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Danışman: PROF.DR. EMİNE ÇOBANOĞLU

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MARMARA ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ

TEZ ONAY BELGESİ

İŞLETME (İNGİLİZCE) Anabilim Dalı ÜRETİM YÖNETİMİ VE PAZARLAMA (İNGİLİZCE) Bilim Dalı TEZLİ YÜKSEK LİSANS öğrencisi NUERSIMANGULI REXITI'nın THE IMPACT OF PERSONAL CONSUMPTION VALUES AND FOOD-RELATED LIFESTYLE ON ORGANIC FOOD PURCHASE BEHAVIOR IN TURKEY adlı tez çalışması, Enstitümüz Yönetim Kurulunun 13.12.2017 tarih ve 2017-34/40 sayılı kararıyla oluşturulan jüri tarafından oy birliği / ~~oy çokluğu~~ ile Yüksek Lisans Tezi olarak kabul edilmiştir.

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ABSTRACT

The organic food consumption has grown world widely in the last years. There is an increasing emphasis on understanding who are the organic food consumers are and what are the motivations behind their buying behavior. Meanwhile, the mediation role of food-related lifestyle (FRL) between value and behavior is arising interest. This study applies food-related lifestyle and the theory of consumption values to better understand organic consumers, to determine the influence factors and also to address the value-behavior gaps on Turkish consumer's choice behavior regarding to organic food products.

For this purpose, a descriptive study has been conducted after review of previous empirical and theoretical studies. Food shopper's data was collected (n=503) using an online survey utilizing a questionnaire with variables adapted from the food-related lifestyle, personal consumption values model and purchase behavior. Data analyzed by a means of factor analysis, cluster analysis, t- test, ANOVA and structural equation model (SEM).

The general conclusion of the study is that food shoppers in Istanbul can be segmented into four food-related lifestyle groups: Rational consumers (31.4 %) who are very organized in shopping and cooking for food; food focus consumers (25.4%) who pay attention every single aspect of food; careless (24.7%) consumers who care less most of the food-related activities and mostly consist of consumers aged between 18-25; and uninvolved (18.5%) are not active in food-related activities. The organic buyer and non-buyers appeared to be different in terms of demographics, food-related lifestyle and consumption values. People with higher income level, and very food focused and rational in their food related behavior are the regular organic food buyers. And functional value for quality, epistemic value and conditional value are important for organic buyers. The structural equation model reveals that food-related lifestyle mediates the relationship between consumption values and organic purchase intention since significant and meaningful relationships were found between the constructs. Research findings could serve as a reference for institutions concerned in order to facilitate organic food sector's on-going expansion in Turkey's food industry.

Key word: Food-related lifestyle; consumption values; purchase behavior; organic food; mediation

ÖZET

Organik gıda tüketimi son yıllarda dünyada oldukça yaygınlaşmıştır. Organik gıda tüketicilerinin kim olduğunun ve satın alma davranışlarının arkasındaki motivasyonların neler olduğunun anlaşılmasına verilen önem artmaktadır. Aynı zamanda, gıdaya ilişkin yaşam tarzının (GYT) değer ve davranış arasındaki aracı rolü de ilgi çekmektedir. Bu çalışma, organik tüketicilerini daha iyi anlamak, tüketime etki eden faktörleri belirlemek ve aynı zamanda Türk tüketicisinin organik gıda seçimindeki değer-davranış farklarını ele almak adına gıdaya ilişkin yaşam tarzı ve tüketim değer teorisini (işlevsel değer, sosyal değer, duygusal değeri, koşullu değeri ve epistemik değeri) uygulamaya koyar.

Var olan ampirik ve teorik çalışmaların incelenmesinden sonra, bu amaca yönelik tanımlayıcı bir çalışma yapılmıştır. Gıdaya ilişkin yaşam tarzından, kişisel tüketim değerleri modelinden ve satın alma davranışından uyarlanan değişkenlerle oluşturulan bir anketle çevrimiçi yollarla gıda alışverişi yapanların tüketicilerin verileri toplanmıştır (n = 503). Toplanan veriler, faktör analizi, küme analizi, t-testi, ANOVA ve yapısal eşitlik modeli (SEM) ile analiz edilmiştir.

Bu çalışmanın genel sonucu olarak, İstanbul'daki gıda müşterileri dört ana GYT grubuna ayrılabilir hale gelmiştir: tertipli bir şekilde yiyecek içecek alışverişi yapan ve yemek pişiren akılcı tüketiciler (% 31.4); gıdanın her yönüyle ilgilenen gıda odaklı tüketiciler (% 25.4); gıda ile alakalı konuların büyük kısmına az değer atfeden ve çoğunlukla 18-25 yaşları arasındaki tüketicileri içeren dikkatsiz tüketiciler (%24,7); ve gıda ile ilgili faaliyetlerde hiç aktif rol almayan dahil olmayanlar (%18.5). Organik gıda satın alanların ve almayanların birbirinden hem demografik açıdan, hem de GYT ve tüketim değerleri bakımından farklı oldukları ortaya konmuştur. Gelir seviyesi yüksek, gıdaya ilişkin davranışlarında odaklı ve akılcı insanların devamlı organik gıda alıcısı olduğu ortaya konmuştur. Aynı zamanda organik tüketici için kalitenin işlevsel değerinin, epistemik değer ve koşullu değer önemli olduğu sonucu çıkmıştır. Yapısal eşitlik modeliyle yapılar arasında anlamlı ve kayda değer ilişkilerin bulunmasıyla, GYT'nin tüketim değerleri ile organik satın alma niyeti arasındaki ilişkiye aracı olduğu ortaya konmaktadır. Araştırma bulguları, Türkiye gıda sektöründe organik gıda alanının büyüme olanaklarıyla ilgilenen kurumlar için referans olabilecektir.

