizens to use on-line tax, the design of on-line tax needs to carefully pay attention to both aspects. Horst et al. (2007) identified the role of risk perception and trust in the intention to adopt government e-services. Based on previous research and theories on technology acceptance, the questionnaire measured perceived usefulness of e-services, risk perception, worry, perceived behavioural control, subjective norm, trust and experience with e-services. Results showed that the perceived usefulness of electronic services in general is the main determinant of the intention to use e-government services. Risk perception, personal experience, perceived behavioural control and subjective norm were found to significantly predict the perceived usefulness of electronic services in general, while trust in e-government was the main determinant of the perceived usefulness of government e-services. In other words, this study interpreted that trust can more direct effect on consumers’ intention to use for a service.

3.3.4 Adoption of the TPB model

As mentioned above, the TPB model has been applied extensively to food studies and has been shown to have good predictive power to explain behavioural intention (Bogers et al., 2004; Chase et al., 2003; Guàrdia et al., 2006; Lobb et al., 2007; Mahon et al., 2006).
A recent meta-analysis conducted by Armitage and Conner (2001) also provides support for the efficacy of the TPB model. In this meta-analysis including 185 independent studies on the predictive potential of the TPB for a variety of health-related behaviours, the TPB explained 27% and 39% of the variance in behaviour and intention, respectively (Armitage and Conner, 2001). Hansen et al. (2004) also tested the ability of two consumer theories related to attitude and intention, the Theory of Reasoned Action and the Theory of Planned Behaviour, in predicting consumer online grocery buying intention. This study’s results suggested that both theories were capable of explaining a high proportion (more than 55%) of the variation in future online grocery behavioural intention. Both theories also provided an acceptable fit to the data. Kim and Han (2001) investigated the use of the theory of reasoned action (Fishbein and Ajzen, 1975) and the Theory of Planned Behaviour (Ajzen, 1985) in consumers’ online buying behaviour. Both of these theories explain the relationship between behaviour and intention well. However, when the new variable, perceived behavioural control, was added into the subjective norm and attitude, its capability of explaining variance showed a 14% increase. In other words, the Theory of Planned Behaviour was a more appropriate model to investigate consumers’ behavioural intention.

The TPB model directly investigates behavioural intention and presents specific factors which have direct / indirect influence on behavioural intention and behaviour (Ajzen, 1991). However, other methodological approaches assume or predict behavioural intention through their results. For instance, in the self-efficacy models, consumers’ purchasing intention is assumed to be based upon consumers’ expectancies (Bandura, 1997). In addition, Conner and Norman (2005) suggested that the TPB model is held to be a complete theory of behaviour in that any other influences on intention and behaviour are held to have their impact upon intention and behaviour via influencing components of the TPB, and it is likely to be more correctly regarded as a theory of the proximal determinants of behavioural intention and behaviour. The main objective of this study is to identify factors affecting consumers’ intention to purchase organic food and determine the relative influence of factors affecting consumers’ purchasing intention for organic food in South Korea.
Thus, the TPB model is appropriate to adopt as a basic research framework when considering this objective of the current study.

The ability of the TPB model has been confirmed across many food studies that examined the relationship between intentions and behaviour (Bredahl et al., 1998). Besides food studies, the TPB model has shown strong predictive utility for a wide range of behavioural intentions and actual behaviours, including condom use (Reinecke et al., 1996), premarital sex (Chan and Cheung, 1998), health behaviours (Armitage and Conner, 2001), alcohol consumption (Conner et al., 1999), and unethical behaviours (Man, 1998). This study aims to identify factors affecting consumers' realised purchase behaviour and investigate the determinants of the relationship between purchase intention and realised behaviour for organic food choice in South Korea. Therefore, considering this objective of the present study, the TPB model was used in this study.

Ajzen (1991, 2001) stated that the model is open to further elaboration if further important proximal determinants are identified, and the effect of variables other than the TPB variables on behavioural intention is likely to be improved by the variables included in the TPB.

Past experience (Lee and Rhee, 1998; March and Woodside, 2005; Verbeke and Vackier, 2005) and trust (Bendapudi and Berry, 1997; Dean et al., 2006; Dyer and Chu, 2003; Singh and Sirdeshmukh, 2000; Tsai and Ghoshal, 1998) have been identified as important variables affecting to people's behaviour. Thus, in this study, past experience and trust will be used to establish if they are significant determinants of consumers' organic food purchase behaviour (See Chapter 4). Past experience (Howard, 1977; Leone et al., 1999; Ouellette and Wood, 1998) and trust (Lobb et al., 2007; Pavlou, 2003; Taylor and Todd, 1995; Wu and Chen, 2005) have been adopted as additional variables and have explained more of the variance in the TPB model in many studies.
Therefore, this accumulated evidence shows that the TPB model can be used to explain various behaviours and behavioural intentions. The TPB model will be employed as the research framework in this study, adding to the model the additional variables of past experience and trust.

3.4 Methodological Techniques related to Purchase Intention

As previously presented, there are not only many theories to explain people’s behavioural intention but also many methodological techniques to indentify people’s behavioural intention. Amongst these techniques, three of the most widely used methodological techniques are discussed: Willingness to Pay, Means-end chain and Conjoint Analysis (Grunert et al., 1995; Martínez et al., 2006).

3.4.1 Willingness to Pay

Willingness to pay (WTP) refers the maximum amount that a buyer will pay for a good, in relation to how much that buyer values the good. Each buyer would be eager to buy a product at a price less than his or her willingness to pay, would refuse to buy the product at a price more than his or her willingness to pay, and would be indifferent about buying the product at a price exactly equal to his or her willingness to pay. Thus, a person’s attitude and intention for a product can be measured by the person’s WTP (Mankiw, 2006).

There are two widely used methods to measure WTP which are the Contingent Valuation Method (CVM) and Experimental auction (Kwon and Kim, 2003). In recent years, experimental auction studies have been employed to investigate consumers’ acceptance and WTP for new consumption alternatives. The experimental auction method, by using real money and real products that can be purchased during the experiment by participants, a non-hypothetical valuation scenario tries to replicate a point-of-purchase decision. This methodological approach is directly linked with
experimental economics research, which is a relatively new theoretical framework. Based on an economic incentive structure, experimental economics tries to induce individuals' behaviour in a laboratory environment which allows the researcher to control some variables and also to test alternative theoretical hypotheses or market performances (Davis and Holt, 1993; Friedman and Sunder, 1994; Kagel and Roth, 1995).

It has been argued that, among auction types, Vickery auctions, named second-price sealed bid auctions, reveal more precisely individuals’ preferences, as each participant has an incentive to bid as much as the participant wants depending on his perception about the value of the product being auctioned (Klemperer, 1999). In a Vickrey auction, participants submit their bids to the auctioneer anonymously. The winner is the participant with the highest bid, but the market price corresponds with the second highest bid. Repeated trials allow participants, through experience, to assign their real value to the product being auctioned, but also permit a test of the effect of changing auction conditions (new information, etc.) on participants’ valuation of such products. In order to avoid the so-called ‘wealth effect’ or ‘income effect’, one round is randomly selected between multiple rounds, so the binding round’s winner becomes the auction’s winner (Menkhaus et al., 1992; Buhr et al., 1993; Shogren et al., 1994).

Researchers have applied the experimental auction method in research on willingness to pay for food. Kim (2004) identified Korean consumers’ WTP for GM food in an experimental auction market. A simultaneous second-price auction was designed to elicit the complete distribution of WTP differences between four alternatives according to the GM food labelling system. The result showed that the estimated WTP for ‘GM food included’ and ‘GM food included possible’ are relatively low and the estimated WTP for ‘non-GM food’ is very high. Results also indicated that the market segmentation between GM food and non-GM food maybe possible.

Soler and Gil (2002) explored, using an experimental second-price sealed-bid auction, the value that consumers place on organic food and the effect that information
included on eco-labels and physical appearance have on their WTP. This methodological approach involved the use of real money and real products, which, in fact, may overcome the hypothetical bias detected in previous studies. It was also discussed that the effect on WTP of consumers' demographic characteristics and lifestyles, as well as attitudes towards food safety and buying behaviour. Results showed that consumers' acceptability of labelled organic food products was increased and that WTP was highly correlated with consumption habits variables. In this study, an experimental auction market has been used to assess consumers' WTP for an organic virgin olive oil. Results suggested that experimental auction markets have become a more reliable valuation method compared to contingent valuation methods for real market. If where there is not nay market, as in the case of most environmental assets, the contingent valuation method has proved to be very useful. But, when a real market exists, contingent valuation methods may bias the WTP as it is based on hypothetical scenarios which may or may not differ from market scenarios.

By comparison, the Contingent Valuation Method (CVM) provides an individual with hypothetical opportunities to purchase public goods in the absence of existing information pertaining to a real market. It is a direct survey approach that can be used to provide acceptable measures of the economic value of a product (Loomis and Walsh, 1997). The object of CVM is to measure consumers' surplus value for a product. To remain consistent with consumer choice theory, the elicitation of WTP needs to propose hypothetical or contingent changes (Shultz et al., 1998). Herath (2002) argued that in cases where revealed preference methods (e.g., travel cost method) are not appropriate, stated preference methods, such as CVM, are the most useful analytical approach. There are some advantages of using the contingent valuation method. First, CVM is able to assess not only an individual's WTP for the present conditions of a product, but it also values their WTP with hypothetical changes to the product. Second, the researcher can develop a hypothetical market for the participating company to make an economic decision. In addition, the method is simple because it is a direct valuation approach which aims at eliciting preferences from questionnaires and experiments (Lee and Han, 2002). The major criticism of CVM has been that stated WTP is a poor indicator of actual WTP (Diamond and
Hausmann, 1994). The CVM is based on a hypothetical market in which respondents are not actually required to make the contributions they claim to be willing to pay (Foster et al., 1997).

Numerous studies using the CVM as an approach have been published in a variety of fields such as water quality improvement, human health, and the economic value of cultural heritage goods. Raje et al. (2002) determined consumers’ WTP more for improvements for water supply service and identified the factors affecting WTP by adopting the contingent valuation method. It was hypothesized that the satisfaction of consumers about water supply service, their beliefs in the water management system and affordability might influence WTP for water. As the results, three important factors were identified that the satisfaction level about the water supply does not influence the odds in favour of WTP. The variable ‘affordability’ significantly affected the odds in slum category. These people expressed their inability to pay more due to continuous increase in the price of other basic amenities like food, shelter and clothing. Thus, they were not ready to accept the increase in water charge any more. In the flats/bungalows category, ‘affordability’ had less impact, while here the variable ‘belief’ influenced the WTP more of consumers.

Gyldmark and Morrison (2001) used willingness to pay (WTP) to elicit values for private insurance covering treatment for four different health problems. By way of obtaining these values, they tested the viability of the contingent valuation method (CVM) and econometric techniques, respectively, as means of eliciting and analysing values from the general public. The results informed confidence in the WTP estimates obtained and, more generally, in CVM as a means of valuing publicly provided goods and in econometrics as a tool for analysing WTP results containing many zero responses. A useful suggestion from results is that concerning payment vehicle bias. A basic principle of value elicitation is to frame questions in the most realistic and familiar way possible so as to improve the chances of obtaining meaningful answers (Herath, 2002). Difficulties anticipated, in employing contingent valuation to value health care in countries with publicly provided health insurance (or health care) has led many researchers to forego realism for fear of obtaining a large proportion of
protest responses. That is, the fear that a survey asking how much more people would be WTP in taxes for a treatment, would obtain a large proportion of protest zero WTP answers (with people arguing that the treatment should be provided with the taxes they are already paying) led to questions being framed in terms of WTP for a private good (Lee and Han, 2002). This study’s finding that the people who stated a zero WTP did so both when framed as a tax and when framed as a private good suggested that researchers need not avoid taxation as a payment vehicle. This finding was particularly striking coming from residents of a country with relatively high tax rates, like Denmark. However, the results were still disturbed by two features common to almost all CV studies: (1) the high mean maximum WTP values and (2) the large number of respondents stating a zero WTP. Thus, an investigation into why respondents state a zero WTP would help to reveal whether they were the result of the respondents’ confusion, a true zero valuation for the good, or simply a strategic or protest response bias. This study would check the validity of the WTP responses by comparing WTP with actual payments, but as already discussed, this was very difficult because the basic assumption of the contingent valuation method is to elicit values for goods for which no market exists or the markets are inefficient. Lastly, it should be noted that the high number of zero WTP responses is not considered as convincing evidence to discard open-ended questions. Using WTP questions to elicit the publics’ preferences for goods that are already publicly supplied is not a straightforward task, and much thought must be devoted as to how these questions will be perceived (Loomis and Walsh, 1997). This study maintained that CVM studies can provide information that is useful for decision-making when used in conjunction with other information. The results of this study support this conviction. If a co-ordinated and scientific approach to investigating the consistency and validity of CVM is put in place, then it ought to be possible to develop the methodology sufficiently to be used in health care sector planning.

Experimental auctions have become an important technique to determine consumers’ willingness to pay as an alternative to contingent valuation methods, which have been criticised for hypothetical bias (List, 2003). The main advantage of experimental auctions is that a real product and real money are used. Thus, the procedure replicates
as closely as possible the actual purchase decision process in actual market (Poole et al., 2007). Experimental auction markets can be designed to occur only once or repeatedly. In practice, a repeated market provides experience to people who have not previously participated in this type of experimental procedure and also the posting of market prices helps participants learn about the market mechanism and informs them of how the good is valued by the successful buyers or sellers. Thus, experimental auction can normally be designed with repeated markets (Jaeger, et al., 2004). However, one significant problem with repeated markets, and specifically with allowing participants active market feedback, is the possibility for participants’ values to become affiliated (Milgrom and Weber, 1982). List and Shogren (1999) explained that affiliation exists when one bidder who values that product highly increases the chance that other bidders will also put a high value on the product. That means bids tend to be higher than the price premium that can actually be charged in the real market place (Kagel et al., 1987; Rutström, 1998). This bidder affiliation is more likely to occur when the auctioned good is novel, as opposed to familiar (List and Shogren, 1999).

In conclusion, the most important problem with using the CVM and Experimental auction method is that measured WTP tends to be different with actually charged WTP in the real market. Because the main objective of this study is to find a gap between intention and realised behaviour, it is meaningless to use these approaches if the difference between intention and realised behaviour is due to using the approach.

3.4.2 Means-End Chain

Means-end-chain theory (MEC), frequently operated as laddering (Reynolds and Gutman, 1988), is a theory that seeks to understand how consumers mentally link products to personally relevant consequences, and how a product facilitates the achievement of desired end states (Grunert et al., 1995; Gutman, 1982). The theory focuses on hierarchical linkages among Means, the Subsequent consequences for the consumer and the End (Audenaert and Steenkamp, 1997). Means are objects (product or service attributes) in which people engage. Ends are valued states of being such as
happiness, security, and accomplishment. Then, Mean-end-chain is a hierarchical cognitive structure that relates consumers' product knowledge to their self-knowledge (Walker and Olson, 1991). In moving from the attributes to the consumers' knowledge, and then the values, the level of abstraction increases (Audenaert and Steenkamp, 1997). In other words, the lower levels of a means-end hierarchy contain relatively concrete knowledge about product attributes and their perceived linkages to the functional consequences of product use. These functional consequences may be associated with more abstract knowledge about the psychological and social consequences of product use. Thus, Means-end-chain connects these psychosocial consequences to abstract self-knowledge about the consumer's life goals and values. Consumers see products as more self-relevant or involving to the extent that their product knowledge about attributes and functional consequences are connected, through Means-end-chain, to their self-knowledge about desirable psychosocial consequences and values (Walker and Olson, 1991).

The MEC approach is based on two fundamental assumptions about consumer behaviour. Firstly, values defined as desirable end-states of existence play an important role in guiding choice patterns for a product. Secondly, consumers cope with the tremendous diversity of products that are potential satisfiers of their values by grouping them into sets or classes, so as to reduce the complexity of choice. This suggests that, in addition to the product-class type of product categories, consumers are capable of creating categories based on product functions. It is essential for consumers to reduce the complexity inherent in the multitude of alternatives with which they are faced. Although grouping is determined by the object's properties, the choice of properties to be focused on is influenced by values. This means that values are translated from their context at the more abstract or inclusive levels of the chain to the less abstract, where products are categorised into classes (Gutman, 1982).

Laddering has become a popular method for revealing means-end-chains. Laddering consists of a series of directed probes used to develop an understanding of how consumers translate the attributes of products into personally meaningful associations (Reynolds and Gutman, 1988). There are two methods of laddering, using
questionnaires, called “hard” laddering, and interviews, called “soft” laddering (Russell et al., 2004a).

Soft laddering, which utilises individual, face-to-face, semi-structured interviews to elicit consumers’ means-end-chains, is the original and to date, the most commonly used laddering method for researchers (Russell et al., 2004a). In the context of a soft laddering interview consumers are prompted to “ladder” their way up means-end-chains to reveal in-depth information about the connections between products, or product attributes and the consequences and values attributable to those products (Audenaert and Steenkamp, 1997; Kahle et al., 2000).

On the other hand, hard laddering is a quantitative approach. In hard laddering, a structured questionnaire is used to gather data on consumers’ means-end-chains (Valette-Florence et al., 2000). Generally, this hard laddering method uses a priori lists pertaining to four levels of abstraction: Attributes, Physical consequences, Psychological consequences and values, from which participants are required to choose appropriate constructs. Participants are required to write in their answers from the corresponding lists and to put a dash in those boxes where they considered there to be no appropriate responses available on the a priori lists. These participants are permitted to fork, for instance, their responses to a maximum of 3 attributes, 9 physical consequences, 27 psychosocial consequences and 27 values. This design allows participants access to previous responses (Audenaert and Steenkamp, 1997; Fotopoulos et al., 2003; Valette-Florence, 1998; Valette-Florence et al., 2000).

Means-end-chain theory and the laddering technique have been used to understand consumers’ perception of food. Costa et al. (2004) presented an overview of the means-end chain theory and associated techniques, and discussed the advantages and disadvantages of its potential application in consumer oriented food product design. This overview, based on literature in the food area, pointed out also the process of conducting a means-end study by drawing on previous research on consumers’ motivations regarding meal choice. Finally, the usefulness of means-end studies in the context of consumer-oriented food product design was evaluated and future
research trends in this area are discussed. Costa et al. concluded that although their main conclusion that methodological issues related with MEC studies’ content and predictive validity, together with some limitations related to specific aspects of food design, pose some serious obstacles to the full implementation of MEC in a consumer-oriented product design process, they are still of the opinion that MEC has the potential to provide an increasingly better understanding of consumers’ product knowledge and its behavioural implications. In other words, they indicated that the MEC theory has the potential of becoming an increasingly valuable tool in consumer-oriented food design processes.

Fotopoulos et al. (2003) attempted to offer more insights into the Greek wine market with emphasis on wines produced from organically grown grapes by relating wine choice to consumers’ personal value structure. With the use of a qualitative sample and applying the Means-end-chains methodology and the corresponding “laddering” interviewing technique, they attempted first to reveal the way basic motives are linked to wine shopping behaviour of consumers and the way wine purchase-relevant knowledge is stored and organised in their memory in relation to their personal values. Then, by discriminating between organic food buyers and non-buyers, this study identified motivational and cognitive discriminating differences between the two consumer types, which can offer a solid explanation as to their distinctive purchasing behaviour in respect of the organic products. The results showed that the most preferred attributes are wine’s “full (pleasant) taste”, “clarity”, “appellation of origin”, “aroma” and “attractive label”. Consumers believed that wine should be bottled in glass and not in carton boxes, because glass can be recycled, an indication of consumers’ environmental consciousness. Although consumers assigned a major role to organic wine’s health aspect, “healthiness” was not sufficient to prevent consumers from comparing organic wine with conventional wine. In other words, healthiness as a purchasing motive did not differentiate satisfactorily between organic buyers and non-buyers. This study indicated that MEC analysis can provide a powerful tool for “true” benefit segmentation. Specifically, segmentation of the wine consumers into buyers and non-buyers of organic wine took place a priori. However, the little differences in the composition of the HVM’s areas between the two
subgroups revealed only after the level of benefits being reached indicate that MEC analysis can offer valuable insights not easily perceived in common, attribute-level segmentation. Thus, this study suggested that conjoint analysis could be usefully integrated into the MEC approach, in order not only to determine which of the attributes related with motives are equally substantial to other consumer types, but also to define specific organic wine brand profiles in terms of these preferences. In addition, a more general segmentation task could be undertaken, to quantitatively define the pre-specified high social status consumer group used in the current study and explore the existence of others into the wider wine market context.

MEC theory seems to bridge successfully the gap between the qualitative and quantitative methods most frequently employed in the early stages of consumer oriented product design (Dahan and Hauser, 2002). Like other qualitative methods, it provides an entire view of consumption motives and allows access to the ways in which individual consumers perceive products and themselves, as well as to the words they use to express these perceptions. However, unlike focus groups, in-depth interviews and projective techniques, MEC studies elicits responses from subjects that can be quantified and used to build estimates of consumers’ knowledge structures with predictive value. Hence, MEC studies’ outcomes can provide a better understanding of consumers’ cognitive positioning of existing products; a more adequate development of positioning strategies for new products; more focus for product improvement programs, by showing which current or potential product attributes are valued by consumers. In addition, it can offer more focus for marketing communication strategies, by highlighting the relevant links between product knowledge and self-knowledge established by consumers (Audenaert and Steenkamp, 1997; Bech-Larsen and Nielsen, 1999; Grunert and Valli, 2001; Nielsen et al., 1998; ter Hofstede et al., 1999).

Although many studies have used the MEC approach to explore consumers’ decision-making around food choice, there have been some criticisms of the MEC theory. When a researcher uses soft laddering, interview, to collect data for his research, the length of a laddering interview typically ranges between 45 min. and 2 hours.
(Reynolds et al., 2001). In addition, much of the time spent on research is spent on reading the transcripts from the interviews, and coding and analysing the data. Laddering interviews are thus very time consuming, labour intensive, and very costly. Therefore, laddering interviews are impossible to use in large-scale consumer studies (Langbroek and Beuckelaer, 2007). A limitation of the hard laddering methods is that they only allow the identification of consumers' means-end-chain based on a very limited number of product attributes. Consumers, for example, can identify the 3 most important product attributes for them (Russell et al., 2004a). Moreover, the content and predictive validity of MEC studies can be greatly compromised by a number of factors, such as lack of established theoretical framework, sample characteristics, data collection methods and analysis techniques (Olson and Reynolds, 2001). In addition, means-end data in food related research are typically rich in consequences and abstract attributes, while poor in values and concrete attributes (Costa et al., 2004). Finally, because consumers' expert knowledge on foods is limited, consumers are naturally weak in inferring outcomes from concrete product features. Consumers may have serious misconceptions about the links between food product attributes and consumption consequences. But, most relevant of all, consumers cannot infer consumption consequences from products which do not yet exist. Consumers' cognitive structures regarding existing products can provide only a glimpse of how they would perceive a truly innovative product (Grunert et al. 2001).

Therefore, the focus of MEC according to marketing researchers should be at the level of the outcomes of consumption. It may have limited use in academic research needing a large sample and large number of variables (Gutman, 1991). Thus, means-end-chain theory will not be used in this study.

3.4.4 Conjoint Analysis

Conjoint analysis is a technique which models the nature of consumer trade-offs among multi-attribute products or services. The model assumes that alternative product concepts can be defined as a series of specific levels of a common set of attributes. It also assumes that the total utility the consumer derives from a product is
determined by the utilities (part-worth) contributed by each attribute level (Ness and Gerhardy, 1994; Oppewal et al., 2000). Utility is the conceptual basis for measuring value in conjoint analysis and this is a subjective judgement of preference unique to each individual. Part-worth is estimated from conjoint analysis of the overall preference or utility associated with each level of each factor used to define the product or service (Hair et al., 2006). The aim of conjoint analysis is to identify attribute combinations that confer the highest utility to the consumer, and to establish the relative importance of attributes in terms of their contribution to total utility (Ness and Gerhardy, 1994). Subsequent analyses provide a means of identifying consumer segments with similar preferences and the simulation of choice among alternative product concepts using choice simulation models. Data collection requires consumers to evaluate alternative product concepts described in terms of a set of attribute levels. A variety of specific data collection methods are possible. For example, the researcher may use a verbal description or, where visual presentation is important, for example in packaging or merchandising, physical, graphic or photographic presentations may be used. The most common methods of data collection are the trade-off method and the full profile method (Hair et al, 2006).

The trade-off method requires respondents to compare attributes two at a time, ranking all combinations of levels (Figure 3.3). It has the advantages of being simple for the respondent and easy to administer, and it avoids information overload by presenting only two attributes at a time (Hair et al., 2006). It was the most widely used form of presentation in the early years of conjoint analysis (Green and Krieger, 1996; Hair et al, 2006). However, this method has become less popular owing to several limitations. It has a sacrifice in realism by using only two factors at a time, and a large number of judgements is needed for even a small number of levels. Respondents also tend to get confused or follow a routinized response pattern because of fatigue (Hair et al, 2006; Ness and Gerhardy, 1994). Moreover, in real choice situations, consumers are confronted with all attributes and their levels simultaneously and not in pairs (Ness and Gerhardy, 1994).
On the other hand, the full profile method presents respondents with a series of full descriptions of the product concepts and requires them to rank (using card-sorting techniques) or score each concept according to their preference or willingness to buy (Moskowitz and Silcher, 2006; Ness and Gerhardy, 1994). The number of product concepts is equal to the product of the number of levels associated with each attribute (Figure 3.3). It is the most popular presentation method and has been used as a tool to investigate the effect of these attributes because of its perceived realism and its ability to reduce the number of comparisons through the use of fractional factorial designs (Deliza et al, 2003; Hair et al, 2006). However it also has been criticized owing to two major limitations. First, as the number of factors increases, so does the possibility of information overload. The respondent is tempted to simplify the process by focusing on only a few factors, when in an actual situation all factors would be considered. Second, the order in which factors are listed on the stimulus card may have an impact on the evaluation. Thus, the researcher needs to rotate the factors across respondents when possible to minimize order effects (Hair et al, 2006; Vriens et al., 1998). Hence, the full-profile method is recommended when the number of factors is 6 or fewer. When the number of factors rages from 7 to 10, the trade-off approach becomes a possible option to the full-profile method (Hair et al, 2006).

Figure 3.3 Examples of the Trade-Off and Full-Profile methods for Conjoint Analysis.

<table>
<thead>
<tr>
<th>Trade-Off Approach</th>
<th>Full-Profile Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Price</strong></td>
<td><strong>Brand name: KX-19</strong></td>
</tr>
<tr>
<td>Level 1: $1.19</td>
<td>Price: $ 1.19</td>
</tr>
<tr>
<td>Level 2: $1.39</td>
<td>Form: Powder</td>
</tr>
<tr>
<td>Level 3: $1.49</td>
<td>Colour Brightener: Yes</td>
</tr>
<tr>
<td>Level 4: $1.69</td>
<td></td>
</tr>
</tbody>
</table>

Source: Hair et al., 2006, p. 494

After gathering respondents' evaluations for a product, respondents are asked to indicate their purchase intention for the products with expression, for example,
“definitely would not buy” and “definitely would buy” (Costa et al., 2000; Hair et al., 2006).

Conjoint analysis has been generally used to find consumers’ preference in field of marketing research (Baker and Burnham, 2001; Murphy et al., 2000; van der Pol and Ryan, 1996). van der Pol and Ryan (1996) applied conjoint analysis to establish the trade-offs that consumers make between price, quality, convenience to prepare and location of purchase in the purchasing of fruit and vegetables. They also used the method to estimate indirectly willingness to pay for the included attributes according to income group. Results identified that quality was found to be the most important attribute. It was also revealed, through segmentation of the price attribute by income, that those on higher incomes had a higher marginal valuation of price. The findings indicated that trade-offs have to be made such that at a given price they can achieve a certain quality level. Conjoint analysis allowed the rate at which consumers trade these attributes to be elicited. The method also allowed researcher to estimate this rate for different segments of income so that more effective strategies can be used for different segments. The technique of conjoint analysis clearly had the potential to address a wide number of issues around consumer preferences for food products. Therefore, van der Pol and Ryan suggested that the conjoint analysis could successfully be used to establish consumer preferences for alternative food products that are commercially practicable.

Murphy et al. (2000) reported the results of a study that concerned the use of conjoint analysis, applied to the Irish honey market. The results show that adjusting pricing and promotional approaches could increase market share for honey producers. This research successfully identified segment of the honey market by using conjoint analysis. However, in this study, actual market share data were not available, either in total or for the segments identified, comparative analysis of such data with predicted shares in the market segments analysed was not presently possible but would be of interest. Thus, such analysis could further test the accuracy and usefulness of this methodology in understanding and anticipating consumer behaviour.
Baker and Burnham (2001) explored consumer preferences for food products that are the product of genetically modified organisms (GMOs) by adopting conjoint analysis. The result of a cluster analysis indicated that consumers divided into three homogeneous groups based on their preference for a branded, low-priced, or GMO free product. There were differences between the segments based on the socio-demographic characteristics of age, education, and income. Consumers in the segment that wished to avoid GMOs were most easily distinguished from consumers in the other two segments based on their high level of risk averseness and belief that GMOs do not positively affect the quality or safety of food products. The findings indicated that consumers who wish to avoid GM food are best identified based not on who they are, but rather based on what they believe.

In addition to above researches, main conjoint analysis researches related to food marketing are summarised in Table 3.1.

**Table 3.1 Main conjoint analysis contributions to food marketing**

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Product</th>
<th>Geographic scope</th>
<th>Sample</th>
<th>Attributes</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halbrendt et al. (1995)</td>
<td>Fish</td>
<td>Mid-Atlantic Region (USA)</td>
<td>56</td>
<td>Price, size and Freshness</td>
<td>Educational programs are strongly recommended to increase recognition of aquaculture products. Quality was most important attribute.</td>
</tr>
<tr>
<td>Van der Pol and Ryan (1996)</td>
<td>Fruits &amp; vegetables</td>
<td>Aberdeen (Scotland)</td>
<td>600</td>
<td>Quality, place of purchase and price; for fruits: packing; for vegetables: easy of preparation</td>
<td>The application of conjoint analysis provides opportunities to use preference-based method to aid the design and targeting of modern crop varieties. Adjusting pricing and promotional approaches could increase market share for honey products. Respondents made choices between apple products, a product category for which decision strategies are likely to be stable and well-developed.</td>
</tr>
<tr>
<td>Baidu-Forson et al. (1997)</td>
<td>Peanuts</td>
<td>Nigeria</td>
<td>101</td>
<td>Plant type, Pod yield, Haulm yield, Foliar leaf spot resistance and grain colour</td>
<td>Variety, number of varieties packed, origin country, other information</td>
</tr>
<tr>
<td>Murphy et al. (2000)</td>
<td>Honey</td>
<td>Ireland</td>
<td>153</td>
<td>Texture, colour, source, price, packaging</td>
<td>Price, designation of origin, texture and sale unit size</td>
</tr>
<tr>
<td>Jaeger et al. (2001)</td>
<td>Packed apples</td>
<td>Berkshire (UK)</td>
<td>105</td>
<td>Variety, number of varieties packed, origin country, other information</td>
<td>Price, designation of origin, texture and sale unit size</td>
</tr>
<tr>
<td>Monjardino and Ventura (2001)</td>
<td>Traditional cheeses</td>
<td>Lisbon (Portugal)</td>
<td>269</td>
<td>Variety, number of varieties packed, origin country, other information</td>
<td>Price, designation of origin, texture and sale unit size</td>
</tr>
<tr>
<td>Baker and Burnham (2001)</td>
<td>GM Corn flakes</td>
<td>USA</td>
<td>2000</td>
<td>Brand, GMO content and price</td>
<td>Consumers fell into three homogeneous groups based on their preference for a branded, low-priced, or GM free product.</td>
</tr>
</tbody>
</table>

*Source: Martinez et al., 2006*
According to Morey and Rossmann (2002), conjoint analysis can be described as a preference survey method. The stated preference method has the following advantages: (1) one can elicit the preferences for alternatives that do not yet exist in the market; (2) the choice set is pre-specified; (3) homogeneity among attributes can be avoided; and (4) the range of attribute values can be extended (Morey and Rossmann, 2002). However, since the stated preference surveys are based on hypothetical choices and do not require the respondents to actually buy the alternatives they are evaluating, it allows for a few biases such as the policy response bias and self-selectivity bias and also can cause different results comparing with actual markets (Braden, 1997).

Conjoint analysis is a decompositional method which asks for general judgments on alternatives (stimuli, products) which are decomposed into part-worths for single attribute levels (Ness and Gerhardy, 1994). Though there are many different types of conjoint analysis methods, all methods request the consumer to evaluate trade-offs between different levels of several attributes in order to decide whether an alternative A is better, equivalent or worse than another alternative B and sometimes additionally how strong this preference is (Hair et al., 2006; Scholl et al., 2005). From a methodological point of view, however, it has to be stated that a simultaneous evaluation of extrinsic and intrinsic product attributes seems to be quite demanding on respondents. For example, if a study evaluates consumers' preferences for a beverage product, respondents show considerable brand specific taste evaluations. By combining intrinsic (taste) and extrinsic factors (brand and labels), researchers can describe not only the main effects, but also interactions between taste and marketing mix elements, allowing researchers to determine key drivers for product preference. However, because the findings are dependent on respondents' subjective and individual judgement, conjoint analysis is unsuitable for studies leading to objective criteria such as pricing research (Enneking et al., 2007).

Basically, the aim of this study is to identify the relationship between consumers' intention to purchase and realised purchase behaviour for organic food. Therefore, in
this study, not only has consumers' intention to purchase a product to be defined in
the actual market situation but also consumers' perception has to be found for the
entire range of organic products. Hence, as conjoint analysis elicits preferences for
alternative and hypothetically assumed products that do not yet exist in the market,
this is not suitable for this study.

3.5 Summary

This chapter reviewed the TPB model and an alternative approach to explain
behavioural intention and choice behaviour. Alternative methodological techniques to
identify behavioural intention were also reviewed. To justify literature of TPB
model was adopted in the study, advantages / disadvantages and usefulness related to
the present study of each approach were reviewed.

The Self-Efficacy Theory relates to people's perception of confidence in their ability
to enact a particular and specific behaviour, such as a health related behaviour rather
than finding related variables influencing behavioural intention. Therefore, this theory
is not an appropriate framework to use in the present study.

The Contingent Valuation Method (CVM) and Experimental auction, two widely
used methods to measure Willingness to Pay (WTP), use hypothetical markets. Thus,
if the CVM and Experimental auction method are used, measured WTP tends to be
different to actual WTP in the real market. Thus, these methods are not adopted in the
current research. MEC theory is more appropriate for marketing research aimed at
predicting consumption rather than for academic studies. It is also a qualitative
approach using a small sample, hence this approach was not used in the present study
which needed generalisation by utilising large sample. Conjoint analysis finds
attribute preferences for hypothetically assumed products, which are not in the real
market. This hypothetical assumption is not appropriate to the objectives of this study,
which aims to investigate consider influences an intention and realised behaviour for
organic food in real market.
The TPB model has been shown to have good ability to predict behavioural intention in food studies. The TPB model directly investigates behavioural intention and presents specific factors influencing behavioural intention, and thus behaviour. Ajzen (2001) indicated when other variables are included in the TPB, prediction of behavioural intention is likely to improve. In the current study, past experience and trust have been used as additional variables to improve the predicting power of the TPB model.

In the next chapter, the proposed research model based on the TPB is presented, and research methods used in the research are reviewed.
CHAPTER FOUR
Chapter 4 Methodology I: The Research Design and The Theory of The Methodology

4.1 Introduction

This chapter deals with the research design and the theory of the methodology used in the current research. This research adopts two complementary studies. The first study, the elicitation survey, aims to set a conceptual framework for the perception of consumers' attitude and purchasing intention for organic food and to assist the design of the questionnaire for the main survey. The second study comprises the main survey and the following interviews. The purpose of the main survey is to determine consumer's intention to purchase and realised purchase behaviour, and to identify the relationship between purchasing intention and realised behaviour for organic food. In the main survey, a questionnaire based on the Theory of Planned Behaviour (TPB) model will be used to identify consumers' purchasing intention, and interviews will follow to identify consumers realised purchase behaviour for organic food and probe discrepancies between intention and realised behaviour. The results of study 1 (the Elicitation survey) will provide the basis for the main study. Figure 4.1 presents the research process for the study.
4.2 Research Philosophy

Scientific research mainly aims to explain and understand a particular phenomenon in people's life, and to create new knowledge. All theory and research efforts have an underlying philosophical foundation. The term 'research philosophy' relates to the development of knowledge and the nature of that knowledge. The research philosophy contains significant assumptions of the way in which a researcher views
the world (Saunders et al., 2007). Even though some researchers conduct research without underlying philosophical considerations, some knowledge of research philosophies is useful because it is helpful to clarify the appropriate choice of the research design and facilitates (Blumberg et al., 2008).

In the field of social research, three main research philosophies exist: positivism, interpretivism, and critical perspective. Table 4.1 summarises the major characteristics of these paradigms. These differences have several implications for how a researcher should conduct research.

<table>
<thead>
<tr>
<th>Basic Principles</th>
<th>Positivism</th>
<th>Interpretivism</th>
<th>Critical Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>View of the world</td>
<td>The world is external and objective</td>
<td>The world is socially constructed and subjective</td>
<td>There are social processes and forces beyond the control of human which affect human’s beliefs and behaviour</td>
</tr>
<tr>
<td>Involvement of researcher</td>
<td>Researcher is independent</td>
<td>Researcher is part of what is observed and sometimes even actively collaborates</td>
<td>It recognizes the existence of a gap between the researcher’s concept of reality and the ‘true’</td>
</tr>
<tr>
<td>Researcher’s influence</td>
<td>Research is value-free</td>
<td>Research is driven by human interests</td>
<td>Research is not value-free, and is conducted within a broader framework based on human’s current knowledge</td>
</tr>
</tbody>
</table>

**Assumptions**

<table>
<thead>
<tr>
<th>What is observed</th>
<th>Objective, Often quantitative, Facts</th>
<th>Subjective interpretations of meanings</th>
<th>Subjective individual interpretations of reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is knowledge developed?</td>
<td>Reducing phenomena to simple elements representing general laws</td>
<td>Taking a broad and total view of phenomena to detect explanations beyond the current knowledge</td>
<td>External forces at the macro level influence everyone</td>
</tr>
</tbody>
</table>

**Source:** Blumberg et al., 2008

Saunders et al. (2007) stated that positivism is a research philosophy adopting the philosophical stance of a natural science. Thus, positivism starts from the idea that the
world can be described by objective facts, which are then examined. The constructs used can be operated to make sure that researchers observing the same phenomenon measure it in the same way (Bryman, 2004). A study structure in positivism is normally that researchers investigate a research problem by examining whether or not theoretically derived hypotheses hold for the situations tested (Saunders et al., 2007). If the objective facts support the hypotheses, the derived fundamental laws are appropriate and their validity is reinforced (Blumberg et al., 2008).

Unlike positivism, the second paradigm, interpretivism is concerned with how people interact and get along with each other. It is also interested in subjective meanings and interpretations of phenomena to identify occurrences in a specific situation. Researchers rely on multiple sources and different methods to collect information about phenomena because each observation is subjective (Blumberg et al., 2008). Generally, the study structure for interpretivism is different from positivism. Interpretivism offers a deep and rich explanation of the investigated phenomena, whose interpretation provides understanding of what is happening. In interpretivism, simple fundamental laws are not enough to understand the whole complexity of social phenomena (Blumberg et al., 2008).

As the discussion between the above paradigms continues, there are those who address the advantages and disadvantages of both perspectives and suggest a compromise position. That is critical paradigm (Blumberg et al., 2008; Sarantakos, 1998). Blumberg et al. (2008) pointed out that the critical paradigm is a research philosophy sharing principles of positivism and interpretivism. This paradigm neither rejects positivism nor receives the interpretive belief, and vice versa. It supports the belief that social science can rely on the research approaches prevailing in the natural sciences like positivism. In contrast, it also allows that understanding people and their behaviour requires an acknowledgement of the subjectivity natural in humans (Blumberg et al., 2008).

The rationale of this study:
1. This study relies upon theory testing rather than theory building. One of the main objectives of this study is to determine the relative influence of factors affecting South Korean consumers’ intention to purchase organic food. This study tested the relationship between the variables of a research model, based on an extended version of the Theory of Planned Behaviour (TPB) theory. This is a positivist approach.

2. The current study sought to achieve scientific rigour by integrating reliability and validity into the study so that it may be replicable to other situations. This study also increased the generalisability of the results by using a quantitative approach. According to Saunders et al. (2007), in order to be able to generalise statistically about regularities in human social behaviour, it is necessary to select a sample of sufficient numerical size through the quantitative approach. Therefore, these require taking into consideration the objectivity of the positivism.

3. Although the present research tested research hypotheses based on a research model and aimed to increase the generalisability of the results through the use of a quantitative method, its other main objectives were to define South Korean consumers’ perception and realised purchasing behaviour related to organic food, and investigate the determinants of the relationship between intended and realised purchase behaviour. To achieve these objectives, this study also adopted a qualitative research method. This approach yielded more in-depth and accurate interpretation necessary for better understanding of the research findings. This is interpretivism.

Hence, in light of the previous discussion, the present research adopts positivism and interpretivism simultaneously.
4.3 Objective of the Research

This study examines which factors influencing consumers’ intention to purchase organic food by integrating the Theory of Planned Behaviour (TPB) model with other variables. Factors of the TPB model and other influencing factors on consumers’ purchasing intention have been identified through literature reviews. In addition, this study investigates the determinants of the relationship between consumers’ purchasing intention and realised purchase behaviour for organic food in South Korea.

The study aims to 1) investigate South Korean consumers’ perception about organic food 2) determine the relative influence of factors affecting consumers’ intention to purchase organic food in South Korea 3) identify factors affecting consumers’ realised purchase behaviour for organic food in South Korea 4) investigate the determinants of the relationship between purchase intention and realised purchase behaviour for organic food in South Korea.

Korean consumers’ perception about organic food: Researchers have examined consumers’ perception about organic food. According to Saher et al. (2006), consumers had a positive attitudes towards organic food and thought that organic food was good for their health. O’Donovan and McCarthy (2002) indicated that because consumers believed that organic food is safer than conventional food, consumers have willingness to buy it. They pointed out that this perception could be an important factor affecting consumer demand for organic food. Canavari et al. (2002) studied the perception of and demand patterns for organic food in Italy. Consumers believed that organic food is possibly a way to reduce the impact of pesticides on the environment, thus they buy organic food. However, there are few studies related to consumers’ perception and purchasing behaviour for organic food in South Korea.

Hence, the first objective of this study is to identify consumers’ perception about organic food in South Korea.
Factors affecting consumers’ intention to purchase and realised purchase behaviour: Many studies have investigated consumers’ intention to choose food, and several studies have been conducted in order to identify specific affecting factors on consumers’ purchasing intention towards organic food. Ajzen (1985) developed the Theory of Planned Behaviour (TPB) model to explain the factors influencing behavioural intention, and pointed out that intention is determined by the person’s attitudes, subjective norms and perceived behavioural control. Researchers have used this model to establish factors affecting consumers’ intention towards foods. For instance, Chen (2007) investigated the relationship between consumers’ attitudes and purchase intention towards organic food in Taiwan using the TPB model, and found that when consumers have a positive attitude and subjective norm to purchase organic food, they are more likely to intend to purchase organic food. Also, when a consumer perceives more behavioural control over the purchasing of organic food, the consumer is more likely to intend to purchase organic food. Arvola et al. (2008) also adopted the TPB model to predict consumers’ intention to purchase organic food in Italy, France and the UK, and found that all consumers in three countries had positive attitude towards intention to buy organic apples, and attitude was the strongest predictor of intention in all countries.

Lead in to other factors researchers have noted, including past experience and trust (Ouellette and Wood, 1998; Hoogland et al., 2007; Verbeke and Vackier, 2005), and these factors have been found as determinants of people’s actual behaviour. For instance, theories of human behaviour hold that the best predictor of future actual behaviour is the frequency of past relevant behaviour (Ouellette and Wood, 1998). One of the possible reasons is that people tend to maintain behavioural persistency and value consistency (Cialdini, 1988). Verbeke and Vackier (2005) also found that habit was the strongest determinant of realised fish consumption, which was strongly based on past experience. Hoogland et al. (2007) tested how consumers understand and trust on-package information about food that may contribute to food choice. As the result, the detailed information enabled consumers to choose more in agreement
with their personal trust about the food products. However, only a few studies have investigated actual behaviour related to organic food choice.

Therefore, the second objective of this study is to determine the relative influence of factors affecting consumers’ intention to purchase organic food in South Korea.

The third objective of the study is to identify factors affecting consumers’ realised purchase behaviour for organic food in South Korea.

**Determinants of the relationship between purchase intention and realised purchase behaviour:** Although the TPB model has been used widely in the food area to predict intention to purchase (Conner and Armitage, 2002), it has been criticised for its pure utilitarian approach to the factors determining realised behaviour. Intention has been shown to have significant power to explain people’s behaviour, but people may not behave in a way that follows their intention (Brinberg et al., 2000; Dean et al., 2006). It can be assumed that there are certain factors affecting the relationship between intention and actual behaviour (Ouellette and Wood, 1998).

Hence, the forth objective of the present study is to investigate determinants of discrepancies between purchasing intention and realised purchasing behaviour of Korean consumers towards organic food.

### 4.4 Research Design

#### 4.4.1 Proposed Research Model

Based on literature reviews, the proposed research model of the present study is presented in Figure 4.2. The proposed research model is based on Ajzen’s the Theory of Planned Behaviour (TPB) model, with the addition of ‘Trust’ (Horst et al., 2007; Lobb et al., 2007; Wu and Chen, 2005) and ‘Past Experience’ (Cialdini, 1988; Eagly...
and Chaiken, 1993; Fodness and Murray, 1999; Sørensen et al., 1996; Ouellette and Wood, 1998; Verbeke and Vackier, 2005).

**Figure 4.2 Proposed Research Model**

![Proposed Research Model](image)

Source: This Study

### 4.4.2 Research Hypotheses and Questions

An attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (Ajzen, 1985; Eagly and Chaiken, 1995; Fishbein and Ajzen, 1975). Several studies have shown an attitude and intention to purchase relationship (Guàrdia et al., 2006; Leek et al., 2000; Mahon et al., 2006; Olsen, 2001).

In the study of Leek et al. (2000) in the UK, the negative attitude towards fish was found to have a significant influence on intention to purchase fish. Olsen (2001)
found a significant effect of positive and negative components of attitude, social norms and moral obligation on intention, which was measured as involvement in seafood as a family meal in Norway. Positive attitude had a positive correlation with intention, while negative attitude had a negative regression coefficient with intention. Mahon et al. (2006) investigated the relationship between attitude and consumption for ready meals and takeaway food. Attitudes were found as the best predictor of intention to purchase for ready meals and takeaway food. Guàrdia et al. (2006) studied meat consumers’ attitudes related to reduced salt meat products. Findings showed that positive attitude towards low salt products had a positive effect on consumers’ intention to purchase low salt meat products.

This study opts for a general hypothesis with respect to determinants of behavioural intention, following the theory of planned behaviour.

From hypothesis 1 to hypothesis 5 are related to consumers’ purchasing intention, and the questionnaire is adopted to investigate these hypotheses.

**H1**: Attitude has a significant effect on consumers’ intention to purchase organic food.

The subjective norm is the perceived social pressure from a person that is important to him or her to perform the behaviour (Fishbein and Ajzen, 1975; Thompson and Thompson, 1996). It has been shown in many studies that the subjective norm has a significant influence on behavioural intention (Chase et al., 2003; Chen, 2007; Scholderer and Grunert, 2001).

Scholderer and Grunert (2001) investigated the determinants of eating fish through the theory of planned behaviour before and after an advertising campaign in Denmark. Before the campaign, no significant relationship was found between behavioural intention and its hypothesised determinants. In the post campaign period, the social norm from the family contributed significantly to the explanation of the intention to eat fish. Chase et al. (2003) investigated dieticians’ intentions to promote whole-grain food using the theory of planned behaviour. Findings showed that subjective norm
was the best predictor of intention, and 89% of respondents agreed that other dieticians and health experts have a big effect on their intention. Chen (2007) examined Taiwan consumers' perception of and purchasing intention about organic food comparing with conventional foods by adopting the theory of planned behaviour. Results were confirmed that subjective norm significantly influenced Taiwan consumers' purchasing intention for organic food choice.

**H2:** Subjective Norm has a significant effect on consumers' intention to purchase organic food.

Perceived behavioural control is about how easy or difficult people think it is to perform a behaviour (Ajzen, 1985). An increase in perceived behavioural control will result in an increase in behavioural intention and the likelihood of performing the behaviour (Armitage and Conner, 2001). Bogers et al. (2004) studied the influence of individuals' misconceptions in assessing fruit and vegetable consumption on the ability of the theory of planned behaviour to explain variance in the consumption of these foods. They found that perceived behavioural control was the strongest predictor of intention to choose of fruit and vegetable. Hypothesis three is set up as follows.

**H3:** Perceived Behavioural Control has a significant effect on consumers' intention to purchase organic food.

The research model for this study proposes that trust will affect customers' intention to purchase organic food. Literatures confirm that trust increases the probability that customers will engage in the behavioural intention (Lobb et al., 2007; Pieniak et al., 2008; Rosati and Saba, 2004; Williams and Hammitt, 2000).

Lobb et al. (2007) explained how food purchasing intentions are influenced by different levels of risk perception and trust in food safety information by using a modified TPB model, SPARTA. Findings showed that trust in media and alternative information sources has a negative effect on consumers' purchasing intentions.
Pieniak et al. (2008) identified segments of European consumers based on their use of and trust in information sources about fish. Trust information sources played an important role in people’s concerns to choice behaviour for fish. Rosati and Saba (2004) explored public perception of trustworthiness of various sources providing information on food-related risks. Results showed that the perceived amount of information each source contained about food-related hazards was a significant element in perception of confidence, as well as the degree of concern consumers believed the agencies had an effect on their behavioural intention for food intake. Williams and Hammitt (2000) investigated how organic buyers differ from their conventional counterparts in the USA. Organic buyers were less trusting of federal food safety agencies than were conventional buyers, and their lack of confidence in food safety issues influenced on their intention to buy organic food. Thus, hypothesis four is built as follows.

\textbf{H4:} Trust has a significant effect on consumers’ intention to purchase organic food.

Past experience is likely to play an important role in determining consumers’ behavioural intentions (Ouellette and Wood, 1998). Eagly and Chaiken (1993) and Ouellette and Wood (1998) suggested that the best predictor of behavioural intention is the frequency of a past behaviour. A possible reason that past behaviour can predict future behavioural intention is the assumption of value consistency imposed by individual customers (Cialdini, 1988).

In a study of customer dissatisfaction, Day et al. (1981) found that past complaining experience was positively related to customer dissatisfaction responses. Other research in consumer behaviour also demonstrated that past history of a particular act exerts a direct influence on future behavioural intention (Conner and Armitage, 1998). Verplanken et al. (1998) have shown that the prediction of intention in car use as a travel mode was significantly improved by the addition of previous experience of car use. Therefore, hypothesis five is hypothesized in this study as follows.
H5: Past Experience has a significant effect on consumers’ intention to purchase organic food.

From research question 1 to research question 4 are related to relationship between consumers’ intention to purchase and realised purchase behaviour, and interviews will be used to probe reason for discrepancies in intended and realised behaviour.

That translating a goal intention into actual behaviour is often difficult, is confirmed by meta-analytic reviews of Ajzen’s (1985) theory of planned behaviour, a model which has often been used to understand and predict consumers’ behaviour (Bamberg, 2002). One central assumption of the theory of planned behaviour is that goal intentions are the only direct determinate of actual behaviours. Meta-analytic reviews confirm that behavioural intentions are indeed strong predictors of behaviour (Ajzen, 1991; Armitage and Conner, 2001) but these meta-analyses also show that the relationship between intention and behaviour is mostly far from perfect. Goal intentions typically account for only 30-40% of the variance in future behaviours. Thus, numbers of researchers have investigated the relationship between intention and actual behaviour (Lee and Rhee, 1998; March and Woodside, 2005).

Lee and Rhee (1998) investigated the relationship between consumers’ purchase intention and actual behaviour of apparel products. There was a significant difference for actual behaviour among respondents who have intention to purchase apparel products. March and Woodside (2005) explored the relationship between tourists’ plan for doing, buying and consuming and what was actual done. The findings showed that less experience of a consumer reflects significantly greater differences between planned and realised consumption behaviour. Therefore, research question one is set up as follows.

RQ1: To establish if there are differences between consumers’ intention to purchase and realised purchase behaviour for organic food.
It represents an individual’s expectancies about certain behaviour in a given setting and can be operationalised as the likelihood to act (Ajzen, 1985). Perceived behavioural control will influence behaviour directly to the extent that perceived control reflects actual behaviour (Armitage and Conner, 2001). Sparks et al. (1995) identified factors reducing consumption of particular foods in the UK by adopting the theory of planned behaviour model. Consumers’ perceived behavioural control had significant effect on reducing the total amount of dietary fat.

RQ2: To establish perceived behavioural control has an effect on realised purchase behaviour for organic food.

Trust has been found to be a good predictor of behaviour in prior research, and a relationship has also been found between trust and behaviour (Dean et al., 2006; Dyer and Chu, 2003; Tsai and Ghoshal, 1998).

Dean et al. (2006) examined the consumption of organic foods by applying two other methods (word association and open-ended questionnaire) in the theory of planned behaviour. Results showed that consumers’ trust of the quality of organic food can have a significant effect on consumption of organic foods. Dyer and Chu (2003) demonstrated that if the suppliers trust the buyers, they will be willing to share more work related information with the buyers. Furthermore, high trust may encourage suppliers to expose operations or cost structure confidentiality to buyers. Tsai and Ghoshal (1998) provided empirical evidence to suggest that trust and trustworthy influence resource exchange and combination. Therefore, there are certain relationships between trust and realised purchase behaviour for organic food. Research question three is set up as follows.

RQ3: To establish if trust has an effect on realised purchase behaviour for organic food.

Past behaviour not only plays an important role in determining consumers’ behavioural intentions (Cialdini, 1988; Eagly and Chaiken, 1993; Ouellette and Wood,
1998) but also directly effects consumers’ actual behaviour (Fodness and Murray, 1999; Sørensen et al., 1996; Verbeke and Vackier, 2005).

In a study in relation with tourists’ information search behaviour, results confirmed that past experience affects the relationship between past experience and actual behaviour. Tourists who had their holiday at a place are more likely to have their vacation in the same place, relying on their knowledge and plan for that place (Fodness and Murray, 1999). Sørensen et al. (1996) compared two groups of fish consumers based on their experience with fish. More experienced consumers had a more positive intention to purchase fish and they more easily buy fish than others. Verbeke and Vackier (2005) found consumers’ determinants of fish consumption behaviour using the TPB. Habit, past experience, was included as an additional variable. Habit identified as a strongest determinant of behaviour, which indicated that fish consumption is strongly based on past experience. Hence, research question four is formulated as follows.

**RQ4:** To establish past experience has an effect on realised purchase behaviour for organic food.

Background studies of research hypotheses and research questions in this study are summarised in Table 4.2.
Table 4.2 Background of Research Hypotheses and Questions

<table>
<thead>
<tr>
<th>Hypotheses/Research Questions</th>
<th>Researcher</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Ajzen (1985)</td>
<td>Theory of Planned Behaviour</td>
</tr>
<tr>
<td></td>
<td>Leek et al. (2000)</td>
<td>Situational determinants of fish consumption in UK</td>
</tr>
<tr>
<td></td>
<td>Olsen (2001)</td>
<td>Consumer involvement in seafood as family meals</td>
</tr>
<tr>
<td></td>
<td>Guardia et al. (2006)</td>
<td>Attitudes towards reduced salt meat product</td>
</tr>
<tr>
<td></td>
<td>Mahon et al. (2006)</td>
<td>the Efficacy of the TPB as a predictor of ready meal and takeaway consumption</td>
</tr>
<tr>
<td>H2</td>
<td>Scholderer &amp; Grunert (2001)</td>
<td>A systematic evaluation of the Danish campaign for fresh fish</td>
</tr>
<tr>
<td></td>
<td>Chase et al. (2003)</td>
<td>Dieticians' intentions to promote whole-grain food</td>
</tr>
<tr>
<td></td>
<td>Chen (2007)</td>
<td>Taiwan Consumers' purchase intentions in relation to organic foods</td>
</tr>
<tr>
<td></td>
<td>Bogers et al. (2004)</td>
<td>An optimistic bias in self-rated fruit and vegetable intake and consumption</td>
</tr>
<tr>
<td>H4</td>
<td>Williams &amp; Hammitt (2000)</td>
<td>A comparison of organic and conventional products buyers in USA</td>
</tr>
<tr>
<td></td>
<td>Rosati &amp; Saba (2004)</td>
<td>Perception of food safety and the reliability of information sources</td>
</tr>
<tr>
<td></td>
<td>Lobb et al. (2007)</td>
<td>Food safety information and purchasing intention</td>
</tr>
<tr>
<td></td>
<td>Pieniak et al. (2008)</td>
<td>European consumers' trust in information sources about fish</td>
</tr>
<tr>
<td>H5</td>
<td>Day et al. (1981)</td>
<td>The hidden agenda of consumer complaining</td>
</tr>
<tr>
<td></td>
<td>Eagly &amp; Chaiken (1993)</td>
<td>The psychology of attitudes</td>
</tr>
<tr>
<td></td>
<td>Ouellette &amp; Wood (1998)</td>
<td>Habit and intention in everyday life</td>
</tr>
<tr>
<td></td>
<td>Verplanken et al. (1998)</td>
<td>Habit versus planned behavior</td>
</tr>
<tr>
<td>RQ1</td>
<td>Lee &amp; Phee (1998)</td>
<td>Consumers' purchase intention and behaviour for apparel products</td>
</tr>
<tr>
<td></td>
<td>March &amp; Woodside (2005)</td>
<td>Plan for buying and consuming discretionary tourism services</td>
</tr>
<tr>
<td></td>
<td>Sparks et al. (1995)</td>
<td>Perceived Behavioural Control, unrealistic optimism and dietary change</td>
</tr>
<tr>
<td>RQ3</td>
<td>Tsai &amp; Ghoshal (1998)</td>
<td>Social capital and value creation</td>
</tr>
<tr>
<td></td>
<td>Dean et al. (2007)</td>
<td>Attitude and moral concern in relation to the consumption of organic food</td>
</tr>
<tr>
<td>RQ4</td>
<td>Sørensen et al. (1996)</td>
<td>The impact of product experience on consumers' cognitive structures with regard to fresh fish</td>
</tr>
<tr>
<td></td>
<td>Fodness &amp; Murray (1999)</td>
<td>Tourist information search behaviour</td>
</tr>
<tr>
<td></td>
<td>Verbeke &amp; Vackier (2005)</td>
<td>Individual determinants of fish consumption</td>
</tr>
</tbody>
</table>

Source: Summarised by Author
4.5 Research Method

4.5.1 Sampling Design

Having specified the research problems, the next stage is to decide an appropriate sample from which to collect information (Churchill and Iacobucci, 2004). According to Hair et al. (2003), the sampling process is significant for identifying, developing and understanding market constructions that need exploration. Data must arrive from respondents who can provide the correct information to answer the research questions, if not the research outcome will be useless.

Churchill and Iacobucci (2004) points out six stages for the sampling process. The first stage is to define the population of the study from which the researcher wishes to draw an inference. The second is to identify the sampling frame such as addresses or telephone numbers on a telephone book. The next stage is to select a sampling method, which largely depends on what can be developed from a sampling frame. The fourth is to select the sample size. The fifth is to choose the elements to include in the study. The last stage is that the appropriated data accumulates from designated respondents (Figure 4.3).

Figure 4.3 The Sampling Procedures

Step 1: Define the Target Population

Step 2: Identify the Sampling Frame

Step 3: Select a Sampling Procedure

Step 4: Determine the Sample Size

Step 5: Select the Sample Elements

Step 6: Collect the Data from the Designated Elements

Source: Churchill and Iacobucci, 2004 p. 323
However, following those six steps is not an easy task, and many things can go wrong with this task (Churchill and Iacobucci, 2004). Hair et al. (2003) suggested critical factors in selecting an appropriate sampling designing in Table 4.3.

### Table 4.3 Critical Factors in Selecting an Appropriate Sampling Design

<table>
<thead>
<tr>
<th>Selection Factors</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Objectives</td>
<td>Do the research objectives call for the use of qualitative or quantitative research designs?</td>
</tr>
<tr>
<td>Degree of Accuracy</td>
<td>Does the research call for making predictions or inferences about the defined target population, or only preliminary insights?</td>
</tr>
<tr>
<td>Availability of Resources</td>
<td>Are there tight budget constraints with respect to both dollars and manpower that can be allocated to the research project?</td>
</tr>
<tr>
<td>Time Frame</td>
<td>How quickly does the research project have to be completed?</td>
</tr>
<tr>
<td>Advance Knowledge of the Target Population</td>
<td>Are there complete lists of the defined target population elements? How easy or difficult is it to generate the required sampling frame of prospective respondents?</td>
</tr>
<tr>
<td>Scope of the Research</td>
<td>Is the research going be international, national, regional or local?</td>
</tr>
<tr>
<td>Perceived Statistical Analysis Needs</td>
<td>To what extent are accurate statistical projections required and/or testing of hypothesized differences in the data structures required?</td>
</tr>
</tbody>
</table>

*Source: Hair et al., 2003 p.363*

According to Hair et al. (2003), sampling procedure should be complimented by considering the theoretical component, sampling issues and advantages and disadvantages of the various sampling methods.

There are two major types of sampling methods: probability and nonprobability sampling (Sekaran, 2003). In probability sampling, the elements in the population have some known chance or probability of being selected as sample subjects. Probability sampling is usually the method used when the representativeness of the sample is important to wider generalisability (Churchill and Iacobucci, 2004). Simple random sampling is representative of probability sampling. In simple random sampling, every population element has a known and equal chance of selection (Cooper and Schindler, 2006). The restricted sampling, another plan of probability sampling, is adopted for improving efficiency of the research by using some of the more complex sampling procedures than the simple random sampling (Sekaran, 2003). Groups of elements that would have heterogeneity among the members within
each group are chosen for study in cluster sampling (Sekaran, 2003). If the research
then uses all the population elements in the selected subsets for the sample, the
procedure is one-stage cluster sampling. If a sample of elements is selected
probabilistically from the selected subsets, the procedure is known as two-stage
cluster sampling. Cluster sampling involves the division of the population into
mutually exclusive and exhaustive subgroups (Churchill and Iacobucci, 2004).
Cluster sampling is appealing when researchers can easily classify very similar areas
(Hair et al., 2003).

In nonprobability sampling methods, each element of the population does not have a
known possibility of being included as sample subjects, because nonprobability
sampling involves personal judgement somewhere in the selection (Churchill and
Iacobucci, 2004; Cooper and Schindler, 2006). Nonprobability sample design
provides researchers with the opportunity to select their sample purposively, and
allow researchers to save time and cost. Therefore, when budget or other factors are
considered rather than generalisation, nonprobability sampling is generally adopted
(Saunders et al., 2007; Sekaran, 2003). The convenience sampling, one form of
nonprobability methods, collects data from a population who are conveniently
accessible. Convenience sampling is often used when the researcher seeks to obtain
ideas about subjects of interest from the sampling, and wishes to explore the idea
(Cooper and Schindler, 2006). The assumptions underlying this method are that the
defined target population is homogeneous and the elements interviewed are similar to
the whole target population with regard to the characteristics being studied (Hair et al.,
2003). It may be the best way of gaining fundamental information quickly, efficiently
and economically (Cooper and Schindler, 2006; Sekaran, 2003). Judgment sampling
is that an expert uses judgment to identify representative samples. For instance,
patrons of a shopping centre might represent the residents of a city, or several cities
might be selected to represent a country. This method is useful when probability
sampling is either not feasible or prohibitively expensive. When the sample size is to
be very small, under 10, a judgment sampling usually is also more reliable and
representative (Aaker et al., 2007). Quota sampling ensures that certain groups are
sufficiently represented in the study through the assignment of a quota. In general, the
quota fixed for each subgroup is based on the total numbers of each group in the population. This method can be considered as a form of balanced stratified sampling, in which a predestined proportion of people are sampled from different groups, but on a convenience basis (Sekaran, 2003). Snowball sampling involves the practice of subjectively identifying and qualifying a set of initial prospective respondents who can help the researcher classify additional people to be included in the research. After interviewing one person, the researcher would ask that person's help to identify other persons with similar characteristics or opinions. Samples of the defined target population who might not hold similar opinions or feelings to those of the respondents are unlikely to be included in this type of sample (Hair et al., 2003). The sample of snowball sampling can be a very useful. This method can be used to reach any small population, such as deep-sea divers, people confined to wheelchairs, and families with triplets (Aaker et al., 2007).

In this study, the population was set as Korean people who shop regularly for food (at least once every month) in South Korea. The nonprobability convenience sampling method was adopted for three reasons. First, the present study has the exploratory nature. As mentioned above, convenience sampling is assumed that it is normally used when the researcher seeks to gain explore the idea from the sample (Cooper and Schindler, 2006). Second reason is because of the lack of an available sampling frame and the lack of specific population information. The assumptions of convenience sampling is the fact that the target sample is uniform, and samples selected according to accessibility, have comparable characteristics with the overall target population being studied (Hair et al., 2003). Lastly, limited time and resources are available in the current study. Convenience sampling enables gathering a large amount of data in relatively short time and at lower costs (Cooper and Schindler, 2006).

4.5.2 Quantitative and Qualitative Research

Quantitative approach is driven by researchers' desire to collect substantial amounts of information from enough members of the target population. If the research objectives are to provide data that allow for identifying meaningful relationships,
establishing the existence of true differences, and verifying the validity of relationships between the phenomena, the consideration should be given to the employment of quantitative research designs (Hair et al., 2003). Quantitative research more frequently use data collection procedures that heavily emphasize asking the respondents sets of standardized, by using structured questionnaires about what they think, feel and do rather than by using interviewing (Bryman and Bell, 2003).

Qualitative research is a research strategy that usually emphasizes words rather than quantification in the collection and analysis of data (Bryman, 2004). Qualitative approach aims to explore issues in more depth rather than simply describe them at a superficial level as may be achieved through the use of questionnaires (Mason, 2002). It sought to understand the meanings that the respondents attached to issues and situations, based on their knowledge, views and experiences (Clark et al., 1998; Mason, 2002).

As a research strategy it is inductive, constructional, and interpretive, but qualitative researchers do not always subscribe to all three of these features (Bryman, 2004).

- an inductive view of the relationship between theory and research, whereby the former is generated out of the latter
- in contrast to the adoption of a natural scientific model in quantitative research, the stress is on the understanding of the social world through an examination of the interpretation of that world by its participants
- an ontological position described as constructionist, which implies that social properties are outcomes of the interactions between individuals, rather than phenomena 'out there' and separate from those involved in its construction

The advantages and difference of the quantitative research as compared to the qualitative research are shown Table 4.4.
Table 4.4 Advantages and Disadvantages of Quantitative Research Designs

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to accommodate large sample sizes; increases generalisability of results</td>
<td>Difficulty of developing accurate survey instruments</td>
</tr>
<tr>
<td>Ability to distinguish small differences</td>
<td>Limits to the in-depth detail of data structures</td>
</tr>
<tr>
<td>Ease of administering and recording questions and answers</td>
<td>Lack of control over timeliness, and potentially low response rates</td>
</tr>
<tr>
<td>Capabilities of using advanced statistical analysis</td>
<td>Difficulties in determining whether respondents are responding truthfully</td>
</tr>
<tr>
<td>Abilities of tapping into factors and relationships not directly measurable.</td>
<td>Misinterpretations of data results and inappropriate use of data analysis procedures</td>
</tr>
</tbody>
</table>

Source: Hair et al., 2003

To define factors to be used in the main survey questionnaire, the elicitation survey is carried out using a qualitative research method (open-ended questionnaire), because the objective of the elicitation survey is to identify variables based on consumers’ in-depth perceptions. While, a quantitative method (questionnaire) will be adopted to define general consumers’ purchasing intention and a qualitative method (interview) will be followed to identify accurate consumers’ actual behaviour for organic food choice and understand differences between intended and realised behaviours.

4.5.3 Data Collection

There are several data collection methods, each with its own advantages and disadvantages. Data collection methods can be largely divided into interviews (qualitative approach) and questionnaire (quantitative approach). Interviewing includes face-to-face interview, telephone interviews, computer-assisted interviews, and interviews through the electronic media. Questionnaires can be personally administered, sent through the mail, or electronically administered. There are some other data collection approaches, including observation of individuals and events with or without videotaping or audio recording, and a variety of other motivational techniques such as projective tests (Sekaran, 2003). Thus, researchers have to make a careful choice of data collection method. They should be concerned about the
facilities available, the degree of accuracy required, the expertise of the researcher, the time available for the study, and other costs and resources associated with and available for data gathering (Cooper and Schindler, 2006; Sekaran, 2003).

4.5.3.1 Interviewing
The interview is probably the most widely employed data collection method in qualitative research. Interviewing, the transcription of interviews, and the analysis of transcripts are all very time-consuming, but they can be more easily accommodated into researchers' personal lives (Bryman, 2004). In many studies, a tentative theory of the factors contributing to a problem is often conceptualised on the basis of the information obtained from the interviews (Sekaran, 2003).

Although there are many types of interviewing, the two main types are the unstructured interview and the semi-structured interview. In the unstructured interview, there may be just a single question that the interviewer asks and the interviewee is then allowed to respond freely, with the interviewer simply responding to points that seem worthy of being followed up (Bryman, 2004). The objective of the unstructured interview is to bring some preliminary issues to the surface so that the researcher can determine what variables need further in-depth information (Sekaran, 2003).

Structured interviews are those conducted when it is known at the outset what information is needed. The researcher has a list of questions or fairly specific topics to be covered, often referred to as an interview guide, but the interviewee has a great deal of freedom in how to reply. Questions may not follow on exactly in the way outlined on the schedule. Questions that are not included in the guide may be asked as the interviewer picks up on things said by interviewees. But, all of the questions will be asked and a similar wording will be used for all interviewees (Bryman, 2004).

4.5.3.2 Questionnaire
A questionnaire is a pre-formulated written set of questions to which respondents record their answers. Questionnaires could be more effective data collection method
when the researcher knows exactly what is required and how to measure the variables of interest. Questionnaires can be administered personally, mailed or electronically distributed to the respondents (Sekaran, 2003).

The obvious difference between the self-administered questionnaire and the interview is that, with the questionnaire, there is no interviewer to ask the questions. Instead, respondents have to read each question themselves and answer the questions themselves. However, because there is no interviewer in the administration of the questionnaire, the research instrument has to be especially easy to follow and its questions have to be particularly easy to answer. Respondents cannot be trained in the way interviewers can be (Bryman, 2004).

Personally administering the questionnaires can be a good way to collect data, when the survey is conducted to a closed area, and the organisation is able to assemble participants to respond to the questionnaires at the workplace. The main advantage of this is that the researcher can collect large numbers of completed responses within a short period of time and it is less expensive and consumes less time than interviewing. However, organisations are often disinclined to allow work hours to be spent on data collection, and participants may give blank questionnaires (Saunders et al., 2007; Sekaran, 2003). The advantages and difference of the questionnaire as compared to the interview are shown Table 4.5.
### Table 4.5 Advantages of the questionnaire over the interview

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking questions with long or complex response categories is facilitated</td>
<td></td>
<td>The cheapness is especially advantageous if researchers have a sample that is geographically widely dispersed</td>
</tr>
<tr>
<td>Asking batteries of similar questions is possible</td>
<td></td>
<td>Questionnaires can be sent out in very large quantities at the same time</td>
</tr>
<tr>
<td>The respondent does not have to share answers with a researcher</td>
<td></td>
<td>It does not suffer from the problem of interviewers asking questions in a different order or in different ways</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Respondents can complete a questionnaire when they want and at the speed that they want to go</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disadvantages</th>
<th>Especially careful questionnaire design is needed.</th>
<th>There is no opportunity to probe respondents to elaborate an answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good reading and writing skills are needed by respondents.</td>
<td></td>
<td>Respondents can read the whole questionnaire before answering the first question. When this occurs, none of the questions asked is truly independent of the others.</td>
</tr>
<tr>
<td>The interviewer is not present to exercise quality control with respect to answering all questions, meeting questions objectives or the quality of answers provided.</td>
<td></td>
<td>There is no interviewer to help respondents with questions they find difficult to understand and hence to answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With postal questionnaires, researchers can never be sure whether the right person has answered the questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Because of the possibility of 'respondent fatigue', long questionnaire are rarely feasible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is easier for respondents actively to decide not to answer a question when on their own than when being asked by an interviewer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surveys by postal questionnaire typically result in lower response rates.</td>
</tr>
</tbody>
</table>

*Source: Summarised by Author*

### 4.5.3.4 Mail Survey

Mail questionnaires are mailed to the respondents, who can complete them at their convenience and at their own pace. The main advantage of this is that a wide geographical area can be covered in the survey. However, the return rates of this method are normally low. In addition, any doubts the respondents might have cannot be clarified. But, some effective techniques can be employed for increasing the rates of response to mail questionnaires, such as enclosing some incentives with the questionnaire and stamped return envelopes (Saunders et al., 2007; Sekaran, 2003).
4.5.3.5 Online Survey

There has been a great growth in the number of studies being administered online (Saunders et al., 2007). There is a crucial distinction between studies administered by e-mail and studies administered via the Web (Bryman, 2004). According to Sheehan and Hoy (1999), there has been a tendency for e-mail surveys to be employed in relation to ‘smaller, more homogeneous online user groups’, whereas Web surveys have been used to study ‘large groups of online users’.

E-mail surveys either have embedded or attached questionnaires. In the case of the embedded questionnaire, the questions are to be found in the body of the e-mail. In the case of attached questionnaire, the questionnaire arrives as an attachment to an e-mail that introduces it (Bryman, 2004; Saunders et al., 2007).

In order to return the completed questionnaire, it must be attached to a reply e-mail, although respondents may also be given the opportunity to fax or send the completed questionnaire by postal mail to the researcher (Sheehan and Hoy, 1999).

Web surveys invite respondents to visit a website at which the questionnaire can be found and completed online. The Web survey has some advantages over the e-mail survey. It can use a much wider variety of embellishments in terms of appearance. A web survey can also include ‘radio buttons format - whereby the respondent makes a choice between closed question answers by clicking on a circle in which a dot appears and a pull-down menus of possible answers is revealed. Thus, respondents can easily answer and rarely feel bored. In the case of open questions, the respondent is invited to type directly into a boxed area (Bryman, 2004).

The online survey will be adopted to collect data for the elicitation survey and the main survey, because the researcher is not able to access to respondents in South Korea. In addition, South Korea ranked the top among OECD countries in the Internet use, and the number of computers in use had reached 80.9% in 2008 (Kim, 2009). Thus, the application of an online survey is appropriate in this study.
4.5.4 Questionnaire Design

Questionnaire construction is one of the most delicate and critical research activities. If a researcher does not ask the right questions in the right way, a research project will not produce useful information, no matter how well other research aspects are designed and executed. Thus, the questionnaire needs to be designed in a specific way (Peterson, 2000).

One of the most important considerations for many researchers is whether to ask a question in an open or closed design. This issue is relevant to the design of both interview and self-administered questionnaire research. With an open question respondents are asked a question and can reply however they wish. Whereas, in the case of a closed question they are presented with a set of fixed alternatives from which they have to choose an appropriate answer (Bryman, 2004). Open questions are generally used in in-depth and semi-structured interviews. But, it is also useful in questionnaires, if researchers are not sure of the response, such as in exploratory research, when researchers require a detailed answer or when researchers want to identify what is upper most in the respondent's mind (Saunders et al., 2007). Closed questions allow the respondents to make quick decisions amongst the several alternatives. It also helps the researcher to code the information easily for subsequent analysis. But, care has to be taken to ensure that the alternatives are mutually exclusive and collectively exhaustive (Sekaran, 2003). The advantages and disadvantages of these two types of question are shown in Table 4.6.

For the elicitation survey, all questions are designed as open questions to collect various opinions of respondents. Closed questions are used to collect data in the main survey and its pilot with a questionnaire based on the Theory of Planned Behaviour model.
Table 4.6 Advantages and Disadvantages of Open / Closed question

<table>
<thead>
<tr>
<th>Open Question</th>
<th>Closed Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantages</td>
<td>Disadvantages</td>
</tr>
<tr>
<td>• Respondents can answer in their own terms</td>
<td>• It is easy to process answers.</td>
</tr>
<tr>
<td>• It allow unusual responses to be derived</td>
<td>• It enhances the comparability of answers</td>
</tr>
<tr>
<td>• The questions do not suggest certain kinds of answer to respondents. Thus, respondents' levels of knowledge and understanding of issues can be tapped</td>
<td>• It may clarify the meaning of a question for respondents</td>
</tr>
<tr>
<td>• It is useful for exploring new areas or ones in which the researcher has limited knowledge</td>
<td>• It is easy for researchers and/ or respondents to complete</td>
</tr>
<tr>
<td>• It is useful for generating fixed-choice format answers</td>
<td>• There is a loss of spontaneity in respondents' answer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It is more time consuming than is usually the case with a comparable closed question</td>
</tr>
<tr>
<td>• Answers have to be ‘coded’, which is very time-consuming</td>
</tr>
<tr>
<td>• It requires greater effort from respondents than closed question</td>
</tr>
<tr>
<td>• The transcription of answers to open questions is immensely time-consuming and adds additional costs to a survey</td>
</tr>
<tr>
<td>• There may be variation among respondents in the interpretation of forced-choice answers.</td>
</tr>
<tr>
<td>• Closed questions may be irritating to respondents when they cannot find a category that they feel applies to them</td>
</tr>
<tr>
<td>• In interviews, a large number of closed questions may make it difficult to establish rapport, because the respondent and interviewer are less likely to engage with each other in a conversation</td>
</tr>
</tbody>
</table>

Source: Bryman, 2004

4.6 Analysis Method

To gain meaningful information from the study, the collected data needs to be analysed and interpreted very carefully (Pallant, 2007). In the pilot survey and the main survey, several quantitative analysis techniques were adopted, which are simple
descriptive statistics, factor analysis, correlation analysis and linear regression analysis. For the exploratory nature of the elicitation survey, content analysis method was employed. Content analysis method was also used to analyse the information obtained from in-depth interviews of the main survey.

4.6.1 Quantitative Analysis Method

4.6.1.1 Descriptive Analysis

Descriptive analysis is the most efficient means of summarising the characteristics of large data sets. Use is typically in the analysis, and results become the foundations for subsequent examination (Burns and Bush, 2006; Sekaran, 2003). In this study, frequencies were used to understand the characteristics of the sample, and measures of central tendency (mean, minimum and maximum) and measures of variability (standard deviation) were computed to describe the research variables and respondents' beliefs about organic food.

4.6.1.2 T-test and ANOVA

T-test and ANOVA test compare the mean scores of two or more groups respectively. To interpret the results of T-test and ANOVA, the meaning of the F-ratio and p-value need to be defined. A calculated F-ratio presents the variance between the groups, divided by the variance with the groups. Therefore, a large F-ratio indicates more variability between the groups, than within each group (Pallant, 2007). Hence, a large F-ratio leads to the rejection of null hypothesis including no difference in means across groups, and the p-value needs to be less than 0.05 in order for the difference to be regarded as significant (Brace et al., 2006).

T-test is used to establish if there are any significant differences in the mean score for two independent group for the variable of interest. The T-test takes into consideration the means and standard deviations of the two groups of the variable and examines if the numerical difference in the means is significantly different from 0 (zero) as
postulated in the null hypothesis of the study (Sekaran, 2003). Unlike the T-test, ANOVA allows researchers to handle data that has designs involving more than two conditions. ANOVA also allows researchers to investigate the effect of more than one independent variable (Pallant, 2007). After obtaining a significant main effect for the dependent variable through ANOVA, in order to find the difference between the subgroups, Post Hoc Multiple tests such as Scheffe’s, Duncan Multiple Range, S-N-K (Student-Newman-Keul), Tukey and Dunnett’s T3 test can be used as appropriate (Sekaran, 2003). In this study, Tukey and Dunnett’s T3 test were used. Tukey was used when assuming equal variance, whereas Dunnett’s T3 was used when not assuming equal variance (Pallant, 2007).

In this study, T-test and ANOVA were conducted in order to investigate the influence of respondents’ demographic profile and past purchase frequency of organic food on variables in the research model.

4.6.1.3 Factor Analysis

Factor analysis is a statistical approach that is used to analyse interrelationships among a set of variables and to explain these variables in terms of their common underlying factors (dimensions) (Kline, 1993). In factor analysis, the researcher can first classify the separate factors of the structure and then identify the extent to which each variable is explained by each factor. Once these factors (or dimensions) and the explanation of each variable are determined, the two primary uses for factor analysis, summarisation and data reduction, can be obtained (Hair et al., 2006). There are two main approaches to factor analysis, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Exploratory factor analysis is normally used in the first stages of research to explore the inter-relationship among a set of variables. On the other hand, confirmatory factor analysis is a more complex and sophisticated set of techniques in order to confirm specific hypotheses or theories concerning the structure underlying a set of variables through structural equation modelling (Hair et al., 2006; Pallant, 2007).
With factor analysis, researchers have to assess the appropriateness of factor analysis through Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett test of sphericity (Hair et al., 2006). KMO measure of sampling adequacy needs to be tested to assess the factorability of the data. The KMO index ranges from 0 to 1, the minimum value for a good factor analysis is suggested as .6 (Pallant, 2007). The Bartlett test of sphericity provides the statistical significance that the correlation matrix has significant correlations among at least some of the variables (Hair et al., 2006).

There are some methods to determine the number of factors, and two methods are the most commonly recommended: the eigenvalues-greater-than-one (or latent roots) rules as mathematical and psychometric criterion and the scree test as rules of thumb (Fabrigar et al., 1999). However, an exact quantitative basis for determining the number of factors has not yet been developed. Practically, researchers seldom use a single criterion in deciding how many factors to extract. Rather, they test and compare a number of different factor solutions extracted from different methods to reach at the best presentation of the data (Hair et al., 2006).

Latent root criterion (Eigenvalues) is one of the most commonly used methods to determine the number of factors. In this technique, factors with an eigenvalue of 1.0 or above are considered significant and retained for further investigation (Pallant, 2007), and it represents the amount of variance accounted for by a factor (Hair et al., 2006). Scree test is derived by plotting each of the factors and examining the plot to find a point at which the shape of the curve changes direction and begins to straighten out. Factors above the curve when it first begins to become a horizontal line are taken for other analysis. The scree test results in one or two more factor solution than does the latent root criterion as a rule of thumb (Hair et al., 2006; Pallant, 2007). The percentage of variance criterion is an approach based on achieving a specified cumulative percentage of total variance extracted by successive factors. Although there is no exact way for obtaining the number of factors, generally, a solution that accounts 60% of the total variance is accepted in social science (Hair et al., 2006).
Once the number of factors has been retained, factors are rotated to a simple structure to make them more interpretable (Hair et al., 2006). Rotation of factors relates to reorienting them or changing the location of the factors in dimensional space to improve the interpretability of the results (Russel, 2002). There are two main approaches to rotation, resulting in either orthogonal or oblique factor solutions. Varimax is widely used as an orthogonal rotation because of its simplicity and conceptual clarity. This method is not appropriate when a theoretical expectation of a general factor exists because varimax serves to spread variance evenly among factors, which results in distorting any general factor in the data (Tabachnick and Fidell, 2006). Thus, varimax rotation is useful for principle components analysis (data reduction) because this process simplifies the presentation and interpretation of factor analysis results (Russel, 2002). Oblique approach allows for the factors to be correlated, however this method is more complicated to interpret and to report. Because the existence of substantial correlations among factors implies that a higher order factor may exist, oblique solutions are more useful in theory building (Hair et al., 2006).