Anahtar kelimeler: Gıdaya ilişkin yaşam tarzı; tüketim değerleri; satın alma davranışı; organik gıda; aracılık

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1 INTRODUCTION

The increasing food supply crises and raised concern towards the modern agriculture practices make consumers more anxious about the food products they purchase. Consumers become increasingly sensitive about food production issues such as food safety(Hwang, 2016; H.-J. Lee & Hwang, 2016), health aspects(Bryła, 2016), quality(Ahmad & Juhdi, 2010; Bryła, 2016; Kahl et al., 2012), animal welfare(Aarset et al., 2004), and environment(Teng & Lu, 2016; Yadav, 2016). This trend can be viewed in worldwide increasing demand towards organic food products(Saba & Messina, 2003; Yadav & Pathak, 2016), which is claimed as " products grown or processed without using synthetic chemicals, and less damaging to the environment" (Özc¸Elik & Uçar, 2008). According to the "world organic agriculture report 2016" by Research Institute of Organic Agriculture, in 2015, the worldwide organic market size is reaching 80 billion US dollars, has expanded over fivefold since 1999(Willer & Lernoud, 2016b) and predicted 16% growth rate over the next five year(PRNewswire, 2015). As one of the countries with largest number of organic producers(Willer & Lernoud, 2016b),Turkish organic food market also has expended very fast. In year 2015, the Turkish organic foods and beverages total market size reached US$97.9 million, $1.3 per capita and expected a strong growth (12.9%) from 2015-2020(Global organic trade guide, 2016). And there are 70.000 active organic producers who produce more than 200 types of organic products and the total production is 1,829,291 Tons (MinFAL, 2016).

As one of the forms of sustainable foods (Vermeir & Verbeke, 2005), organic food production and consumption is the primary concerns of policy makers as it has impacts on the environment, individual and public health, social cohesion, and the economy (Reisch, Eberle, & Lorek, 2013). Besides, the developing demand for organic product also brings considerable opportunity for the producers and retailers(Kearney, 2010). Because consumers add high value to the organic food that this made them less price sensitive(Aschemann-Witzel & Zielke, 2017) and willing to pay price premium(Akgüngör, Miran, & Abay, 2007; Gil, Gracia, & Sanchez, 2000; Athanasios Krystallis & Chryssohoidis, 2005; Loureiro & Hine, 2002). This enabled the firms to charge higher price for organic foods compared to conventional products(Larsson, 2014).Therefore, in order to shape sustainability in food

consumption and also for organic food producers to be successful, it is essential that the government , the organic producers and retailers understand profiles of organic consumers and the factors that play a role when a consumer is considering an organic food product.

1.1 Aim and objectives

To better understand the organic food buyers and main predictors of their purchase behavior it is important to understand the psychographic factors such as food related life style(Lobo & Chen, 2012; Nie & Zepeda, 2011; Zepeda & Nie, 2012) and the values underlying their food purchase choices(Finch, 2006; Yadav, 2016) for several reasons. First and foremost, current consumption of organic food is more than meeting a basic need, it's an expression of identity and worldviews(Senauer, 2001). In other words, consumers consuming foods for the external values food could provide(Nie & Zepeda, 2011) that how they evaluate the product value can predict their behavior. Second, the changing lifestyle also affected the way consumers interacts with food that various lifestyle factors are forcing them to review relationships with food and how food fits with their consumption and behavioral requirements(Reid et al.,2001).These evidences bring urgency to explore the effects of consumption value and FRL in order to understand organic food consumers and their consumption behavior. Thus the objectives of this research are (1) understand food-related lifestyle (FRL) of food shopper in Turkey, (2) identify demographics, consumption values and organic purchase behavior of different FRL segments, (3) understand psychographic (FRL, value) profile and behavioral profile of organic buyers/non buyers, (4) identify main determents of organic food purchase intention applying the theory of consumption value, (5) analyze FRL role in addressing value -behavior gaps in organic food purchase behavior, (6) propose strategies for the business and government organization to facilitate organic food sector's on-going expansion of domestic market , and(7) make a contribution to the literature of organic food consumption and FRL of Turkish consumers.

1.2 Significance of the study

The various research outcomes obtained in this thesis will provide overall understanding of consumer's demographics, behavior, lifestyle, and value regarding to the organic food, which will important for businesses managers, market researchers, public policy makers and consumers.

Turkey is one of the expanding markets. In year 2015,the numbers of organic producers reached 70,000, five times more compare to the number in year 2005(MinFAL, 2016). The total market size reach US$97.9 million for organic food and beverages sector, and have a very optimistic growth rate at 12.9%(Global organic trade guide, 2016). The businesses will benefit from the result of the study; utilize the results from marketing communication strategies to product development and market positioning. While the results reveal who are the organic consumers are by offering demographical, psychographic and behavioral profile of the food consumers while analyze the factors affecting consumers purchase intention.

Public policy makers, also, will benefit from the findings of this research by better understanding food-related lifestyle of its citizens and their organic purchase behavior for launching effective healthy eating educational programs and also boost domestic consumption and increase sustainability.

The consumers will be the true victors. The better understanding of consumers will help to better satisfy their needs and wants. If the businesses apply right marketing strategies fit for the consumers needs, consumer's expectation will be met.

Finally, the study will offer valuable source to the field of academic business research by providing research into organic food consumption behavior. This study is the first attempt to segmented food shopper in Turkey based on FRL, and also a first attempt to explore the mediating role of FRL between consumption values and behavior while explore the effects of consumption value and FRL effects on organic food consumption behavior. Table 1-1 below is the collection of marketing related thesis, conducted in Turkey, from 2002 to 2015, focused on organic food product. Most of the thesis focused on the effects of consumer perceptions, belief, knowledge and the demographics and the marketing communications on organic purchase behavior, and most of them focused on organic agricultural products. Only one thesis written by Yesiloglu(2013) researched the effects of life style on organic food purchase behavior. Considering the advantages of using the product specific lifestyle, this thesis focused on the effect of consumption value and FRL. So the research outcomes will offer new view about consumers organic consumption and also will provide information about FRL of Turkish consumers.