Factor loading refers to the correlation between each factor decided and each of the original variables. Each factor loading is a measure of the significance of the variable in measuring each factor (Aaker et al., 2007). Factor loadings can differ between +1 to −1. If a variable is closely associated with a factor, the factor loading will be high. In examining factors, a decision must be made regarding which factor loading are significant. There are several different ways of determining the significance of factor loading including using the practical significance, assessing statistical significance and using the number of variables (Hair et al, 2006).

Table 4.7 presents guidelines for identifying significant factor loadings based on sample size by assessing statistical significance.
In the present study, this guideline is employed for identifying significant factor loadings in the main survey. While, when considering the sample size of the pilot survey which is 58, factor loading of .70 and above are significant. However, in the pilot survey, factor loading of above .40 will be accepted as the significant level, because the objective of the pilot survey is to determine problems with the questionnaire prior to the start of the main survey and validate dimensions as the same as previous studies. Indeed, according to Hair et al. (2006), factor loadings in the rage of ±.30 to ±.40 are considered to meet the minimal level for interpretation of structure.

4.6.1.4 Reliability and Validity

It is important to make sure that the instrument developed measures the particular concept that was set out to be measured correctly. Hence, reliability and validity have been of particular concern to researchers for a long time (Sekaran, 2003). Reliability is a function of internal consistency of interrelatedness of items and frequently substituted for convergent validity (Schmitt, 1996).

Reliability is concerned with stability and consistency of measurement. Two assessments of stability are test-retest reliability and parallel-form reliability. The former is obtained by repeating the same measure under equal conditions. The latter is concerned with the correlation of responses in two comparable sets of measures. Consistency can be observed by testing the correlation of the items and the subsets of
items in the measuring instrument. This can be obtained by inter-item reliability and split-half reliability (Aaker et al., 2007; Sekaran, 2003).

Table 4.8 shows the accepted level of reliability by researchers. As shown table, researchers suggest that the Cronbach’s alpha level of reliability should be between .60 at the minimum.

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Situation</th>
<th>Recommended Cronbach’s alpha levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis (1964)</td>
<td>Prediction for individual</td>
<td>Above .75</td>
</tr>
<tr>
<td></td>
<td>Prediction for group of 25–50</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>Prediction for group over 50</td>
<td>Below .5</td>
</tr>
<tr>
<td>Hair et al. (2006)</td>
<td>Exploratory research</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Commonly acceptable level</td>
<td>.7</td>
</tr>
<tr>
<td>Kaplan and Saccuzzo (1982)</td>
<td>Basic research</td>
<td>.7 - .8</td>
</tr>
<tr>
<td></td>
<td>Applied research</td>
<td>.95</td>
</tr>
<tr>
<td>Murphy and Davidshofer (1988)</td>
<td>Unacceptable level</td>
<td>Below .6</td>
</tr>
<tr>
<td></td>
<td>Low level</td>
<td>.7</td>
</tr>
<tr>
<td></td>
<td>Moderate to high level</td>
<td>.8 - .9</td>
</tr>
<tr>
<td></td>
<td>High level</td>
<td>.9</td>
</tr>
<tr>
<td>Nunnally (1967)</td>
<td>Preliminary research</td>
<td>.7</td>
</tr>
<tr>
<td></td>
<td>Basic research</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>Applied research</td>
<td>.9 - .95</td>
</tr>
</tbody>
</table>

Source: Peterson, 1994

Although reliability is a necessary, it is not sufficient condition for a good measurement. Validity ensures the ability of an instrument to measure what it is supposed to measure (Aaker et al., 2007). There are some methods of estimating the validity of measurements.

Content validity focuses on the sufficiency with which the domain of the characteristic is captured by the measure. Content validity is known as “face validity” because it is examined by looking at the measure to determine the domain being sampled. If the actual items show different from the possible domain, the measure is said to lack content validity (Churchill and Iacobucci, 2004). This validity subjectively estimates the connection between the individual items and the concept through ratings by expert judges and pre-tests (Hair et al., 2006).
Construct validity is the extent to which a set of measured items truly reflects the theoretical latent construct those items are designed to measure. Therefore, it deals with the precision of measurement. Results of construct validity provide confidence that items assess taken from a sample represent the actual score that exists in the population (Hair et al., 2006). Construct validity is established by measuring convergent and discriminant validity. If given that the different methods are all measuring the same construct, and the measures should be highly correlated, evidence of convergent validity is provided. Whereas, discriminant validity requires that a measure does not correlate too highly with measures that are not supposed to be related (Churchill and Iacobucci, 2004). Correlation analysis is one of the most widely used techniques in establishing construct validity (Sekaran, 2003).

Criterion validity is based on empirical evidence that the measure connects with other "criterion" variables. Criterion validity can be explained by two different validities, concurrent and predictive validity. If the two variables are measured at one time or closely related, concurrent validity is established. While, if the measure can forecast some future event, predictive validity has been found. For instance, a measure of brand preference or purchasing intention is valid if it can be shown through sales records to predict future sales. Thus, this validity is the most important type for decision-making purpose, for the nature of decisions requires predictions of unsure future events. The regression analysis is used to establish this validity (Aaker et al., 2007; Hair et al., 2006).

4.6.1.5 Linear Multiple Regression

Multiple regression analysis is a statistical technique that is based on correlation but allows a more sophisticated exploration of the interrelationship among a set of variables (Pallant, 2007). Researchers want to examine for several independent variables influence on a dependent variable of interest. Multiple regression analysis is the appropriate technique to use to solve this problem. This process suggests information about the model as a whole and the relative contribution of each of the independent variables that make up the model (Hair et al., 2003). Multiple regression analysis has been used in many food studies related to the Theory of Planned
Behaviour model (Bogers et al., 2004; Cheng et al., 2005; Guàrdia et al., 2006; Mahon et al., 2006; Verbeke and Vackier, 2005).

Although there are some different types of multiple regression analysis such as standard multiple regression, moderated regression analysis, and stepwise multiple regression, standard multiple regression is the most commonly used type of multiple regression. In standard multiple regression analysis, all the independent variables are entered into the equation at the same time. Each independent variable is assessed in terms of its predictive ability, over that provided by all the other independent variables (Pallant, 2007).

There are some key terms to develop and understanding of linear regression. One key issue is the assessment of collinearity (multicollinearity). It describes a situation where an independent variable is related ($r = .8$ and above) to one or more of the other independent variable in the model (Pallant, 2007). Coefficient of determination ($R^2$) is a measure of the proportion of the variance of the dependent variable about its mean that is explained by the independent variables. The coefficient can differ between 0 and 1 (Hair et al, 2006). The larger the $R^2$ value, the more of the behaviour of the dependent variable is associated with the independent variable that is being used to predict it (Brace et al., 2006; Hair et al, 2006). Although $R^2$ indicates the explanatory power of the model, it does not provide the level of significant. The $F$-ratio indicates a measure of this significance in the regression analysis. Thus, a larger $F$-ratio indicates that the model has more explained by variance. The less than 0.05 p-value for the $F$-ratio is regarded as significant (Brace et al., 2006). The beta ($\beta$) value is a measure of how strongly each independent variable has effect on the dependent variable. Researchers can directly compare independent variables to determine which independent variable has the most influence on the dependent variable through the beta ($\beta$) value. This is also considered to be significant when the p-value is less than 0.05 (Pallant, 2007).
4.6.2 Qualitative Analysis Method

4.6.2.1 Content Analysis

Content analysis involves identifying coherent and important examples, themes, and patterns in the data. The analyst looks for quotations or observations that go together, that are examples of the same underlying idea, issue, or concept. The evaluator typically begins by reading through field notes, interviews, and case studies while writing comments in the margins indicating what can be done with the different parts of the data. This is the beginning of organizing the data into topics and files (Patton, 1987).

The procedure of content analysis is to start from a basic step which defines the data, and selects the interviews or those parts which are relevant to answering the research question (Flick, 2006). In the first step, the data are formally characterised. Theoretically based definitions of the aspects of analysis and main/sub categories are defined in this step. In the second step, analytic units are defined. The coding unit identifies what is the smallest element of material which may be analysed, the minimal part of the text which may be under a category. The contextual unit characterizes what is the largest element in the text which may put under a category. The analytic unit identifies which passages are analysed one after the other. In the next step, the defined categories and coding agenda are revised. In the fourth step, the final analysis is conducted through the texts before their results are interpreted. Finally, the results of analysis are interpreted with respect to the research question and questions of validity are addressed (Flick, 2006; Mayring, 2000). Figure 4.4 is redesigned by the author, based on integrating the existing literature of Flick (2006) and Mayring (2000) and described the procedure of content analysis.
Content analysis is not limited to a certain theoretical background. It is mainly used to analyse subjective viewpoints, collected with semi-structured interviews (Flick, 2006; Mayring, 2000). The aspects of text interpretation, following the research questions, are put into categories, which were carefully founded and revised within the process of analysis (Mayring, 2000). Content analysis is a replicable and valid method for making specific inferences from text to other states or properties of its source (Krippendorff, 2004).

4.7 Summary

This chapter discussed the methodology of the present study. It started with a discussion of the rationale of the research philosophy. Then, following the study objectives, along with brief explanations of their theoretical backgrounds. The specific objectives of the study were to define influencing factors on consumers' behavioural intention and realised purchase behaviour for organic food, examine
effects of factors on purchasing intention and realised behaviour and investigate determinants of the relationship between intention and realised behaviour for organic food in South Korea. The study frame was introduced, followed by brief theoretical backgrounds and study hypotheses. Methodological approaches adopted in this study were explained.

In the next chapter, the process and results of the elicitation survey and the pilot survey are presented, and the development of questionnaire used in the main survey is reviewed.
CHAPTER FIVE
Chapter 5 Methodology II: The Questionnaire Development Process

5.1 Introduction

This research uses two complementary studies. This chapter deals with the process of the development of the questionnaire used in the main survey. An open-ended elicitation survey aimed to set a conceptual framework for the perception of consumers, their attitude and purchasing intention towards organic food. The results were used to design the questionnaire for the main survey. A pilot survey was conducted to determine problems with the designed questionnaire.

5.2 Elicitation Survey

5.2.1 Research Questions and Objectives of the Elicitation Survey

The elicitation survey was an exploratory study which aimed to build a conceptual framework for the concept of consumers' attitude and intention to purchase organic food and to help design the questionnaire for the main study. This type of process is particularly necessary for the research of Korean consumers' intention to purchase due to the lack of a conceptual basis in the existing literature. This study instrument was designed around the Theory of Planned Behaviour (TPB) (Ajzen, 1985). This elicitation survey also helped to identify those specific beliefs and referents for inclusion in the instrument (Ajzen, 1985; Eves and Cheng, 2007). The present study tried to find consumers' attitude, past experience and trust for organic food by using a
questionnaire based on literature reviews. The result of the survey was used to design
the experimental conditions for the main study.

Therefore, the main objective of the elicitation survey is to set up a conceptual
framework for consumers' opinions and beliefs about organic food and to help
construct the questionnaire for the main survey. The specific objectives of this study
are to:

- identify the concept of consumers' beliefs, past experience and trust for
  organic food.

- identify the concept of consumers' intention and the reason to purchase
  organic food.

- assess the conceptual framework to set up the questionnaire for the main study.

5.2.2 Research Methodology

This section investigates some general methodological issues that are particularly
related to the collection of data for the elicitation survey: sampling design, data
collection method and data analysis method.

5.2.2.1 Sampling Design

Sampling methods can be divided into the two broad categories of probability and
nonprobability. Probability sampling is used when elements in the population have a
known opportunity of being included in the sample, whereas nonprobability sampling
is adopted when elements do not have known or predetermined chance of being
selected as subjects (Sekaran, 2003). Considering the features of probability and
nonprobability sampling, the nonprobability convenience sampling method was used
for the elicitation survey, because the purpose of this survey was to explore the
concept of Korean consumers' beliefs and intention to purchase for organic food;
secondly, limited time and resources were available because of long distance between researcher and sample. The detail of sampling methods is explained in Section 4.5.

Sample sizes between 30 and 500 could be effective depending on the type of sampling design used and the research question investigated. In qualitative studies, typically small sample sizes are used because of their concentrated nature (Sekaran, 2003). Morgan (1998) suggests smaller samples when participants are likely to have plentiful knowledge to say on the research topic. This can occur when participants are very involved in or emotionally preoccupied with the topic. He also recommends smaller sample sizes when topics are controversial or complex and when gleaning participants' personal opinions in a major goal. Morgan suggests larger samples when a topic is low involvement with participants, when the researcher wants 'to hear numerous brief suggestions'. Fenton et al. (1998) also suggest that a topic like media representations of social science research, which most people are unlikely to have much interest in or even to have thought about, could easily have resulted in a wall of silence in large samples.

Because qualitative research method will be adopted to conduct the elicitation survey, large sample size is not appropriate. However, this survey's main objective is to find consumers' numerous opinion for organic food. Consumers' are not expert in organic food, and the researcher need to hear their perceptions and beliefs for organic food. In addition, with considering data collection method which is used in this survey (See following Section 5.2.2.2), small sample size is also not adequate to adopt for the elicitation survey. Therefore, between 30 and 100 sample size is proper for this survey, the sample size is to be decided as 60 people.

5.2.2.2 Method of Data Collection

The objective of the elicitation survey is to identify variables based on consumers' in-depth opinions. Interviewing, specifically semi-structured interviews may be more ideal as a data collection method in this survey, because interviewing is used to find variables through in-depth discussion (Bryman, 2004). However, significant problems exist for the researcher to conduct interviews with a participant in person when
considering time, distances and other costs. On the other hands, although questionnaires can not yield much in depth information, this problem can be covered by using open questions, because open questions are used, when researchers need a detailed answer or deep information (Bryman, 2004). In addition, by using a mail questionnaire, the researcher can reach participants over a wide geographic area, if the researcher is not able to access respondents (Saunders et al., 2007). Hence, considering advantages and disadvantages of interviews and questionnaires, open-ended questionnaires were sent to participants in this survey, yielding qualitative data.

5.2.2.3 Method of Data Analysis

Qualitative data refers to all non-numeric data or data that have not been quantified. It can range from a short list of responses to open-ended questions in an online questionnaire to more complex data such as transcripts of in-depth interviews or entire policy documents. To be useful these data need to be analysed and the meanings understood (Saunders et al., 2007).

There are many qualitative research approaches, with the result that there are also different strategies to deal with the data collected. Tesch (1990) groups these strategies into four main categories: 1) understanding the characteristics of language, 2) discovering regularities, 3) comprehending the meaning of text or action, 4) reflection. Tesch’s four categories point out a number of broad ways of differentiating approaches to qualitative analysis. Some approaches to analysing qualitative data may be highly formalised and proceduralised, whereas others rely much more on the researcher’s interpretation. In broad terms, the first two categories are associated with some analytic strategies that begin deductively, where data categories and codes to analyse data are derived from theory and researchers’ predetermined analytical framework. In contrast, other analytic strategies associated with this list start inductively, without predetermined, or a priori, categories and codes to direct researchers’ analysis (Saunders et al., 2007). However, because qualitative data deriving from interviews or participant observation typically take the form of a large corpus of unstructured textual material, qualitative data has diverse features. Thus,
there is no standardised approach to the analysis of qualitative data (Bryman, 2004; Saunders et al., 2007).

The objective of the elicitation survey is to find relevant factors to this research by collecting consumers’ opinions. Because the interview was carried out using open-ended questions administered online, this survey took the form of a semi-structured interview. Therefore, taking account of the advantages and features of content analysis (See Chapter 4 section 4.6), it was adopted as the analysis method for the elicitation survey.

5.2.3 Field Work

In this section the administrative procedures relating to the fieldwork for the elicitation survey are presented.

5.2.3.1 Questionnaire Layout

The questionnaire consisted of two parts, Part 1: measuring questions asking consumers’ attitude, intention to purchase, past experience and trust for organic food and Part 2: socio demographic questions (Appendix A-1).

Part I was divided into 7 sections, based on the main research model of this research (See Chapter 4 section 4.4).

In the first section of part 1, respondents were asked about their knowledge of and purchasing behaviour for organic food. The second section of part 1 began with questions, designed to elicit respondents’ intention to purchase organic food.

The third section of part 1 dealt with establishing the attitude of consumers towards organic food using two questions, ‘what do you believe are the advantages of purchasing organic food?’ and ‘what do you believe are the disadvantages of purchasing organic food?’.
The fourth section determined respondents’ beliefs about the normative expectations of others towards them purchasing of and their motivation to comply with these expectations using four open ended questions.

The fifth section established respondents’ beliefs about the existence of factors that may assist or obstruct performance of the behaviour and the perceived power of these factors. This was measured by two questions, ‘what factor or circumstances make it easier for you to purchase organic food?’ and ‘what factor or circumstances make it difficult for you to purchase organic food?’.

The sixth section asked about consumers’ past experience for purchasing organic food and consisted of three questions. The first question asked about respondents’ experience of and satisfaction with purchasing organic food. The second and third questions determined the reasons for their satisfaction.

The last section elicited consumers’ trust in organic food using six questions. Respondents were asked about ‘information sources for organic food’, ‘which of the sources would they trust most’ and ‘whether they trust that the food is organic or not and the reason why’.

Part II obtained respondents’ socio-demographic profiles. Subjects were asked to provide their gender, age, education level, marital status, number of children and income. This part was designed to investigate the socio-demographical influences on perceptions and behavioural intentions to purchase organic food, because these characteristics have been suggested as significant factors that affect consumers’ perception and behaviour (Solomon, 2006).

5.2.3.2 Pilot Study

To test the reliability of questionnaire, it must go through the process of a pilot study. A pilot study is a small-scale study, and normally it consists of administering the proposed questionnaire under actual research conduction. Responses obtained from a pilot study can be analysed according to research design, and tentative conclusions
might be made. Thus, a pilot study can provide information on many aspects of the research, such as the likely answers and an assessment of research cost, in addition to questionnaire-related information (Peterson, 2000). The pilot study’s sample was chosen as Koreans who buy food in order to match the main sample of this research. However, its size is smaller than a whole sample. This procedure aimed to remove potential problems in the questionnaire. After the pilot study, some questions may be added, deleted or modified until the questionnaire in relation to feedback collected (Aaker et al., 2007).

The pilot study for the elicitation Survey was conducted from the 21st to 23rd of March, 2007. Eleven Korean undergraduate and postgraduate students living in Guildford and London were selected for the pilot study. The average time to complete the questionnaire was 15 minutes. The focus of the pilot study was to find directions and questions which were difficult to understand and to check the translation between Korean and English. The piloting procedure revealed that there were some drawbacks in understanding the context of some questions, although most of the respondents found no translation problems.

Most participants gave comment that they felt that some questions were repeated. Three respondents felt that Question 4.1 *the reason why have intention to buy for organic food*, Question 5. *the advantage of purchasing organic food*, and Question 9 *factor affecting buying organic food* were similar questions. They also mentioned that Question 6. *the problems of buying organic food* and Question 10. *factors affecting negatively buying organic food* were similar. Another two respondents gave the same response in Question 13 *trust in real organic food* and Question 14 *trust in its quality and safe or organic food*.

Secondly, there were some problems with the sincerity of responses. Although most participants replied that it is easy to understand the questionnaire and the survey was not boring, many respondents did not answer in detail. Particularly, in questions related to explanations about the reason for purchasing organic food such as Question 4.1 *the reason why have intention to buy for organic food* or Question 8.1 *the reason...
why people disapprove of your purchasing for organic food, most respondents did not give a reason or answered very briefly.

Following the pilot study of the elicitation survey, some questions were modified. First, questions related to the reason for intention to buy for organic food were deleted and a question related to the frequency for purchasing organic food was added. Secondly, within questions that respondents had felt were similar, Question 14 trust in its quality and safe or organic food was deleted. The final form of questionnaire for the elicitation survey is presented in Appendix A-1.

5.2.3.3 Data Collection

An online survey was adopted for collecting data, and a snowball sampling method was adopted for sampling. Snowball sampling is a technique for developing a research sample where existing study subjects recruit other subjects from among their acquaintances. Thus, the sample group appears to grow like a rolling snowball. This sampling technique is often used in hidden populations which are difficult for researchers to access (Salganik and Heckathorn, 2004).

Questionnaire was constructed in a special online survey website before being distributed to respondents. The Web address where the questionnaire could be found and completed was e-mailed to 10 participants who researcher’s acquaintances living in South Korea, and those 10 participants forwarded the Web address to 6 of their acquaintances. The survey was carried out between 27th March to 4th April, 2007 and 59 questionnaires were completed. On review of completed questionnaire, there was found to be a lack of respondents over 45 years (11% of total 59 respondents). Therefore, a second survey was carried out to collect the opinions of older consumers.

The second survey was carried out between 3rd May to 9th May, 2007. An e-mail survey was used for the second survey. A total of 20 people’s e-mail addresses were collected from researcher’s acquaintances, and 20 questionnaires were distributed, 16 completed questionnaires were returned.
A total of eighty questionnaires were ultimately distributed, and 75 completed questionnaires were used for analysis.

5.2.4 Result of Analysis

In this section the results of analysis of the elicitation survey are presented. Content analysis was used to analyse the data, and 6 categories were derived from the data. Those six categories are: 1. Consumers' understanding of organic food; 2. Consumers' intention to purchase for organic food; 3. Consumers' positive beliefs about organic food; 4. Consumers' negative beliefs about organic food; 5. Consumers' past experience of purchasing organic food; 6. Consumers' trust of organic food.

5.2.4.1 Sample

The sample comprised 36 males and 39 females. There were 9 respondents aged under 24 years old, 31 respondents aged between 25-34, 12 respondents at 35-44 years old, 13 respondents aged between 45-54 and 10 respondents of over 55 years. Fourteen respondents had completed high school, 48 had graduated from university or were university students, and 13 people had taken or were taking a postgraduate course. Thirty eight people were married, 36 were not married, and 1 was 'other' (such as divorced, separated by death). Respondents having no children amounted to 40, respondents having one children amounted to 13 and respondents having two or more child amounted to 22. There were 15 respondents who were earning under 2 million won per month, 18 respondents earning 2.01 million – 3.50 million won per month, 25 respondents earning 3.51 million – 5.00 million won per month, and 17 respondents earning over 5.01 million won per month.

5.2.4.2 Understanding of Organic Food

Most of the participants understood organic food to be food to which agrichemicals or chemical fertilizers are not added, and food products that are produced by organic
production methods, such as using natural manure, or controlling blight and harmful insects through the use of natural enemy.

"Using natural fertilisers. Agricultural products or food products made from those agricultural products which are grown by an organic cultivation method provides protection from damage by blight and harmful insects by using a natural enemy (Male/35-44 years old)"

Twelve respondents described organic food as 'harmless' or 'healthy' and environmentally friendly food, because organic food is not sprayed with agricultural chemicals.

"Organic food is harmless to human and helps to protect the environment, because farmers cultivate organic products by using environmentally friendly composts and organic methods of cultivation instead of using chemical fertilizers (Female/under 24 years old)"

"I can have it without worrying because no chemicals are added to it. It can be helpful for the health of my family (Female/25-34 years old)"

Baker et al. (2004) used the Means-End Chain model to investigate the values that induce German and British consumer to buy organic food. Most of the German consumers understood organic food to be healthy food, and "health-relatedness" was the most important factor influencing purchase of organic food. The British consumers also perceived organic food’s "health-relatedness" to be the main factor influencing their choice of organic food. According to Baker et al. (2004), this perception related to "healthy food" as a result of a fear of chemicals.

Those who had experience of organic food choice mainly buy vegetables and fruits. This result is supported by Lim (2005). Lim carried out market research to find consumers' propensity to consume organic food in a supermarket, Seoul. It was found that consumers preferred to buy organic vegetables and fruits.
5.2.4.3 Intention to Purchase

Most of the participants (64 out of 75) intended to purchase for organic food, with thirty three participants have intending to purchase organic food more often than once in every 2 weeks. Those who did not intended to purchase organic food referred to its high price.

“I don’t want to buy it not really because of its high price (Male/ 25-34 years old)”

Amongst participants who intended to purchase organic food, expensiveness was also a main obstacle.

“If there are no big differences between organic food and conventional food, I really intend to buy organic food. But, its expensiveness is the problem (Male/ over 55 years old)”

This issue has also been noted in previous research (Briesch et al. 1997; Guadagni and Little, 1983; Moon et al., 2006). According to Guadagni and Little (1983), consumers have distinctive price responses that reflect the manner in which they process price information. Consumers are assumed to treat the price as a relevant decision variable in making a choice (Briesch et al. 1997).

5.2.4.4 Positive Beliefs about Organic Food

Most of the participants believed that organic food helped to improve their health, and that they can eat it without any fear, because organic food is safe to the human body.

“It is good for our health, because it is chemical free food. So, I can have it with an easy mind (Male/ 25-34 years old)”

This result was again linked to freedom from chemicals. This perception was also noted by Devcich et al. (2007). According to their research, modern health worries were significantly related to a preference for foods with natural as opposed to synthetic additives, and for organic food.
Most of the participants also thought that organic food was environmentally friendly food, again linked to freedom from chemicals.

"It is good for children's health and for the protection of the environment because it is not sprayed with any agrichemicals or chemical fertilizer (Female/ 45-54 years old)"

The increasing importance of health, and the impact the food production has on the environment, on food consumption trends suggest that consumers want not only healthy but also environmentally sustainable food products (Magnusson et al., 2001; Torjusen et al., 2001; Wandel and Bugge, 1997). Consumers with more concern about their health and environmental protection will be more likely to have a positive attitude to organic foods (Chen, 2007).

Most of the people around the participants were thought to approve of the respondent purchasing organic food because it is good for health and its production and consumption may help to protect the environment. Some indicated quite specific perceived benefits such as became delicate their skin and taking period pains away.

"My friends recommend me to buy organic food in order to protect from endocrine disruptor and harmful chemical things to human and environment (Female/ under 24)"

"My friends approve of purchasing organic food because skins of fruits have many nutritive elements and organic fruits can be eaten with skin and all (Female/ 45-54 years old)"

Similar results were noted by Chen (2007). Since organic foods are perceived as healthier and environmentally friendly (Schifferstein and Oude Ophuis, 1998; Williams and Hammit, 2001), Chen (2007) found that when consumers perceive that the important people surrounding them think organic foods are better than conventional foods, they will have more intention to purchase organic foods.
Many respondents mentioned concern for the health of children and family and a prospect of health improvement can be positive influence on consumption of organic food.

"In order to improve health of my family and me, it is a good choice of organic food which can be eaten with confidence (Female/ 45-54 years old)"

Others thought that social issues relating to well-being and promotion by the mass media had had a positive effect on their purchase of organic food.

"TV or other mass media explain many benefits of organic food. After watching them, I feel that I have to buy organic food (Male/ 25-34 years old)"

Consumers’ prospect to improve quality of life for their family and themselves, such as "enjoyment", "well-being" and "health" as well as "personal achievement" has previously been found to have a positive effect on consumers’ organic food choice (Baker et al., 2004). Søndergaard and Edelenbos (2007) also suggested linking family decision-making and food choice. Parents were more concerned about health, and thus, the ‘healthiness’ to be a main motivation for purchasing food.

Some others referred to contribution to the economy and better taste.

"It helps to improve the health of my family and to develop rural and national economy. Also, I felt its better taste and fresh (Female/ 45-54 years old)"

Similarly, Rehber and Turhan (2002) stated that organic food helped the farmers to increase productivity and to protect natural resources through using proper technological systems and also to develop the national economy. Wier et al. (2008) pointed out that European consumers’ organic food choice was primarily motivated by their positive perception towards organic food such as freshness, taste and health benefits.

5.2.4.5 Negative Beliefs about Organic Food

Most of participants thought that the high price of organic food had a negative effect on their household economy.
"I always have a challenge to buy organic food because it is more expensive than
conventional food (Male/ 25-34 year old)"

In addition, they thought that organic food had to be eaten promptly because it
spoiled faster than conventional food.
"It doesn't keep very well (Male/ 45-54 years old)"

Others referred to poor appearance and the presence of pests.
"It is too expensive, and fruits and vegetables are not looking so good, and there are
many worms in the fruits. (Female/ 35-44 years old)"

There were a few surrounding people who were thought to disapprove of the purchase
of organic food, believing that they can not trust it is organic, and that there are no
differences between organic food and conventional food.
"My friend asserts that organic food is also added few agrichemicals, and if it is
washed many times, conventional food is not different with organic food (Female/ 35-
44 years old)"

Many participants found it difficult to buy organic food because of its high price and
lack of confidence in its status. Limited availability of organic food was also an
important barrier to purchasing organic food. Respondents indicated that even if they
wanted to buy organic food, they could not find it easily.
"It is expensive, and I can't find an organic shop, and I can't trust it is organic. So, I
can't normally buy it (Female/ 35-44 years old)"

Higher prices are thought to be a main barrier to choosing organic food. The
relationship between organic products and higher prices, but not higher quality, as
compared with conventional products has been found to be a negative factor for the
image of organic products (Magnusson et al., 2001; Torjusen et al., 2001). ‘Not easily
available’ and ‘inconvenient location of point of sale’ were main factors creating
negative influence on organic food consumption. Lack of availability could play a
significant role in intention to purchase, including amongst those who have a strong
intention to purchase organic food given the choice (Chen, 2007; Chryssohoidis and Krystallis, 2005; Zanoli and Naspetti, 2002).

5.2.4.6 Experience

Most of the participants (68) had some experience of purchasing organic food, and most of those participants (47) were satisfied with their choice. The main reason of their satisfaction is that they felt good after eating organic food. Participants mentioned such benefits as a cure from diabetes, improvement in a delicate skin and taking period pains away.

"My children have took their atopic dermatitis away (Male/ 25-34 years old)"

"It is fresh, and my period pain is getting better (Female/ 45-54 years old)"

"It is helpful to my wife’s diabetes (Male/ over 55 years old)"

Greenish yellow vegetables are reported to be effective to cure cancer and geriatric diseases because they have various efficacy components such as minerals, unsaturated fatty acids and vitamin (Lee et al., 1992; Tsujimura et al., 1990). Kim et al. (2004) found that concentration of these efficacy components in organic green vegetables were higher than in normal green vegetable. They suggested that organic food could be useful as food for medical treatment of cancer and geriatric disease. The feeling of healthiness suggests that consumers are choosing something that is good for them and their family related to the nutritional value of the food eaten. Consumers believed that organic food is good for health (Chen, 2007). In Dean et al.’s study (2006), people expressed feelings such as good for health, pleased, safe, in relation to organic foods.

Another sixteen participants answered that better taste and freshness means they are satisfied with organic food choice.

"I am satisfied because of its quality. Vegetables are fresher and tastier, and have better aroma. I might be keep eating organic food (Female/ 35-44 years old)"

The majority of organic consumers felt that organic food tasted better than conventional, and taste has been reported to be the most important purchase criterion
(Kihlberg and Risvik, 2007; Magnusson et al., 2001). People tend to repeat contact with stimuli that give rise to pleasurable sensory sensations (Warburton, 2003).

Those who were not satisfied with organic food answered that organic food was too expensive, and that they cannot obtain the desired efficacy from it.

“Although it is more expensive than others, I can’t get any efficacy from it (Male/ 35-44 years old)”

“It is too expensive, and I don’t know if it is really organic. I couldn’t tell the difference compared with conventional food (Female/ 35-44 years old)”

Consumers who felt that in spite of the higher price of organic food, there was not higher quality than conventionally grown products, had negative attitudes towards organic food purchase (Magnusson et al., 2001). Verbeke and Vackier (2005) investigated how recognition of price by past purchase experience influenced consumers’ attitude towards fish. The factors ‘past experience’ and ‘habit’ were positively correlated with all the items of the positive attitude factors (such as satisfaction, healthiness, nutritional value, trustworthiness, taste), but were negatively correlated with the items ‘price’. The high price perception of fish was most negative for more experienced respondents.

There were more participants who were satisfied with organic food choice in the older age group (over 45 years old). Only seventeen percent of the older group were not satisfied with their experience, whereas, thirty three percent of the younger groups were not satisfied. The main reason for the dissatisfaction of the younger group was the expensiveness of organic food, whereas, expensiveness was mentioned by only two participants in the older group.

Kihlberg and Risvik (2007) compared two age groups to see whether there are important differences in values and hedonic evaluation of organic food between older consumers and younger consumers in Sweden. In their study, those over 30 years old had a greater intention to buy organic products than those under 30 years old. Saba and Messina (2003) investigated consumers’ attitude and risk/benefit perceptions.
towards organic foods. Younger consumers (under 39 years old) did not purchase because they believed that to eat organic fruits and vegetables means paying more.

5.2.4.7 Trust

Trust of Information for Organic Food

Many participants received information about organic food from the mass media, such as TV, the Internet, newspapers, magazine and radio, and they trusted information related to organic food from those mass media. The main reason for confidence with information from mass media was that such information is verified and that mass media offers accurate information through experts’ opinion.

"Experts explain specific benefits of organic food on TV, and I think that TV offers verified information to audiences (Female/ under 24 years old)"

Verbeke (2005) identified that the most important information source regarding food quality and safety in general is the mass media, with advertising being the most widely used tool. In addition, television documentaries and high quality newspapers (Hunt and Frewer, 2001) have been reported as the most trustworthy information sources about food products. Findings of the Eurobarometer (2006) survey showed that physicians or doctors, and scientists are the most trusted sources when it comes to providing information about food risks, because they are experts.

Others were most confident with information from their friends or family, because information from them is verified by their experiences.

"I can trust because my friends recommend to me from their experience (Female/ under 24 years old)"

The most frequently used information sources by consumers are family and friends (Pieniak et al., 2007). The ‘personal influence’ source has consistently been shown to play a more significant role in influencing behaviour than advertising and market-dominated sources (Blackwell et al., 2001).
Trust of Organic food

Many participants trusted in organic food as they felt better after eating organic food. This result was again linked to feeling better after eating organic food.

"After eating organic food, I felt good. And, it had a better taste and freshness (Female/ 25-34 years old)"

"I can have confidence with it because my friend had effect by organic food (Male/ 45-54 years old)"

Batte et al. (2007) investigated consumers' willingness to pay for multi-ingredient, processed organic food products. Results suggested that consumers are willing to pay premium prices for organic foods with over 95% organic ingredients. Health concerns were expected to be important determinants of willingness to pay for selected food attributes. Thus, consumers who felt good after eating organic food trusted the quality of organic food and had more strong intention to buy organic food (Dean et al., 2006).

In addition, they trusted that labelling of organic food was accurate, with a picture and the name of the manufacturer on the label.

"There are the origin, the date of manufacture, and name and picture of manufacturer on the cover. So, I can trust it. (Female/ 25-34 years old)"

Some participants trusted that information provided by authorities such as consumer organisations (e.g. Agricultural Cooperatives in Korea).

"I tended to trust information from NongHyup (Agricultural Cooperatives in Korea). So, I sometimes buy organic food because NongHyup recommended it is good (Male/ over 55 years old)"

On-package information for food products is increasingly relevant for those consumers who want to differentiate between conventional products and organic products with distinctive advantages in terms of moral and health aspects of eating (Caswell, 1997). Accurate information through the label can influence on consumers' purchase decision (Hoogland et al., 2007) and standardised information by authorities
increased consumers’ perception of the trustworthiness of organic products (Torjusen et al, 2004).

Those who did not trust organic food thought that there is no 100% chemical free organic food, and it possibly has a few agrichemical or chemical fertilizers.

"If it is sold with name of organic products, I think, there is no 100% chemical free organic food (Male/ 45-54 years old)"

5.3 Questionnaire Generation

The design of the questionnaire involved two main steps. In the first step, the main factors used in this research were identified by the elicitation survey. Secondly, the questionnaire of the current study was developed through findings of the elicitation survey and literature reviews of prior studies using the Theory of Planned Behaviour (TPB) model, and exploring factors influencing organic food purchase.

5.3.1 Elicitation of Variables

In the elicitation survey, respondents’ attitude, subjective norm, perceived behavioural control and intention for organic food were asked with reference to ‘Constructing a TPB questionnaire’ (Ajzen, 2002). Questions to establish consumers’ understanding and perception of organic food (Chryssohoidis and Krystallis, 2005; Fotopoulos and Krystallis, 2002; Hutchins and Greenhalgh, 1997), purchase experience (Canavari et al., 2002; Schifferstein and Oude Ophius, 1998), frequency of purchasing (Jolly, 1991; Magnusson et al., 2001; Magnusson et al., 2003; Schifferstein and Oude Ophius, 1998), satisfaction of purchasing (Cheng et al., 2005; Hsu et al., 2006; Jolly, 1991), and trust (Chen and Li, 2007; Frewer et al., 1996; Lockie et al., 2004; Pieniak et al., 2007; Siegrist, 2000; Williams and Hammitt, 2000) were also included in the elicitation survey (See Appendix A-1).
Categories, including Korean consumers' understanding of organic food, intention to purchase, positive and negative beliefs, past experience and trust resulted in 29 items which were used as variables in the present study (Table 5.1).

### Table 5.1 Categories and Items by the Result of Elicitation Survey

<table>
<thead>
<tr>
<th>Categories</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of Organic Food</td>
<td>Non chemicals food, Healthy food, Environmentally friendly food</td>
</tr>
<tr>
<td>Positive Beliefs about Organic Food</td>
<td>Health, Food Safety, Good Taste, Fresh</td>
</tr>
<tr>
<td>Negative Belief about Organic Food</td>
<td>High Price, Shorter Shelf-life, Presence of pests, Lack of availability</td>
</tr>
<tr>
<td>Past Experience</td>
<td>Satisfied with choice, Direct or indirect benefits</td>
</tr>
<tr>
<td>Trust of Information Source</td>
<td>Family, Friend, Retailer, Authorities</td>
</tr>
<tr>
<td>Trust of Organic Food</td>
<td>Confidence of accurate label, Efficacy, Lack of confidence for quality</td>
</tr>
</tbody>
</table>

*Source: This Study*

### 5.3.2 Measurement of Variables

The measurement for all the variables in this research relied on previous research and the results of the elicitation survey. In the questionnaire, interval and nominal scales, and open-ended questions were used as appropriate to suit the purpose of each question. In this research, measurement of items used 7-point Likert-type scales (e.g., 1 = Extremely Disagree to 7 = Extremely Agree), 7-point numeric scales (e.g., 1 = Extremely Unlikely to 7 = Extremely Likely) and 7-point bipolar rating scales (e.g., 1
Bad to 7 = Good) based on the results of the pre-pilot survey and literature reviews, and with reference to ‘Constructing a TPB questionnaire’ (Ajzen, 2002). Ajzen (2002) stated that there is no a priori way to determine the proper scaling of beliefs (Conner and Norman, 2005), and the correct scoring depends on the way in which the respondents more easily interpret and answer the scale.

Open-ended questions were adopted to obtain information for following interviews. Nominal scales were also used to determine respondents’ gender, education level, living circumstances, age of children and household income (e.g. Male = 1, Female = 2).

Table 5.2 shows the measurements including variables, question, scale and source.
### Table 5.2 Construction of the Questionnaire

<table>
<thead>
<tr>
<th>Construct</th>
<th>No.</th>
<th>Questions</th>
<th>No. of Items</th>
<th>Scale</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased Experience</td>
<td>Q1</td>
<td>Purchased Experience</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
<tr>
<td>Past Purchasing Behaviour</td>
<td>Q2</td>
<td>Past experience of Organic Food Purchasing</td>
<td>11</td>
<td>Interval</td>
<td>7-point</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q3</td>
<td>Ideal of Organic Food Purchasing</td>
<td>11</td>
<td>Interval</td>
<td>7-point</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q4</td>
<td>The reason of purchasing</td>
<td>1</td>
<td>Open*</td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>Q5</td>
<td>Intention to purchase</td>
<td>1</td>
<td>Interval</td>
<td>7-point numeric</td>
</tr>
<tr>
<td>Attitude</td>
<td>Q6</td>
<td>Perceived likelihood of outcome of purchasing organic food</td>
<td>9</td>
<td>Interval</td>
<td>7-point Likert</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q7</td>
<td>Attitude</td>
<td>6</td>
<td>Interval</td>
<td>7-point bipolar rating</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>Q8</td>
<td>Evaluation of those outcomes of purchasing organic food</td>
<td>9</td>
<td>Interval</td>
<td>7-point bipolar rating</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>Q9</td>
<td>Subjective Norm</td>
<td>1</td>
<td>Interval</td>
<td>7-point Likert</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q10</td>
<td>Normative Belief</td>
<td>6</td>
<td>Interval</td>
<td>7-point Likert</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q11</td>
<td>Motivation to Comply</td>
<td>6</td>
<td>Interval</td>
<td>7-point Likert</td>
</tr>
<tr>
<td>Trust of Information</td>
<td>Q12</td>
<td>Perceived Behavioural Control</td>
<td>1</td>
<td>Interval</td>
<td>7-point numeric</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q13</td>
<td>Control Belief</td>
<td>3</td>
<td>Interval</td>
<td>7-point bipolar rating</td>
</tr>
<tr>
<td>Trust of Information</td>
<td>Q14</td>
<td>Trust in Information Sources</td>
<td>7</td>
<td>Interval</td>
<td>7-point numeric</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q15</td>
<td>Reason of Trust (Do Not Trust) in Information Sources</td>
<td>1</td>
<td>Open*</td>
<td></td>
</tr>
<tr>
<td>(Result of李licitation Survey)</td>
<td>Q16</td>
<td>Reason of Trust (Do Not Trust) in Information Sources</td>
<td>1</td>
<td>Open*</td>
<td></td>
</tr>
<tr>
<td>Trust of Organic Food</td>
<td>Q17</td>
<td>Trust of Organic Food</td>
<td>1</td>
<td>Interval</td>
<td>7-point bipolar rating</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q18</td>
<td>Reason for Trust of Organic Food</td>
<td>5</td>
<td>Interval</td>
<td>7-point Likert</td>
</tr>
<tr>
<td>(Result of Elicitation Survey)</td>
<td>Q19</td>
<td>Reason for Do Not Trust of Organic Food</td>
<td>5</td>
<td>Interval</td>
<td>7-point Likert</td>
</tr>
<tr>
<td><strong>PART 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td>Q1</td>
<td>Gender</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
<tr>
<td>(Kihlberg &amp; Risvik, 2007; Lockie et al., 2004; Magnusson et al., 2003; Williams &amp; Hammitt, 2000)</td>
<td>Q2</td>
<td>Age</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
<tr>
<td>(Kihlberg &amp; Risvik, 2007; Lockie et al., 2004; Magnusson et al., 2003; Williams &amp; Hammitt, 2000)</td>
<td>Q3</td>
<td>Education</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
<tr>
<td>(Kihlberg &amp; Risvik, 2007; Lockie et al., 2004; Magnusson et al., 2003; Williams &amp; Hammitt, 2000)</td>
<td>Q4</td>
<td>Living Circumstances</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
<tr>
<td>(Kihlberg &amp; Risvik, 2007; Lockie et al., 2004; Magnusson et al., 2003; Williams &amp; Hammitt, 2000)</td>
<td>Q5</td>
<td>Age of Children</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
<tr>
<td>(Kihlberg &amp; Risvik, 2007; Lockie et al., 2004; Magnusson et al., 2003; Williams &amp; Hammitt, 2000)</td>
<td>Q6</td>
<td>Household Income</td>
<td>1</td>
<td>Nominal</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Summarised by Author

**Note:** * Open-ended question
5.3.2.1 Intention to Purchase

Intention has traditionally been measured as a probability or likelihood of performing a behaviour (Thompson and Thompson, 1996). Fishbein and Ajzen (1975) recommended an expectation measure of intention because such a measure takes into account real constraints that may prevent people from performing the behaviour in question. Mahon et al. (2006) investigated predictors of ready meal and takeaway consumption, and Guardia et al. (2006) examined purchasing intention towards reduced salt meat products using the TPB model. According to Ajzen and Fishbein (1980), researchers have to consider all contexts in which the behaviour may reasonably occur and that they have to make their survey over a reasonable period of time. In this study, respondents’ purchasing intention limited within 1 week. This study measured intention to purchase organic food with 1 item using a 7-point numeric scale, ranging from 1 = Extremely Unlikely to 7 = Extremely Likely.

5.3.2.2 Attitude

The TPB model posits that behavioural intention is a function of attitude, reflecting individuals’ favourable or unfavourable evaluation of the particular behaviour (Fishbein and Ajzen, 1975). In this study, the direct measurement of the attitude component was based on a 7-point bipolar rating scale. Respondents were required to respond to six statements (e.g. For me to purchase organic food is . . . , etc.), using bipolar adjective pairs for each statement (i.e. bad/good, harmful/beneficial, unhelpful/helpful, unpleasant/pleasant, un-enjoyable/enjoyable and worthless/valuable).

An indirect measure of attitudes is usually derived from the strength of the behavioural beliefs weighted by how much respondents value the outcomes accruing from performing the particular behaviour (Ajzen, 1985; Lam and Hsu, 2006). The behavioural beliefs and outcome evaluations were measured on a set of 9 beliefs statements. The statements were built following the structure of questionnaire guidelines by Ajzen (2002) and the results of elicitation survey: (1) health benefit; (2) tastes; (3) food safety; (4) protection of environment; (5) contribution of economy; (6)
expensive; (7) shorter shelf life; (8) poor appearance; (9) presence of pests. Respondents were made using a 7-point Likert type scale (i.e. 1 = Extremely Disagree to 7 = Extremely Agree), using bipolar end points (i.e. Bad = 1 to Good = 7).

5.3.2.3 Subjective Norm
In the TPB model, behavioural intention is also predicted by subjective norm, referring to the perceived social pressure from important referents to perform or not perform the behaviour (Ajzen, 1985; Madden et al., 1992). Direct measurement for the subjective norm was obtained by asking about the opinions of other’s about the respondent buying organic food (e.g. Most people who are important to me think that I should buy organic food), with a 7-point Likert scale, ranging from 1 = Extremely Disagree to 7 = Extremely Agree.

In addition, the subjective norm is underpinned by normative beliefs focusing upon the perceived pressure from specified referents to perform the target behaviour, weighted by the person’s motivation to comply with these referents (Ajzen, 1985; Wiethoff, 2004). Normative belief and motivation to comply were structured into six reference groups (i.e. family, friends, doctor, scientist, dietician and retailers) based on the structure of questionnaire guidelines by Ajzen (2002) and the results of the elicitation survey.

5.3.2.4 Perceived Behavioural Control
The final predictor of behavioural intention in the TPB model is perceived behavioural control, which reflects the perceived ease and difficulty of performing the particular behaviour (Ajzen, 1985; Mahon et al., 2006). The item was formed on the basis of direct measure of a perceived behavioural control used in previous studies (Bamberg, 2002; Cheng et al., 2005) (i.e. It would be easy for me to buy organic food), with a 7-point numeric scale, ranging from 1 = Extremely Unlikely to 7 = Extremely Likely.
The perceived behavioural control is underpinned by control beliefs. Control beliefs refer to beliefs about the presence and absence of obstacles, impediments and resources, which may hinder or facilitate the performance of a particular behaviour (Ajzen, 1985; Conner et al., 1999; Wiethoff, 2004). In this study, the control beliefs were measured on a set of 3 beliefs statements: (1) expensiveness; (2) trust for its efficacy; (3) availability, derived from the results of the elicitation survey.

5.3.2.5 Past Experience

Bamberg and Schmidt (2001) stated that past experience can be included as substantive predictor of behaviour, equivalent to the other independent variables. According to Ouellette and Wood (1998), the best predictor of intention is the frequency of a past behaviour and Sørensen et al. (1996) reported that more experienced fish consumers have a more positive attitude towards consumption of fish. Similarly, Verbeke and Vackier (2005) pointed out that past experience emerged as a strong determinant of behaviour in the strict sense, which indicated that fish consumption is strongly habituated.

As shown in Table 5.2, the past purchasing behaviour measurement completed 11 items about past experience of purchasing with a 7-point interval scale, anchored from 1 = Never to 7 = Always.

5.3.2.6 Trust

In this study, trust will be added into the proposed research model as a dependent variable, because trust has been formed to be the one of the main determinants of the relationship between behavioural intention and behaviour (Singh and Sirdeshmukh, 2000). Questions regarding trust were divided into two types, Trust of Information Source and Trust of Organic Food Status. Lobb et al. (2007) explained the relationship amongst purchasing intention, trust and risk perception based on the TPB model. Findings showed that trust in food safety information, as provided by various sources had a significant effect on behavioural intention. The trust in information sources measurement was formed following previous literature and the results of the
elicitation survey (i.e., How trustworthy do you think the following sources of information about organic food are?), with a 7-point numeric scale, anchored from 1 = Extremely Untrustworthy to 7 = Extremely Trustworthy (Table 5.2).

Dean et al. (2006) examined the consumption of organic foods by using the TPB model. Finding suggested that consumers’ trust in the quality of organic food can have a significant effect on purchasing behaviour towards organic foods. Based on previous studies and the results of the elicitation survey, three question were formed relates to respondents’ trust in organic food status and reasons why they trust its status or not, using a 7-point bipolar rating scale (i.e., 1 = Extremely Distrust to 7 = Extremely Trust), using a 7-point Likert scale (e.g., 1 = Extremely Disagree to 7 = Extremely Agree).

5.3.3 Questionnaire Layout

After defining and refining items and factors from the elicitation survey and literature reviews, the questionnaire was generated. The structure of the questionnaire was based on ‘Constructing a TPB questionnaire’ (Ajzen, 2002).

The questionnaire consisted of two parts. The first part was divided into seven sections. In the first section, respondents were asked about purchase experience and purchasing behaviour for organic food. Firstly, respondents were asked to answer questions about their past experience of organic food purchasing with a nominal scale (‘yes’ and ‘no’). Then, they were asked to answer their frequency of purchasing experience and their ideal purchase behaviour with specific organic products. Seven-point interval scale was employed. Figure 5.1 shows sample questions asking respondents past experience.
Figure 5.1 Sample Questions asking Past Experience in the Questionnaire

Q1. Have you ever purchased organic food?
   Yes  o Please Start from Q2
   No  o Please Start from Q3

Q2. Please indicate how often you DO buy the following type of organic food?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk and Dairy products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat and Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits and Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soya bean products (e.g. Bean, Tofu)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The second section asked intention to purchase organic food. This question will be used as the dependent variable in this research. Figure 5.2 presents question of intention to purchase organic food.

Figure 5.2 Intention to Purchase Questions in the Questionnaire

Q5. I intend to purchase organic food within the next week.

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unlikely</th>
<th></th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The third section consisted of three questions. This section deals with measuring the attitude of respondents towards organic food. Firstly, perceived likelihood of outcome of purchasing organic food was asked by 9 items (e.g. Q6. Organic food...). Respondents answer seven-point scale from ‘1 = Disagree Extremely’ to ‘7 = Agree Extremely’. Secondly, respondents were asked their attitude for organic food using seven-point bipolar adjectives scales (e.g. Q7 For me to purchase organic food is...). Lastly, evaluation of the outcomes of purchasing organic food was determined using 9 items, and respondents answer from ‘1 = Bad’ to ‘7 = Good’ (Q8. For me to
purchase organic food...). Figure 5.3 exhibits the samples questions regarding attitude in the questionnaire.

![Figure 5.3 Sample Questions asking Attitude in the Questionnaire](image)

<table>
<thead>
<tr>
<th>Q6. Organic food</th>
<th>Disagree Extremely</th>
<th>Agree Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>A. has health benefits</td>
<td>o o o o o o o</td>
<td>o o o o o o o</td>
</tr>
<tr>
<td>B. tastes better</td>
<td>o o o o o o o</td>
<td>o o o o o o o</td>
</tr>
<tr>
<td>C. ...</td>
<td>o o o o o o o</td>
<td>o o o o o o o</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q7. For me to purchase organic food is</th>
<th>1 2 3 4 5 6 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. bad</td>
<td>o o o o o o o</td>
</tr>
<tr>
<td>B. harmful</td>
<td>o o o o o o o</td>
</tr>
<tr>
<td>C. ...</td>
<td>o o o o o o o</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q8. For me to purchase organic food</th>
<th>Bad</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>A. to improve health is</td>
<td>o o o o o o o</td>
<td>o o o o o o o</td>
</tr>
<tr>
<td>B. that tastes better is</td>
<td>o o o o o o o</td>
<td>o o o o o o o</td>
</tr>
<tr>
<td>C. ...</td>
<td>o o o o o o o</td>
<td>o o o o o o o</td>
</tr>
</tbody>
</table>

The fourth section dealt with respondents’ subjective norm for organic food. The first question directly measures subjective norm for organic food, followed by normative beliefs, people’s perceptions of whether specific referents would want them to perform the behaviour under consideration. Lastly, motivation to comply, operationalised as people’s willingness to comply with the expectations of the specific referents, was explored. Seven-point interval scales were employed for all of these questions. In order to consider the case of that there is no applicable person, a N/A column was added into question 10 (normative belief) and question 11 (motivation to comply). Figure 5.4 shows sample subjective norm questions.
### Figure 5.4 Sample Questions asking Subjective Norm in the Questionnaire

**Q9.** Most people who are important to me think that I should buy organic food.

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Q10.** The following people would approve or disapprove of me purchasing organic food.

(N/A: There is no applicable person)

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Family</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>B. Friends</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>C. Doctor</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>D. ...</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**Q11.** Generally speaking, how much do you want what following people think you should do?

(N/A: There is no applicable person)

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Family</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>B. Friends</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>C. Doctor</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>D. ...</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

In the fifth section, respondents were asked about their perceived behavioural control. In the first question, respondents reported their perceived capability of purchasing organic food. Secondly, respondents reported their beliefs that they have control over purchasing organic food, that its whether performance of the behaviours is or is not in their control. To measure respondents' control belief, seven-point interval scale was adopted (Figure 5.5).
Figure 5.5 Sample Questions asking Perceived Behavioural Control in the Questionnaire

Q12. It would be easy for me to buy organic food.

<table>
<thead>
<tr>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Q13. To what extent do the following make it easy or difficult for you to buy organic food.

<table>
<thead>
<tr>
<th>Extremely Difficult</th>
<th>Extremely Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

A. Its expensiveness

B. Trust for its efficacy

C. Availability (Number of choices or stores for organic food)

The sixth section asked respondents’ trust of information sources about organic food purchasing and the reason for their confidence. Seven information sources were included and a seven-point interval scale was used to record response. Two open-ended questions allowed reporting of the reason why they trusted sources.

In the last section, confidence in organic food and the reason why they trust or not was explored. Figure 5.6 depicts sample questions related to trust in organic food.
Figure 5.6 Sample Questions asking Trust in Organic Food in the Questionnaire

Q14. How trustworthy do you think the following sources of information about organic food are?

<table>
<thead>
<tr>
<th>Source</th>
<th>Extremely Untrustworthy</th>
<th>Extremely Trustworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Mass Media (TV, Radio, Newspapers or Magazines etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>B. Most people who are important to me</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>D. Experts (Scientist, Doctor, Dietician etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E. ...</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Q15. For those sources of information you DO trust, please explain why you trust them?

Q17. To what extent do you trust that organic food is truly organic?

<table>
<thead>
<tr>
<th>Extremely Distrust</th>
<th>Extremely Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Q18. If you trust that it is organic, please indicate the reason?

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>Extremely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td>6 7</td>
</tr>
</tbody>
</table>

Part II asked respondents’ socio-demographic characteristics. Respondents were asked to provide their gender, age, education level, living circumstances, age of children and household income (Figure 5.7).
Figure 5.7 Sample Questions asking Socio-demographics in the Questionnaire

<table>
<thead>
<tr>
<th>Q1. Gender</th>
<th></th>
<th>Q2. Age</th>
<th></th>
<th>Q3. Highest education level</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Male</td>
<td>0</td>
<td>1. Less than 24 years old</td>
<td>0</td>
<td>1. Under High school</td>
<td>0</td>
</tr>
<tr>
<td>2. Female</td>
<td>0</td>
<td>2. 25 - 34</td>
<td>0</td>
<td>2. High school</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. 35 - 44</td>
<td>0</td>
<td>3. Undergraduate degree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. 45 - 54</td>
<td>0</td>
<td>4. Postgraduate degree</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. 55 - 64</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. More than 65 years old</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The questionnaire is presented in Appendix A-2.

5.4 Pilot Survey

It is crucial to begin the fieldwork by conducting a pilot study to help the researcher to identify and eliminate possible problems before the main study (Peterson, 2000). Thus, the main purpose of the pilot study was to identify whether the questionnaire is reliable and valid before launching a main survey.

To identify the number of dimensions for the measures, Exploratory Factor Analysis (EFA) was applied. To assess the reliability of the dimension, Cronbach's Alpha was employed. Alpha provides the degree of inter-item consistency which indicates that the items that make up the dimension are measuring the same underlying construct (Brace et al., 2006). For further examination of the relationship between retained factors and intention to purchase for organic food, a Pearson correlation test and multiple regression analysis were conducted.
5.4.1 Pre-Pilot Study

Prior to the pilot study, a pre-pilot survey was conducted. The aim of the pre-pilot survey was to identify potential problems with redundant questions, missing questions, misunderstood questions and ambiguous questions, and to check the translation between Korean and English. Participants were asked to fill out the questionnaire and to participate in interviews.

The pre-pilot study was carried out from the 18th to 19th of October, 2007. Eight Korean undergraduate/postgraduate students and 2 full time workers living in Guildford and London were selected for the pre-pilot survey. The average time to complete the questionnaire was 9 minutes, and the face-to-face interview took approximately 40 minutes.

Firstly, participants were asked about prefer scaling form between unipolar type and bipolar type to adopt more appropriate scale in the questionnaire. All participants expressed that unipolar type was easier to answer for overall questions.

Five participants felt that the filter sentences "Please Go to Question 2 / Please Go to Question 3" following responses to Question 1 (Have you ever purchased organic food?) were not clear. They understood that those answering "yes" to Question 1 should answer only Question 2, and all of them did not answer Question 3.

There were some suggestions for improving questions by participants. Six participants suggested that it is better to change Question 4 (Please explain why you were not able to buy organic food as often as you would like) to a multiple choice question. Because there are not many options given to answer Question 4, and most participants tended not to answer subjective questions. Regarding Question 5 (I intend to purchase organic food within the next week), 4 participants felt that "within next week" is too short to shop. One of these participants said "In my case, I normally shop once every two weeks. So, I couldn’t answer to this question." Six participants felt that "Pleasant" and "Enjoyable" of Question 7 (For me to purchase organic food is) had the same meaning. They recommended that one of these phrases should be
deleted. Lastly, 3 participants suggested that Question 17 (To what extent do you trust that organic food is truly organic?) should be modified as a diverging type question. They thought if some respondents “extremely trust” about organic food, they can not answer Question 19 (If you do not trust that it is organic, please indicate the reason).

Regarding questions related to socio-demographic profile, 8 participants recommended that a question about age of children should be added to the questionnaire. They thought that families that had younger children would be more concerned about food safety and health than other families. One of them said “In my case, when my son was little, my family used to often buy organic food. But, now my son is 10 years old, and my wife doesn’t normally buy organic food.” Regarding income, 3 participants did not answer this question, as they had no income.

Following the pre-pilot survey, some questions were corrected and added. First, sentences “Please Go to Question 2 / Please Go to Question 3” of Question 1 were replaced with “Please Start from Question 2 / Please Start from Question 3”. Secondly, a question related to the age of children was added in the second part of the questionnaire. The final form of questionnaire used in the main pilot study is presented in Appendix A-2.

5.4.2 Objectives of the Pilot Study

A pilot study should be well planned, organised and implemented, in the same way as the main study, because it can contribute to improving the reliability of multiple measures of a hidden construct (Peterson, 2000). Pilot testing finds potential weakness, inadequacies, ambiguities and problems prior to the start of the main research study, allowing correction before the actual data assembly takes place (Sarantakos, 1998).

Hence, the objectives of the pilot study were to:
• determine problems with the questionnaire and revise and modify the questionnaire

• identify dimensions of influencing factors on consumers' intention to purchase for organic food

• validate dimensions as the same as previous studies

• verify dimensions are the same as the research model of the present study

• demonstrate construct validity such as convergent validity and discriminant validity

5.4.3 Data Collection

According to Bailey (1994), the pilot survey should be carried out in the same form as the main study. If the main study uses mail survey, its pilot questionnaires should be mailed (Bailey, 1994). However, Sarantakos (1998) stated that the structure and purpose of a pilot survey varies from case to case, depending on the type of research and the structure of the methodology used. Although the principal data collection method was a Web survey (Bailey, 1994), multiple methods were used for the data collection in the pilot survey. Because older people are not familiar with not only using the Internet but also answering to a Web questionnaire (Hyun and Kim, 2002), an alternative method was required.

The questionnaire was constructed in a Website before being distributed to respondents. The Web pilot survey used two types of methods. One was the snowball sampling, as used for the elicitation survey (See Section 5.2). The researcher persuaded 7 acquaintances who live in South Korea, and those 7 participants forwarded the Web address where the questionnaire could be found and completed to their acquaintances. The other one is to use panels of those who visited the Website where the questionnaire is linked and completed. A total of 60 questionnaires were
distributed for the Web survey, 45 participants (75%) completed the online questionnaire.

As an alternative method to the Web survey, a mail survey was adopted to collect older people’s responses. Before distributing the questionnaire, the researcher obtained 20 peoples’ home address from researchers’ acquaintances. A total of 20 questionnaires were mailed to participants over 45 years old living in South Korea, and 13 (65%) completed questionnaires were returned.

The survey was carried out between 23rd October to 18th November, 2007 and 58 questionnaires were used for the analysis.

5.4.4 Result of Analysis
The population was set as Korean consumers who shop for food regularly (e.g. at least once every month), which would be the same as the main survey in order to provide face validity to the study.

5.4.4.1 Demographic Characteristics of Respondents
The characteristics of respondents were demonstrated by the examination for the socio-demographics: Gender, Age, Education Level, Living Circumstances, Age of Children and Income.

As shown in Table 5.3, the percentage of females (65.5%) is higher than that of males (34.5%). The great majority of the respondents were in the 25-34 year old group, which accounted for 46.6 percent. The next largest group was of respondents who were 35 – 44 years old (25.9%). Educationally, the largest group was respondents with undergraduate degree (48.3%). Respondents who had postgraduate degree were the next largest group (31.0%). No respondent had under a high school qualification. ‘Living with partner and children’ group accounted for 29.3%, followed by the ‘Living alone group’ (25.9%), the ‘Living with partner’ group (19.0%) and the ‘Living with parents’ group (13.8%). Regarding children, respondents who had no
children were the largest group (66%). Respondents who had children over 19 years old were the next largest group (17%), followed by having 2–6 years old children (7%), having 13–18 years old children (7%) and having 7–12 years old children (3%). The gross income of family (per month) W 2.01–3.5 million group accounted for 32.8 percent of the sample, followed by less than W 2 million group (25.9%), W 3.51–5 million (22.4%) and more than W 6.51 million group (13.8%).

Table 5.3 Profiles of the Respondents

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Categories</th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>20</td>
<td>34.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>38</td>
<td>65.5</td>
</tr>
<tr>
<td>Age</td>
<td>Less than 24</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>27</td>
<td>46.6</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>15</td>
<td>25.9</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>9</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>More than 65</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Highest Education Level</td>
<td>Under High school</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>12</td>
<td>20.7</td>
</tr>
<tr>
<td></td>
<td>Undergraduate degree</td>
<td>28</td>
<td>48.3</td>
</tr>
<tr>
<td></td>
<td>Postgraduate degree</td>
<td>18</td>
<td>31.0</td>
</tr>
<tr>
<td>Living circumstances</td>
<td>Living alone</td>
<td>15</td>
<td>25.9</td>
</tr>
<tr>
<td></td>
<td>Living with partner</td>
<td>11</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>Living with partner and children</td>
<td>17</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>Living with parents</td>
<td>8</td>
<td>13.8</td>
</tr>
<tr>
<td></td>
<td>Living with parents, partner and children</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>Living with children</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Living with others</td>
<td>4</td>
<td>6.9</td>
</tr>
<tr>
<td>Age of Children</td>
<td>Having 0 month – 1 year old children</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Having 2–6 years old children</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Having 7–12 years old children</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Having 13–18 years old children</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Having over 19 years old children</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Having no children</td>
<td>38</td>
<td>66</td>
</tr>
<tr>
<td>Income (Gross income per month)</td>
<td>Under W 2 million</td>
<td>15</td>
<td>25.9</td>
</tr>
<tr>
<td></td>
<td>W 2.01–3.5 million</td>
<td>19</td>
<td>32.8</td>
</tr>
<tr>
<td></td>
<td>W 3.51–5 million</td>
<td>13</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>W 5.01–6.5 million</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>Over W 6.51 million</td>
<td>8</td>
<td>13.8</td>
</tr>
</tbody>
</table>

Source: This study

This result was similar with the Population Census in South Korea (Table 5.4). In 2005, the average year of educational attainment was 11.2 years (scholastic ability of over leaving high school in mid-course), and 20–39 years old people are over to a
college degree, 40 – 49 years old people are over to a high school degree, and over 50 years old people are equal to a middle school degree. ‘Married couple with children’ is the largest group (39.7%) of the family type and followed by the ‘Married couple’ (31.9%). In 2007, the average monthly wage is around 3.46 million won (£ 1,887) (Korea National Statistical Office, 2007).

Table 5.4 Population and Housing Census in South Korea

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Average years of educational attainment by gender &amp; age group (year)</th>
<th>(year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Total</td>
<td>Average 11.2 6 – 19 13.8 30 – 39 40 – 49 over 50 8.2</td>
<td>years old</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>12.0 13.6 13.8 12.9 10.0 10.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10.5 13.9 13.3 11.7 6.7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2005</th>
<th>Total No. of ordinary Households (unit: 1,000) 3,142</th>
<th>1 person 2 3 4 5 over 6 persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.3</td>
<td>30.6 17.6 18.7 6.9 2.9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2005</th>
<th>Total No. of relatives households (unit: 1,000) 2,363</th>
<th>Married couple 31.9 Married couple with children 39.7 Single parents with children 7.9 Married couple with parents 2.9 Married couple with parents &amp; children 7.0 Other types 10.7</th>
</tr>
</thead>
</table>

| 2005 | Average of mother age 29.1 years old under 19 years old 0.9 11.0 35 - 39 5.3 0.8 over 45 years old 0.1 |
|------|------------------------------------------------|--------------------------------|

| 2007 | Total average wages 3,460 | Transport 2,500 Communication 4,750 Financial 4,900 Real estate 2,050 Services 3,100 |

Note: W 1,880 ≡ £ 1

5.4.4.2 Exploratory Factor Analysis

As a result of exploratory factor analysis (EFA), reliability, and item-based statistics, the number of dimensions for proposed constructs was identified (Table 5.5). At the initial stage, Bartlett’s test of sphericity (a statistical test for the presence of
correlations among the variables) and the KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy were measured to assess the factorability of the data. KMO value was .426. Although KMO value was not exceeded the acceptable minimum value which is .6 (Hair et al., 2006; Pallant, 2007), it can be explained because this is the result of pilot survey, thus, sample size was smaller than the main survey. The Barlett’s test of sphericity was found significant (p < .000). Thus, significant inter-correlation exists among all factors.

As shown Table 5.5, eight constructs were classified as exploratory extracted measures: Positive Behavioural Beliefs, Normative Beliefs, Attitude, Trust of Information Source, Negative Behavioural Beliefs 1, Subjective Norm, Negative Behavioural Beliefs 2, and Control Beliefs. The retained factors were supported by the following criteria: a) meaningfulness of each factors retained, b) all variables loaded significantly on each factor, c) high amount of variance (%) explained by the nine factors (69 %), d) all variables show relatively high communalities.

As the result of EFA, eight factors were produced. The first, fifth and seventh factor were labelled ‘Positive Behavioural Beliefs’, ‘Negative Behavioural Beliefs 1’, and ‘Negative Behavioural Beliefs 2’ respectively, because all variables of these factors are related to behavioural beliefs dimension of the TPB model. All items in the ‘Positive Behavioural Beliefs’ were answered positively (good) by most respondents, while all items were answered negatively (bad) by respondents in the ‘Negative Behavioural Beliefs 1 & 2’. The second factor was labelled ‘Normative Beliefs, since all items of this factor were related to the normative beliefs dimension of this study. The third factor which represents consumers’ attitude towards organic food was named ‘Attitude’. Variables of ‘Attitude’ factor are very similar to Ajzen’s Theory of Planned Behaviour Model (TPB). The forth factor was labelled ‘Trust of Information Source’, because all items of this factor were regarding to confidence of respondents about information source for organic food. The sixth factor was labelled ‘Subjective Norm, since this factor is related to subjective norm dimension of the proposed model of this study. The eighth factor was labelled ‘Control Beliefs’. Although one item (Q6 Taste) was not related to this dimension, this item was not well loaded (.441), in
addition, the other items of this factor were related to the control belief factor of the proposed research model in this study.

To test the internal consistency of the eight factors, Chronbach’s alpha was used. As shown in Table 5.5, eight components have good internal consistency with Cronbach’s alpha (>.71). Therefore, these eight components are deemed reliable (Churchill and Iacobucci, 2004).
Table 5.5 The Result of EFA and Reliability Analysis

<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>Factor loading</th>
<th>Communality</th>
<th>Criteria for Selecting</th>
<th>Eigen values</th>
<th>% of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reliability (α)</td>
<td>Eigen values</td>
<td></td>
</tr>
<tr>
<td>Positive Behavioural Beliefs (PBB)</td>
<td>Q8 Safety</td>
<td>.801</td>
<td>.840</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q6 Environment</td>
<td>.795</td>
<td>.885</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q8 Economy</td>
<td>.770</td>
<td>.907</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q6 Economy</td>
<td>.759</td>
<td>.836</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q8 Environment</td>
<td>.736</td>
<td>.824</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q6 Safety</td>
<td>.703</td>
<td>.750</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q8 Health</td>
<td>.680</td>
<td>.793</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q8 Taste</td>
<td>.552</td>
<td>.729</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td></td>
<td>Q6 Health</td>
<td>.435</td>
<td>.793</td>
<td></td>
<td>.921</td>
<td>14.459 28.918</td>
</tr>
<tr>
<td>Negative Behavioural Beliefs (NBB)</td>
<td>Q11 Dietician</td>
<td>.885</td>
<td>.886</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td></td>
<td>Q11 Scientist</td>
<td>.879</td>
<td>.848</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td></td>
<td>Q10 Scientist</td>
<td>.843</td>
<td>.876</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td></td>
<td>Q10 Doctor</td>
<td>.831</td>
<td>.884</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td></td>
<td>Q11 Doctor</td>
<td>.798</td>
<td>.807</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td></td>
<td>Q10 Dietician</td>
<td>.733</td>
<td>.811</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td></td>
<td>Q11 Retailer</td>
<td>.615</td>
<td>.829</td>
<td></td>
<td>.935</td>
<td>4.518 9.037</td>
</tr>
<tr>
<td>Attitude (AT)</td>
<td>Q7 Pleasant</td>
<td>.865</td>
<td>.882</td>
<td></td>
<td>.908</td>
<td>3.798 .7.596</td>
</tr>
<tr>
<td></td>
<td>Q7 Enjoy</td>
<td>.803</td>
<td>.840</td>
<td></td>
<td>.908</td>
<td>3.798 .7.596</td>
</tr>
<tr>
<td></td>
<td>Q7 Good</td>
<td>.688</td>
<td>.860</td>
<td></td>
<td>.908</td>
<td>3.798 .7.596</td>
</tr>
<tr>
<td></td>
<td>Q7 Value</td>
<td>.680</td>
<td>.750</td>
<td></td>
<td>.908</td>
<td>3.798 .7.596</td>
</tr>
<tr>
<td></td>
<td>Q7 Help</td>
<td>.624</td>
<td>.791</td>
<td></td>
<td>.908</td>
<td>3.798 .7.596</td>
</tr>
<tr>
<td></td>
<td>Q7 Benefit</td>
<td>.620</td>
<td>.857</td>
<td></td>
<td>.908</td>
<td>3.798 .7.596</td>
</tr>
<tr>
<td>Trust of Information Source (TIS)</td>
<td>Q14 Authority</td>
<td>.856</td>
<td>.868</td>
<td></td>
<td>.881</td>
<td>3.116 6.231</td>
</tr>
<tr>
<td></td>
<td>Q14 Expert</td>
<td>.735</td>
<td>.733</td>
<td></td>
<td>.881</td>
<td>3.116 6.231</td>
</tr>
<tr>
<td></td>
<td>Q14 Label</td>
<td>.734</td>
<td>.820</td>
<td></td>
<td>.881</td>
<td>3.116 6.231</td>
</tr>
<tr>
<td></td>
<td>Q14 Media</td>
<td>.731</td>
<td>.769</td>
<td></td>
<td>.881</td>
<td>3.116 6.231</td>
</tr>
<tr>
<td></td>
<td>Q14 Retailer</td>
<td>.684</td>
<td>.760</td>
<td></td>
<td>.881</td>
<td>3.116 6.231</td>
</tr>
<tr>
<td>Negative Behavioural Beliefs 1 (NBB 1)</td>
<td>Q8 Pest</td>
<td>.855</td>
<td>.874</td>
<td></td>
<td>.765</td>
<td>2.707 5.414</td>
</tr>
<tr>
<td></td>
<td>Q8 Appearance</td>
<td>.849</td>
<td>.866</td>
<td></td>
<td>.765</td>
<td>2.707 5.414</td>
</tr>
<tr>
<td></td>
<td>Q8 Expensive</td>
<td>.687</td>
<td>.738</td>
<td></td>
<td>.765</td>
<td>2.707 5.414</td>
</tr>
<tr>
<td>Subjective Norm (SN)</td>
<td>Q10 Family</td>
<td>.721</td>
<td>.861</td>
<td></td>
<td>.814</td>
<td>2.156 4.312</td>
</tr>
<tr>
<td></td>
<td>Q9 Subjective Norm</td>
<td>.707</td>
<td>.817</td>
<td></td>
<td>.814</td>
<td>2.156 4.312</td>
</tr>
<tr>
<td></td>
<td>Q10 Friend</td>
<td>.679</td>
<td>.806</td>
<td></td>
<td>.814</td>
<td>2.156 4.312</td>
</tr>
<tr>
<td></td>
<td>Q11 Family</td>
<td>.448</td>
<td>.804</td>
<td></td>
<td>.814</td>
<td>2.156 4.312</td>
</tr>
<tr>
<td>Negative Behavioural Beliefs 2 (NBB 2)</td>
<td>Q6 Pest</td>
<td>.823</td>
<td>.908</td>
<td></td>
<td>.713</td>
<td>1.841 3.683</td>
</tr>
<tr>
<td></td>
<td>Q6 Appearance</td>
<td>.794</td>
<td>.768</td>
<td></td>
<td>.713</td>
<td>1.841 3.683</td>
</tr>
<tr>
<td></td>
<td>Q6 Shelf-life</td>
<td>.577</td>
<td>.743</td>
<td></td>
<td>.713</td>
<td>1.841 3.683</td>
</tr>
<tr>
<td>Control Beliefs (CB)</td>
<td>Q13 Available</td>
<td>.825</td>
<td>.783</td>
<td></td>
<td>.744</td>
<td>1.706 3.413</td>
</tr>
<tr>
<td></td>
<td>Q13 Trust</td>
<td>.642</td>
<td>.871</td>
<td></td>
<td>.744</td>
<td>1.706 3.413</td>
</tr>
<tr>
<td></td>
<td>Q13 Price</td>
<td>.600</td>
<td>.780</td>
<td></td>
<td>.744</td>
<td>1.706 3.413</td>
</tr>
<tr>
<td></td>
<td>Q6 Taste</td>
<td>.441</td>
<td>.682</td>
<td></td>
<td>.744</td>
<td>1.706 3.413</td>
</tr>
</tbody>
</table>

KMO = .426, Bartlett's test = 2746.140 (p < .000)

Source: This Study

198
5.4.4.3 Correlation Analysis

To examine the relationship between dimensions, a Pearson correlation test was performed. Ten dimensions by EFA analysis and based on the proposed research model of the current study were subjected to the analysis. Table 5.6 shows correlation coefficients among dimensions for external consistency.

Table 5.6 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>IT</th>
<th>PBB</th>
<th>NB</th>
<th>AT</th>
<th>TIS</th>
<th>NBB1</th>
<th>SN</th>
<th>NBB2</th>
<th>CB</th>
<th>PBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBB</td>
<td>.351**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NB</td>
<td>.397**</td>
<td>.352**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT</td>
<td>.607**</td>
<td>.644**</td>
<td>.407**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIS</td>
<td>.280*</td>
<td>.455**</td>
<td>.367**</td>
<td>.394**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBB1</td>
<td>.037</td>
<td>.227</td>
<td>.118</td>
<td>.152</td>
<td>.092</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>.467**</td>
<td>.571**</td>
<td>.578**</td>
<td>.465**</td>
<td>.392**</td>
<td>.211</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBB2</td>
<td>.299*</td>
<td>.385**</td>
<td>.255</td>
<td>.386**</td>
<td>.228</td>
<td>.043</td>
<td>.200</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CB</td>
<td>.305*</td>
<td>.372**</td>
<td>.302*</td>
<td>.472**</td>
<td>.249</td>
<td>.206</td>
<td>.364**</td>
<td>.216</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PBC</td>
<td>.350**</td>
<td>.125</td>
<td>.444**</td>
<td>.169</td>
<td>.327*</td>
<td>-.086</td>
<td>.330*</td>
<td>.154</td>
<td>.211</td>
<td>1</td>
</tr>
</tbody>
</table>

SD 2.1361 1.2038 2.1563 1.1731 1.2475 1.4619 1.7603 1.3936 1.3453 1.5687

**: Correlation is significant at the 0.01 level. *: Correlation is significant at the 0.05 level

Source: This Study

As shown in Table 5.6, relatively high correlation was found between two dimensions, the 'Positive Behavioural Beliefs (PBB)' and the 'Attitude (AT)' (.644). In the TPB model, the behavioural beliefs is assumed to provide the cognitive and affective foundations for attitudes, and the subjective norm is determined by people's normative beliefs (Ajzen, 2002). Thus, the high correlation between the 'Positive Behavioural Beliefs (PBB)' and the 'Attitude (AT)' can be explained, and the correlation between the 'Subjective Norm (SN)' and the 'Normative Beliefs (NB)' (.578) also can be explained by the TPB model. The 'Intention (IT)' also showed high correlation with the 'Attitude (AT)' (.607). Ouellette and Wood (1998) stated that people's attitude can explain high of the variance in their behavioural intention, thus the high correlation between them can be explained. There was relatively high
correlation between the 'Subjective Norm (SN)' and the 'Positive Behavioural Beliefs (PBB)' (.571), and this can be also supported by the TPB model. According to the TPB model (Ajzen, 1991), people's behaviour is guided by three kinds of beliefs, behavioural, normative and control beliefs, and these beliefs not only determine major components of the TPB model but also influence each other.

Although there were correlation between some dimensions, the 'Attitude (AT)' and the 'Control Beliefs (CB)' (.472), the 'Intention (IT)' and the 'Subjective Norm (SN)' (.467), the 'Attitude (AT)' and the 'Subjective Norm (SN)' (.465), the 'Positive Behavioural Beliefs (PBB)' and the 'Trust of Information Source (TIS)' (.455), and the 'Perceived Behavioural Control (PBC)' and the 'Normative Beliefs (NB)' (.444), their correlations were not strong. The other dimensions showed low relationship or no significant relationship with other dimensions (< .40). Thus, construct validity was established.

5.4.4.4. Multiple Regression Analysis

Multiple regression analysis was conducted to investigate the relationship of nine factors based on the result of EFA and the proposed research model in the present study and behavioural intention. The result of the regression test is summarised in Table 5.7.
Table 5.7 The Result of Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.776</td>
<td>.213</td>
<td>17.688</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>PBB</td>
<td>.277</td>
<td>.215</td>
<td>.130</td>
<td>1.288</td>
<td>.204</td>
</tr>
<tr>
<td>NB</td>
<td>.462</td>
<td>.215</td>
<td>.213</td>
<td>2.143</td>
<td>.037</td>
</tr>
<tr>
<td>AT</td>
<td>.920</td>
<td>.215</td>
<td>.431</td>
<td>4.273</td>
<td>.000</td>
</tr>
<tr>
<td>TIS</td>
<td>.164</td>
<td>.215</td>
<td>.077</td>
<td>.761</td>
<td>.450</td>
</tr>
<tr>
<td>NBB1</td>
<td>.029</td>
<td>.215</td>
<td>.013</td>
<td>.132</td>
<td>.895</td>
</tr>
<tr>
<td>SN</td>
<td>.729</td>
<td>.215</td>
<td>.341</td>
<td>3.385</td>
<td>.001</td>
</tr>
<tr>
<td>NBB2</td>
<td>.382</td>
<td>.215</td>
<td>.179</td>
<td>1.775</td>
<td>.082</td>
</tr>
<tr>
<td>CB</td>
<td>.172</td>
<td>.215</td>
<td>.080</td>
<td>.797</td>
<td>.430</td>
</tr>
<tr>
<td>PBC</td>
<td>.683</td>
<td>.215</td>
<td>.320</td>
<td>3.170</td>
<td>.003</td>
</tr>
</tbody>
</table>

\( R^2 \) \hspace{1cm} .512
Adjusted \( R^2 \) \hspace{1cm} .421

Source: This Study

As shown in Table 5.7, the regression model is statistically significant (\( p = .000 \)). The adjusted \( R^2 \) is 0.421, which indicates that approximately 42% of the variance in purchase intention is explained by the factors. The ‘Normative Beliefs (NB)’, the ‘Attitude (AT)’, the ‘Subjective Norm (SN)’, and the ‘Perceived Behavioural Control (PBC)’ have significant influence on intention to purchase with p-value (\( p < .05 \)). The ‘Attitude’ has the largest beta coefficient (\( \beta = .431 \)) followed by the ‘Subjective Norm’ (\( \beta = .341 \)), the ‘Perceived Behavioural Control’ (\( \beta = .320 \)) and the ‘Normative Beliefs’ (\( \beta = .216 \)). This means that the ‘Attitude’ made the strongest unique contribution to explaining the purchasing intention for organic food.

5.4.5 Discussion

As the result of EFA, there were some problems with the KMO value. The KMO value was not measured from the result of factor analysis. In order to find the problem with the KMO value, the researcher has asked advice of the statistical
advisor and tried to analyse with various analysis method. It was found that some questions of the questionnaire have problems.