Table 1-1 Thesis conducted in Turkey from year 2002 to 2015

Thesis Topic	Author	Year	Thesis number	Main focus
Turizm işletmelerinde organik gıda kullanımı algı ve tutumlarının araştırılması: Gaziantep ili örneği.	ZAFER BARIŞ	2015	421671	The consumer's perceptions and attitudes for organic food and its role in gastronomy tourism.
Organik gıda grubundaki ürünler için yapılan bütünleşik pazarlama faaliyetlerinin, genç tüketicilerin satın alma davranışları üzerindeki etkisi; Üniversite öğrencileri üzerinde uygulama çalışması.	SİNEM TAŞLIK ÇINARLI	2014	383965	Investigated the role of integrated marketing communications on young consumers buying behavior of organic food products.
Organik tarım ürünlerinin pazarlamasında marketlerin rolü.	HALİL İBRAHİM GENÇELİ	2013	348310	Presented the role of the markets in commercialization of the organic agriculture product and the consumer tendencies.
Tüketicilerin organik gıda almasını etkileyen faktörlerin araştırılması.	AYSUN DÖNDAŞ	2013	354958	Investigate factors that effect consumer's intention to buy organic food.
Yaşam tarzının müşteri sadakati ve tüketici satın alma davranışları üzerine etkileri; Organik gıda ürünlerini kullanan tüketiciler üzerinde bir uygulama.	HÜLYA YEŞİLOĞLU	2013	327465	Analyzed the effect of life style on consumer purchasing behavior and customer loyalty.
Hedef pazar seçimi ve marka konumlandırma; Organik Çay Pazarı'nda marka konumlandırma üzerine bir uygulama.	ERDAL ÖZBEY	2012	320183	The impact of brand strategies on consumer purchase behavior.
Öğretmenlerin organik gıdalara yönelik görüşlerini etkileyen faktörler: Muş ili örneği.	AYŞE SARITAŞ	2012	308876	Teacher's attitudes towards organic products and its effects on organic purchase behavior.
İzmir'de organik gıdalara ilişkin tüketici davranışlarını belirlemeye yönelik bir araştırma.	SELİN LÜLECİ	2012	333414	Examines the impacts of health consciousness, ethnicity and product belief and attitude on purchase intention and purchase behavior.
Organik gıdalarla ilgili tüketici davranışlarının belirlenmesi üzerine bir araştırma.	ŞUAYİP BIYIKOĞLU	2010	283179	Examine the impact of consumer's demographics and consumers knowledge on organic purchase behavior.
Niğde'de üretilen organik ve organik olmayan tarım ürünlerinin üretim ve pazarlama sürecindeki farklılıklar belirlenmesi.	FATIMANA SAĞTAŞ ÖZKUL	2010	262045	Analyze organic and non-organic products difference in terms of production and marketing process
Attitudes and purchase intentions of consumers for organic products in the Turkish market.	NAİME MELTEM ÇAKICI	2009	240645	Investigate factors effecting consumers purchase intention based on the Planed behavior theory.

Thesis Topic	Author	Year	Thesis number	Main focus
Etik pazarlama anlayışı çerçevesinde organik tarım ürünleri pazarlaması.	SİNAN NARDALI	2009	228796	Illuminate ethic issues related to marketing and certification of organic products.
Organik tarım işletmelerinin pazarlama faaliyetleri ve sorunlara yönelik yaklaşımları.	SEÇİL ADALET GÖK	2008	228047	Analyzed marketing mix of organic products.
Organik tüketicilerin kişisel değerler çerçevesinde sınıflandırılması.	DİDEM ÇELİKKANAT	2008	228100	Clustered organic consumers depending on their List of Values (LOV) structure and Investigate the relationship between personal values and organic food buying behavior.
Organik gıda sektöründe niş pazarlama stratejileri.	GRESİ SANJE DAHAN	2008	226295	Niche marketing strategies and its implementation in organic food market.
Türkiye'de organik tarımın desteklenmesi marka yaratım süreci ve kooperatifler için bir başarı modelinin önerilmesi.	GÜNER ÖZEVİN	2008	221153	The importance of the brand, brand creating process on organic production develop.
Yeşil pazarlama: Türkiye'de organik gıda ürünlerinin kullanımını arttırmaya yönelik stratejiler.	ÇİĞDEM TİRKEŞ	2008	221774	Profiling current and potential organic food consumers in Turkey and identifying the factors that may influence the consumers' attitude and behavior towards the consumption of organic produce.
Organik tarım işletmelerinde pazarlama sorunlarına yönelik Şanlıurfa ilinde bir araştırma.	SÜREYYA ECE	2008	230838	Applications and problems in marketing process were examined
Organik ürünlerin pazarlanmasında tüketicilerin tutumlarının ve tercihlerinin değerlendirilmesine yönelik bir araştırma.	AYŞE KARA	2007	210565	Consumer attitude and preference towards organic products.
Organik tarım ürünleri pazarlaması ve uygulamalar.	ZAHİDE KURT	2006	189929	The marketing process of organic agriculture products in supermarkets in turkey.
Organik tarım ürünlerinin Avrupa Birliği'ne pazarlanması.	HATİCE TÜRK	2005	162586	The development of organic agriculture and how they marketing to the European union.
Ekolojik (organik) tarım ürünleri pazarlaması.	TUĞBA USKUÇ TÜRKÖZ	2002	125447	Turkish organic farm development and marketing of organic food and its importance.

Source: created by researcher using YOK thesis center webpage

1.3 Design of the study

In this study, the outline starts with the general introduction as chapter 1, which contains research aim, objectives, and significance of this study. Chapter 2 includes the literature review, which provides information about the world organic market situation. And

the theoretical background of the study is also introduced. Chapter 3 includes the research background. And chapter 4 describes the research methodology. Chapter 5 presented the findings of the data analysis. Chapter 6 includes discussion and conclusion of the research. Finally, chapter 7 present research limitations and recommendation for further researchs.

2 LITRATURE REVIEW

This section will answer to the question" what is organic?" and provide information about the world organic market situation. And also introduce consumption value theory, life style research in marketing, food-related lifestyle (FRL) application in consumer segmentation and FRL role in value – behavior chain.

2.1 What is Organic?

People using different contexts to define the term "organic", and it is easily associated or even confused with the terms " green", "ecological", "environmental", "natural", "sustainable"(Schifferstein & Oude Ophuis, 1998) and some times even mixed up with "local (köy) products. Table below concluded the definitions of these related terms by different authors.

Table 2-1. Definition of Organic product and related terms

Terms	Definitions	Author & year
Organic food	Produced without artificial fertilizers or pesticides	Oxford English Dictionary
	"Grown, stored and processed without the use of pesticides, synthetic fertilizers, and growth hormones". A food, which is cultivated via environmentally friendly process.	(Chinnici, D'Amico, & Pecorino, 2002; Gold, 2007; Lockie, Lyons, Lawrence, & Mummery, 2002)
	"Organic food production refrains from using synthetic chemicals like pesticides and fertilizers, fungicides, growth hormones and regulators or genetic modifications. Also, livestock is not treated preventive medication to avoid the residues of chemicals contain in the end products".	(Chen, 2007; Jones, Clarke-Hill, Shears, & Hillier, 2001; Schifferstein & Oude Ophuis, 1998)
Green food	Product that can satisfy customer needs while use the energy and sources out of environmental responsibility and ensuring social desirability of the product stemming from causing no harm to the environment and people.	(Polonsky & Rosenberger 2001
	Green foods that are safe, fine quality, nutritious, healthy to consumers and they are concerned with animal welfare produced under the principle of sustainable development	(Lijuan, 2003)
	Green foods defined as products that are typically nontoxic, made from recycled material, or minimally packaged. Besides green food also refers to "original grown, recycle or reusable, contain natural ingredient or recycle content, do not pollute environment and do not test on animals".	(Mishra & Sharma, 2010; Ueasangkomsate & Santiteerakul, 2016)
Natural food	Minimally processed and is preservative-free.	Ahmad &Juhdi 2010
Local (köy) food	Local food is food product produced within a certain geographical distance. Include all products in the country, in other words, not imported.	Adams & Salois 2012

Source: prepared by researcher based on literatures obtained from Google scholar and ScienceDirect

The “Oxford English Dictionary” defines organic as “produced without artificial fertilizers or pesticides”. As shown in Table 2-1, The “U.S. Department of Agriculture (USDA) National Organic Program (NOP)” defines organic as: “Organic produce and other ingredients are grown without the use of pesticides, synthetic fertilizers, sewage sludge, genetically modified organisms, or ionizing radiation. Animals that produce meat, poultry, eggs, and dairy products do not take antibiotics or growth hormones”(Gold, 2007). Organic products include diverse product categories such as fruits, vegetables, dairy, animal products, cereals, and grains. Besides, there are other categories, such as cotton and cotton made fabrics, textiles, wooden products such as furniture, shampoos, conditioners and cosmetics (Aarset et al., 2004). On the other hand, the Green product is the product that can satisfy customer needs while using the energy and sources out of environmental responsibility and ensuring social desirability of the product stemming from causing no harm to the environment and people. In developing green products, it is necessary to consider influences of the product on the environment and influences of production process, such as, used raw materials, materials, and sources of energy, produced waste etc. (Polonsky & Rosenberger, 2001).And the food producers uses the term “natural” to indicate that “a food has been minimally processed and is preservative-free”. Lastly, in general, the local foods point the products, which produced within a certain geographical distance not imported from other region or other countries(Adams & Salois, 2012).

As we can see the definitions, green and natural foods may not be necessarily organic, but organic food can be green. About the term “natural”, Ahmad and Juhdi (2010) stated, “Organic” does not mean “natural”. The production of natural food does not include any standards regarding farm practices. In contrast, organic products have strict rules to follow from farm to consumption. Local foods, also is one of the most confusing term for consumers, not all the organic food are grown locally, and locally labeled do not imply pesticides free(Buck, 2014), and most of the time there is no formal standard for production for local food(Adams & Salois, 2012). However, organic, green, natural and local food is the different forms of sustainable food(Vermeir & Verbeke, 2005), which is aiming to improve environment, individual and public health, and social wellbeing(Reisch et al., 2013).