Question 2 and Question 3 asking about past experience of purchasing organic food had some problems. One of objectives of the research is to identify consumers' intention to purchase organic food, and Question 5 is asking about consumers' purchasing intention for organic food. However, because there were very low relationship between questions asking past experience and question asking intention to purchase, the KMO value was not measured when these questions added into factor analysis. Specifically, there are too many organic products in Question 2 and Question 3, but Question 5 is asking about the whole organic food. In addition, although Question 2 is asking real purchase experience and Question 3 is asking consumers' ideal purchasing, many respondents answered differently in these two questions. For example, in ‘Question 2 – meat and fish product’, a respondent answered 5 (often purchase), but this respondent answered 1 (never) in ‘Question 3 – meat and fish product’.

Thus, based on the research of Lam and Hsu (2006), 2 questions asking simple frequency about past experience for organic food will be added into the main survey questionnaire. In addition, 4 products (Instant noodle, Snacks, Flours and Seasonings) that over 70% of respondents do not buy it as the result of pilot survey will be removed from the questionnaire.

As the result of the pilot survey, many participants felt that Question 6 (perceived likelihood of outcome of purchasing organic food) and Question 8 (evaluation of those outcomes of purchasing organic food) are same questions. Therefore, in order to distinguish obviously of these two questions' meaning, Question 6 will be changed “Organic food has (is) ...” to “Purchasing organic food would mean I would ...” (Conner and Norman, 2005; Lam and Hsu, 2006).

Additionally, some questions will be added into the main survey questionnaire through literature reviews. According to Conner and Norman (2005), multiple-item
questions are more appropriate to measure people’s behaviour. However, there is only one question related to intention (Question 5), subjective norm (Question 9) and perceived behavioural control (Question 12) in the pilot survey questionnaire. Hence, in order to measure accurately, one intention question (Conner and Abraham, 2001; Lam and Hsu, 2006), one subjective norm question (Bagozzi and Dholakia, 2006; Lam and Hsu, 2006), and one perceived behavioural control question (Arvola et al., 2008; Lam and Hsu, 2006) will be newly added into the main survey questionnaire. In addition, three items asking control belief strength were added into the main survey questionnaire to determine perceived behavioural control more exactly (Ajzen, 2002; Conner and Norman, 2005).

Many respondents commented that they were confused by Question 18 (the reason why they trust that it is organic) and Question 19 (the reason why they do not trust that it is organic). If they answered that they trust that organic food is truly organic on Question 17, they could not exactly understand whether they also have to answer Question 19. According to William (2006), it is able to use a forced-choice response scale with an even number of responses and no middle neutral or undecided choice. In this case, respondents are forced to decide whether they are inclined more towards the agree or disagree end of the scale for each item. Therefore, the middle point was deleted from the scale, and a nominal scale was accepted for Question 17. Sentences forcing respondents to decide to answer either Question 18 or Question 19 were added the end of the Question 17.

Many respondents also commented that they could not exactly answer to Question 5. They shop every two weeks or three weeks, but Question 5 was asking their purchasing intention within the next week. Thus, Question 5 will be changed “I intend to purchase organic food within the next week” to “I intend to purchase organic food within the next month”.

As the result of the transfer viva, it was recommended that a question regarding actual distribution channel for organic food purchasing in South Korea is necessary. Therefore, based on the result of the elicitation survey and Kim et al. (2005) and Jung
(2006), Question “Where do you normally buy organic food?” is newly added into the revised questionnaire.

The revised questionnaire is presented in Appendix A-3.

5.5 Summary

This chapter started with the process and presented the results of the elicitation survey. The findings of the elicitation survey were used as important factors to design a questionnaire for the main study, and the questionnaire was developed through literature reviews and findings of the elicitation survey.

To determine problems with the questionnaire, a pilot survey was conducted, and 58 completed questionnaires were used for the final analysis. As a result of factor analysis, eight dimensions were identified: Positive Behavioural Beliefs, Normative Beliefs, Attitude, Trust of Information Source, Negative Behavioural Beliefs 1, Subjective Norm, Negative Behavioural Beliefs 2 and Control Beliefs. All these eight factors were supported by the criteria and proposed model in this study. To investigate the relationship between factors and behavioural intention, multiple regression analysis was conducted. Results showed that the ‘Attitude’, the ‘Subjective Norm’, the ‘Normative Beliefs’, and the ‘Perceived Behavioural Controls’ had a significant influence on the intention to purchase organic food. As results of the pilot survey, it was found that some questions in the questionnaire have problems. Therefore, the questionnaire was revised, based on the results of the pilot survey and the literature reviews.
CHAPTER SIX
Chapter 6 Findings and Discussion I: Main Study - Quantitative Research

6.1 Introduction

The purpose of this chapter is to present the findings of the quantitative research of the main study. It begins with an overview of the data analysis process of the present study. Before conducting each analysis, the rationale of the applied techniques is briefly explained. This chapter is mainly divided into three parts. The first part profiles respondents' socio-demographic characteristics. The second part presents the estimation of research variables and the reliability and the validity of factors affecting the intention to purchase organic food. The last part examined the relationship between factors affecting purchase intention and behavioural intention, and then discussed the hypotheses of this research in comparison with previous literatures.

6.2 The Process of the Data Analysis

The main objectives of the study were to 1) investigate consumers' perceptions of organic food in South Korea 2) determine the relative influence of factors affecting South Korean consumers' intention to purchase organic food 3) identify factors affecting consumers' realised purchase behaviour for organic food in South Korea 4) investigate the determinants of the discrepancies between consumers' purchase intention and realised purchase behaviour for organic food in South Korea. To achieve these goals, two main stages of approach were performed which were quantitative approach and qualitative approach. The Figure 6.1 summarises the process of the analysis.
Figure 6.1 The Process of the Analysis

**STUDY**

**Stage I: Quantitative**  
*(Chapter 6)*

- Characteristics of Respondents
- Estimation of Variables
- Examination of Validity and Reliability
- Influence of Factors on Intention
- Hypotheses Testing  
  (Section 6.7)

**Stage II: Qualitative**  
*(Chapter 7)*

- Factors Affecting to Realised Behaviour
- Content  
  (Section 7.3)

- Determinants between Intention and Realised Behaviour
- Discussion of Results  
  (Section 7.3)

- Descriptive  
  (Section 6.3)
- Descriptive  
  (Section 6.4)
- T-test & ANOVA  
  (Section 6.4)
- Correlation  
  (Section 6.4)
- Correlation  
  (Section 6.6)
- EFA  
  (Section 6.5)
- Regression  
  (Section 6.7)
The proposed research model was tested in two stages. The first stage is quantitative approach. Analysis of the quantitative approach used the Statistical Package for the Social Sciences (SPSS 14.0) which allowed descriptive analysis, factor analysis, reliability analysis, correlation analysis and regression analysis. First, summary of the characteristic of respondents’ profiles was presented by using descriptive analysis, and results were compared with the Population Census in South Korea. Before defining the main factors in this study, the elements of model were estimated and the relationship between elements and variables was tested. Possible emerging factors affecting consumers' intention to purchase for organic food were defined, and validity and reliability of variables were proved by using an Exploratory Factor Analysis (EFA) and Correlation analysis. The influence of factors on consumers’ purchasing intention was tested by using Multiple Regression Analysis. Lastly, hypotheses were tested and discussed.

In the second stage, qualitative approach was used. Factors affecting to consumers’ realised purchase behaviour organic food were defined. The influence of factors on realised purchase behaviour and the determinants of the relationship between purchase intention and realised purchase behaviour for organic food were examined by using content analysis. The results of analysis were discussed through comparing with prior literature. The second stage of this study will be presented in the next chapter.

6.3 Profiles of Respondents

The questionnaire was distributed between 30th June to 3rd August, 2008. Before distributed questionnaires, Daum Communications, which is leading email provider, online communities, and Naver.com, which is the top portal site in South Korea (Park, 2004) were selected to access the sample. The questionnaire was constructed in a Website before being distributed to respondents. The researcher joined the top two communities having the largest numbers of members on these Web sites, and the web address of constructed questionnaire was linked these communities. A total of three
hundred and seven questionnaires were collected, and 303 completed questionnaires were used for the final analysis. The socio-demographic profiles of the respondents are presented below.

**Gender:** Gender of the respondents is shown in Figure 6.2.

![Figure 6.2 Gender of the Respondents (n = 303)](image)

From the 303 respondents, 160 respondents identified themselves as female (52.8%), slightly higher than the population of males (47.2%). This result is line with the Population Census in South Korea. In 2008, Korean males comprised around half of total South Korean population (Figure 6.3).

![Figure 6.3 Gender ratio of South Korea in 2008 (n = 48,877,252)](image)

*Source: Korea National Statistical Office (2009)*
Age Group: the age group of the sample was divided into 6 categories. Figure 6.4 represents the distribution of age group according to these categories.

Of the 303 subjects, 34.7% of the sample were between 25 to 34; 22.8% of the respondents were between 45 to 54; 20.8% were between 35 to 44 and 11.6% were between 55 to 64. This result can be compared with the Population Census in South Korea.

As shown in Figure 6.5, South Korean population by age group was evenly distributed in 2007. However, the result of this study, respondents between 25 to 34 age group yielded a greater population than other groups. Thus, the implication of this will be discussed in the conclusion chapter.
**Highest Education Level**: Education level was categorised into four groups. Figure 6.6 presents the highest education level of the respondents.

![Figure 6.6 Highest Education Level of the Respondents (n = 303)](image)

The result showed that samples of the study were highly educated. Two point six percent of the respondents stated their level of education as being under high school degree, while 27.7%, 17.2% of the respondents identified as high school degree and postgraduate degree respectively. The figure also shows that more than half of the respondents' highest education level were undergraduate degree.

![Figure 6.7 Average years of Educational Attainment in South Korea (2005)](image)

*Source: Korea National Statistical Office (2009)*

Figure 7.7 presents average years of educational attainment by age group of South Korea. In 2005, the average year of educational attainment of South Korean was 11.2 years. Namely, on the average, South Koreans had scholastic ability of over leaving high school in mid-course. Between twenty to thirty nine years old people had college degree and 40 to 49 years old people had over to a high school degree. Therefore, South Koreans are highly educated people, and the result of the study is supported by the Population Census in South Korea.
Living Circumstances: Living circumstances of the respondents were classified into seven groups. Figure 6.8 shows living circumstance of the respondents.

Thirty nine point six percent of the subjects were living with partner and children; 25.7% of the subjects were living with parents; 15.2% of the subjects were living with parents, partner and children and 10.6% of the subjects were living with partner.

Source: Korea National Statistical Office (2009)

In line with the results of the current study, the largest numbers of Korean people were living with partner and children.
Income: Figure 6.10 depicts the gross income per month of the subjects.

Figure 6.10 Gross Income of the Respondents (n = 303)

The gross income of family (per month) ₩ 3.51 – 5 million group accounted for 33.7% of the samples, followed by ₩ 2.01 – 3.5 million group (25.1%) and less than ₩ 2 million group (15.5%) (₩ 1,850 ≈ 1 pound).

In 2008, the average monthly wage of South Korea was around 3.10 million won (£ 1 ≈ ₩ 2,000). This supported the result of this study, because this amount belonged in between the largest group (₩ 3.51 – 5 million) and the second largest group (₩ 2.01 – 3.5 million).

Figure 6.11 Average Monthly Wages by Industrial Classification of South Korea in 2008

Source: Korea National Statistical Office (2009)
Age of Children: Figure 6.12 represents the age of children of the respondents.

![Figure 6.12 Age of Children of the Respondents (n = 303)](image)

Respondents having no children amounted to 115 (37.9%), respondents having children over 19 years old amounted to 87 (28.7%) and respondents having 13 – 18 years old children amounted to 47 (15.5%).

6.4 Estimation of Variables in the TPB

6.4.1 Belief Composites

As previously mentioned, the Theory of Planned Behaviour (TPB) model was employed as the research framework in this study together with the additional variables such as trust and past experience (See Chapter 3 and 4). The TPB model suggests that behavioural intention is influenced by three sets of beliefs drawn from peoples’ schemata (Armitage and Conner, 2001). Firstly, beliefs about the outcome of the behaviour, as well as evaluations of these outcomes are said to produce an ‘attitude’. Secondly, the beliefs an individual holds regarding the expectations held by others (normative beliefs) as well as the individual’s motivation to comply with these expectations give rise to a ‘subjective norm’. Lastly, beliefs about any factors that may either impede or facilitate completion of the behaviour, as well as the strength of each of these beliefs, determines ‘perceived behavioural control (PBC)’ (Ajzen, 2002).
In this study, beliefs about organic food were explored following the structure of questionnaire guidelines by Ajzen (2002), incorporating the results of the elicitation survey (See Chapter 5 Section 5.3). Detailed results for each of the beliefs are presented in the Table 6.1, follow descriptive analysis.

As shown in the Table 6.1, respondents perceived health benefits, taste, food safety, protection of environment and contribution to the economy to be positive attributes of organic products. They believed that organic food helps to improve the health of the human body, to protect the environment and to develop the rural economy. They also believed that organic food is tastier and safer than normal food. In contrast, beliefs about expensiveness, shorter shelf life, poor appearance and presence of pests of organic food were negative attributes. Respondents thought that organic food was too expensive and spoils faster than conventional food. It is not perceived as looking so good and pests or worms may be present. Although respondents had some negative beliefs towards organic food, their overall attitude was positive. Respondents generally believed that all relevant referents, family, friends, doctor, scientist, dietician and retailers had an interest in their organic food purchasing behaviour, also generally motivated to comply with their wishes. Thus, they tended to think that most people who are important to them would approve their purchasing organic food (overall subjective norm). Lastly, respondents believed that the expensiveness of organic food was a barrier to their organic food purchasing. However, they also believed that trust in its efficacy and availability tended to facilitate their organic food purchasing. Thus, they generally thought that it would be easy to buy organic food (overall perceived behavioural control: PBC).
### Table 6.1 The Mean Values (SD) of Beliefs' items and Descriptive Analysis for Organic Food Purchase Behaviour

<table>
<thead>
<tr>
<th>Components</th>
<th>Questions</th>
<th>Items</th>
<th>Mean</th>
<th>Std.D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q10 Attitude</strong></td>
<td>Good – Bad</td>
<td>5.88</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beneficial – Harmful</td>
<td>5.87</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helpful – Unhelpful</td>
<td>5.61</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pleasant – Unpleasant</td>
<td>5.40</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Bipolar scale</td>
<td>Enjoyable – Unenjoyable</td>
<td>5.37</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>(e.g. Bad: 1... 7: Good)</td>
<td>Valuable – Worthless</td>
<td>5.78</td>
<td>1.14</td>
<td></td>
</tr>
<tr>
<td><strong>Q11 Beliefs about the outcome of the behaviour</strong></td>
<td>Health benefit</td>
<td>5.77</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taste</td>
<td>5.20</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food safety</td>
<td>5.23</td>
<td>1.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protection of environment</td>
<td>5.61</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution to the economy</td>
<td>5.43</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expensiveness</td>
<td>2.26</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shorter shelf life</td>
<td>2.51</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor appearance</td>
<td>3.32</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presence of pests</td>
<td>3.27</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td><strong>Q12 Evaluations of outcomes of the behaviour</strong></td>
<td>Health benefit</td>
<td>6.08</td>
<td>.98</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taste</td>
<td>5.94</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food safety</td>
<td>6.11</td>
<td>1.04</td>
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<td>Protection of environment</td>
<td>6.04</td>
<td>.98</td>
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<td></td>
<td>Contribution to the economy</td>
<td>5.90</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expensiveness</td>
<td>3.59</td>
<td>1.47</td>
<td></td>
</tr>
<tr>
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<td>Shorter shelf life</td>
<td>3.56</td>
<td>1.35</td>
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<td></td>
<td>Poor appearance</td>
<td>3.51</td>
<td>1.39</td>
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<td>Presence of pests</td>
<td>3.59</td>
<td>1.50</td>
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<td><strong>Q13 Subjective Norm</strong></td>
<td>People think that should buy...</td>
<td>4.68</td>
<td>1.50</td>
<td></td>
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<td></td>
<td>Approve or Disapprove...</td>
<td>4.79</td>
<td>1.43</td>
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<td>1.50</td>
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<td></td>
<td>Approve or Disapprove...</td>
<td>4.79</td>
<td>1.43</td>
<td></td>
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<td>Family</td>
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<td>1.66</td>
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<td>Friends</td>
<td>5.08</td>
<td>1.81</td>
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<td>4.93</td>
<td>1.94</td>
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<td></td>
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<td>Retailers</td>
<td>5.59</td>
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<td><strong>Q16 Motivation to comply</strong></td>
<td>Family</td>
<td>5.84</td>
<td>1.15</td>
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<td>Friends</td>
<td>5.26</td>
<td>1.38</td>
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<td></td>
<td>Doctor</td>
<td>5.45</td>
<td>1.75</td>
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<td>Scientist</td>
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<td>2.03</td>
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<td>Dietician</td>
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<td>5.08</td>
<td>1.83</td>
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<td>How is it to buy organic...</td>
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<td>1.16</td>
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<td>Trust for its efficacy</td>
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<td>1.42</td>
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<td></td>
<td>Availability</td>
<td>4.54</td>
<td>1.27</td>
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<td><strong>Q20 Control belief strength</strong></td>
<td>Expensiveness</td>
<td>3.25</td>
<td>1.63</td>
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<td>Trust for its efficacy</td>
<td>4.58</td>
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<tr>
<td></td>
<td>Availability</td>
<td>4.56</td>
<td>1.31</td>
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</table>
6.4.1.1 Respondents' Trust, Past Experience of and Intention to Purchase Organic Food

To obtain opinions of respondents towards additional variables (trust and past experience) and the dependent variable (intention to purchase) in this study, descriptive analysis was also carried out. Table 6.2 presents the results of descriptive analysis.

Although respondents generally trusted information sources about organic food, they expressed greater trust in information from important person (family and friends) and experts (doctors, dieticians and scientist), and showed relatively low confidence in information from retailers, label of products and mass media. Respondents tended to buy organic food frequently, and they generally expressed high intention to purchase organic food.

<table>
<thead>
<tr>
<th>Components</th>
<th>Questions</th>
<th>Items</th>
<th>Mean</th>
<th>Std.D</th>
</tr>
</thead>
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<td>Q21 Trust information sources</td>
<td>Mass media</td>
<td>4.67</td>
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<td></td>
<td></td>
<td>Important person</td>
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<td>1.13</td>
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<td></td>
<td></td>
<td>Experts</td>
<td>5.09</td>
<td>1.24</td>
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<td></td>
<td></td>
<td>Retailers</td>
<td>4.21</td>
<td>1.38</td>
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<td></td>
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<td>Label</td>
<td>4.40</td>
<td>1.30</td>
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<td></td>
<td></td>
<td>Authorities</td>
<td>4.90</td>
<td>1.30</td>
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<td></td>
<td></td>
<td>Consumer Organisations</td>
<td>5.25</td>
<td>1.20</td>
</tr>
<tr>
<td>Past Experience</td>
<td>Q3 Purchasing frequency</td>
<td>Buying Frequency</td>
<td>4.43</td>
<td>1.37</td>
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<tr>
<td>Intention</td>
<td>Q8 Intention to purchase</td>
<td>Intention to purchase</td>
<td>5.23</td>
<td>1.44</td>
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<td></td>
<td>Q9 Intention to purchase</td>
<td>Plan to purchase</td>
<td>5.11</td>
<td>1.45</td>
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</table>

To compare differences among variables by socio-demographic characteristics, an independent T-test and ANOVA were adopted. Although an independent sample T-test was used to test for significant differences between gender groups, and ANOVA was used to compare among other demographic groups such as age, education and income, there were no significant differences among all socio-demographic groups. Thus, all demographic groups were consolidated into two independent groups. For
instance, age group were consolidated into younger (under 44 years old) and older (over 45 years old) groups, education group were lower (under High School degree) and higher (over Undergraduate degree) groups, and income group were lower (under W 3.5 million) and higher (over W 3.51 million) groups. The validity and reliability of all variables were confirmed by followed the exploratory factor analysis and correlation analysis (See Section 6.5 and 6.6), as well as mean values of all variables were used to test a liner multiple regression analysis because the relationship between beliefs and major components of the TPB model was examined through Pearson’s correlation coefficient (See Section 6.4.2). Thus, consolidated mean scores for all variables were also used to examine for significant differences among socio-demographic groups.

An independent sample T-test with a confidence level of 95% was executed, and there were some differences among demographic characters which are age and income groups about variables in this study, but there were no differences among other demographic groups such as gender and education. Table 6.3 shows the result of the T-test according to socio-demographic characteristics.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Variables</th>
<th>Type</th>
<th>N</th>
<th>Mean</th>
<th>Std.D</th>
<th>F</th>
<th>T</th>
<th>Sig.</th>
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</thead>
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<td>Age</td>
<td>Attitude</td>
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<td>193</td>
<td>5.5622</td>
<td>1.0252</td>
<td>2.045</td>
<td>-2.239</td>
<td>.026</td>
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<tr>
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<td></td>
<td>Old (≥ 45)</td>
<td>110</td>
<td>5.8288</td>
<td>0.9442</td>
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<td>Young (&lt; 44)</td>
<td>193</td>
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<tr>
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<td>Young (&lt; 44)</td>
<td>193</td>
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<td>1.4992</td>
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</tr>
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<td></td>
<td></td>
<td>Old (≥ 45)</td>
<td>110</td>
<td>5.4318</td>
<td>1.2368</td>
<td>4.161</td>
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<td>.017</td>
</tr>
<tr>
<td>Income</td>
<td>Perceived Behavioural Control</td>
<td>Low (≤ W 3.5m)</td>
<td>123</td>
<td>5.0122</td>
<td>1.1152</td>
<td>2.893</td>
<td>-2.772</td>
<td>.006</td>
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<tr>
<td></td>
<td></td>
<td>High (≥ W3.51m)</td>
<td>180</td>
<td>5.3389</td>
<td>0.9270</td>
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<tr>
<td></td>
<td>Past Experience</td>
<td>Low (≤ W 3.5m)</td>
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<td></td>
<td></td>
<td>High (≥ W3.51m)</td>
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<td>1.3081</td>
<td>0.986</td>
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</table>

Note: W1,850 ≈ 1 pound

As shown in the Table 6.3, older respondents (over 45 years old) showed more positive attitude towards organic food, higher confidence in information sources of
organic food and higher intention to purchase organic food than younger respondents. Respondents in higher of income (over W 3.51 million) tended to believe that they could buy organic food easily, and they have more frequently purchased organic food than respondents in lower of income (under W 3.5 million).

Although comparing test among variables by living circumstances (presence of young children) was also examined, a significant difference was not found among these groups.

Lastly, to investigate whether or not significant differences exist among different past purchase frequencies with regard to the variables of this research, an ANOVA test with a significant level of 95% was adopted (Table 6.4).

Table 6.4 Differences among Variables by Past Purchase Frequency

<table>
<thead>
<tr>
<th>Variables</th>
<th>Past Purchasing Frequency</th>
<th>N</th>
<th>Compared Group</th>
<th>Post Hoc Mean</th>
<th>Std. D F Sig.</th>
<th>Sig.</th>
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<td>Middle High</td>
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<td>5.51 0.93</td>
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<td>.006</td>
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<td>Middle</td>
<td>56</td>
<td>Low High</td>
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<td>5.51 0.93</td>
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<td>5.96 0.75</td>
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<tr>
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<td>High</td>
<td>.000</td>
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</tr>
</tbody>
</table>
In this study, respondents' past experience of organic food was determined with a 7-point Likert scale, anchored from 1 = Never to 7 = Always. To compare differences among different frequency level of groups, past experience was consolidated into three different groups which are low frequency group (1-3 = low level of frequency), middle frequency group (4 = middle level of frequency) and high frequency group (5-7 = high level of frequency). Consolidated mean scores for all variables were also used for this analysis. In order to detect where exactly the mean differences lie, Post Hoc tests were carried out using either Tukey (assuming equal variance) or Dunnett's T3 (not assuming equal variance) tests (Pallant, 2007).

As Table 6.4 shows, significant differences appear among different past purchase frequency groups with regard to all variables with p-value of 0.00. The 'Intention to Purchase' shows the highest F-ratio (98.95), which indicates the widest gap among different past purchase frequency groups with regard to intention to purchase. The results of the Post Hoc test, confirmed that there was a significant difference among all three past purchase frequency groups with this variable. Among the three past purchase frequency groups, the high frequency group showed highest intention to purchase organic food with a mean score of 5.95, while the low frequency group showed lowest intention to purchase organic food with a mean score of 3.85. The 'Subjective Norm' shows the second highest F-ratio (56.36). Post Hoc test also confirmed a significant difference among all three past purchase frequency groups with this variable. The high frequency group showed higher willingness to comply with opinions of relevant referents about organic food (5.56), and the low frequency group showed lower willingness to comply with opinions of relevant referents about organic food (3.92).

The 'Trust in Information Source' shows the third highest F-ratio (28.32). As the result of Post Hoc test, there were significant differences between the high frequency group and the low frequency group, and the high frequency group and the middle frequency group. There was no significant difference between the low frequency group and the middle frequency group with this variable. The high frequency group trusted information sources about organic food (5.28), while the low frequency group
and the middle frequency group showed relatively lower confidence in information sources about organic food (4.38 and 4.69 respectively). The ‘Attitude’ also shows a high F-ratio (17.10), and the result of Post Hoc test found that there were significant differences between the high frequency group and other two groups (the low frequency group and the middle frequency group). Although the low frequency group and the middle frequency group expressed positive attitude (5.25 and 5.51 respectively) towards organic food, the high frequency group expressed stronger positive attitude toward organic food with a mean score of 5.95 than those two groups. The ‘Perceived Behavioural Control’ shows F-ratio with a score of 10.41. The high frequency group showed significant differences with the low frequency group and the middle frequency group through Post Hoc test. Although the low frequency group and the middle frequency group tended to perceive that they could buy organic food easily (4.91 and 5.04 respectively), the high frequency group more positively perceived that organic food purchasing is easy with a mean score of 5.46 than the other two groups.

Five respondents who completed the questionnaire had no experience of purchasing organic food. Therefore, their data were not included in the analysis of two questions regarding value for reasons to trust / not to trust organic food status (Table 6.5).

<table>
<thead>
<tr>
<th>Questions</th>
<th>Item</th>
<th>Mean (n=298)</th>
<th>Std.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q25 If you Trust that it is organic, please indicate the reason.</td>
<td>Organic food improved my health</td>
<td>5.3023</td>
<td>1.1486</td>
</tr>
<tr>
<td></td>
<td>Organic food was tastier than normal food</td>
<td>5.1628</td>
<td>1.1464</td>
</tr>
<tr>
<td></td>
<td>Its short shelf-life means no chemicals have been used</td>
<td>5.4767</td>
<td>0.96682</td>
</tr>
<tr>
<td></td>
<td>Its accurate label makes me trust it is organic</td>
<td>5.3140</td>
<td>0.97331</td>
</tr>
<tr>
<td></td>
<td>There is no special reason</td>
<td>4.3023</td>
<td>1.5034</td>
</tr>
<tr>
<td>Q26 If you Do not trust that it is organic, please indicate the reason.</td>
<td>I did not feel any health benefits from it</td>
<td>3.7353</td>
<td>1.1940</td>
</tr>
<tr>
<td></td>
<td>Organic food was not tastier than normal food</td>
<td>3.3162</td>
<td>1.2394</td>
</tr>
<tr>
<td></td>
<td>Its long shelf-life means chemicals may have been used</td>
<td>4.5588</td>
<td>1.3039</td>
</tr>
<tr>
<td></td>
<td>There are some sellers who sell fake organic food</td>
<td>5.8971</td>
<td>1.2723</td>
</tr>
<tr>
<td></td>
<td>There is no special reason</td>
<td>3.5294</td>
<td>1.2528</td>
</tr>
</tbody>
</table>
As shown in the Table 6.5, reasons to trust that organic food is truly organic were its short shelf-life and accurate label. Respondents trusted that organic food’s short shelf-life means no chemicals have been used, and its accurate label makes them trust it is truly organic. Reasons not to trust that organic food is not truly organic were mainly related to the existence of some sellers who sell fake organic food.

6.4.2 Estimation of Model Elements

The usual components of the TPB model, Attitude, Subjective Norm and Perceived Behavioural Control, are determined by expectancy-value formulations, respectively behavioural beliefs \( (A_B \propto \sum b_i e_i) \), normative beliefs \( (SN \propto \sum n_i m_i) \) and control beliefs \( (PBC \propto \sum c_i p_i) \) (Ajzen, 1985). These formulations are expressed as:

\[
A_B \propto \sum b_i e_i, \\
SN \propto \sum n_i m_i, \\
PBC \propto \sum c_i p_i
\]

where

\[
\sum = \text{Sum} \\
b_i = \text{behavioural belief strength} \\
e_i = \text{outcome evaluation} \\
n_i = \text{normative belief strength} \\
m_i = \text{motivation to comply} \\
c_i = \text{control belief strength} \\
p_i = \text{control belief power}
\]

To compute beliefs, related questions were shifted from unipolar to bipolar scoring scales, following Ajzen’s simple linear transformation (Ajzen, 2002).

To examine the relationship between estimated beliefs and major components, Pearson’s correlation coefficient was adopted.
6.4.2.1 Pearson's Correlation Coefficient

To test the degree of association between beliefs and major components ($\sum b_i e_i$ and attitude, $\sum n_j m_i$ and subjective norm, $\sum c_i p_i$ and perceived behavioural control) of the TPB model, a Pearson correlation test was carried out. Table 6.6 shows correlation coefficients among components for external consistency.

### Table 6.6 Correlation Matrix: Beliefs and Major Components

<table>
<thead>
<tr>
<th></th>
<th>Attitude</th>
<th>Behavioural Beliefs</th>
<th>Subjective Norm</th>
<th>Normative Beliefs</th>
<th>Perceived Behavioural Control</th>
<th>Control Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Beliefs</td>
<td>.473**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td></td>
<td>.535**</td>
<td></td>
<td>.431**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.061</td>
<td></td>
<td>.105</td>
<td>-.127*</td>
<td>.388**</td>
<td></td>
</tr>
<tr>
<td>Control Beliefs</td>
<td>.318**</td>
<td>.322**</td>
<td>.445**</td>
<td>-.097</td>
<td>.346**</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.6590</td>
<td>2.3689</td>
<td>.7409</td>
<td>7.3586</td>
<td>1.2063</td>
<td>.2310</td>
</tr>
<tr>
<td>Std.D</td>
<td>1.0032</td>
<td>1.9702</td>
<td>1.4321</td>
<td>13.2890</td>
<td>1.0186</td>
<td>1.2651</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level, **Correlation is significant at the 0.01 level.

As shown in Table 6.6, the 'Behavioural Beliefs' and the 'Attitude' showed significant correlation (.473). It indicates that respondents' behavioural beliefs about organic food were strongly associated with their attitude towards organic food. Ajzen (2002) stated that an individual's behavioural beliefs provide substantive information about the attitudinal consideration that lead the individual's decisions to perform or not to perform in the behaviour under consideration. Therefore, their high correlation can be explained. The 'Control Beliefs' showed significant moderate correlation (.346) with the 'Perceived Behavioural Control'. This means that the relationship between control beliefs and perceived behavioural control about organic food was not very strong but significantly moderate. Control beliefs provide a picture of the factors...
that are viewed as facilitating or impeding performance of the behaviour (Ajzen, 2002), thus the significant relationship between control beliefs and perceived behavioural control should be explained. Lastly, the ‘Normative Beliefs’ and the ‘Subjective Norm’ were significantly correlated at the < .05 level, but they showed weak correlation (-.127). In other words, respondents’ normative beliefs about organic food were weakly associated with their subjective norm towards organic food. Although stronger relationship between normative beliefs and subjective norm was better explanation of the model, because normative beliefs are assumed to provide the cognitive and affective foundations for subjective norms (Ajzen, 2002), normative beliefs were significantly related to subjective norms in this research. Hence, the degree of association between beliefs and major components of the TPB model was confirmed in the current study.

The results of correlation analysis showed that there were significant relationships between model elements, beliefs and major components. Thus, the assumptions of the model were corroborated.

6.5 Assessments of Validity and Reliability

The exploratory factor analysis (EFA) was established to find possible emerging dimensions and to provide evidence for validity of the variables.

As the result of the first exploratory factor analysis, there was a multicollinearity between two variables, subjective norm and intention to purchase. A high correlation was also found between intention to purchase and other variables as the result of correlation analysis (See Section 6.6). Multicollinearity is a statistical phenomenon in which two or more variables in a multiple regression model are highly correlated. Although multicollinearity does not reduce the predictive power or reliability of the model as a whole, it could not give valid results about any individual predictor and it could produce large standard errors in the related independent variables (Leeflang et al., 2000; Yu, 2008). One of the objectives of this study is to investigate how factors
affecting organic food choice influence intention to purchase, thus intention to purchase is the dependent variables in this study. Therefore, to remedy the multicollinearity, items of intention to purchase were removed from the final exploratory factor analysis (Kim et al., 2009; Yu, 2008).

Principle component extraction with a Varimax Rotation, applied to the final 17 items, provides the construct validity. As a result of EFA, reliability, and item-based statistics, the number of dimensions for proposed constructs was identified (Table 6.7). At the initial stage, Bartlett's test of Sphericity (a statistical test for the presence of correlations among the variables) and the KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy were measured to assess the factorability of the data. KMO value at .899 exceeds the acceptable minimum value which is .60 (Hair et al., 2006; Pallant, 2007). The Bartlett's test of Sphericity was found significant (p = .000). Thus, significant inter-correlation exists among all factors.

The retained factors were supported by the following criteria: a) meaningfulness of each factors retained, b) all variables loaded significantly on each factor, c) high amount of variance (%) explained, d) all variables show relatively high communalities. The latent root criterion of 1.0 was used for factor inclusion, and a factor loading of 0.40 was used as the benchmark to include items in a factor. Factor loadings of the variables ranged from 0.60 to 0.86, above the suggested threshold value of 0.40 for practical and statistical significance (Hair et al., 2006). The communalities of the 17 items ranged from 0.58 to 0.88, suggesting that the variances of each original variable (from 58% to 88%) were reasonably explained by the factor solution. Four factors with eigenvalues above 1.0 were generated and were formed with about 77% of the total variance explained. Four constructs were classified as exploratory extracted measures: Attitude, Subjective Norm, Trust in Information Source, and Perceived Behavioural Control. Table 6.7 shows identified factors by exploratory factor analysis.

To test the internal consistency of the four factors, Chronbach’s alpha was used. As shown in Table 6.7, all constructs ranged from 0.76 to 0.94, higher than the minimum
cut-off score of 0.7. Therefore, these four components are deemed reliable (Churchill and Iacobucci, 2004). As a result, variables with four dimensions and 17 items seem valid and reliable. Factor analysis supports the validity of variables. Cronbach’s alpha coefficients also support reliability of the four dimensions.
<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>Factor loading</th>
<th>Criteria for Selecting</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
<td>F4</td>
<td>Communality</td>
<td>Reliability (α)</td>
<td>Eigen values</td>
<td>% of variance</td>
<td></td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td>Q10 Beneficial</td>
<td>.859</td>
<td>.199</td>
<td>-.020</td>
<td>.242</td>
<td>.836</td>
<td>.941</td>
<td>8.422</td>
<td>49.543</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q10 Valuable</td>
<td>.850</td>
<td>.184</td>
<td>.166</td>
<td>.124</td>
<td>.798</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q10 Helpful</td>
<td>.833</td>
<td>.226</td>
<td>.148</td>
<td>.131</td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q10 Pleasant</td>
<td>.827</td>
<td>.204</td>
<td>.281</td>
<td>-.026</td>
<td>.805</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q10 Good</td>
<td>.811</td>
<td>.201</td>
<td>.104</td>
<td>.214</td>
<td>.755</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q10 Enjoyable</td>
<td>.801</td>
<td>.187</td>
<td>.350</td>
<td>.005</td>
<td>.799</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21 Authority</td>
<td>.205</td>
<td>.856</td>
<td>.062</td>
<td>.160</td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21 Label</td>
<td>.123</td>
<td>.789</td>
<td>.336</td>
<td>-.021</td>
<td>.751</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trust in Information Source</strong></td>
<td>Q21 Consumer Organisation</td>
<td>.200</td>
<td>.766</td>
<td>-.058</td>
<td>.297</td>
<td>.718</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21 Expert</td>
<td>.332</td>
<td>.739</td>
<td>.045</td>
<td>.258</td>
<td>.725</td>
<td>.914</td>
<td>2.310</td>
<td>13.586</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21 Media</td>
<td>.187</td>
<td>.730</td>
<td>.278</td>
<td>.191</td>
<td>.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21 Retailer</td>
<td>.140</td>
<td>.729</td>
<td>.396</td>
<td>-.036</td>
<td>.710</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q21 Important person</td>
<td>.273</td>
<td>.606</td>
<td>.223</td>
<td>.312</td>
<td>.589</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subjective Norm</strong></td>
<td>Q13 Subjective Norm 01</td>
<td>.311</td>
<td>.263</td>
<td>.834</td>
<td>.142</td>
<td>.882</td>
<td>.945</td>
<td>1.301</td>
<td>7.656</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q14 Subjective Norm 02</td>
<td>.295</td>
<td>.279</td>
<td>.826</td>
<td>.185</td>
<td>.881</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived Behavioural Control</strong></td>
<td>Q18 Perceived Behavioural Control 02</td>
<td>.260</td>
<td>.175</td>
<td>.043</td>
<td>.861</td>
<td>.841</td>
<td>.761</td>
<td>1.041</td>
<td>6.126</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q17 Perceived Behavioural Control 01</td>
<td>.069</td>
<td>.302</td>
<td>.228</td>
<td>.752</td>
<td>.714</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KMO = .899, Bartlett's test = 4259.879 (p = .000)
6.6 Correlation Analysis

To examine the relationship between research variables, a Pearson correlation test was performed. The six dimensions identified by EFA analysis and based on the research model of this study were subjected to the analysis. In general, the magnitude of the correlation coefficients was medium to large. Table 6.8 shows correlation matrix of the relationships among research variables.

Table 6.8 shows that intention was highly related to variables, attitudes, subjective norm and past experience. This would then indicates that respondents believed that attitude would be more likely to facilitate their purchasing intention, believed that others would endorse their purchasing intention, and believed that their past experience would be more likely to encourage their purchasing intention. Specifically, the 'Intention' showed relatively high correlation with three dimensions, the 'Past Experience' (.680), the 'Subjective Norm' (.643) and the 'Attitude' (.578). Ouellette and Wood (1998) pointed out that past experience can explain more of the variance in intention than can also attitude and subjective norm individually. Thus, their high correlation can be explained, and the correlation between the 'Past Experience' and the 'Subjective Norm' (.612) is also explained. In addition, the behavioural intention is predicted by people’s attitude and subjective norm in the TPB model (Ajzen, 2002), and this can explain about the correlation among these dimensions. With same reason, the correlation (.535) between the 'Attitude' and the 'Subjective Norm' is explained in the TPB model.

The results of correlation analysis also show that the 'Subjective Norm' (.560) and the 'Attitude' (.517) were strongly related to the 'Trust in Information Source'. This result may imply that the 'Trust in Information Source' which is newly added into the original TPB model plays an important role in predicting behavioural intention in this study. People’s trust in information source is related to their negative and positive beliefs, and impacts to intention in the TPB model, and this information source can be official or derived from personal experience of the consumer or their friends or family.
(Lobb et al., 2007). Thus, correlations among these dimensions can be explained by this.

Although there were correlations between 'Trust in Information Source' and some dimensions, the 'Perceived Behavioural Control' (.499), the 'Intention' (.481) and the 'Past Experience' (.432), their correlations were not strong. The other dimensions showed low relationship or no significant relationship with other dimensions (< .40). Thus, construct validity was established.

Table 6.8 Correlation Matrix of the Relationship among Research Variables

<table>
<thead>
<tr>
<th></th>
<th>Attitude</th>
<th>Subjective Norm</th>
<th>Perceived Behavioural Control</th>
<th>Trust in Information Source</th>
<th>Past Experience</th>
<th>Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.535**</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived</td>
<td>.388**</td>
<td>.350**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural</td>
<td>.517**</td>
<td>.560**</td>
<td>.499**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Experience</td>
<td>.383**</td>
<td>.612**</td>
<td>.240**</td>
<td>.432**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>.578**</td>
<td>.643**</td>
<td>.361**</td>
<td>.481**</td>
<td>.680**</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>1.6590</td>
<td>.7409</td>
<td>1.2063</td>
<td>.8076</td>
<td>.4306</td>
<td>1.1749</td>
</tr>
<tr>
<td>Std.D</td>
<td>1.0032</td>
<td>1.4321</td>
<td>1.0186</td>
<td>1.0173</td>
<td>1.3750</td>
<td>1.4209</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)

6.7 Research Hypotheses Testing

In the final stage of analysis for the quantitative approach of this study, regression analysis tested research hypotheses and the research model. Five dimensions, Attitude, Subjective Norm, Perceived Behavioural Control, Trust in Information Source and
Past Experience, were independent variables; Intention to Purchase was the dependent variable.

6.7.1 Influence of Independent Variables on Dependent Variable

In the previous analysis, the validity and reliability of independent variables, namely: Attitude, Subjective Norm, Perceived Behavioural Control, Trust in Information Source and Past Experience were confirmed. Since the relationship between calculated beliefs and major components of the TPB model was examined through Pearson’s correlation coefficient, mean values of independent variables were used to test a linear multiple regression analysis in this study. Thus, the dependent variable, intention to purchase organic food, was also measured by mean values (Lugoe and Rise, 1999).