2.2 World Organic Product Market

The organic product consumption has been growing remarkably among consumers all over the world(Mohamad, Rusdi, & Hashim, 2014; Bravo et al., 2013). Consumers are becoming more conscious about the food they eat. Not only for the evolving consumption preference, but also as the results of various contaminated food scares such as " mad cow disease, genetic modification of food, high fat diets, salmonella food poisoning, foot-and-mouth epidemic, hormone-laced milk, and e-coli infected meats, fruits, and vegetables"(Miles & Frewer, 2001). Moreover, many studies also raised concerns towards the increasing level of usage of chemical fertilizers to increase the yield of food production(Basha, Mason, Shamsudin, Hussain, & Salem, 2015).Further, with the combination of increasing environmental awareness and concerns, consumers began to lose confidence for the modern agricultural practices(Miles & Frewer, 2001; Chen, 2007). This has been obviously reflected in increasing consumers demand for organic produces worldwide. According to the latest survey on certified organic agriculture worldwide by "Research Institute of Organic Agriculture/ FiBL(Forschungsinstitut für biologischen Landbau)",in year 2014, there were 43.7 million hectares of organically managed land (based on the principles to minimize the human impact on the environment, while ensuring the agricultural systems operate as naturally as possible), which is more than 4 times of the 11 million hectares in 1999. And the number of producers grows from 200,000 in 1999 to 2.3 million in 2014. It's also reported that the worldwide organic market size is 80 billion US dollars in year 2015, Among, the market for organic food and drink has expanded over fivefold between 1999 to 2014(Willer & Lernoud, 2016b) and earned £49 billion market value in 2105(Soil Association, 2016).

The organic production mostly located in Asia region, which produce 40% of organic products as shown in Figure 2-1, the India is the country with highest production in the region. Africa is the second biggest region with 26% production rate and the Uganda is the biggest producer. Then, the Latin America and Europe region occupy 17%, 15% respectively and the North America and Oceania, in total, occupy 2% of the world organic production (Willer & Lernoud, 2016a).

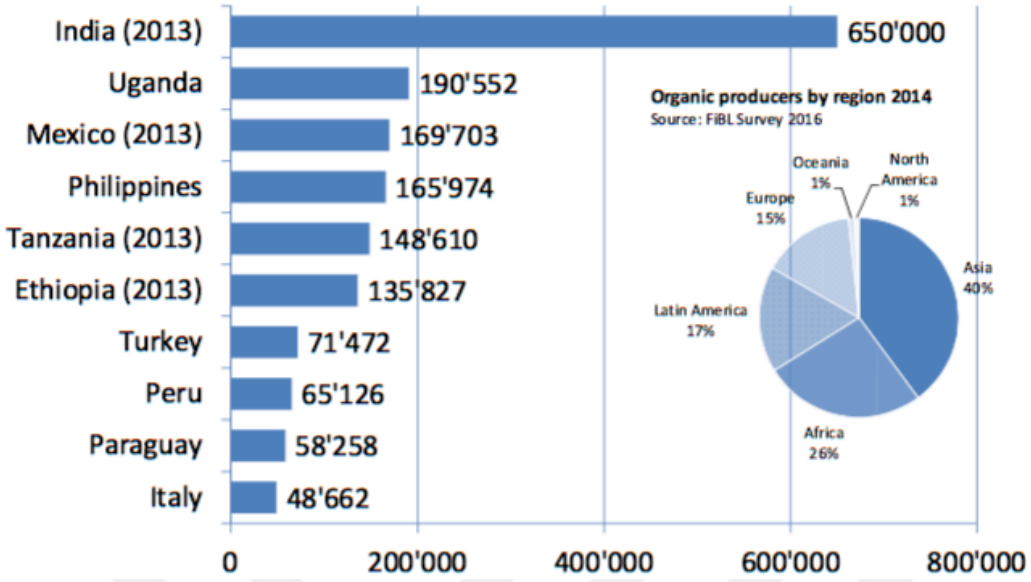


Figure 2-1.Countries with the largest number of organic producer

Source: Willer, H. & Lernoud, J., 2016a. *Organic Agriculture Worldwide 2016 : Current Statistics*, Frick.

As shown in Table 2-2, the United States generate most organic product sales, occupy 43% of global organic market, grew by 11.4% growth rate. Germany claimed as the second biggest organic market, generated 13% of global market with 4.8% growth rate, and has the largest organic market in Europe. France has the third largest organic market, occupy 8% of the global organic market and has 10.2% growth rate. China's organic market has huge potential, with 50% growth rate and 5% market share. UK and Canada have generated 4% of global sale respectively, where the Switzerland and Italy generate 3% individually. Sweden and Oceania also occupy 4% of global sale in total, where Sweden has 45% market growth rate. Table 2-3 also informed leading countries in organic market, such as, US is the largest market (US $39 billion organic sale), the Australia has the biggest organic land (17.2 million hectares) .In Falkland the percentage of organic land among total farmland (36.3%) is the highest in the world. In Denmark, organic foods have the highest market share (7.6%). And the highest per-capita consumption found in Switzerland (221 euro per year).

Table 2-2, Leading markets for organic products worldwide

Country	Percentage of global sale	Growth rate
United States	43%	11.40%
Germany	13%	4.80%
France	8%	10.20%
China	5%	50%
UK	4%	4.9
Canada	4%	-
Switzerland	3%	7.5
Italy	3%	6.20%
Sweden	2%	45%
Oceania	2%	-

Source: Created by author based on Organic Market Report 2016 by soil assoiation.

Table 2-3. Leading countries

Organic sales	United states US $39 billion
Organic land	Australia 17.2 million hectares
% Organic land	Falkland Islands 36.3%
% Organic food	Denmark 7.6%
Per capita spend	Switzerland 221 euros per year

Source: Soil Association, 2016. Organic Market Report 2016.

As one of the form of sustainable food(Vermeir & Verbeke, 2005), organic food production and consumption have positive impacts on environment, improvement of individual and public health, social cohesion, and the economy (Reisch et al., 2013).Besides, the developing demand for organic product brings considerable opportunity for the producers(Kearney, 2010). In addition to increasing demand from consumers, there are other factors that attract firms to produce organic food: first and foremost, consumers always like to attach social and emotional value to their organic food consumption(Finch, 2006), this make consumers less price sensitive and willing to pay price premium(Akgüngör et al., 2007; Gil et al., 2000; Athanasios Krystallis & Chryssohoidis, 2005; Loureiro & Hine, 2002). As a result, this enable the firms to charge higher price for organic foods compare to conventional products(Larsson, 2014). These advantages make organic food production as a main interest of both policy makers and producers.

According to the PRNewswire (2015) news, the TechSci Research report, "Global Organic Food Market Forecast & Opportunities, 2020", claim that “global organic food market is expected to witness strong growth over the next five years, global organic food market is projected to register a CAGR (Compound Annual Growth Rate) of over 16% during

2015 – 2020". The same report also quote "the growth in the organic market can be attributed to growing health concerns among consumers and increasing awareness with regard to health benefits of organic food". There are other factors such as increasing income levels(Kearney, 2010), lifestyle changes(B. I. Goetzke & Spiller, 2014; Reid et al., 2001), and growing health concerns among consumers,(Davies, Titterington, & Cochrane, 1995). Moreover, easy accessibility, product labeling, and also government involvement to encouraging adoption of organic food products among citizens(PRNewswire, 2015).

2.3 Theory of Consumption Value

There are various theories have been developed to analyze and explain consumer food choice behavior in the literature. The most popular ones in organic food consumption research are "Theory of Planed Behavior (TPB)"(Ajzen, 1991), "Attitude Behavior Context(ABC) Theory" (Guagnano, Stern, & Dietz, 1995), "Protection Motivation Theory(PMT)"(Rogers, 1975), and "Value theory of Rokeach(1973) and Schwartz (1992)" .

The TPB predicts consumer behavior based on intention to perform the behavior, which is effected by "attitudes", "subjective norm", and "perceived behavior control". TPB has been applied by several research (i.e. Arvola et al., 2008; Çakici, 2009; Chen, 2007; Gracia & De Magistris, 2007; Saba & Messina, 2003; Tarkiainen & Sundqvist, 2005; Thøgersen, 2009; Yadav & Pathak, 2016; Yazdanpanah & Forouzani, 2015) in the field of organic food consumption. The ABC theory, on the other hand, argues that the consumers acts upon expected functional and psychological gain from a given behavior (Guagnano et al., 1995), is a overall framework of means-end theory, health belief theory and food-related life style theory. And the PMT established upon threat identification and response in order to understand behavior, and Scarpa & Thiene (2011) applied the theory to find out the underlying preference regarding to the organic food. The values theory of Rokeach (1973)and Schwartz (1992) are the most used theory to predict consumer behavior by studying the link between values and behavior. In the field of organic food consumption research, Dreezens et al. (2005) and Baker et al. (2004) applied the theory to predict consumers organic purchase behavior.

Values are the "criteria people use to select and justify actions and to evaluate events"(Schwartz, 1992), and generally perceived as extremely stable construct to predict

behavior(Krystallis et al., 2008).And Leroi-Werelds et al. (2014)point out the effectiveness of multidimensional conceptualization of consumer's values on predicting consumers behavior than one-dimensional approach. For that reason, the hypotheses of this research are drawn from the "theory of consumption values" by Sheth et al. (1991) , a multidimensional approach that integrates components from various consumer behavior models(Turel, Serenko, & Bontis, 2010) and assumes that consumer choice is a function of multiple consumption values(Wang, Liao, & Yang, 2013).

The "theory of consumption values", is one of the recent developments to explain the reasons of consumers' buying decisions,mainly focuses on the consumption values that explain "why consumers choose to buy or not to buy (or use or not use) a specific product, why consumers choose one product type over another" (Sheth et al. 1991). It's an important model that explains and predicts consumer preference between different product and brands in the market by revealing explicit and implicit reason and motivation that underlies purchasing most of the goods and services(Long & Schiffman, 2000).

As shown in Figure 2-2, the theory stated that "functional value, social value, emotional value, epistemic value, and conditional value influencing consumer choice behavior". Sheth et al. (1991) assumes that "consumers always attach different values to the product and these in turn will affect motivation to purchase". The theory has three fundamental axiomatic propositions: " the consumer's behavior is a function of various consumption values; the consumption values have different contributions in any purchase situation; and the consumption values are independent"(Sheth et al., 1991). Therefore, consumer's decision can be affected by any or all of the five consumption values. Each of these values has a different contribution in specific buying situations, each relates additively, and each has an incremental contribution(Gonçalves, Lourenço, & Silva, 2016). The following section introduces the values and relevant literature for each.

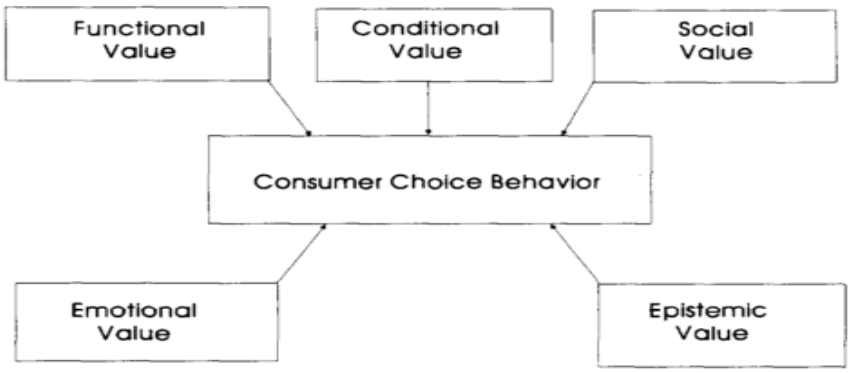


Figure 2-2 Five values influencing consumer choice

Source: Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, *22*(2), 159–170.