One of the aims of the present research is to examine the influence of factors on consumers’ purchasing intention of organic food. To achieve this goal, the following hypotheses were generated:

**H1:** Attitude has a significant effect on consumers’ intention to purchase organic food.

**H2:** Subjective Norm has a significant effect on consumers’ intention to purchase organic food.

**H3:** Perceived Behavioural Control has a significant effect on consumers’ intention to purchase organic food.

**H4:** Trust has a significant effect on consumers’ intention to purchase organic food.

**H5:** Past Experience has a significant effect on consumers’ intention to purchase organic food.

Testing these hypotheses relies on a linear multiple regression analysis. The five dimensions, as obtained from the previous analysis, are independent variables, and the intention to purchase of organic food, as derived from the previous analysis, is dependent variable. Table 6.9 summarises the linear multiple regression analysis test between independent variables and dependent variable.
Table 6.9 Summary of Regression Analysis: Independent Variables and Intention to Purchase

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-.102</td>
<td>.039</td>
<td>-2.625</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>.322</td>
<td>.040</td>
<td>.317</td>
<td>8.056</td>
<td>.000</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.290</td>
<td>.044</td>
<td>.292</td>
<td>6.603</td>
<td>.000</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.124</td>
<td>.039</td>
<td>.122</td>
<td>3.206</td>
<td>.002</td>
</tr>
<tr>
<td>Trust in Information Source</td>
<td>.159</td>
<td>.039</td>
<td>.160</td>
<td>4.018</td>
<td>.000</td>
</tr>
<tr>
<td>Past Experience</td>
<td>.294</td>
<td>.034</td>
<td>.415</td>
<td>8.725</td>
<td>.000</td>
</tr>
</tbody>
</table>

\[
R^2 = .605
\]
\[
\text{Adjusted } R^2 = .598
\]
\[
F = 86.254
\]
\[
\text{Sig.} = .000
\]

As shown in Table 6.9, the regression model is statistically significant (p = .000). The adjusted \( R^2 \) is 0.598, which indicates that approximately 60% of the variance in purchase intention is explained by the factors. All independents variables, the ‘Attitude’, the ‘Subjective Norm’, the ‘Perceived Behavioural Control’, the ‘Trust in Information Source’ and the ‘Past Experience’ have significant influence on intention to purchase organic food with p-value at the 0.01 level.

The ‘Past Experience’ has the largest beta coefficient (\( \beta = .415 \)) followed by the ‘Attitude’ (\( \beta = .317 \)), the ‘Subjective Norm’ (\( \beta = .292 \)), the ‘Trust in Information Source’ (\( \beta = .160 \)) and the ‘Perceived Behavioural Control’ (\( \beta = .122 \)). This means that the ‘Past Experience’ made the strongest unique contribution to explaining the purchasing intention for organic food. Hence, \( H_1, H_2, H_3, H_4 \) and \( H_5 \) are confirmed.
To compare the variation amongst the research model of this study, the original theory of planned behavioural (TPB) model and the TPB model including new variables, the linear multiple regression analysis was also performed.

### Table 6.10 Comparing the Variation amongst Regression Models

<table>
<thead>
<tr>
<th></th>
<th>The original TPB model</th>
<th>Adding Trust into TPB</th>
<th>Adding Past Experience into TPB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intention</td>
<td>Intention</td>
<td>Intention</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-.013</td>
<td>.122</td>
<td>.110</td>
</tr>
<tr>
<td><strong>AT</strong></td>
<td>.430</td>
<td>.071</td>
<td>.304</td>
</tr>
<tr>
<td><strong>SN</strong></td>
<td>.447</td>
<td>.049</td>
<td>.451</td>
</tr>
<tr>
<td><strong>PBC</strong></td>
<td>.119</td>
<td>.063</td>
<td>.085</td>
</tr>
<tr>
<td><strong>TR / PE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>R^2</strong></td>
<td>.439</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adj. R^2</strong></td>
<td>.433</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>77.971</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sig.</strong></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 6.10, all of the regression models are statistically significant (p = .000). The adjusted $R^2$ of the original TPB model is 0.433, which means that approximately 43% of the variance in purchase intention is explained by attitude (AT), subjective norm (SN) and perceived behavioural control (PBC). The model that trust (TR) variable was added into the original TPB model explains purchase intention with approximately 49% of the variance (adjusted $R^2 = .491$). Lastly, when past experience (PE) added into the original TPB model, the model explains purchase intention with approximately 57% of the variance (adjusted $R^2 = .576$). Therefore, the research model of this study increased the explanation power to 60% from 43% of the original TPB model. The model added trust variable increased the predictive power 6%, and the model included past experience increased the predictive power 14% from the result of original TPB model.
6.7.2 Discussion of Hypotheses Testing

Through the linear regression analysis, hypotheses were confirmed and several significant results were achieved. Figure 6.13 shows the summary of hypotheses testing.

Figure 6.13 Summary of Hypotheses Testing

![Diagram showing the relationships between attitude, subjective norm, perceived behavioural control, trust, and past experience leading to intention to purchase organic food.]

Note: * Significant at the 0.01 level

6.7.2.1 Model Capacity of Explanation

The final model obtained (Figure 6.13) shows predictive capacity of the 'Intention to purchase organic food' with approximately 60% of the variation ($R^2 = .59$). This confirms the utility of the theory of planned behaviour (TPB) model for this study.

Although some previous studies that adopted the TPB model showed slightly improved explanation of behavioural intention by attitude, subjective norm and
perceived behavioural control (Guàrdia et al., 2006; Povey et al., 2000), in many previous studies, results showed less than 50% explanation of variance in the model (Bogers et al., 2004; Chase et al., 2003; Lobb et al., 2007; Mahon et al., 2006; Verbeke and Vackier, 2005), thus this 60% of the variation explains the intention to purchase organic food well.

Chase et al. (2003) applied the TPB model to examine dieticians’ intention to promote whole-grain foods in U.S.A. The model showed 27% predictive capacity of behavioural intention. Lobb et al. (2007) developed a SPARTA model based on the TPB including trust and risk perception to examine the relationship between the global variables and the intention to purchase chicken in the UK. The model predicted 27 % of behavioural intention. Verbeke and Vackier (2005) hypothesised that attitude towards eating fish, subjective norm and perceived behavioural control, have a positive impact on behavioural intention to eat fish in Denmark, and it was confirmed, explaining 30.8 % of the variance in intention to intake fish. Bogers et al. (2004) determine the effect of misconception of fruits and vegetable consumption on the explanatory value of the TPB model. Attitude, subjective norm and perceived behavioural control explained 44% of the variance in the intention to eat fruit and vegetables. Mahon et al. (2006) adopted the TPB model to investigate the purchase of ready meals and consumption of takeaway foods by UK consumers. In the case of ready meals, attitude, subjective norm and perceived behavioural control explained 46% of variance in behavioural intention. For the takeaway foods, factors of the TPB model explained 47% of variance in intention to purchase takeaway foods.

Some other food studies using the TPB model showed similar predictive power in explaining behavioural intention with this study (Guàrdia et al., 2006; Mahon et al., 2006; Pawlak and Malinauskas, 2008; Povey et al., 2000). Povey et al. (2000) examined the application of the TPB model to dietary behaviours with a particular focus on the roles of perceived control and self-efficacy as two components of the perceived behavioural control in the TPB model. The results showed that a significant proportion of the variability in intention to eat a low fat diet was explained by attitudes and perceived behavioural control ($R^2 = .63$). Guàrdia et al. (2006) evaluated
Catalunya consumers' attitude towards low salt meat products, following the TPB model. The model explained the behavioural intention with 60% of predictive capacity. Pawlak and Malinauskas (2008) identified specific beliefs regarding eating two cups of fruits among ninth-grade youth attending public high schools in eastern North Carolina utilising the TPB model. Variables accounted for 55% of variance in behavioural intention to eat fruits. In the study of Mahon et al. (2006) investigated intention to purchase of ready meals and takeaway foods, even though predictive capacity of original TPB model was 46%, inclusion of a measure of habit in the regression increased the predictive power to 59%. Similarly, in this study, exclusion of additional variables, trust and past experience, reduced the explanation of the model from $R^2 = .59$ to $R^2 = .43$ (See Table 6.9 and Table 6.10).

6.7.2.2 Attitude

As shown in Figure 6.13, 'Attitude' had a significant positive impact on the 'Intention to purchase organic food' ($\beta = .317$) with p-value ($p = .000$), thus, hypothesis 1 is confirmed.

Attitude has been widely identified as an important factor to predict intention to food choice. Lockie et al. (2004) studied that how the various motivational, attitudinal and behavioural factors interacted to influence increasing levels of organic consumption in Australia. Results showed that consumers' positive attitude towards organic food leaded increasing levels of organic consumptions. Grankvist and Biel (2001) examined importance attached to purchase criteria, attitudes towards eco-labelled food, and prescriptive norm strength to purchase eco-labelled food as potential predictors of purchasing eco-labelled food. Positive attitude about eco-labelled food product was positively correlated with a high relative frequency of choice it of Swedish consumers. Canavari et al. (2002) investigated how increased awareness of food safety and attitude towards specific food can influence Italian consumers' behaviour regarding this specific food product. Findings showed that consumers' positive attitudes towards organic food had a significant influence on their organic food choice behaviour.
Several food studies that adopted variables of the TPB model corroborate the results of the current study. McCarthy et al. (2003) examined Irish consumers’ perceptions towards beef and the influence of these perceptions on consumption adopting Fishbein and Ajzen’s (1975) the Theory of Reasoned Action (TRA). In their study, both attitude and the subjective norm influenced positively intention to purchase beef, but it was attitude that was of greater importance. Arvola et al. (2008) investigated the usefulness of integrating measures of affective and moral attitudes into the TPB model in predicting purchase intentions of organic food in three countries, Italy, Finland and UK. The measure of positive moral attitude was found to increase the share of variance explained in attitude and intention in Italy and UK. All participants had positive attitude towards intention to buy organic apples, and attitude was the strongest predictor of intention in all countries. Attitude was also found to be a positive predictor of intention to consume and purchase ready meals and takeaway foods in the UK (Mahon et al., 2006), and intention to purchase chicken of UK consumers was positively affected by attitude (Lobb et al., 2007). Guàrdia et al. (2006) measured consumers’ attitudes towards low salt meats using the TPB model. Consumers had positive attitude towards low salt meat, and positive attitude had the strongest effect on their intention to purchase low slat meat among three variables, attitude, subjective norm and perceived behavioural control.

6.7.2.3 Subjective Norm

Analysis confirmed that ‘Subjective Norm’ was a significant predictor of intention to purchase organic food ($\beta = .292$) in this study. Although subjective norm was a significant and positive predictor, it was a weaker predictor than attitude in the TPB model. This finding is in line with previous food choice applications of the TPB model.

Mahon et al. (2006) investigated the predictive utility of the TPB model in the context of ready meal and takeaway food consumption in the UK. Subjective norm contributed to the predictive power of the model for ready meals, but it was a weaker predictor than attitude. They also found that subjective norm had no predictive effect for takeaway food. Brewer et al. (1999) determined the factors influencing
consumption or avoidance of milk in American consumers using the TRA. In their study, attitude was a good predictor of milk consumption, but subjective norm was not. Chen (2007) hypothesised that since organic foods are perceived as healthier (Grankvist and Biel, 2001; Magnusson et al., 2001), when Taiwan consumers perceived that the important people surrounding them think organic foods are better than conventional foods, they will have more intention of purchasing organic foods. It was confirmed that subjective norm positively enhanced consumers' intention to purchase organic foods, even though it showed less strong predictive power than attitude. McCarthy et al. (2003) determined factors influencing intention to purchase beef in the Irish market. Even though subjective norm significantly influenced purchasing intention for beef, it made less contribution to explaining behavioural intention than attitude. Similarly, subjective norm was found to have a significant effect on consumers' intention to buy fermented sausages with reduced sodium content, but it was a weaker predictor than attitude (Guàrdia et al., 2006).

However, subjective norm has been found to be the strongest predictor in some other studies. Chase et al. (2003) tested variables of the TPB model in explaining dieticians' intentions to promote whole-grain foods. In the study, subjective norm was the strongest predictor of intention. Findings showed that the subjective norm was 11.9 times more important than attitudes and 2.3 times more important than perceived behavioural control in explaining intention to promote whole-grain foods.

6.7.2.4 Perceived Behavioural Control

In this study, the 'Perceived Behavioural Control' was the weakest predictor of intention to purchase organic food ($\beta = .122$). This is consistent with other food choice studies.

Guàrdia et al. (2006) evaluated consumers' behavioural intention towards purchase of reduced salt sausages in Chtalunyta using the TPB model. Although all components of the TPB model had a significant effect on behavioural intention, perceived behavioural control was the weakest predictor of intention. Mahon et al. (2006) examined predictors of intention to eat ready meals and takeaway foods of British
consumers. In their study, perceived behavioural control failed to emerge as a significant predictor of consumption of either food. Bredahl and Grunert (1997) adopted the TPB model to explain intention to buy three specific sea food categories, fish, frozen fish and shelled shrimps of Danish consumers. Perceived lack of capability and control of buying and preparing the product was analysed, and it was found as no significant predictor of consumption of all three types of sea foods. Povey et al. (2000) pointed out when a person has a high level of self-confidence in evaluation of a product purchasing decision, perceived behavioural control will not be a major issue in influencing behavioural intention.

In contrast, perceived behavioural control has been found to be a stronger predictor of behavioural intention, in some earlier studies (Bogers et al., 2004). Bogers et al. (2004) found that perceived behavioural control was the strongest predictor intention to consume both foods, fruits and vegetable, amongst Dutch consumers. In their study, the prediction by perceived control was better for the intention to eat vegetables than for the intention to eat fruits. Chen (2007) tested Taiwan consumers’ intention to purchase organic food by using the TPB model. Perceived behavioural control was found as a stronger predictor than subjective norm, and a weaker predictor than attitude.

6.7.2.5 Trust

Trust was included in the TPB model as a dependent variable in this study. This variable was labelled ‘Trust in Information Source’, because all items of this variable related to the confidence respondents had about information sources for organic food. As shown in Figure 6.13, the factor ‘Trust in Information Source’ had a significant influence on ‘Intention to purchase organic food’, even though it was not the strongest contribution to explaining the behavioural intention ($\beta = .160$) in the model. Thus, hypothesis 4 was confirmed.

Vermeir and Verbeke (2008) adopted the extended TPB model to investigate sustainable purchase behaviour and to formulate recommendations for stimulating sustainable food consumption among young adults in Belgium. Trust had a direct
positive effect on intention to purchase sustainable diary products. Lobb et al. (2007) analysed how food purchase can be explained and predicted taking into account trust in food safety information using the TPB model. Results showed that trust in information sources significantly influenced intention to purchase chicken. Kim et al. (2008) used the modified TPB model including trust to investigate consumers' decision-making processes leading to purchase behaviour. Findings found that consumers' trust positively affected consumers' intention to purchase.

Bonne and Verbeke (2008) focused on trust amongst Belgian Muslims in information sources about halal meat and their confidence in key actors and institutions for monitoring and controlling the halal meat chain. Findings revealed that trust in information sources had a significant effect on consumers' intention to purchase, and Islamic institutions and the Islamic butcher received, in general, most confidence for monitoring and controlling the halal status of meat. However, based on Muslims' confidence, four different market segments were identified, and consumers' purchasing intention and behaviour were significantly different depending on these segments. Indifferent consumers were rather undecided about who should monitor the halal status of meat, and they were most open to purchasing halal meat in the supermarket. Concerned Muslim consumers showed higher confidence in Belgian than in Islamic institutions, which was associated with perceiving a lack of information, poor hygiene and safety concern as barriers to purchasing halal meat. Confident consumers displayed a clear preference for Islamic institutions to monitor and communicate about halal. Islamic idealists, who were typified by younger age, second generation and high Muslim self-identity, differed from the confident consumers through their very low confidence in local Belgian sources and institutions.

6.7.2.6 Past Experience

Past experience was also added into the original TPB model as a dependent variable in this study. The factor 'Past Experience' had a highly significant positive impact on 'Intention to purchase organic food' with strongest unique contribution to explaining behavioural intention ($\beta = .415$).
This result corroborates previous studies. In the study of Verbeke and Vackier (2005), past experience was included into the TPB model to identify Danish consumers' intention to purchase fish, under the assumption of a positive relationship between intention and prior consumption frequency (Olsen, 2001). Findings showed that past experience had the strongest influence on behavioural intention to buy fish. Hsu et al. (2006) used the extended model of TPB to examine the antecedents of consumers' intention to continue using online shopping. Consumers' level of positive satisfaction with prior experience was strongly associated with their online shopping continuance intention. Another TPB study related to ready meals found that past experience had a significant influence on behavioural intention. Even though it did not show the strongest predictive power amongst the variables, it was stronger than subjective norm and perceived behavioural control. In addition, the inclusion of past experience into the model increased its predictive power (Mahon, et al., 2006). When added to the regression model, measures relating to past behaviour were typically found to improve significantly the prediction of later behaviour (Saba and Di Natale, 1999). This could mean that the predictive power of past behaviour relies on the belief that past behaviour was a reasoned action. A strong relation between prior and later behaviour proves that the behaviour in question is well thought through and hence is stable over time (Bamberg and Schmidt, 2001).

6.8 Summary
This chapter presented the findings of quantitative research of the main study. First, the profiles of the respondents were illustrated, and sub-determinants of the usual components of TPB model were confirmed. Findings explained well the relationship between the estimated beliefs and the main components. Thirdly, the validity and reliability of the research variables were assessed. Findings confirmed four dimensions of the independent variables: Attitude, Subjective Norm, Perceived Behavioural Control, and Trust in Information Source. The results supported that the variables are valid. In addition, Cronbach’s alpha coefficient supported the reliability of these dimensions. Fourth, correlation analysis provided an initial identification of
the type of correlations among the research variables. Finally, regression analysis tested the research hypotheses and the research model. The results showed that all factors, Attitude, Subjective Norm, Perceived Behavioural Control, Trust in Information Source and Past Experience, had a positively significant influence on the purchasing intention for organic food. The past experience factor was the strongest predictor, and the perceived behavioural control factor was the weakest predictor of the purchasing intention for organic food. These results of the present study were discussed in comparison with the relevant previous studies.
CHAPTER SEVEN
Chapter 7 Findings and Discussion II: Main Study - Qualitative Research

7.1 Introduction

This chapter presents the findings of the qualitative research of the main study. The chapter begins with profiles of the participants’ socio-demographic characteristics. The intention and realised purchase behaviour of respondents are presented. Factors affecting the intention to purchase of organic food are identified, and the determinants of the relationship between behavioural intention and realised purchase behaviour for organic food are also investigated. The results of analysis are discussed by comparing them with previous studies.

7.2 Profiles of Participants

7.2.1 Interview Participants

The questionnaire was followed up with in-depth interviews with the people recruited through the questionnaire. Before completing the questionnaire, respondents were informed of the intention to conduct a small number of interviews in the future. They were asked to leave their contact details at the end of the questionnaire if they were willing to take part in the interviews. In-depth, semi-structured interviews were conducted with participants. A total of twenty eight respondents’ contact details were collected, and 20 participants took part in the interviews. They were interviewed on a face-to-face basis. The interview was carried out between 5th to 24th September, 2008. Interviews lasted between 40 min. and 70 min. and were conducted at the
participants’ home or in coffee shops according to participants’ convenience and preference.

Among the 20 participants, 14 of the interviewees were female, and 6 were male. The ages of interviewees ranged from under 24 to over 65 years, with most people aged between 25 and 44. The majority of the sample had relatively high educational backgrounds, 11 people had undergraduate degrees and 6 had postgraduate degrees. Most people were living with a partner or a partner and children. The majority of the respondents had no children, 3 had school age children and 4 respondents had preschool aged children. The majority of the sample earned between 2.01 million and 5.00 million won per month. Table 7.1 shows the profiles of respondents in detail.

Table 7.1 Profiles of Respondents

<table>
<thead>
<tr>
<th>Sample</th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Living with</th>
<th>Age of children</th>
<th>Income (₩10,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>&lt;24</td>
<td>High school</td>
<td>Partner &amp; child</td>
<td>2</td>
<td>201-350</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>25-34</td>
<td>Undergraduate</td>
<td>Partner</td>
<td>no child</td>
<td>351-500</td>
</tr>
<tr>
<td>3</td>
<td>Female</td>
<td>25-34</td>
<td>Undergraduate</td>
<td>Alone</td>
<td>no child</td>
<td>under 200</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>25-34</td>
<td>Undergraduate</td>
<td>Partner</td>
<td>no child</td>
<td>201-350</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>25-34</td>
<td>Undergraduate</td>
<td>Parents</td>
<td>no child</td>
<td>over 651</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>25-34</td>
<td>Undergraduate</td>
<td>Partner &amp; child</td>
<td>5</td>
<td>over 651</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>25-34</td>
<td>Postgraduate</td>
<td>Partner</td>
<td>no child</td>
<td>351-500</td>
</tr>
<tr>
<td>8</td>
<td>Female</td>
<td>35-44</td>
<td>Postgraduate</td>
<td>Parents</td>
<td>no child</td>
<td>201-350</td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>35-44</td>
<td>Postgraduate</td>
<td>Partner &amp; children</td>
<td>3/1</td>
<td>351-500</td>
</tr>
<tr>
<td>10</td>
<td>Female</td>
<td>35-44</td>
<td>Undergraduate</td>
<td>Parents &amp; Partner &amp; child</td>
<td>6</td>
<td>351-500</td>
</tr>
<tr>
<td>11</td>
<td>Male</td>
<td>35-44</td>
<td>Undergraduate</td>
<td>Partner</td>
<td>no child</td>
<td>351-500</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>35-44</td>
<td>Postgraduate</td>
<td>Partner</td>
<td>no child</td>
<td>201-350</td>
</tr>
<tr>
<td>13</td>
<td>Male</td>
<td>35-44</td>
<td>Postgraduate</td>
<td>Partner &amp; child</td>
<td>9</td>
<td>351-500</td>
</tr>
<tr>
<td>14</td>
<td>Female</td>
<td>35-44</td>
<td>Undergraduate</td>
<td>Partner &amp; child</td>
<td>10</td>
<td>201-350</td>
</tr>
<tr>
<td>15</td>
<td>Female</td>
<td>45-54</td>
<td>Undergraduate</td>
<td>Partner &amp; child</td>
<td>14</td>
<td>351-500</td>
</tr>
<tr>
<td>16</td>
<td>Female</td>
<td>45-54</td>
<td>Postgraduate</td>
<td>Alone</td>
<td>no child</td>
<td>under 200</td>
</tr>
<tr>
<td>17</td>
<td>Female</td>
<td>55-64</td>
<td>High school</td>
<td>Partner &amp; children</td>
<td>33/30</td>
<td>501-650</td>
</tr>
<tr>
<td>18</td>
<td>Female</td>
<td>55-64</td>
<td>Undergraduate</td>
<td>Partner &amp; children &amp; grandchild</td>
<td>37/36/33</td>
<td>351-500</td>
</tr>
<tr>
<td>19</td>
<td>Male</td>
<td>55-64</td>
<td>High school</td>
<td>Partner &amp; children</td>
<td>34/34/31</td>
<td>501-650</td>
</tr>
<tr>
<td>20</td>
<td>Male</td>
<td>&gt; 65</td>
<td>Undergraduate</td>
<td>Partner &amp; children &amp; grandchild</td>
<td>36/35/33</td>
<td>351-500</td>
</tr>
</tbody>
</table>

Note: ₩1,850 ≈ 1 pound
7.2.2 Intention and Realised Behaviour

Based on their questionnaire responses, thirteen interviewees out of the total expressed a high intention to purchase organic food. Of those, 11 people actually purchased organic food, and 2 people did not purchase organic food. Two interviewees neither intended nor did not intend to purchase organic food. One of them purchased organic food and the other did not. Five interviewees had expressed a low intention to purchase organic food. Among them, 2 people actually purchased organic food and remaining 3 did not (See Table 7.2).

Table 7.2 Realised Purchase Behaviour

<table>
<thead>
<tr>
<th>Sample</th>
<th>Purchasing Intention</th>
<th>Realised Purchasing Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very high (7/7)</td>
<td>Purchased</td>
</tr>
<tr>
<td>2</td>
<td>Middle (4/4)</td>
<td>Purchased</td>
</tr>
<tr>
<td>3</td>
<td>High (5/5)</td>
<td>Purchased</td>
</tr>
<tr>
<td>4</td>
<td>Very low (2/2)</td>
<td>Non-purchased</td>
</tr>
<tr>
<td>5</td>
<td>Middle (4/4)</td>
<td>Non-purchased</td>
</tr>
<tr>
<td>6</td>
<td>Very low (2/2)</td>
<td>Non-purchased</td>
</tr>
<tr>
<td>7</td>
<td>Very low (1/1)</td>
<td>Purchased</td>
</tr>
<tr>
<td>8</td>
<td>Very low (2/2)</td>
<td>Purchased</td>
</tr>
<tr>
<td>9</td>
<td>Very high (6/6)</td>
<td>Purchased</td>
</tr>
<tr>
<td>10</td>
<td>Very high (7/7)</td>
<td>Purchased</td>
</tr>
<tr>
<td>11</td>
<td>Very low (2/2)</td>
<td>Non-purchased</td>
</tr>
<tr>
<td>12</td>
<td>High (5/5)</td>
<td>Non-purchased</td>
</tr>
<tr>
<td>13</td>
<td>Very high (7/7)</td>
<td>Purchased</td>
</tr>
<tr>
<td>14</td>
<td>High (5/5)</td>
<td>Purchased</td>
</tr>
<tr>
<td>15</td>
<td>High (5/5)</td>
<td>Non-purchased</td>
</tr>
<tr>
<td>16</td>
<td>Very high (6/6)</td>
<td>Purchased</td>
</tr>
<tr>
<td>17</td>
<td>Very high (7/7)</td>
<td>Purchased</td>
</tr>
<tr>
<td>18</td>
<td>Very high (6/6)</td>
<td>Purchased</td>
</tr>
<tr>
<td>19</td>
<td>Very high (7/6)</td>
<td>Purchased</td>
</tr>
<tr>
<td>20</td>
<td>Very high (7/7)</td>
<td>Purchased</td>
</tr>
</tbody>
</table>

*Note: 1 = Very Low 7 = Very High*
Findings from the interviews showed that realised purchase behaviour for organic food was different depending on the living circumstances of respondents. Respondents having preschool children aged under 6, generally bought organic food and showed very high intention to buy organic food. While, amongst the 6 respondents who did not actually buy organic food, 5 of them were either childless or had grown-up children. Therefore, the results found that there are differences between consumers who have young children and those who did not show realised purchase behaviour for organic food. In addition, all of the older aged respondents (over 45 years old) showed a high intention to buy organic food, and all of them actually bought organic food. In contrast, amongst the younger group, 7 respondents showed high intention to buy organic food, and 4 of those had young children. Thus, the results found that consumers who had a high intention to purchase and actually bought organic food, tended to be older. There were no differences among other demographic groups, gender, education and income, about realised purchase behaviour of organic food.

7.3 Results and Discussion

Content analysis was used to analyse the information obtained from interviews, and 4 major themes were derived from the information: 1. Price; 2. Confidence in organic food; 3. Past experience; 4. Unexpected circumstance.

7.3.1 Price

High price had made it difficult for some participants to buy organic food, even if they recognised benefits, including those who had expressed an intention to buy organic food.

"I understand benefits of organic food and trust its efficacy, but because I am always considering about economic problem, practically purchasing organic food is not easy" (No.12, Male/35-44)
Price had also influenced realised purchase behaviour for organic food of another participant who neither intended nor did not intended to purchase organic food. The high price of organic food was the most significant reason to not buy organic food.

"If it is vegetable for salad, I would buy organic product, but I always hesitate because of its high price" (No. 5, Female/25-34)

Several studies have confirmed this result of the study. According to Kihlberg and Risvik (2007), Swedish consumers would not buy an organic food product that was appreciably higher in price than a conventional food. Similarly, Gracia and Magistris (2008) pointed out that the expected negative estimate coefficient indicated that the more importance Italian consumers attached to price when shopping the lower the level of consumption was. Therefore, the increase of organic food demand is still limited by the importance that consumers attach to price when shopping. Verhoef (2005) examined whether perceived price influences organic meat choice, concluding that Dutch consumers who perceived the price to be high are less willing to buy organic meats and will consume less quantity.

A woman participant pointed out that she normally bought cheap or discounted organic products, but that lack of availability of discounted organic food had made it difficult for her buy organic food on this occasion.

"The first reason is because of the price. If there were cheap organic products, I would buy it. Normally, if I can find cheap or discounted organic products, I used to buy organic food, but in this time, I couldn't see any reasonable price organic products" (No.15, Female/45-54)

A female participant who neither intended nor did not intend to purchase organic food also answered that the most important reason for her realised purchase behaviour for organic food was price. Even though she recognised possible benefits of organic food, she could not normally purchase organic food because of its high price. In this instance the item purchased was not perceived to be expensive.

"I bought organic bread in this shopping. It was not expensive. And, if you insist on asking the reason, I think...maybe because of health. Everybody knows that organic
food is good for health, so... if it is not expensive, why people don’t buy it... but you know... it is expensive. But, in this time, its price was reasonable comparing with normal bread. So I bought it” (No. 2, Female/ 25-34)

This result suggested that lower pricing for organic food had direct effect on consumers’ realised purchasing behaviour. Changing price strategies and effect on purchasing behaviour of food were examined in a series of studies (French, 2003; French et al., 1997; French et al., 2001) French et al. (1997) examined the effects of pricing strategies on sales of fruits and vegetables in an adolescent population. Price on fruit, carrot, and salad were reduced by 50% and sales were monitored. Findings showed that fruit sales increased by about fourfold, carrot sales increased by about twofold, but there were no significant intervention effects on sales of salads during the low-price period. The effect of a range of price reductions of lower fat vending machine snacks was examined by French (2003) in Minnesota. Price reduction was associated with a significant increase in percentage of lower fat snack sales. When prices were reduced by 10%, 25% and 50%, the percentage of lower fat snack sales increased by 9%, 39% and 93%, respectively. Similar results have been reported previously by the same workers (French et al., 2001).

Some participants mentioned that although high price was the major barrier to buying organic food, it can be justified if it is for a baby. Both those who had expressed a high intention and a low intention to buy organic food made this point.

“The first reason why I don’t buy organic food is because of price. However, if I will marry and have baby, I will probably buy organic food for my baby.” (No. 5, Female/ 25-34)

Some participants with high intention addressed their children’s health, rather than their own. One participant only bought organic food for her baby, eating non-organic food themselves.

“The most important reason to buy organic food is for my son. I don’t buy organic food for me. I only buy organic food for my baby. So, for my son, the price is not important” (No.10, Female/ 35-44)
"Although organic food is expensive, because I have little children, I choose lower chemical food, even if it is not 100% chemical free. And, because it is lower chemical, organic food is good for health. So, I try to buy organic food" (No. 9, Female/ 35-44)

"Organic food is expensive. But, I think that we have to eat organic food depend on products. Anyway, we buy organic vegetable and fruits 1/3 of normal food. Normally, we buy only organic food for baby (grandson)" (No. 20, Male/ Over 65)

Thompson and Kidwell (1998) studied conventional and organic produce purchases in USA and drew similar conclusions to this study. Families with children were more likely to buy organic products than those without children. Batte et al. (2007) investigated American consumers’ willingness to pay for organic products and also found that families with children were willing to pay higher premium for foods with 70–95 percent and 95–99 percent organic ingredients than were consumers without children.

Some participants with a high intention to buy organic food answered that the health of their family and their own health was more important than price.

“It is true that I always hesitate when I buy organic food. If organic food is not expensive, I would always buy only organic food. But, I mean... because health is more important than the price, I buy organic food if it is essential” (No. 1, Female/ under 24)

Some participants particularly noted that they believed that organic food is good for health because it is chemical free or low-chemical food, thus they bought organic food even though it was expensive.

“Organic food is expensive than normal food. But, it has no sprayed chemicals, so I think, it is good for health. For me and my family, health is more important than price” (No. 17, Female/ 55- 64)
"Even it is expensive, if I feel it is better, I normally buy it. Better means... I think, because it is no chemical, it is good for body. Isn't it?" (No. 3, Female/25-34)

Some participants indicated that for frequently consumed items, they buy organic food because of health, even though organic food is expensive.

"I think that organic food is better for health than normal food. Because I eat everyday milk or other dairy products, I think, I should eat better quality food for everyday eaten food. Even if it is more expensive, we need to eat good food" (No. 13, Male/35-44)

Several researchers have found similar results. Healthiness is an important criterion for purchase and a parameter of quality for many consumers (Magnusson et al., 2001; Wandel and Bugge, 1997), and although there is no definite evidence that organic foods are healthier than normal foods, consumers perceive organic foods to be healthier than normal foods (Grankvist and Biel, 2001; Magnusson et al., 2001; Torjusen et al., 1999). This is also confirmed in a UK study. British organic food consumers thought that organic food was better than conventionally produced food. They were said to develop an interest in organic food for their own health benefit or that of their family (Soil Association, 1999). Some studies suggested that the primary motivation to purchase high priced organic food relates to health concerns (Batte et al., 2007). Loureiro and Hine (2002) stated that organic labelled products can command premium prices. They found that Colorado consumers were willing to pay more premiums for locally grown organic products using a contingent valuation survey. Wang and Sun (2003) also found that Vermont consumers were willing to pay more for organic apples and milk because perceived as more healthy.

7.3.2 Trust

Some respondents indicated that trust had not influenced their purchasing decision, including both those who had expressed confidence in organic food and those who had not.
Some interviewees mentioned that even though they trusted experts' opinion and perceived benefits of organic food, they could not purchase it because of its high price.

"Yes... I trust it. However, I am not an expert, I am an ordinary customer. Thus, my confidence came from experts' opinion. I just trust them. I still trust that organic food is good and better than normal food. But, for me, at this moment, economic problem is most important things" (No.12, Male/ 35-44)

Confirming previous findings from literature, one of the most trusted information sources were health-related experts such as doctors, dieticians and public health recommendations (Holgado et al., 2000). Pieniak et al. (2007) also suggested that consumers with strong interest in health-related information paid more attention to health and nutrition-related experts. However, price of products is the most major concern for consumers' purchasing behaviour rather than anything else (Kihlberg and Risvik, 2007).

Some participants indicated that although high price and lack of confidence in organic food were the major barrier to buying organic food, they are willing to buy organic food for baby because they believed perceived benefits of organic food.

"Actually, I don't trust it 100%. And, the first reason of non-purchasing is price. Although I am concerning about organic food purchasing, I hesitate because of these two reasons. But, even though... I think that it is better than normal food. So, if I have baby in the future, I will grow some organic food by my self. And, if I can't grow some organic products by myself, maybe...I could buy some." (No. 5, Female/ 25-34)

"I can't 100% trust organic food, but if you think about child, you surely should buy organic food, even it is expensive. I just think that organic food is better that normal food even very little bit... so I buy organic product" (No. 9, Female/ 35-44)

Even though there is no distinct evidence that organic foods are good for health, people trust organic foods to be better for health than normal foods (Grankvist and Biel, 2001; Magnusson et al., 2001; Torjusen et al., 1999). This was confirmed in
several studies in other countries. A British national survey revealed that 45 percent of respondents mentioned fear of conventional foods, chemical residues from pesticides and antibiotics and food additives (Mintel, 1999). German consumers also trusted that organic products contain more nutrients, fewer residues, and that they taste better. They were dissatisfied with conventional food and seek support for organic food (Frohn, 1996).

Some participants also mentioned that they trust organic food because of overall perceived benefits. However, they also expressed concern that organic food is not truly organic.

"I mean that I can't 100% trust it. I trust it because I felt better. But, you know... there are so many no real products, and even if it is organic, I don't think that it is 100% organic. But, I think...organic food is better, so I am rather trust" (No.15, Female/ 45-54)

"You know... it is difficult to trust that it is 100% truly organic. But, although I don't trust it, I think, even it is not truly organic, organic food maybe better than normal product." (No. 2, Female/ 25-34)

"Honestly, I don't think that we can feel directly any efficacy after eating organic food. In fact, normal food is grown with too much chemical. So I think, even if organic is no 100% chemical free, it should be lower chemical than normal food, thus, organic is better than normal" (No.17, Female/ 55-64)

This result can be connected with the suggestion of several researchers. According to Torjesen et al. (2001), choosing organic food can be interpreted as a way of coping with perceived risks related to modern, industrial food production. It is seen as a way of seeking security and confidence in what people eat. Similarly, Baker et al. (2004) pointed out that the most important factor underlying organic food purchase is distrust in conventional food rather than truly trust in organic food.
Some participants indicated that even though they buy organic food, they do not truly trust retailers and manufacturers of organic food.

"You know... I can't confirm with my eyes whether it is really grown organically or not. Also, even if seller sales normal food as organic food to me, I can't do anything... because I don't know. Anyway, although I buy organic food, I can't trust it" (No. 1, Female/ under 24)

"I can't trust about processed food. In fact, some manufacturing companies ignore consumers' health because of their own profit. In this mean, I can't trust it. So, I normally buy non-processed organic food, normally vegetables" (No. 3, Female/ 25-34)

It has been argued that information from food retailers and manufacturers often lacks public trust and credibility (Frewer et al., 1996). Bauer et al. (1998) also reported that industry was associated with very low levels of confidence for consumers. Pieniak et al. (2007) also concluded that people do not really trust commercial or economic operators, and such an insight would be the real obstacles and reasons why people do not consume food in line with dietary recommendations.

A female participant indicated that she did not trust organic food because there is no detailed information about organic food, and no certification system by the authorities.

"Although I buy organic food, I can't trust that it is truly organic. I mean... because detail information of origin or food processing is not informed to consumers, so it is difficult to trust about it. Also, there is no standard certification system by the government or authority, so I can't trust it" (No. 16, Female/ 45-54)

This result is in line with other studies. Awareness of the label and detailed information about organic food can increase the probability that consumers would be likely to purchase organic food (Batte et al., 2007). The lack of consumer belief about the specificities of organic food and the lack of criteria covered by the authority can be key issues hampering the development of the demand for organic food (Roitner-Schobesberger et al., 2008).
In contrast, the other participants answered that trust had influenced their realised purchasing of organic food.

Some participants indicated that they trust recommendation of acquaintances, thus, they buy organic food.

"Also, in the nursery, teachers recommend and educate to parents to feed organic food. They are teachers of my son. I should trust them" (No. 10, Female/35-44)

Others mentioned their confidence in verified information of mass media.

"My friends say that organic food is good. I just believe them, and buy organic food. Also, I trust information from mass media. Well...because they offer verified information...I think..." (No. 19, Male/55-64)

Confidence characteristics of food have become very important to consumers, and consumers put their trust in the information source and information received (Grunert, 2006). Friends and family have frequently been recognised as reliable information sources (Pieniak et al., 2007), trust in information from them is likely to be very influential for potential consumption of food (Frewer et al., 1996). In addition, the resulting trust about information for food is known to consumers through coverage in mass media and through discussions in public forums organized by experts (Kramol et al., 2006).

Some participants indicated that even though they try to trust information from the mass media, they have some confusion, because of conflicting information.

"I can't trust 100%. In the recent news, I heard that some organic products make some poison by itself to protect from damages by blight and harmful insect, because it is not sprayed agrichemicals. Thus, those kinds of organic food could be more harmful to human body. So, I don't know what I should do actually. Like this... my trust in organic food is changing depend on information of mass media. I try to follow information of mass media" (No. 20, Male/over 65)
"Also, some TV programs inform benefits and good thing of organic food, but another program, it was news, inform that there are many no-real organic product and some organic products come from China. Something like this...So, I can't trust it" (No.12, Male/35-44)

Investigating the effects of conflicting information, Breakwell and Barnett (2003) found that people perceived more risk and less credibility after reading conflicting information compared to reading single information. Similarly, Viscusi (1997) investigated the effects of receiving conflicting high and low risk information from some sources, such as government and industry, and suggested that when experts give conflicting information it increases consumers' perceptions of risk and lowers the credibility of the information sources.

7.3.3 Past Experience

Satisfaction with past experience leads to repurchase of organic food, while dissatisfaction with past experience resulted in not continuing to buy organic food.

Some participants who had been satisfied with their past experience and expressed high intention answered that they purchased organic food because they felt better after eating organic food, including improvement in their skin.

"After eating organic food, I felt that my skin was getting better. I don't know ...maybe because organic food is not devitaminized" (No. 3, Female/25-34)

Others mentioned better taste.

"I felt that organic food was better taste. One of my friends gave real organic vegetable which is grown by my friend. It was really better taste, fresh and glossy. It was really good. Also, I often buy organic vegetable in the local market, it is also nice." (No. 18, Female/55-64)

Patel and Schlundt (2001) proposed that positive experience could increase food intake via an associative learning system where satisfaction has been associated with
eating more food. Lim et al. (2008) also stated that high satisfaction with past food experience can occupy a significant position in people's reference memory, then influencing future dietary behaviours.

Other participants answered that even though they had been satisfied with their past experience, they only buy organic food if they can find it at a reasonable price.

"Because there were no reasonable price organic products, I couldn't buy it in this time. I intend to buy organic food because I felt good after eating it. It was taste and fresh. Although I couldn't buy it in this time, anyway I buy organic food because of my past experience" (No. 15, Female/ 45-54)

"As I've said... I don't normally buy organic food, I seldom buy it when its price is not expensive. Anyway, because I felt that organic food is fresher and better taste. This bread was better taste as well. So, Yes, probably... If I can find reasonable price's organic product, I will buy it because I am satisfied with it" (No. 2, Female/ 25-34)

People who had experience of higher price of organic food, even if they felt then to be better than normal products, had negative intention towards organic food choice (Magnusson et al., 2001). Verbeke and Vackier (2005) examined the influence of past experience by price on intention to purchase fish in Belgium. The high price experience had highly significant negative impact on behavioural intention in fish consumption.

Some participants mentioned that they did not purchase organic food because they had perceived no benefits from their past experience. However, they expressed that they would be willing to pay more for organic food, if they had evidence of its benefits.