Functional value refers to consumers' perception about a product or services utilitarian or physical performance including dependability, reliability, quality and price(Sheth et al., 1991). Previous research reveal that the perceived belief in the high quality (Ahmad & Juhdi, 2010; Bryła, 2016; Kahl et al., 2012) and the price (Chen, 2007; Padilla Bravo et al., 2013; Tarkiainen & Sundqvist, 2005) influence organic food purchase. Finch (2006) confirmed the functional value (price) influences the purchase of organic food products. The impact of functional value also has been applied in several research work related to eco-friendly/sustainable consumption behavior: Bei & Simpson (1995) state that consumers consider the price and quality when they buy recycled products. However, in Lin & Huang's (2012) study, the functional values, price and quality are not main drivers of consumers green product choice behavior that the consumers care more about the environmental degradation when they make green purchase decisions rather that the quality and price of the product. Functional value proved as a necessary but not sufficient predictor of green buying (Gonçalves et al. 2016). Biswas & Roy (2015) confirmed consumers price perceptions play major role in their sustained green consumption.

Social value is the "perceived utility derived from an alternative association with one or more specific social groups" (Sheth et al. 1991). The social values linked with social approval and image improvement(Sweeney & Soutar, 2001) that influence organic food choice behavior(Finch, 2006) and green product adaptation (Biswas & Roy, 2015b) and green

consumers choice behavior(Lin & Huang, 2012; Mohd Suki, 2015).

Emotional value is the "perceived utility derived from an alternative capacity to arise feelings or affective states" (Sheth et al., 1991). Goods and services are always linked with emotional responses. Thus, different than other measures, their constructs include both utilitarian and hedonistic components(Lin & Huang, 2012). And the combination of rational and emotional factors play important role in purchase decision and the emotional factors always seen as a key(Mackay, 1999). Consumers are likely to feel pleasure or making good personal contribution because they believe that their purchase of organic food contributes to the environment and to animals' well being(Padel & Foster, 2005), in other words, consumers' values, which is focusing on the welfare of others influence organic consumers (Lea & Worsley, 2005).Finch (2006) also confirmed the positive relationship between emotional value and consumer's organic food choice behavior. And (Lin & Huang, 2012) claimed emotional value play important role on green consumer's choice behavior.

Conditional value is the "perceived utility derived from an alternative as the result of a specific situation or set of circumstances facing the decision maker". In other words, the product or services attains this value due to the situation (Sheth et al., 1991). And situational variables referred to the conditions that surrounding consumers when they respond to the stimulations of their needs and wants(Nicholls et al., 1996). The conditional value arises when the value strongly linked with the products use in specific context(Wang et al., 2013). It is a significant predictor of organic food consumption behavior(Finch, 2006) and sustained green consumption behavior(Biswas & Roy, 2015b;Lin & Huang, 2012)..

Epistemic value is the "perceived utility derived from an alternative capacity to arise curiosity, provide novelty, or satisfy a desire for knowledge" (Sheth et al., 1991). Knowledge play vital role in all stages of the decision process, such as, new product adaptation(Laroche et al., 2001). The adoption process for a new product requires that there should be a matching elaboration between the buyer's perceived situational characteristics and product attributes. Novelty seeking serves as a means of self-preservation and the individual may find it useful to create a database of potentially useful knowledge(Hirschman, 1990). A further explanation for seeking novelty relates to gaining the skills to solve problems (Lin & Huang, 2012). Organic food purchase behavior effected by personal knowledge(Nie & Zepeda, 2011) and education

level (Omar, Nazri, Osman, & Ahmad, 2016) due to the importance of higher involvement and information search to differentiate it from conventional products as organic foods offer complex food attribute and quality. Thus the organic consumer's behavior is influenced by epistemic value that novel consumers who have strong desire for knowledge more likely to choose them(Finch, 2006). And the green consumer's behavior is influenced by epistemic value (Biswas & Roy, 2015b; Gonçalves et al., 2016; Lin & Huang, 2012; Mohd Suki, 2015).

The consumption value theory has been employed and tested by Sheth et al. (1991) in more than 200 applications regarding consumer buying decision, product decisions and brand decisions, and has demonstrated consistently good predictive validity. As concluded in Table 2-4, This theory also has been applied by researchers in different field, such as Candan Ünal & Erciş (2013) applied the theory for analyzing brand loyalty towards personal care product, Turel et al., (2010) used for explain user decisions for the use of hedonic digital artifact, Lin & Huang (2012) and Suki NM,(2015) applied to find out the influence factors on consumers green product choice behavior, and the influence of consumption values on sustainable consumer behavior across consumer segments with preferential green choice approach were studied by (Biswas & Roy, 2015b; Yildirim & Candan, 2015). The theory also applied to consumer segmentation is several studies (i.e. Long & Schiffman, 2000; Pope, 1998; Yildirim & Candan, 2015).

However, despite the growing popularity of organic food limited research has explored the effects of consumption value on organic food choice behavior(Finch, 2006). Majority consumers are conscious of the value of organic foods, but their behavior does not necessarily reflect this fact(Finch, 2006; Thøgersen, 2009). Therefore, to better understand consumer's organic food purchase behavior, understanding the consumption values generating their food choices is crucial. Thus, this study applies the theory of consumption, considering it's importance in understand the consumption values underlying food choices. And also due to the fact that the value construct was validated through an intensive investigation in a variety of fields as laid in previous literature. This study adopts all five consumption value factors by considering the characteristics of organic food and current consumption behavior. To measure the five consumption values, this study adopts scales that the literature commonly uses. The functional value uses eight items to cover the quality

aspects and price aspects, and the social value also measured by four items, which were all adopted from(Sweeney & Soutar, 2001). The functional value-price, measures the price perception of the organic products. The functional value-quality dimension measures consumer's opinion on organic food product quality. And the social value dimension measures the levels of respondent's concern with peer opinion and behavior regarding organic food products. The emotional values adopted from (Arvola et al., 2008) has three items to measure the consumers' perception of the organic food product. The four conditional value items and three epistemic value dimensions are adopted from Lin & Huang (2012) to measure respondents choice behavior regarding to the organic food in specific situation and to measure the level to which consumers obtain related information and seek novelty before purchasing.