"Because I used to shop for food with my mother and it was shopping for my family, I used to buy organic food even it was expensive. Also, after eating organic food, because I couldn't feel any difference with normal products, I didn't buy it in this
shopping. If I felt better after eating, maybe...I would buy organic food even it is more expensive” (No.12, Male/ 35-44)

“Actually, I had organic food before, but I couldn’t feel any particular differences...taste, freshness or whatever... So, I didn’t buy it later. If I felt something after eating organic food, I would buy organic food even it is more expensive...maybe” (No. 5, Female/ 25-34)

Although some participants did not express willingness to pay more to buy organic food, they also answered that they did not buy organic food because they could not feel any differences, and would buy if they can have evidence of its benefits.

“I have rarely bought organic food, but I couldn’t feel anything better than normal food. So, I didn’t feel that I would buy organic food in the future. If I felt better after eating organic food, I would buy it. But, I couldn’t feel any reason that I have to buy organic food, so I didn’t buy it” (No. 4, Female/ 25-34)

“I couldn’t feel any differences between organic and normal. If I felt some differences or any efficacy, I would buy organic food. I didn’t feel anything, so I didn’t buy organic food in this time” (No.12, Male/ 35-44)

According to Furst et al. (1996), most people who had performed the behaviour in the past would do it again in the future. However, if the experience had been unpleasant or unsatisfying, it was less likely to happen again. Thus, past behaviour influenced future behaviour only when the experience had been positive (Forward, 2006).

In contrast, other participants answered that past experience had no influence on their realised purchasing of organic food.

Participants with high intention answered that actual purchasing of organic food was not related to their past experience. They purchased organic food because of perceived benefits rather than actually experiencing benefits. They believed that
organic food is better than conventionally grown food even though they could not directly feel its benefits.

"I bought organic food because I think organic food is better than normal food as I mentioned before. I don't think... I bought it because I satisfied with my past organic food choice. I didn't buy because of past experience of my choice" (No. 1, Female/under 24)

"Actually, I couldn't feel any efficacy or difference. I buy organic food...because I think, it is even little bit better than others. But, honestly, I couldn't feel that it is really good to my son. I don't know, but maybe better than normal food" (No.10, Female/35-44)

Some referred to possible long-term benefits.

"My past experience had no influence me. I think, I couldn't feel any efficacy from it. Honestly, I don't think that we can feel directly any efficacy after eating organic food. But, in long term view, I think that organic food is better than normal food for me and my family, thus, I buy it" (No. 19, Male/55-64)

This result was again linked to consumers' perceived benefits rather than realised benefits of organic food. Organic foods are widely perceived to be tastier and healthier than conventionally produced products (Grankvist and Biel, 2001; Magnusson et al., 2001; Torjusen et al., 1999), and these perceived benefits make organic food products an interesting consumption option (Loureiro and Hine, 2002).

Some interviewees mentioned about habitual purchasing. Two of them answered that they have habitually bought organic food rather than feeling any efficacy after once purchasing organic food.

"As I've mentioned before, although I couldn't feel any efficacy, I regularly buy organic milk, so... maybe I buy it habitually. Well... after once purchasing, I used to buy it...Anyway, I didn't feel any efficacy" (No.14, Female/35-44)
“No, I couldn’t feel specific difference of taste or efficacy from organic food. I mean, it maybe a kind of habitual diet. It was difficult to eat normal food because I have eaten organic food. For some reason or other, I think, I have to don’t eat normal food” (No. 16, Female/ 45-54)

This result could be confirmed by prior studies. In the Mahon et al. (2006) study, habit was found to be a predictor of actual behaviour. The majority of respondents said that they did not buy ready meals and takeaways out of habit and they had no intention of doing so. However, since using them once, they have habitually purchased ready meals and takeaways. Saba and Di Natale (1999) examined the role of attitudes, habit and intention in predicting the actual consumption of meat in Italy. Results found that habit showed the highest correlations with the actual consumption of meat, and Italian consumers consume meat habitually. Ji and Wood (2007) hypothesised that regardless of consumers’ intentions, they would repeat habits to purchase food in USA. The results found the anticipated pattern in which consumers repeated habitual behaviours to buy fast food.

7.3.4 Unexpected Circumstances
Some participants who expressed low intention to buy organic food but actually bought organic food mentioned that the reason to buy organic food was not related to its price, their trust in and past experience of organic food. They addressed that it was because of unexpected circumstance.

Some participants mentioned that the reason they bought organic food was because of unexpected circumstances, including those who had previously indicated no intention to buy organic food. For instance, a participant mentioned that there was no other choice only organic food, so he had to buy organic garlic.

“I didn’t have other choice, because there was only organic product what I want to buy (garlic). If there was normally grown product, I surely bought normal product. I bought it on my way to home. In that store, only organic garlic was left. So, I bought it” (No. 7, Male/ 25-34)
A female participant answered that her realised purchase behaviour for organic food was not related to price of organic food, but related to buying it as a present. She knew that her friend fed her baby, organic food.

"Because... I know that my friend feeds only organic food her baby, so I just thought that organic food is good for present for her. Anyway there was organic product, so I could buy it." (No. 8, Female/ 35-44)

They answered that confidence in organic food is not related to their actual purchasing behaviour for organic food either. They indicated that it was irrelevant to choice for organic food.

"Actually, it doesn't matter whether it is truly organic or not for me, because I don't buy organic food." (No. 7, Male/ 25-34)

"If it is present and if the receiver wants to have only organic, I buy it. Honestly, I think that organic is little bit better than normal food. But, I don't truly trust it. So, it is not related to my confidence in organic product that I bought organic food in this shopping" (No. 8, Female/ 35-44)

Past experience also had no relationship with their organic food purchase in this shopping.

"You know... I don't intend to buy organic food. Although I have experience to buy organic food, I'm not interested in organic food. The reason why I bought it is because there were no other choices. It was not related to past experience... not at all" (No. 7, Male/ 25-34)

"In this time, because it was necessary to me (present for baby), I bought it. It is not related to my past experience." (No. 8, Female/ 35-44)

Terry and O'Leary (1995) pointed out that it is possible for a person to face some external factors to perform a behaviour. Sheppard et al. (1988) also stated that certain behaviour is not completely under the person's control in some situations. Dunn et al.
(2008) examined the rationale behind decisions to either choose or avoid fast food in Australia. Findings showed that in terms of personal circumstances, people referred to unexpected factors such as overtime work, a special use and unable to take food as influencing their food choice.

7.4 Summary

This chapter discussed the findings of qualitative research of the main study. The profiles of respondents were presented, and the intention and actual purchase behaviour of respondents were explained. Findings showed that the high price of organic food made it difficult for many respondents to buy organic food. Past experience of organic food influenced many respondents’ realised purchase behaviour, and the respondents also answered that trust influenced their realised purchase behaviour. Some respondents indicated that their actual purchasing for organic food was because of unexpected circumstances. The findings were discussed comparing with relevant literature reviews.
CHAPTER EIGHT
Chapter 8 Discussion and Conclusion

8.1 Introduction

This chapter presents the overall discussion and conclusion of the present study. This chapter consists of four sections. The first section contains the objectives of the research as stated in the Chapter 1. The second section reviews the research finding and discusses the findings and draws conclusion. The third section identifies the contributions of the research including theoretical contributions, and practical and managerial implications. The last section discusses the limitations of the research and makes suggestions for future research.

8.2 Objectives of the Study

Growing awareness of health issues, in combination with concerns about food safety, has led modern consumers to increase their demand for organic produce, which is perceived as less damaging to the environment and considered to be healthier than normally grown foods. Concern about food safety and a desire for healthier food among South Koreans is very high at the moment, and thus Korean consumers have become interested in organic food. However, although Korean consumers are interested in organic food and recognise the benefits, the value of the organic market is still very low, and organic consumption has not increased to the same degree as consumers' interest in organic food. In addition, there are only a few studies related to organic food in Korea, and these organic food studies have focused research on nutrition. Hence, the main objective of this study was to identify South Korean consumers' perception, purchasing intention and realised purchasing behaviour for organic food, and then to investigate the determinants of the relationship between
consumers' purchasing intention and their realised purchase behaviour. The specific objectives of the research were:

1) To investigate South Korean consumers' perceptions of organic food

2) To determine the relative influence of factors affecting consumers' intention to purchase organic food in South Korea

3) To identify factors affecting consumers' realised purchase behaviour for organic food in South Korea

4) To investigate the determinants of discrepancies between consumers' purchase intention and realised purchase behaviour for organic food in South Korea

The following section reviews and discusses the findings of the study with regard to these objectives.

8.3 The Research Findings and Overall Discussion

To achieve the objectives of study, this study used both a quantitative approach and qualitative approach. South Korean consumers' perceptions about organic food were identified through an open-ended questionnaire in the elicitation survey. Through the results of the elicitation survey, a conceptual framework was built up to help design the questionnaire for the main study. Factors affecting purchasing intention and the relationship between identified factors and behavioural intention were evaluated through a questionnaire based on an extended version of the theory of planned behaviour (TPB) in greater depth. Factors affecting Korean consumers' realised purchase behaviour were examined through in-depth interviews. Through comparing findings between quantitative and qualitative research, this research found determinants of the discrepancies between intention and realised behaviour, and led
to the development of a model of food choice behaviour regarding the relationship between intention and realised behaviour.

Figure 8.1 shows the actual research process of this study.

Figure 8.1 Actual Process of the Research

8.3.1 Consumers' Perceptions about Organic Food

South Korean consumers generally understood organic food to be food to which agrichemicals or pesticides were not added, and food products that were grown by organic production methods. They thought that organic food helped to improve health
and that it is good for the preservation of the environment. According to Chen (2007), people generally believe that organic foods are better than conventional foods as organic foods are perceived as healthy and environmentally friendly foods (Chen, 2007) because of their lower residues of pesticide (Schifferstein and Oude Ophuis, 1998; Williams and Hammit, 2001). Williams (2002) also pointed out that the view that organic foods are healthier than conventional foods appears to be based on the perception that organic foods contain lower levels of pesticides and synthetic fertilisers. Similarly, Baker et al. (2004) stated that consumers understood organic food to be healthy food because it contained fewer chemicals than normal food. In this study, some South Korean consumers believed in the benefits of organic food because they had experienced direct or indirect health benefits from it, such as a cure from diabetes, improvement in a delicate skin and taking period pains away. This result could be supported by some prior studies. Kim et al. (2004) found that organic vegetables have more various efficacy components such as minerals, unsaturated fatty acids and vitamins than normal food, and these efficacy components of vegetables have been reported to be effective to cure some kinds of diseases (Lee et al., 1992; Tsujimura et al., 1990). However, some other studies refute such perceptions of organic food's health benefits. According to Williams (2002), although there is a widespread conviction held by the public that organic food is healthier than conventional food, evidence to support this perception is difficult to identify because very limited research has been conducted and much of the available scientific data is out-dated. It has also been suggested that application of manure and reduced use of fungicides and antibiotics in organic farming could result in a greater contamination of organic foods by microorganisms or microbial products (Tinker, 2001). In addition, there are virtually no studies of any size that have evaluated effects of organic Vs conventional foods on human health (Williams, 2002). Thus, in order to support consumers’ perceptions regarding potential health benefits of organic food, more scientific research of better quality and focusing on human health is needed.

Some South Korean consumers thought that organic food consumption helped to develop the economy and that organic food is tasty and fresh. Organic foods help producers to increase productivity using alternative technological systems and it
contributed to develop the rural and national economy (Rehber and Turhan, 2002). Taste has been reported to be a major choice criterion for food (Kihlberg and Risvik, 2007; Magnusson et al., 2001), and organic consumers thought that organic food tasted better than normal (Kihlberg and Risvik, 2007; Wier et al., 2008). People’s organic food purchase could be stimulated by their positive perceptions such as freshness, taste and health benefits (Wier et al., 2008), thus, people have more intention to purchase organic foods (Chen, 2007). In general, South Korean consumers expressed high intention to purchase organic food with a positive perception towards organic food, but this did not necessarily lead them to purchase organic food.

However, South Korean consumers also believed that organic food was expensive, and this expensiveness was the most negative factor influencing organic food choice. The popular perception of organic products is expensive (Cunningham, 2001), and because people had negative perception towards price of organic products, they would not buy organic food (Gracia and Magistris, 2008; Kihlberg and Risvik, 2007). Some South Korean consumers had negative perceptions towards organic food because they perceived that there were no differences between normal food and organic food. In other words, people had negative perceptions towards organic food because of its higher prices, which were not matched higher quality or differences compared with normal food (Magnusson et al., 2001; Torjusen et al., 2001).

8.3.2 The Influence of Factors Affecting Consumers’ Intention to Purchase and Realised Purchase Behaviour

Based on a review of literature (Bamberg, 2002; Cheng et al., 2005; Chryssohooidis and Krystallis, 2005; Dean et al., 2006; Fotopoulos and Krystallis, 2002; Hutchins and Greenhalgh, 1997; Lam and Hsu, 2006) and the result of elicitation survey with reference to ‘Constructing a TPB questionnaire’ (Ajzen, 2002), this study determined the relative importance of variables in the research framework and the research model such as attitude, subjective norm, perceived behavioural control, trust, past experience on purchasing intention for organic food. With the designed research
framework, this study identified factors affecting South Korean consumers’ purchase behaviour for organic food, and investigated the influence of factors on their organic food choice behaviour.

Firstly, the current study confirmed the assumptions and utility of the extended theory of planned behaviour (TPB) model of this study. Significant relationships were found between beliefs and the major components of TPB model, and the final model explained the relationship among variables with high predictive capacity (60%). Although some food studies using the TPB model have shown similar predictive capacity (Guàrdia et al., 2006; Mahon et al., 2006; Pawlak and Malinauskas, 2008; Povey et al., 2000), in many other previous studies, results showed less than 50% predictive power in the model (Bogers et al., 2004; Chase et al., 2003; Lobb et al., 2007; Mahon et al., 2006; Verbeke and Vackier, 2005). In addition, Armitage and Conner (2001) reviewed 185 independent studies using the TPB to provide the efficacy of the TPB model, and from reviewed studies, the TPB accounted for 27% and 39% of the variance in behaviour and intention. Therefore, the present study showed good predictive power to explain the intention to purchase organic food of South Korean consumers.

Three factors, ‘Attitude’ ($\beta = .317$), ‘Subjective Norm’ ($\beta = .292$) and ‘Perceived Behavioural Control’ ($\beta = .122$) which are elements of the original TPB model, had significant influence on intention to purchase, and also ‘Trust in Information Source’ ($\beta = .160$) and ‘Past Experience’ ($\beta = .415$) which were newly added variables in this research, had significant influence on intention to purchase. Among them, ‘Perceived Behavioural Control’ ($\beta = .122$) made the weakest contribution, and ‘Past Experience’ ($\beta = .415$) made the strongest contribution in predicting intention to purchase. Moreover, the addition of ‘Past Experience’ variable into the original TPB was the main reason to improve the variance of the model in this study. The original TPB model accounted for 43% of the variance, the model with added the ‘Trust’ variable only accounted for 49% of the variance, and the model with only the ‘Past Experience’ variable added accounted for 57% of the variance in explaining purchase intention.
Perceived behavioural control, trust and past experience had also an influence on realised purchase behaviour for organic food for both consumers groups who showed discrepancies in intended and realised purchasing behaviour, and for those who did not.

8.3.2.1 Attitude and Beliefs

South Korean consumers generally had positive attitude towards organic food. Attitude had a significant positive impact on intention to purchase organic food in this study. Attitude has been widely identified as an important predictor of intention in many food related studies (Canavari et al., 2002; Grankvist and Biel, 2001; Lockie et al., 2004), and it was confirmed again through this study results.

In this study, attitude did not show the strongest contribution to explain intention to purchase organic food, but it showed a positively significant impact on behavioural intention. A number of previous studies are in line with this result. Lockie et al. (2004) found that Australian consumers' positive attitude towards organic food guided increasing consumption of organic food. Similarly, positive attitude towards eco-labelled food had a positive impact on its choice amongst Swedish consumers (Grankvist and Biel, 2001). Canavari et al. (2002) also found that Italian consumers' positive attitudes had significantly effected their organic food purchasing behaviour.

In the TPB model, attitude is derived from behavioural beliefs which are determined by behavioural belief strength and evaluation of the outcome of performing the behaviour (Ajzen, 1985; Fishbein and Ajzen, 1975). 'Behavioural beliefs' was divided into either positive or negative beliefs in this research. Consumers believed that health benefits, taste, food safety, protection of environment and contribution to the economy related to organic food were positive, while, they believed that the expensiveness, shorter shelf life, poor appearance and presence of pests in organic food were negative. As mentioned above, it was found that South Korean consumers had positive attitude towards organic food, and the 'Attitude' had positive influence on the 'Intention to purchase organic food'. Despite the fact that expensiveness,
shorter shelf life, poor appearance and presence of pests were perceived negatively to consumers, these aspects apparently did not directly reduce consumers’ intention to purchase organic food, and positive aspects outweighed negative aspects. In addition, some consumers mentioned that their belief which is possible long term benefits of organic food was more important reason to buy organic food than negative aspects. Older consumers showed more positive attitude towards organic food because of its health and food safety benefits than younger consumers, and consumers who had young children addressed these benefits of organic food for their children’s health. Since organic food is perceived as a healthy (Grankvist and Biel, 2001; Magnusson et al., 2001; Torjusen et al., 1999), consumers are interested in organic food for their own health benefit or that of their family (Soil Association, 1999), and even if it is expensive, people purchase organic food because of its health benefits (Batte et al., 2007). Consumers are willing to pay more premiums for organic labelled or locally grown organic products because perceived as more healthy (Loureiro and Hine, 2002; Wang and Sun, 2003), and people with young children are more likely to purchase organic food than those without young children (Thompson and Kidwell, 1998). Organic products are also believed as a tasty (Fotopoulos et al., 2003) and environmentally friendly food products (Davies et al., 1995; Makatouni, 2002), thus, it could be expected that consumers’ positive beliefs of organic food would have a stronger relationship with their attitude and impact on the intention to buy in this study.

In summary, South Korean consumers had both of negative and positive beliefs towards organic food, but overall attitude was positive, and their general attitude had a positive impact on their purchasing intention for organic food.

8.3.2.2 Subjective Norm

Subjective norm was an important predictor of intention to purchase organic food in this study. Although subjective norm was a weaker predictor than past experience and attitude, it showed stronger predictive power than other variables in the results of analysis. Previous research had shown similar result with this study. Guàrdia et al. (2006) studied Catalunya consumers’ attitudes and intention towards reduced salt
meats. Positive subjective norm had a strong effect on their intention to purchase meats. Even though it showed weaker predictive power than attitude, it showed stronger power than perceived behavioural control. Pawlak and Malinauskas (2008) investigated prevalent beliefs regarding eating fruits among youth adults in eastern North Carolina using the TPB model. Findings confirmed that subjective norm had positively significant effects on intention to eat fruit among white girls and white and black boys, but it was weaker than attitude and stronger than perceived behavioural control.

Subjective norm is determined by the sum of a person’s normative beliefs and motivation to comply in the TPB (Ajzen, 1985; Fishbein and Ajzen, 1975). In this study, consumers generally believed and followed opinions of all relevant referents (family, friends, doctor, scientist, dietician and retailers) to guide their organic food choice behaviour. Specifically, family was the most influential referents to consumers’ general behaviour (motivation to comply), and although there were no significant differences, retailers were slightly more influential to consumers’ organic food purchasing behaviour (normative belief) than others. Retailers promoted South Korean consumers’ organic food purchasing by addressing its health benefits and experts also addressed its health benefits, as well as they approved consumers by informing its freshness, tasty and environmentally friendly issues. Family and friends approved consumers because they felt better taste and health benefits from organic food. In other words, the opinion of all referents had an important effect on purchasing intention for organic food choice of Korean consumers. Lindeman and Stark (1999) investigated middle aged Finnish women’s meat eating behaviours. Results found that meat consumption was influenced by opinions of other members of social group. Caswell (1997) pointed out that manufacturers could promote consumers to buy organic products by informing its distinctive benefits in terms of health aspects. Opinions voiced by family, friends and experts can often influence an individual’s consumption behaviour (McCarthy et al., 2003). Australian consumers believed that experts (dietician, nutritionist, doctor) and their family and friends would influence on their food consumption (Dunn et al., 2008). Leek et al. (2000)
also pointed out that the social norm from the family had an important effect on the food consumption.

In summary, South Korean consumers believed opinions voiced by relevant referents in relation to purchase of organic food, and thus their subjective norm had a positive impact on their behavioural intention to purchase organic food.

8.3.2.3 Perceived Behavioural Control

Perceived behavioural control had a positive effect on intention to purchase organic food, but it was identified as the weakest predictor of behavioural intention in the result of quantitative research. This result is in line with other prior studies. In the study of Guàrdia et al. (2006), although perceived behavioural control had a significant effect on Catalunya consumers' behavioural intention to choose low salt sausages, it was the weakest predictor of intention. Povey et al. (2000) stated that perceived behavioural control would not significantly influence behavioural intention, because some people have high self-confidence in their purchasing decision. In this study, it could be expected that the reason for its weak contribution to explaining the purchasing intention for organic food was because consumers thought that expensiveness of organic food negatively impacted on their organic food purchasing behaviour, but trust of its efficacy and availability positively (but not significantly) impacted on their behaviour. In particular, consumers in the lower income growing tended to think that they could not easily buy organic food because of its high price compared with those who in the higher of income.

The results of the qualitative research also found that South Korean consumers felt that they could more easily to buy organic food than before because of increasing of stores and the numbers of organic products, and they also trusted perceived efficacy of organic products. In contrast, price of organic food as a barrier was a major theme in the results of qualitative research. Price was the major reason for discrepancies between intention and actual behaviour, as well as playing an important role in consumers' realised organic shopping behaviour. Even if some Korean consumers had expressed high intention to buy organic food because of its perceived benefits
such as healthy, tasty and environmentally friendly food, they did not actually purchase it due to its high price. This result is consistent with previous studies. For instance, Gracia and de Magistris (2008) studied the impact of the importance that Italian consumers attach to the price when shopping for organic food, and found that those consumers who pay more attention to the price when shopping are less likely to be regular consumers. Kihlberg and Risvik (2007) found that Swedish consumers did not buy organic products because of its higher in price compared with conventional products. Dutch consumers also did not buy organic food because of its expensiveness, and even if they did buy it, they bought less (Verhoef, 2005). Cunningham (2001) stated that the high price of organic product is the main reason to restrict its consumption. Similarly, Zanoli and Naspetti (2002) found that most of Italian consumers hesitated to purchase organic food due to its higher price. In contrast, some South Korean consumers actually bought organic food when they found some reduced or cheap priced organic products, even though they did not intend to buy it. A series of studies also pointed out that changing price strategies directly effected consumers' food purchasing behaviour, and that reduced price of food products significantly increased the sales of the food products (French, 2003; French et al., 1997; French et al., 2001).

In summary, South Korean consumers believed that high price of organic food made it difficult for them to purchase organic food, and that trust for its efficacy and availability tended to make it easier for them to purchase organic food, and because of this discord in their control beliefs, their general perceived behavioural control had a positive but weak impact on purchasing intention for organic food choice. In addition, high price of organic food had a negative and major influence on realised purchase behaviour for organic food, and price of organic food was a major determinant of discrepancies between intention and realised behaviour.

8.3.2.4 Trust

Trust had a significant, positive impact on purchasing intention of organic food in the quantitative research, but was a weak predictor of behavioural intention. This could be explained because all items regarding trust in information sources were defined as
one dimension in this study. In previous studies (Bonne and Verbeke, 2008; Lobb et al., 2007), if variables were divided by the character of information source, the results may have been more clear. Lobb et al. (2007) examined UK consumers' purchasing behaviour towards chicken by evaluating trust in various information sources. Results showed that trust in information from media had a negative, significant effect on intention to purchase chicken, and other information sources (food chain, authorities and independent) had no significant effects on their behavioural intention. Bonne and Verbeke (2008) identified consumer segments based on their confidence in institutions that could monitor and control the halal meat chain. The clusters differed in terms of trust in information sources on halal meat, health and safety concern, consumption barriers, consumption frequency and place of purchase.

In the results of interview of the current study, South Korean consumers trusted information about organic food from their friends and family, and verified information from mass media. Information from friends and family have been recognised as trustworthy (Pieniak et al., 2007), and thus their information is likely to be more influential for possible demand of food (Frewer et al., 1996). Kramol et al. (2006) indicated that information through mass media and discussions in public forums managed by experts had positively influenced consumers' food consumption. In contrast, some Korean consumers did not truly trust information about organic food from retailers and manufacturers. Consumers had frequently shown very low levels of confidence in information from food retailers and producers (Bauer et al., 1998; Frewer et al., 1996). Pieniak et al. (2007) stated that people do not purchase food because they do not truly trust advertisement or commercial of food retailers and manufacturers. Some Korean consumers also did not trust organic food because there was no credible certification criterion by the authorities. Williams and Hammitt (2000) examined American consumers' organic food purchasing behaviour. Findings indicated that organic buyers were less trusting of food safety agencies and regulations than conventional buyers. Further, 23% of organic buyers claimed to trust the government agencies responsible for food safety in the United States. Roitner-Schobesberger et al. (2008) also pointed out that the lack of criteria system by the authority can be a main barrier to purchase organic food. In addition, in this research,
older South Korean consumers generally showed a higher confidence in all information sources about organic food than younger consumers. Namely, although there were discrepancies in trust about information sources amongst South Korean consumers, these trust information sources were defined as one predictor of intention to purchase, and thus trust had a weak impact on purchasing intention of organic food in this study.

Through the results of interview, trust was also confirmed as another concern amongst some South Korean consumers’ realised purchase behaviour for organic food. Some Korean consumers indicated that they bought organic food because they believed that it would be better for health than normal food. Grankvist and Biel (2001) stated that people believe organic food to be better for health than conventional food. A German study confirmed this result (Frohn, 1996), German people believed organic food to be more nutritious and with less added pesticide than normal food, and thus they choose organic food. Some Korean consumers also expressed lack of confidence in conventional food, and mentioned that although they did not trust that organic food is truly organic, they believed that organic food is better and having fewer residues than normal food, thus they bought organic food. Baker et al. (2004) stated that the main reason to purchase organic food is lack of confidence in normal food, rather than true confidence in organic food. However, some Korean consumers mentioned that because of the high price of organic food, this influenced their realised behaviour rather than trust in benefits of organic food. Holgado et al. (2000) and Pieniak et al. (2007) pointed out that one of the most trusted information sources for food consumption was health and nutrition related experts, however high price has frequently been reported as the main barrier to buying organic food (Kihlberg and Risvik, 2007).

In summary, trust had an impact on some South Korean consumers’ behavioural intention and realised purchasing behaviour for organic food. Some consumers purchased organic food because they trusted information from acquaintances and the mass media, and they trusted that organic food is better than normal food. Some
others did not buy organic food because they did not trust information from producers or retailers and the authorities.

8.3.2.5 Past Experience

Through the results of quantitative research, it was identified that past experience had a significantly positive impact on intention to purchase organic food with the strongest unique contribution to explaining the behavioural intention in the model. Olsen (2001) stated that there was strong and positive relationship between purchasing intention and past consumption experience, and Hsu et al. (2006) also indicated that people's level of positive satisfaction with past experience was strongly linked with their behavioural intention to purchasing. Verbeke and Vackier (2005) confirmed that past experience had the strongest impact on intention to purchase fish amongst Belgian consumers. Mahon, et al. (2006) found although past experience was not the strongest predictor of behavioural intention, it showed strong predictive power to explain food consumption amongst UK consumers. In this study, South Korean consumers generally showed high intention to purchase organic food, and when they bought organic food frequently, their purchasing intention towards organic food was higher.

It was found that past experience was also a major theme explaining realised purchase behaviour for organic food amongst Korean consumers through the results of the qualitative interview. Consumers who had been satisfied with past experience repurchased organic food. They were satisfied with organic food choice because they felt better taste and freshness than normal food and improvement in their skin. Some people also mentioned such specific medical benefits as a cure from diabetes and taking period pains away. Satisfaction with past experience increased food consumption (Patel and Schlundt, 2001), and people clearly remembered about past food experience if it was positive and it could then significantly impact on their future food choice behaviours (Lim et al., 2008). Fotopoulos et al. (2003) pointed out that if consumers were satisfied with prior organic products choice, it could be strong evidence to repurchase of organic products. This result also could be linked with the results of quantitative research in this study that analysed the differences amongst
South Korean consumers’ perception towards organic food by their past purchasing frequency of organic food. The high frequency purchasing consumers expressed more positive attitude towards organic food, and showed higher willingness to comply with opinions of relevant referents about organic food, and more positively perceived that organic food purchasing is easy than the low frequency purchasing consumers. The high frequency purchasing consumers also showed relatively higher confidence in information sources about organic food than the low frequency purchasing consumers.

Some other Korean consumers mentioned that they habitually bought organic food in the qualitative interview. They indicated that although they did not feel desired efficacy from it, they did not want to buy normal food after once purchasing organic food. Mahon et al. (2006) found that habit was an important predictor of realised behaviour. Matthewa et al. (1997) stated that people could habitually consume some specific foods if those foods be perceived as helpful for their healthy control. Similarly, Saba and Di Natale (1999) also pointed out that people also habitually purchase food rather than being influenced by their beliefs or purchasing intention for food.

In other words, a prior choice and satisfaction with the past experience of South Korean consumers had a strong impact on their intention to purchase organic food, and this past experience also led their realised organic shopping behaviour. In addition, as they bought organic food regularly, their purchasing intention of organic food was higher, and they showed more positive attitude, subjective norm and perceived behavioural control, and more trust in information sources about organic food.

In contrast, some Korean consumers did not repurchase organic food because they had perceived no benefits from their past purchase. They could not obtain the desired efficacy from it and feel any difference compared with normal food such as better taste and freshness. Forward (2006) noted that if people had been dissatisfied with prior experience, behaviour would be less likely to occur again, therefore only positive past experience could influence their future behaviour. Some other Korean
consumers suggested that their actual purchasing behaviour was not related to past experience. Purchase was because of anticipated benefits, possibly in the long term, rather than really experiencing benefits. Many researchers have indicated that people widely perceive organic food to be healthier than normal food (Grankvist and Biel, 2001; Magnusson et al., 2001; Torjusen et al., 1999), and that people were interested in organic food intake because of these perceived benefits (Loureiro and Hine, 2002).

In summary, past experience had a positive influence on South Korean consumers' intention to buy organic food with the strongest contribution. It had also an effect on realised purchase behaviour for organic food, where prior satisfaction lead to repurchase and prior dissatisfaction resulted in not purchasing again, although some others mentioned that their actual purchasing was because of anticipated benefits rather than past experience.

8.3.3 Consumers' Intention and Realised Behaviour

This study found some unique results to get to consumers' realised purchase behaviour for organic food. The majority of South Korean consumers showed purchasing behaviour as their intention, but some others did not behave as their intention. They showed discrepancies in intended and realised purchase behaviour for organic food. Through the face to face interview, this research found some new insights affecting realised purchase of organic food which are unexpected circumstances (e.g. no other alternatives and a special use) and socio-demographic characters (e.g. age and living circumstance). These new insights and the price of organic food were determined as the major determinants of the discrepancy.

8.3.3.1 Discrepancies in Intention and Realised Purchase Behaviour

Price of organic food, unexpected circumstances and living circumstances were main reasons for discrepancies in intended and realised behaviour of some South Korean consumers. Where consumers did buy when they had indicated that they would not, the main reason was due to no other choices, a special use such as present, the presence of young children and cheaper price of organic food than they thought.
While, where consumers did not buy when they had indicated that they would buy, the main reason was the expensiveness of organic food.

This result corroborated a few studies investigating the relationship between intention and actual behaviour. March and Woodside (2005) identified tourists’ plan for doing, buying and consuming and actual behaviour, and investigated the differences between them, and there was difference between plan and realised behaviour of tourists. However, the major reason of discrepancies of March and Woodside’s study was different to the result of this study. In their study, past experience reflected the differences between planned and realised behaviour. Lee and Rhee (1998) determined the relationship between intention to purchase and realised purchase behaviour of apparel products in South Korea. They found that consumers showed discrepancies in intended and realised purchasing behaviour, and the main reason of discrepancies, as in the result of this study, was the price of apparel products. The research findings of the current study confirmed the presence of discrepancies between behavioural intention and realised behaviour of people.

### 8.3.3.2 The Role of New Insights in Discrepancies between Intention and Realised Behaviour

In this study, some new insights arose which were not part of the original research objectives. These new insights played an important role in the relationship between purchase intention and realised organic purchasing behaviour.

Some Korean consumers mentioned that the reason they bought organic food was because of unexpected circumstances. For example, if there was no other choice available, or if consumers thought the recipients of the product being purchased would prefer organic products, consumers would buy organic products. People frequently face unexpected circumstances when performing a particular behaviour (Terry and O’Leary, 1995), and an individual’s behaviour may not, therefore, be controlled by that person in some cases (Sheppard et al., 1988). Dunn et al. (2008) found that external factors such as working overtime, a special use and unable to have food, which were not expected before, lead to change food purchase.
Actual purchase behaviour for organic food was also found to be different depending on the living circumstances and age of consumers. South Korean consumers having young children reported a high intention to purchase organic food and they actually purchased it. In some cases, they indicated that they bought organic food only for their children, rather than for themselves. These findings corroborated previous research. Thompson and Kidwell (1998) investigated American consumers’ choice behaviour of organically and conventionally produced products, and found that consumers’ behaviour depended on the presence in the household of pre school children. Land (1998) also stated that the presence of young children had had a significant influence on the family’s organic food consumption by discussing the quality of and additives in foods, and whether foods had been sprayed or not. Similarly, Wier et al (2008) identified main differences and similarities of organic purchasing behaviour between two European countries, Great Britain and Denmark, and found that households with young children significantly increased organic budget share in both countries.

In this study, older Korean consumers (over 45 years old) expressed higher intention to buy organic food than younger consumers, and they actually purchased it. However, amongst the younger consumers who expressed high intention to buy organic food, only those consumers who also had young children actually bought organic food. Most young respondents with no child or with grown-up children expressed low intention and did not actually buy organic food. Roitner-Schobesberger et al. (2008) investigated Thai consumers’ perceptions and purchasing behaviour of organic fruits and vegetables. They found that the consumers of organic food in Thailand tended to be older than those not purchasing organic food. Millock et al. (2004) identified factors affecting organic food choice in Denmark, and found that being of an older age significantly increased the probability of being a heavy consumer of organic food. In contrast, other studies have found that younger consumers (under 45 years old) have a higher propensity to purchase organic products than older consumers (Huang, 1996; Lockie et al., 2004; O’Doherty Jensen et al., 2001). O’Doherty Jensen et al. (2001) suggested the reason why younger
consumers showed high intention to purchase organic products. There may be a pattern whereby younger consumers are over represented among early adopters in developing markets, while older consumers appear to be well represented in more mature markets. Lockie et al. (2004) also determined that older consumers were less likely to consume organic food in Australia, even if they had very little influence over the level of organic food consumption. In their research, little variation was evident across age groups until respondents reached their 60s, at which point the number of organic consumers dropped. Thus, Lockie et al. concluded that the low level of purchasing intention for organic food amongst older consumers potentially reflected a drop in income following retirement from paid employment.

In this study, the reason that consumers having young children and older consumers had a high propensity to buy organic food could be due to anticipated health benefits of organic food. Older people and parents of young children put more emphasis on food consumption relevant to the prevention of a disease and the intake of nutritious food (Douglas, 1998; Urala, 2005), and organic food is perceived as more healthy and nutritious food (Grankvist and Biel, 2001; Magnusson et al., 2001; Roddy et al., 1996). Thus, older consumers and households with young children showed high intention to buy organic food and actually purchased it.

Therefore, unexpected circumstance, age differences and the presence of young children in a household were also major themes explaining the relationship between behavioural intention and realised purchase behaviour for organic food in South Korea.

8.3.4 Major Conclusions of the Research

The major conclusions of the current study are summarised below.

South Korean consumers understood organic food to be food which has not been treated with artificial fertilizers or pesticides, and thus they believed that it is good for human health. They generally had positive attitudes towards organic food because of
its health benefits, its contribution to the economy and its taste and freshness. Therefore, South Korean consumers’ general intention to purchase organic food was high, although some expressed a low purchasing intention because of negative aspects such as high price, shorter shelf life, and poor appearance of organic food. A positive attitude towards organic food had a positive impact on the intention to purchase organic food amongst South Korean consumers. They tended to comply with opinions voiced by all their referents in relation to organic food purchasing, and their positive subjective norm also had a positive influence on intention to purchase organic food. South Korean consumers also tended to think that it would be easy to buy organic food, and thus their perceived behavioural control had a positive effect on their purchasing intention, even though it was a weak impact. Trust and past experience had a positive impact on their intention to purchase organic food. However, although positive aspects of trust, such as information from family, friends and experts and trust of perceived benefits, and positive aspects of past experience, such as satisfaction with prior choice, encouraged actual organic food purchase behaviour amongst South Korean consumers, negative aspects such as lack of confidence in information from retailers, the authorities and certification systems and dissatisfaction with past choice impeded actual organic food purchase behaviour. Along with negative aspects of trust and past experience, the high price of organic food was also a major barrier to actually purchasing organic food for South Korean consumers.

This research determined the factors affecting purchasing intention and realised purchase behaviour for organic food as mentioned above, as well as identifying the determinants of the relationship between intention and realised behaviour for organic food choice in South Korea. Older consumers had a higher propensity to purchase organic food and actually bought it. However, amongst younger consumers, only those who had young children actually bought organic food, whether or not they had expressed a high or low intention to buy it. Therefore, being older and having young children predicted high intention and high realised purchasing behaviour for organic food. Another factor that was established related to realised organic food purchasing. If South Korean consumers faced some unexpected circumstances, such as no other
alternative choices or the use of organic food for a special purpose, they purchased organic food in a way that was contrary to their original intention. The price of organic food also affected consumers’ organic food purchasing behaviour. South Korean consumers sometimes purchased organic food when they found reduced price organic food, and sometimes they did not purchase it when organic food was considered too expensive. Hence, people shopped opportunistically, as well as changing their purchase behaviour when shopping for others, such as friends or young children.

8.3.5 Proposed Food Choice Behaviour Model

The findings of this study have been used to develop a new model of food choice behaviour regarding to the relationship between intention to purchase and realised purchase behaviour (Figure 8.2).
Figure 8.2 Food Choice Behaviour Model

**FACILITATORS**

<table>
<thead>
<tr>
<th>Subjective Norm</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normative Beliefs</strong></td>
<td>+ Behavioural Beliefs</td>
</tr>
<tr>
<td>Opinions of referents: Family, Friends, Doctor, Scientist, Dietician, Retailer</td>
<td>Health, Taste, Food safety, Protection of environment, Contribution to the economy</td>
</tr>
</tbody>
</table>

**Perceived Behavioural Control**

+ Control Beliefs
- Trust of efficacy, Easy availability

- Control Beliefs
- High price of food

**Trust**

Positive
- Information from Family, Friends, Mass media, Experts
- Trust of perceived benefits

Negative
- Information from Retailers / Producers
- Lack of confidence in Authorities / Criteria system

**Past Experience**

Positive
- Satisfaction with prior choice, Habitual purchasing

Negative
- Dissatisfaction with prior choice, No desired benefits

**DETERMINANTS of DISCREPANCY**

<table>
<thead>
<tr>
<th>Unexpected Circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td>No alternative choices, Special use</td>
</tr>
</tbody>
</table>

**Demographics**

- Age, Living circumstance

**Perceived Behavioural Control**

Control Beliefs
- Price of food

**Past Experience**

Negative
- Dissatisfaction with prior choice, No desired benefits

**Realised Food Purchase Behaviour**

**BARRIERS**

--- Affecting Intention
--- Affecting Realised Behaviour
--- Affecting Discrepancy
--- Relationship between Intention and Realised behaviour
The proposed food choice behaviour model (Figure 8.2) explains the factors affecting intention to purchase and the realised purchase behaviour for food, and presents the determinants of the discrepancies between the intention and the actual behaviour.

Three major components of the original theory of planned behaviour (TPB) model had a positive influence on intention to purchase of food. Consumers had either positive or negative behavioural beliefs in this study, and the results showed that positive behavioural beliefs towards organic food, such as health, taste, food safety, protection of environment and contribution to the economy, outweighed the negative behavioural beliefs, such as expensiveness, shorter shelf life, poor appearance and presence of pest of food. Thus, the model presents that overall positive attitude towards food facilitates peoples' intention to purchase of food. Consumers responded positively to the opinions of all relevant people, such as advice from family, friends, experts and retailers about organic food. The model, thus, explains that the subjective norm also plays a positive role in purchasing intention for food. Although consumers perceived that the high price of organic food made it difficult for them to buy organic food, they also believed that trust of efficacy and easy availability of organic food made it easy for them to buy. Therefore, the overall perceived behavioural control was positive in this study, and the model shows that perceived behavioural control has a positive effect on food purchasing intention.

In the model, trust and past experience, are added into the original TPB model, and these have effects on both the intention to purchase and the realised purchase behaviour for food. Even though consumers did not trust the information from retailers and manufacturers and showed lack of confidence in authorities and criteria systems, they trusted strongly the information from family, friends, mass media and experts and showed strong confidence in the perceived benefits of organic food. Thus, overall trust has a positive influence on food purchasing intention in the model. In addition, the model explains that positive aspects of food such as confidence in information sources from family, friends, mass media and experts, and trust of perceived benefits facilitate realised purchase behaviour for food. In contrast, information from retailers and manufacturers, and lack of confidence in authorities
and criteria systems impede realised food purchase behaviour. Past experience also has positive influence on intention to purchase organic food in the model. Although consumers showed dissatisfaction with past organic food choice, satisfaction with past choice and habitual purchasing prevailed over the negative aspects, thus the overall past experience of consumers was positive. The model also presents that positive past experience (satisfaction and habitual purchasing) facilitates realised food choice behaviour, while negative past experience (dissatisfaction and no desired benefits) impedes realised food choice behaviour.

The proposed food choice behaviour model identifies the discrepancy between intention and realised behaviour, and presents important determinants of the discrepancy between purchasing intention and realised purchasing behaviour. In this study, if there were no alternative choices or the product would be used for special purposes, consumers purchased organic food in a different way from their original intention. Thus, the model depicts that unexpected circumstances (no alternative choices or special use) are important determinants of the discrepancy between intention and realised behaviour for food purchasing. Consumers showed different level of intention to purchase organic food and actual purchase behaviour for organic food depending on whether or not they have young children. Consumers having young children actually purchased organic food for their children, even though they were not really likely to buy organic food for themselves. Older consumers tended to have a higher intention to buy organic food than younger consumers, and their high purchasing intention of organic food played an important role in realised purchase behaviour. Hence, the model explains that demographic characters (age and living circumstance) play an important role in the purchasing intention, the realised purchase behaviour and the relationship between intention and realised behaviour for food. The price of organic food was also an important factor for realised purchase behaviour and the discrepancy between intention and realised behaviour. If there were reduced price of organic products, consumers purchased those cheap products even if they did not intend to buy them, while, if organic products were too expensive, consumers did not easily purchase those products even they had intended to buy them. Hence, the model indicates that the price of food, either expensive or cheap, is a main
determinant of the discrepancy between intention and realised behaviour for food choice, and high price of food (negative perceived behavioural control) is a barrier to actual food purchase behaviour.

8.4 Contributions of the Study

This study examined the antecedents and consequences of purchasing intention for organic food, and investigated the determinants of the relationship between the intended and realised behaviour for organic food choice in South Korea. The results of the many analyses in this research provide several conceptual and theoretical contributions, as well as practical contributions for retailers in the food industry.

8.4.1 Theoretical Contributions

Through the elicitation survey, this study understood South Korean consumers' general perception and understanding about organic food, and information from the analysis of the results helped to build a conceptual framework and this was used as the main source of variables in the research model. This elicitation survey was necessary for the study of South Korean consumers' purchasing intention because of the lack of a conceptual basis in the existing literature. Therefore, this study, through this type of process, provides validity and reliability for the research model for the main survey.

This study represents one of the first attempts to examine consumer behaviour towards organic food using the theory of planned behaviour (TPB) model in South Korea. As previously mentioned, the TPB model has previously been used to explain behavioural intention of consumers in food related research, and this study again provided justification for using the TPB model in explaining food choice behaviour of South Korean consumers. This study also confirmed that all elements, attitude, subjective norm and perceived behavioural control of the TPB model were significant in predicting the behavioural intention of Korean consumers' organic food choice.
Therefore, the empirical results and findings from this study are helpful in making a contribution to further expand research in relation with food consumer behaviour, as well as, using the TPB model offers very useful information for people in marketing who wish to gain insights into the intentions of the consumers in the context of a customer and firm relationship in South Korea.

Trust and past experience were added into the original TPB model as dependent variables in this study. The ‘trust and past experience’ based research model provides a more holistic view of consumers’ purchasing behaviour for organic foods, incorporating the effects of the consumers’ trust and past experience, and a range of antecedents of trust and past experience, and assessing the impact of these factors not only on behavioural intentions but also on realised purchase behaviours. In addition, the inclusion of trust and past experience as separate variables into the original TPB model resulted in a high predictive power for behavioural intention. In particular, past experience has shown the strongest contribution to explaining an intention to purchase organic food. Inclusion of both of trust and past experience in the regression increased the predictive power to 60 %, inclusion of only trust increased it to 49 %, and inclusion of only past experience increased the predictive power to 57 %, from the 43 % variance explained by the original TPB model. Accordingly, past experience and trust towards organic food play an important role in organic food choice behaviour of Korean consumers. Previous studies have often not adequately adopted trust and past experience to predict behavioural intention for food choice, and concomitantly have not understood their relationships with each other or how they work independently or in combination to influence intention to purchase. This study, by adopting trust and past experience as new variables of the TPB model and distinguishing between the concepts both conceptually and empirically, has provided important insights into their distinct roles in the organic food purchase behaviour. Thus, this study provides perhaps the most comprehensive understanding to date of the trust and past experience related factors that consumers consider as they engage in organic food consumption.
This study adopted both quantitative and qualitative approaches. To understand Korean consumers’ general beliefs and perceptions of organic food, an open-ended questionnaire (qualitative approach) was used in the elicitation survey. A quantitative approach (questionnaire) was adopted to define general consumers’ purchasing intention and the factors affecting intention to purchase. It was followed up by qualitative approach (in-depth interview) to identify accurately consumers’ actual behaviour for organic food choice and understand the differences between intended and realised behaviours. Through quantitative research, this study could obtain large numbers of responses relating to organic food choice behaviour and increase the generalisability of the result. Through in-depth interviewing, this research could gain deep, interesting and unexpected information regarding realised food choice behaviour of Korean consumers. By using both quantitative and qualitative method, this research could make up for the weak point of each method, as well as obtaining more accurate results for the research.

This study provides evidence on the influence of consumers’ organic knowledge and perception on South Korean purchasing behaviour. There are only a few studies related to organic food, and none of the previous empirical studies on South Korea has investigated consumers behaviour and realised purchasing behaviour for organic food. However this study examined Korean consumers’ organic food choice behaviour, and has found important results through the research. This research understood Korean consumers’ general perceptions and purchasing intention of organic food, and these perceptions of organic food influences both the probability to purchase and realised purchase behaviour for organic food. Results from this research are an important contribution because they provide valuable information on consumers in South Korea that can be used by policy makers in organic farming at national and regional level.

There have been many studies investigating behavioural intention and behaviour and most of these studies attempted to predict people’s behaviour through the behavioural intention. However, this study not only predicted behaviour through behavioural intention, but also directly examined realised behaviour. Moreover, this study found
the discrepancies in intended and realised behaviour and identified a number of potentially important determinants of the relationship between purchasing intention and realised purchase behaviour. It also provided empirical evidence concerning the relative importance of each of these determinants on consumers' realised purchasing behaviour. More specifically, the results suggested that consumers’ positive beliefs about organic food, such as perceived health benefits, reduced pesticides and environmentally friendly food, facilitated their actual purchasing of organic food, while, consumers’ negative beliefs about organic food, such as its high price and lack of confidence, impeded their purchasing of organic food. Thus, these results underline the importance of consumers’ perception of facilitating or impeding situational factors for their actual purchasing behaviour. As such, the results may offer more practical information to policy makers and retailers in the food industry.

By adopting both a quantitative and qualitative approach, the current study identified the discrepancies in intended and realised behaviour, and found some new insights which had not been indentified in previous studies. Particularly, unexpected circumstances, such as no other alternative choices and a special purpose, were identified as important determinants of the relationship between intention and actual behaviour. Hence, these new insights of this study will play a significant role as prior literature in future research regarding intention and realised behaviour.

Lastly, through the findings of the study, the present study developed a new model of food choice behaviour addressing both the factors affecting consumers’ intention to purchase and realised purchase behaviour, and also the relationship between intended and realised purchase behaviour for organic food choice.

The developed model shows three main categories of factors affecting intention to purchase and realised purchase behaviour and their relationship, which are ‘Facilitators’, ‘Barriers’ and ‘Determinants of discrepancy’. ‘Facilitators’ had positive influence on intention to purchase and realised purchase behaviour of food, and include positive attitude, positive subjective norm, positive perceived behavioural control, positive trust, and positive past experience. ‘Barriers’ had negative influence
on realised purchase behaviour of food, and include negative trust, negative past experience, and high price of food. As mentioned above, this study indentified discrepancies between intention and realised behaviour, and factors grouped under ‘Determinants of discrepancy’ had influence on the discrepancy. Thus, the developed model not only provides important information to guide further research, finding factors affecting intention and realised purchasing behaviour for food choice, but also contributes to future research by indentifying which factors facilitate or impede intention to purchase and realised purchase behaviour for food choice.

The model also explains which factors influence intention to purchase, realised purchase behaviour, and the discrepancy by using four different types of line. This approach highlights that one factor may influence not only intention to purchase but also realised purchase behaviour and the discrepancy between them simultaneously. Therefore, the developed model could offer appropriate information to each further research, which could be the defining factors affecting purchasing intention for organic food, the identifying or confirming of factors influencing realised purchase behaviour for organic food, or an confirming into the determinants of the discrepancy between intention and actual behaviour in respect of organic food choice, as well as the defining factors influencing them concurrently.

In the three main categories of the model, ‘Facilitators’ and ‘Barriers’ were found through literature reviews, and their roles were confirmed through the results of this study. However, ‘Determinants of discrepancy’ was the new insight, and came from the results of interviews in this study. Thus, this was mentioned by some interviewees in specific circumstances (e.g. people who having young children, old aged people, or people who have special purpose in buying organic products). Hence, future studies could test that this result would be confirmed and generalisable through quantitative research.

Moreover, factors in the model could be applied to different samples in a further study. The price of food is a main element of organic food purchasing behaviour in the model, and it could be considered to be due to a unique situation of the organic
food market in South Korea, which is at a very low level of organic market value and high price of organic products in the food industry. The total sales of organic agricultural products was estimated as 0.4% of total agricultural products in 2006, and the average price of organic products was double the price of normal products in 2007 (See Chapter 1). Hence, further research could scrutinise the results shown in the model by extending the sample to other Asian countries, to Europe or to America. It could be also test whether the factors in the model would be confirmed when applied to other food products.

8.4.2 Practical and Managerial Implications

The findings of this study provide several practical and managerial implications at both the policy level and at the industry level.

Firstly, in this study, Korean consumers did not exactly understand the differences between organic food and environmentally friendly food. Both organic products and environmentally friendly products were understood as indicating that due to the production methods the chemical residues are much lower than the maximum allowable residue limits, and as offering additional benefits, particularly regarding health and environmental impact. In fact, organic products are classified as a type of environmentally friendly product in South Korea. In the results of the interviews in the current study, some consumers indicated that they did not buy organic food because there was no trustworthy and detailed information about organic food, verified by government. Although South Korea’s government organises the environmentally friendly products certification system, and the environmentally friendly products are indicated by a symbolic label, this certification system is only applied to agricultural products and it is not applied to all kinds of food products. Thus, South Korea’s government should clearly distinguish organic products and environmentally friendly products, and the certification system should be applied to all kinds of food products, and not only to agricultural products. With this in mind, if South Korea’s government adds more detailed information about the certification label of organic and environmentally friendly products, it could help to reduce
consumers’ confusing and increase the market share of organic food in the South Korean food industry.

In addition, at the government policy level and mass media it would seem advisable to reduce confusing complicated information and offer more systematised information about organic food. In the results of this research, consumers generally believed and followed information about organic food from the mass media. However, as mentioned above, because of a lack of detailed information from the government and mass media, consumers had a limited knowledge about organic food, and this limited knowledge made them hesitate to purchase organic food. Thus, the South Korean government should offer educational programs or promotions of organic food, and the mass media should offer more accurate and detailed information to consumers. The information and educational campaign should be extended as broadly as possible, reaching not only non-organic food consumers but also existing consumers. Greater knowledge of organic food products will not only encourage new consumers to buy organic food products but will also increase the level of consumption among existing consumers.

Moreover, retailers in the food industry need to consider the promotion of organic products to encourage households with babies or young children and older consumers to purchase organic products. The findings of the current study suggest that many respondents with a high intention to purchase indicated that they were influenced by are for their children’s health, rather than their own. In addition, some of them only purchased organic food for their baby, whilst eating non-organic food themselves. Other respondents with low intention to purchase mentioned that they had no willingness to buy organic food at that moment, but if they have baby in the future, they would purchase organic food for their baby. Older Korean consumers also showed a high purchasing intention and they actually bought organic food. Accordingly, if retailers and producers produce organic food for babies or young children or old people, and then educates and informs consumers about the health benefits and safety of the food, it would be helpful for developing the organic food market in South Korea.
Consumers should also be provided with additional information about organic farming, so that they have knowledge and confidence about organic production methods and organic certification. In the results of this research, consumers did not truly trust organic food because they could not confirm whether organic food was really grown by organic production methods. Providing information about organic farming to consumers and the distinctiveness of organic food may encourage the non-organic consumers to buy organic products. Although it might not allow the encouraging of consumers who are satisfied with organic food and have no need for additional information, it might allow producers and retailers to convince some of those consumers who simply distrust and are unaware of the benefits organic products. By addressing the issue that organic product is grown surely without artificial pesticides and is thus less likely to have residues, producers and retailers would emphasise its health aspects, which is the most important issue for consumers. Direct personal contact between consumers and producers or retailers, which is achieved when foods are purchased at farm gates, market stalls or in specialist stores, makes it possible for consumers to obtain detailed information about organic products, production methods or specific producers. If this information can be delivered directly to consumers, then their confidence in organic products can be increased, and this would give organic products a unique and distinctive position in the food industry.

Finally, a practical and managerial implication of the findings concerns the important effect of the price of organic products. The results indicate that the effect of price was not just on purchasing intention of organic food but was also on realised purchase behaviour for organic food. In particular, the price of organic food was found to the most important determinants of the discrepancies between intended and realised purchase behaviour for organic food. Some Korean consumers with low purchasing intention bought organic food when they found a reduced price for organic food or the products were cheaper than they thought. Some other consumers did not purchase organic food because of its high price even though they had expressed a high intention to purchase it. Thus, food retailers may improve the market share of organic food via pricing strategies.
In summary, organic food retailers and producers should be well placed to answer the South Korean consumers' health concerns and claims about price with assurance of its status, and the South Korean government and mass media should give correct and detailed information to consumers. Increasing consumers' understanding of organic farming, their trust in the accurate inspections and the organic certification system as well as increasing the availability and range of organic products at various prices may be the most effective way of increasing their market share of the food industry in South Korea.

8.5 Limitations and Future Research

Although the current study makes important contributions to the understanding of South Korean consumers' perception about organic food and investigating the determinants of the relationship between realised behaviour and intention to purchase for organic food, several limitations remain which may need consideration when interpreting the findings. Overcoming these limitations can provide direction for future research.

The first limitation is that the distinction between organic food and environmentally friendly food was not clearly identified. Although the differences between organic food and environmentally friendly food were indicated in the front page of the questionnaire and pointed out to respondents before they completed the questionnaire, respondents could not exactly distinguish the differences between them. In fact, organic food is a type of environmentally friendly food in South Korea, and this may cause consumers' confusion. Therefore, this study could not obtain pure data only for organic food purchasing behaviour. Accordingly, future works may consider specific products of each type of environmentally friendly food as subjects of their study, and compare South Korean consumers' purchasing behaviour among those specific products rather than general types of organic food products. It would lead to a gain in more accurate results.
Secondly, there needs to be more of a theoretical basis for the integration of trust as possible direct influences on intention to purchase into the research model. Although the results of this study indicated a significant relationship between trust and purchasing intention, trust did not explain intention to purchase with a strong contribution. Thus, it would be useful to explore the possibility of alternative models for understanding the relationship between trust and behavioural intention. For instance, in future research, it could be proposed that trust functions as a mediator, such that the exogenous variables influence purchase intention via their effect on trust.

Third, it should be mentioned that different types of trust variables depend on the character of the information source. Trust in information source had an effect on the intention to purchase as one variable in this study, but the results could not distinguish a relationship between each information source and the behavioural intention. Although trust in information source had a significant effect on the intention to purchase organic food, which information source had more strongly contributed to the prediction of purchasing intention was not determined. Hence, future work should consider using several identifiable trust information sources to explain behavioural intention for food choice, and then investigate the relationship between each of the trust information sources and consumers’ food choice behaviour.

The fourth limitation relates to the use of convenience sampling and the number of respondents in the elicitation survey. There were few consumer behaviour studies relating to organic food in South Korea, and the elicitation survey, thus, was carried out to compensate for the lack of a conceptual basis in the existing literature. Although samples were obtained by adopting an online survey method through the whole of South Korea, samples were limited to consumers who shop for food regularly and have access to a computer. Moreover, relatively small samples were obtained. Therefore, perhaps, those respondents did not truly represent the populations of consumers in South Korea, and did not match the perceptions and understanding of organic food in South Korean consumers. Hence, future works should be concerned with using a more comprehensive sampling design and, which
would be more systematic. Probability sampling would give a higher reliability and validity to the data and findings of those future studies.

Next, the findings of the research showed a greater proportion of respondents between 25 to 34 age group than other age group. Thus, the results of the present research may not be representative of the entire population in South Korea. Future studies should aim to recruit respondents in line with population statistics to validate the findings of their research. Although this research found different beliefs and purchasing behaviour for organic food among different socio-demographic groups such as age, income and living circumstances, it could not find any difference among other socio-demographic groups such as gender and highest education level. Thus, future work could investigate consumers’ behaviour for organic food choice in South Korea by focusing on each socio-demographic characteristic.

Finally, the current study provides some new insights into discrepancies between consumers’ purchasing intention and their realised purchase behaviour for organic food choice. Although previous research provided support for a relationship between intention and behaviour, this research is the first step in providing the determinants of discrepancies between behavioural intention and actually performed behaviour, and indentifying people’s realised food purchasing behaviour by comparing the results between quantitative approach and qualitative approaches. Hence, future studies should be based on the results of the current study and attempt to offer further insights into the relationships between intention and actual behaviour under different conditions. In view of these concerns, the findings of this study will offer a definite foundation upon which to undertake further research work.
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APPENDICES
Appendices

Appendix A-1. The Questionnaire of the Elicitation Survey

Dear Sir and Madam

The purpose of this questionnaire is to study consumers’ opinion for organic food. The research will contribute to a PhD thesis in Food Management at University of Surrey, UK.

Any data or information obtained from this questionnaire will be anonymous.

Thank you for devoting your time to complete this questionnaire.

Your contribution to the research is valued.

Your Sincerely

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+44 (0)7814475503
PART I

1. Please explain about what you understand by organic food.

2. How frequently do you buy organic food?

3. What type of organic food do you buy most often?
   (e.g) Milk dairy / Meat & Fish / Fruit & Vegetable etc.

4. Do you intend to purchase organic food?
   (4-1) If you intend to purchase organic food, when will you buy organic food?
   ① Within 1 week
   ② Within 15 days
   ③ Within 1 month
   ④ Within 3 month

5. What do you believe are the advantages of purchasing organic food?

6. What do you believe are the disadvantages of purchasing organic food?
12. Where do you get information about organic food?
   Can you name three such sources?

12-1) Which of the sources listed in your answer to question 13, would you trust most to provide information about organic food?

12-2) Please state why you gave this answer.

13. When you purchase organic food, do you trust that it is organic?

13-1) If you trust that it is organic, please explain why?

13-2) If you do not trust that it is organic, please explain why?
PART II

1. Gender
Male ( ) Female ( )

2. Age
Under 24 ( ) 25-34 ( )
35-44 ( ) 45-54 ( )
Over 55 ( )

3. Education
Under High school ( ) University (UGs) ( ) University (PGs) ( )

4. Marriage
Married ( ) Not Married ( )
Single [Divorce / Separate / Separation by death] ( )

5. Number of Children
0 ( ) 1 ( ) 2 ≤ ( )

6. Income (Income of your family / month) (1 pound ≈ 1,850 won)
Under 2 m. won ( ) 2.01 ~ 3.5 m. won ( )
3.51 ~ 5 m. won ( ) Over 5.01 m. won ( )

Thank you very much
Appendix A-2. The Questionnaire of the Pilot Survey

Dear Sir and Madam

Thank you for agreeing to take part in this survey.
The purpose of this survey is to study consumers' opinion about organic food.
The research forms part of a doctoral study at University of Surrey, UK, and will be used for academic purpose only.

Please could you complete the questionnaire provided, if you shop for food regularly (at least once per month).

Any data or information obtained from this survey will be treated with complete confidentiality and will not be attributable to you.

If you need further details or you wish to make any further comments regarding the study, please contact me at the address given below.

Thank you for devoting your time to complete this survey.

Sincerely Yours
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GU2 7XH
PART I

Q1. Have you ever purchased organic food?

Yes  ○  Please Start from Q2  
No   ○  Please Start from Q3

Q2. Please indicate how often you DO buy the following type of organic food?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk and Dairy products</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>○</td>
<td>○</td>
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<tr>
<td>Meat and Fish</td>
<td>○</td>
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<td>○</td>
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<td></td>
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<tr>
<td>Fruits and Vegetables</td>
<td>○</td>
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<td>○</td>
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<tr>
<td>Soya bean products (e.g. Bean, Tofu)</td>
<td>○</td>
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<td>○</td>
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<tr>
<td>Rice</td>
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<td>○</td>
<td>○</td>
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<tr>
<td>Instant noodle</td>
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<tr>
<td>Breads</td>
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<tr>
<td>Seasonings</td>
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<td>○</td>
<td>○</td>
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<tr>
<td>Others</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tbody>
</table>
Q3. Please indicate how often IDEALLY you would buy the following types of organic food

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Always</th>
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<tbody>
<tr>
<td>Milk and Dairy products</td>
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<td>0</td>
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<tr>
<td>Meat and Fish</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Fruits and Vegetables</td>
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<tr>
<td>Soya bean products</td>
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<tr>
<td>Rice</td>
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<tr>
<td>Instant noodle</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Snacks</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Breads</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>Flours</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Seasonings</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Q4. Please explain why you were not able to buy organic food as often as you would like.

Q5. I intend to purchase organic food within the next week.

<table>
<thead>
<tr>
<th>Extremely Unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Q6. Organic food

<table>
<thead>
<tr>
<th></th>
<th>Disagree Extremely</th>
<th>Agree Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. has health benefits</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>B. tastes better</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>C. provides peace of mind for food safety</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>D. helps to protect the environment</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>E. contributes to the local rural and national economy</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>F. is expensive</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>G. has a shorter shelf life</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>I. has a poor appearance</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>J. has presence of pests</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Q7. For me to purchase organic food is

<table>
<thead>
<tr>
<th></th>
<th>1 2 3 4 5 6 7</th>
<th>good</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. bad</td>
<td>0 0 0 0 0 0 0</td>
<td>good</td>
</tr>
<tr>
<td>B. harmful</td>
<td>0 0 0 0 0 0 0</td>
<td>beneficial</td>
</tr>
<tr>
<td>C. unhelpful</td>
<td>0 0 0 0 0 0 0</td>
<td>helpful</td>
</tr>
<tr>
<td>D. unpleasant</td>
<td>0 0 0 0 0 0 0</td>
<td>pleasant</td>
</tr>
<tr>
<td>E. unenjoyable</td>
<td>0 0 0 0 0 0 0</td>
<td>enjoyable</td>
</tr>
<tr>
<td>F. worthless</td>
<td>0 0 0 0 0 0 0</td>
<td>valuable</td>
</tr>
</tbody>
</table>
Q8. For me to purchase organic food

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. to improve health is</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B. that tastes better is</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C. that provides peace of mind for food safety</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D. that helps to protect the environment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. that contributes to the local rural and national economy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F. that is expensive</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G. that has shorter shelf-life than normal food</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I. that has poor appearance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>J. that has presence of pest</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Q11. Generally speaking, how much do you think that the following people should do?

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Primary</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B. Private</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C. Government</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D. Scientists</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E. Retailers of organic food</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F. Retailers of organic food</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Q9. Most people who are important to me think that I should buy organic food.

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

Q10. The following people would approve or disapprove of me purchasing organic food.

(N/A: There is no applicable person)

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Family</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>B. Friends</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>C. Doctor</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>D. Scientist</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>E. Dietician</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>F. Retailers of organic food</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
</tbody>
</table>

Q11. Generally speaking, how much do you want to what following people think you should do?

(N/A: There is no applicable person)

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Family</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>B. Friends</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>C. Doctor</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>D. Scientist</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>E. Dietician</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>F. Retailers of organic food</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
</tbody>
</table>
Q12. It would be easy for me to buy organic food.

<table>
<thead>
<tr>
<th>Extremely Unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td></td>
</tr>
</tbody>
</table>

Q13. To what extent do the following make it easy or difficult for you to buy organic food.

<table>
<thead>
<tr>
<th></th>
<th>Extremely Difficult</th>
<th>Extremely Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A. Its expensiveness</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>B. Trust for its efficacy</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>C. Availability</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q15. For these sources of information you obtained, which ones do you trust them?

Q16. For these sources of information you obtained, which ones do you trust them?
Q14. How trustworthy do you think the following sources of information about organic food are?

<table>
<thead>
<tr>
<th>Source</th>
<th>Extremely Untrustworthy</th>
<th>Extremely Trustworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Media (TV, Radio, Newspapers or Magazines etc.)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Most people who are important to me</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Experts (Scientist, Doctor, Dietician etc.)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Retailer (Food Company, Manufacturer etc.) or Food industry</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Product labels</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Authorities (Korea Food &amp; Drug Administration, Ministry of Health &amp; Welfare)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Consumer organisation</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Q15. For those sources of information you DO trust, please explain why you trust them?

Q16. For those sources of information you DO NOT trust, please explain why you trust them?
Q17. To what extent do you trust that organic food is truly organic?

<table>
<thead>
<tr>
<th></th>
<th>Extremely Distrust</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Extremely Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q18. If you trust that it is organic, please indicate the reason?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Extremely Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Extremely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Organic food improved my health</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○○</td>
</tr>
<tr>
<td>B. Organic food was tastier than normal food</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
<tr>
<td>C. Its short shelf-life means no chemicals have been used</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
<tr>
<td>D. Its accurate label makes me trust it is organic</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○</td>
</tr>
<tr>
<td>E. There is no special reason</td>
<td>○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○</td>
</tr>
</tbody>
</table>

Q19. If you do not trust that it is organic, please indicate the reason?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Extremely Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Extremely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. I did not feel any health benefits from it</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
<tr>
<td>B. Organic food was not tastier than normal food</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
<tr>
<td>C. Its long shelf-life means chemicals may have been used</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
<tr>
<td>D. There are some sellers who sell fake organic food to consumers</td>
<td>○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
<tr>
<td>E. There is no special reason</td>
<td>○○○○○○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>○○○○○</td>
</tr>
</tbody>
</table>
PART II

Q1. Gender

1. Male  ○  2. Female  ○

Q2. Age

1. Less than 24 years old  ○  2. 25 - 34  ○
3. 35 - 44  ○  4. 45 - 54  ○
5. 55 - 64  ○  6. More than 65 years old  ○

Q3. Highest education level

1. Under High school  ○  2. High school  ○
3. Undergraduate degree  ○  4. Postgraduate degree  ○

Q4. Living circumstances

1. Living alone  ○  2. Living with partner  ○
3. Living with partner and children  ○  4. Living with parents  ○
5. Living with parents, partner and children  ○  6. Living with children  ○
7. Living with others  ○

Q5. Age of Children

1. Child 1  _________  2. Child 2  _________
7. No children  _________

Q6. Income (Gross Income of your family / month) (1 pound ≈ 1,850 won)

1. Under 2 m. won  ○  2. 2.01 - 3.5 m. won  ○
3. 3.51 - 5 m. won  ○  4. 5.01 - 6.5 m. won  ○
5. Over 6.51 m. won  ○

Thank you very much
Appendix A-3. The Questionnaire of the Main Survey

Dear Sir and Madam

The purpose of this survey is to understand consumers’ perceptions towards organic foods and their purchase behaviour such food.

The research forms part of a doctoral study being conducted at University of Surrey, UK. The information obtained from this survey will be treated with complete confidence and will not be attributable to you.

If you regularly shop for food (e.g. at least once per month), please could you complete the questionnaire provided. The questionnaire will be completed within 10 minutes. Late I would also like to conduct a small number of interviews, if you would be willing to take part in an interview, please leave your contact details at the end of the questionnaire. I will then contact you to arrange suitable time.

If you need further details or you wish to make any further comments regarding the study, please contact me at the address given below.

Thank you for taking time to complete this survey. Your contribution to the research is valued.

Yours sincerely
Ms Bo Won Suh
Doctoral Student (Food Management)
Faculty of Management and Law
University of Surrey
Guildford, Surrey, UK
GU2 7XH
b.suh@surrey.ac.uk
+44 (0)7814475503
"**Organic food** is the output of organic farming techniques or ecological agriculture methods. The organic farming technique is an agricultural method where by crops are cultivated using organic matters, without using agriculture medicines or chemical fertilizers, thus reducing environmental pollution."

In this country (South Korea), organic product is classified as a kind of environmentally friendly agricultural product (See below Table). Environmentally friendly agricultural product is defined as “an agricultural product which is produced without chemical fertilises or pesticides or with the minimum quantity of chemical fertilises or pesticides in order to offer safe agricultural products to consumers and protect environment”.

<table>
<thead>
<tr>
<th>Type of Environmentally friendly agricultural product</th>
<th>Standard</th>
</tr>
</thead>
</table>
| Organic Agricultural Product                         | • Perennial Products: Cultivated without any artificial fertilizers and chemicals over 3 years  
|                                                      | • Other Products: Cultivated without any artificial fertilizers and chemicals over 2 years  
|                                                      | • Product in a Transition Period: Cultivated without any artificial fertilizers and chemicals over 1 year |
| Chemical Free Agricultural Product                    | • Cultivated with less than 1/3 artificial fertilizers of Guidelines on safe use of artificial fertilizer and without chemical |
| Low Chemical Agricultural Product                     | • Cultivated with less than 1/4 chemicals and artificial fertilizers of Guidelines on safe use of pesticides |

Although organic product is a kind of environmentally friendly agricultural products, this study is conducted to understand your behaviour towards only **Organic Foods**.

* Thus, please could you answer to all questions provided related to your perceptions and purchase behaviour towards **only Organic Foods**, not all other environmentally friendly agricultural products.
PART I

Q1. Have you ever purchased organic food?

Yes  o  Please Start from Q2
No  o  Please Start from Q5

Q2. Where do you normally buy organic food?

A. Off Price Superstore  o  B. Department Store  o
C. Local Market  o  D. Special Organic Shop  o
E. Direct Transaction  o  F. Online Shopping Mall  o
G. Others  o

Q3. Please indicate how often you DO BUY organic food?

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Always</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Q4. Please indicate how often you DO BUY the following type of organic food?

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Always</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk and Dairy products</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Meat and Fish</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Fruits and Vegetables</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Soya bean products (e.g. Bean, Tofu)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Rice</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Flour products (e.g. Breads, Noodles)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Others</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q5. Please indicate how often IDEALLY you would buy organic food?

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Always</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

Q6. Please indicate how often IDEALLY you would buy the following types of organic food?

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Always</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk and Dairy products</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Meat and Fish</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Fruits and Vegetables</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Soya bean products (e.g. Bean, Tofu)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Rice</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Flour products (e.g. Breads, Noodles)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Others</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

Q7. Please explain why you were not able to buy organic food as often as you would like.

Q8. I intend to purchase some organic food within the next month.

| Extremely Unlikely | Extremely Likely | Extremely 
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Q9. I plan to purchase some organic food within the next month.

| Extremely Unlikely | Extremely Likely | Extremely 
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
**Q10. For me to purchase organic food is**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. bad</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>good</td>
</tr>
<tr>
<td>B. harmful</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>beneficial</td>
</tr>
<tr>
<td>C. unhelpful</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>helpful</td>
</tr>
<tr>
<td>D. unpleasant</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>pleasant</td>
</tr>
<tr>
<td>E. unenjoyable</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>enjoyable</td>
</tr>
<tr>
<td>F. worthless</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>valuable</td>
</tr>
</tbody>
</table>

**Q11. Purchasing organic food would be mean I would**

<table>
<thead>
<tr>
<th></th>
<th>Disagree Extremely</th>
<th>Agree Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A. have get health benefits</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>B. get a better taste</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>C. peace of mind for food safety</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>D. help to protect the environment</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>E. contribute to the local rural and national economy</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>F. pay high price</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>G. get a shorter shelf life food</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>H. get a poor appearance food</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I. get pest present food</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
Q12. For me to purchase organic food

<table>
<thead>
<tr>
<th></th>
<th>Bad</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. to improve health is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>B. that tastes better is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>C. that provides peace of mind for food safety is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>D. that helps to protect the environment is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>E. that contributes to the local rural and national economy is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>F. that is expensive is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>G. that has shorter shelf-life than normal food is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>H. that has poor appearance is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>I. that has presence of pest is</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
</tr>
</tbody>
</table>
Q13. Most people who are important to me think that I should buy organic food.

<table>
<thead>
<tr>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q14. Most people who are important to me would approve or disapprove of me purchasing organic food.

<table>
<thead>
<tr>
<th>Disapprove</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Approve</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

Q15. The following people would approve or disapprove of me purchasing organic food. (N/A: There is no applicable person)

<table>
<thead>
<tr>
<th></th>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Family</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>B. Friends</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>C. Doctor</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>D. Scientist</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>E. Dietician</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>F. Retailers of organic food</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

Q16. Generally speaking, how much do you want to do what the following people think you should do? (N/A: There is no applicable person)

<table>
<thead>
<tr>
<th></th>
<th>Extremely Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Agree</th>
<th>7</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Family</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>B. Friends</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>C. Doctor</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>D. Scientist</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>E. Dietician</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>F. Retailers of organic food</td>
<td></td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>
Q17. How is it for you to buy organic food?

<table>
<thead>
<tr>
<th>Extremely Difficult</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Easy</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Q18. If I wanted to, it would be possible for me to buy organic food.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Q19. To what extent do the following make it easy or difficult for you to buy organic food?

<table>
<thead>
<tr>
<th></th>
<th>Extremely Difficult</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Extremely Easy</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Its expensiveness</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>B. Trust for its efficacy</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>C. (Number of choices or stores for organic food)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Q20. I expect that the followings help my purchasing organic food.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Its expensiveness</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>B. Trust for its efficacy</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>C. (Number of choices or stores for organic food)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
Q21. How trustworthy do you think the following sources of information about organic food are?

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Extremely Untrustworthy</th>
<th>Extremely Trustworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Mass Media (Internet, TV, Radio, Newspapers or Magazines etc.)</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>B. Most people who are important to me (Family, Friend etc.)</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>C. Experts (Scientist, Doctor, Dietician etc.)</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>D. Retailer (Food Company, Manufacturer etc.) or Food industry</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>E. Product labels</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>F. Authorities (Korea Food &amp; Drug Administration, Ministry of Health &amp; Welfare)</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>G. Consumer organisation</td>
<td>0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

Q22. For those sources of information you DO TRUST, please explain why you trust them?

Q23. For those sources of information you DO NOT TRUST, please explain why you trust them?
Q24. Do you trust that organic food is truly organic?

Yes  ○  Please GO TO Q25
No  ○  Please GO TO Q26

Q25. If you TRUST that it is organic, please indicate the reason?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Extremely Disagree</th>
<th>Extremely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Organic food improved my health</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>B. Organic food was tastier than normal food</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>C. Its short shelf-life means no chemicals have been used</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>D. Its accurate label makes me trust it is organic</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>F. There is no special reason</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Q26. If you DO NOT TRUST that it is organic, please indicate the reason?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Extremely Disagree</th>
<th>Extremely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. I did not feel any health benefits from it</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>B. Organic food was not tastier than normal food</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>C. Its long shelf-life means chemicals may have been used</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>D. There are some sellers who sell fake organic food to consumers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>F. There is no special reason</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
PART II

Q1. Gender
1. Male 0 2. Female 0

Q2. Age
1. Less than 24 years old 0 2. 25 - 34 0
3. 35 - 44 0 4. 45 - 54 0
5. 55 - 64 0 6. More than 65 years old 0

Q3. Highest education level
1. Under High school 0 2. High school 0
3. Undergraduate degree 0 4. Postgraduate degree 0

Q4. Living circumstances
1. Living alone 0 2. Living with partner 0
3. Living with partner and children 0 4. Living with parents 0
5. Living with parents, partner and children 0 6. Living with children 0
7. Living with others 0

Q5. Age of Children
1. Child 1 2. Child 2
7. No children

Q6. Income (Gross Income of your family / month) (1 pound = 1,900 won)
1. Under 2 m. won 0 2. 2.01 - 3.5 m. won 0
3. 3.51 - 5 m. won 0 4. 5.01 - 6.5 m. won 0
5. Over 6.51 m. won 0
If you would be willing to take part in an interview about purchase of organic food, please leave your contact details

Contact details

E-mail address

Telephone No.

Mobile No.

Thank you very much
Appendix B. The Sample of Interview Transcript

Dear Sir and Madam

Thank you very much for taking part in this interview.

I am a PhD student at the University of Surrey. As part of my PhD research, I am interviewing people about their purchasing behaviour for organic foods.

This interview takes approximately 30 minutes. If it is okay with you, I will voice record our conversation. The information you provide will only be used for academic purposes and will remain strictly confidential.

Your thoughtful responses to study’s questions are greatly appreciated and will be of substantial value to me. If you have any questions during the interview, please do not hesitate to ask for clarification.

Thank you very much for your time and co-operation.

Yours sincerely
Bo Won Suh

Doctoral Student (Food Management)
Faculty of Management and Law
University of Surrey
Guildford, Surrey, UK
GU2 7XH
b.suh@surrey.ac.uk
+44 (0)7814475503
Gender: Female
Age: under 24
Education: High school
Living with: Partner and child
Age of Children: 2 years old (1 child)
Income: 2.01 million won – 3.05 million won
Purchasing intention for organic food: Very High (7/7)
Realised purchasing behaviour: Purchased
Date of Interview: 10/09/2008

Q: Have you ever shop for food after last questionnaire survey of this study?

Yes

Q: Did you buy any organic food product in your last shopping?

Yes, I did

Q: (In the questionnaire) You answered that high price of organic food make you difficult to buy organic food. But, you bought organic food. Why did you buy organic food?

Actually, I am not expert about organic food, so I don’t know whether organic food is really good or not, I mean...healthy issues, good for human body something like that...

Anyway, the reason why I bought organic food is because of vague perception about organic food... I mean... if we eat organic food, we can be free from chemical, pollution, and food safety problem and so on... that kinds of mind...
So, even organic food is expensive... I buy organic food because it is food for my family and baby.

Q: If so, how often you do buy organic food?

Well... quite often probably.
I think... I buy organic food every food shopping.

Q: How often you do shop for food?

Normally... once every two weeks... I think...

Q: How much you do buy organic food?

I think... I buy organic food 1/3 of total food.

The important thing is not price but health for me.

Q: OK... let's come back to the question about the price.
If so, even organic food is expensive, the high price of organic food had no influence on your purchasing. Is it right?

Well... no... it is not... because it is true that I always hesitate when I buy organic food.
If organic food is not expensive, I would always buy only organic food.

But, I buy organic food not much... about 30% of total food, because of its high price.
Thus, it is right that price had influence on my organic food purchasing.

But, I mean... because health is more important than the price, I buy organic food if it is essential.
Q: What is that mean “essential”?

It means… I always think about my daughter when I shop for food. Because my daughter is only 2 years old, I can’t feed everything to her. So, I normally buy organic food to feed my baby.

Q: If so, do you normally only buy organic food for your daughter?

Well… I mean… the most important thing is my baby for me…thus, I normally buy it for my daughter rather than me or my husband. But, we also have organic food with my daughter, I don’t only feed it to my baby because I think it is better than normal food.

Anyway, the most important reason to buy organic food is for my baby… I mean.

Q: If so, do you think that organic food is good for health and better than normal food?

Um… yes… even I don’t know exactly.

But, I think that organic food is better for health than normal food as I said, because it is better than normal food even very little bit.

Q: But, you had answered that you do not trust organic food is truly organic (in the questionnaire).

You know… I can’t confirm with my eyes whether it is really grown organically or not.

Also, even if seller sales normal food as organic food to me, I can’t do anything… because I don’t know…
I mean that I can’t 100% trust it. I think...there are so many no real products, and even if it is organic, I don’t think that it is 100% organic.

That’s why I said that I don’t trust it.

But, again...I think...organic food is better.

**Q: If so, why did you buy organic food?**

Maybe...it is inconsistent...
Anyway, as I’ve mentioned... the perception that organic food seems to be better than others...even just little bit...

I buy organic food because of this perception...

Anyway, although I buy organic food, I can’t say that I trust it...
Right... I don’t truly trust organic food...

**Q: (In the questionnaire) You answered that availability of organic food make you difficult to buy organic food. But, you bought organic food. Why did you buy organic food?**

Well... I think... I answered that because we can’t easily find special organic food shop.
Honestly, I never go to special organic shop on purpose to buy organic food.

Just... I normally go to off-price superstore to shop for food, and organic products are sold in there, so I often use it.

And, now... most of off-price superstore sale organic food.
Q: It means... it is not difficult to find shop selling organic food?
No... not difficult...

Q: If so... what about the number of or kinds of organic food?
Is it readily available?

Well... because we can’t get all kinds of food as organic food, it is limited. I think...
But, in my case, I buy normally for my baby.

In case of baby products, there are quite lots of organic food products.
I could buy everything what I needed for my daughter.

So, yes it is readily available...

Q: What do you normally buy organic food?

Normally... juice or soy milk... I mean... organic juice or milk, sometimes vegetables or fruits.

I cook the weaning food or cookie, snack for my daughter.
I buy organic product for this... flour, butter, or milk... something like that...

Q: You said that you have experience to buy organic food.
Did your past experience of consuming organic food influence your decision to purchase this time?

No.

Q: If so, why did buy organic food?

Well... I couldn’t feel any particular differences...efficacy, taste and so on...
Anyway... the reason why I bought organic food is not related to past experience of my choice. I didn’t buy organic food because of past experience.

I bought organic food because I think organic food is better than normal food as I mentioned before.

I don’t think... I bought it because I satisfied with my past organic food choice.