Table 2-4. Studies related to the consumption value theory

Title	Author	Year	Journal	Main focus
Green buying behavior and the theory of consumption values: A fuzzy-set approach	Helena Martins Gonçalves, Tiago Ferreira Lourenço, Graça Miranda Silva	2016	Journal of Business Research	Explore the effects of consumption values on green buying behavior.
Consumer Environmental Concern and Green Product Purchase in Malaysia: Structural Effects of Consumption Values	Norazah Mohd Suki	2015	Journal of Cleaner Production	Examines the effects of consumption values and environmental concerns on Malaysian consumers' purchase of green products.
Leveraging factors for sustained green consumption behavior based on consumption value perceptions: testing the structural model	Aindrila Biswas, Mousumi Roy	2015	Journal of Cleaner Production	Focused on the effect of perceived consumption values on behavioral intention to sustained green product consumption and willingness to pay.
Green Products: An Exploratory Study on the Consumer Behavior in Emerging Economies of the East	Aindrila Biswas and Mousumi Roy	2015	Journal of Cleaner Production	Explored the effects of consumption values on sustainable consumer behavior
Segmentation of Green Product Buyers Based on Their Personal Values and Consumption Value	Seda YILDIRIM, Burcu CANDAN	2015	Environmental Values	Profiling the green buyers according to their personal values and consumption values and tested their role in green consumption preference.
Functional, Social and Emotional Values as Determinants of Environmentally Responsible Media Consumption	Jaana Kosonen	2014	Thesis	How consumption values influence environmentally responsible consumption of print and digital media.

Title	Author	Year	Journal	Main focus
A study of relation among perceived consumption value and customer satisfaction of boutique hotel in Thailand	Patporn Wongsuchat, Atcharawan Ngamyan	2014	International Journal of Scientific and Research Publications	Explores relationships between service quality and perceived consumption value toward customer satisfaction that may influence brand loyalty
Analyzing the relationship between consumption values and brand loyalty of young people: A study on personal care products	Burcu Candan , Sevtap Ünal , Aysel Erciş .	2014	European Journal of Research on Education	Explore the relationship between consumption values and brand loyalty regarding to personal care product
What Affects Mobile Application Use? The Roles of Consumption Values	Hsiu-Yu Wang1, Chechen Liao1 & Ling-Hui Yang	2013	International Journal of Marketing Studies	Examine the main factors effecting the behavioral intention of Apps users applying the theory of consumption values.
The influence factors on choice behavior regarding green products based on the theory of consumption values	Pei-Chun Lin, Yi-Hsuan Huang	2012	Journal of Cleaner Production	Examines whether the consumers with different level of environmental concerns different in their consumption values and choice behavior regarding to green foods
User acceptance of hedonic digital artifacts: A theory of consumption values perspective	Ofir Turel, Alexander Serenko, Nick Bontis	2010	Journal of Information & Management	By using the consumption theory, exams the value drivers of hedonic digital artifacts consumption behavior
The Investigation of Chinese Consumer Values, Consumption Values, Life Satisfaction, and Consumption Behaviors	Ge Xiao,Jai-Ok Kim	2009	Psychology & Marketing	Investigate how the changing value systems of modern Chinese consumers affect their consumption behaviors and life satisfaction through the mediating variables of consumption values.
The User Experience of Smart Phones: A Consumption Values Approach	Mads Bødker,Greg Gimpel,Jonas Hedman	2009	8th global mobility roundtable conference	How the Theory of Consumption Values are useful constructs to conceptualize and understand smart phone use experience
The Impact of Personal Consumption Values and Beliefs on Organic Food Purchase Behavior	Ames E. Finch	2006	Journal of Food Products Marketing	This study examines the nature of the consumption values that differentiate organic food buyers from non-organic food buyers.
Consumption values and relationship: segmenting the market for frequency programs	Mary M.Long, Leon G. Schiffman	2000	Journal of Consumer Marketing	Explore the range of values which motivate business consumer's reaction to service providers.
Consumption values, sponsorship awareness, brand and product use	Nigel Pope	1998	Journal of Product & Brand Management	Discriminate between brands and those individuals who are aware or not aware of a corporation's sponsorship activities by using consumption value theory.

Source: prepared by researcher based on articles obtained from Google scholar and ScienceDirect

2.4 The Lifestyle research in marketing

Solomon (2006) defined lifestyle as " a patterns of behavior or consumption that reflecting people's choice regarding how to spend their time and money as well as their interests and beliefs". Since introduced by Lazer (1963), the concept of lifestyle has been very popular in both academic and applied marketing research for segmentation of consumer market. There are several reasons behind the rise of lifestyle research in marketing. The first motive concerns consumer classification, or differentiation with one another group. As cited by Grunert et al.(1993), Hustad & Pessemier (1972) argue that " the classical segmentation variables and demographic variables have become less useful in predicting consumer behavior". In addition to that, lifestyle data assumed to be very practical, not only deriving segments for media selection, but also development of advertising positioning, repositioning(Well, 1974) and product development(Grunert et al., 1993). Besides, lifestyle directed the renewed interest towards post-material values by measuring lifestyle and value(Grunert et al., 1993), and the lifestyle also assumed to close the gap between value and behavior by mediate the relationship between(Brunsø, Scholderer, & Grunert, 2004a). Last but not least, the approach towards the standardization of marketing parameters globally (Jain, 1989) also drive the interest to find global segments that the lifestyle is assumed as a practical criteria. Thus, the cross-culturally valid lifestyle tool have been developed for fulfilling the demand (Grunert et al., 1993)

Most of the lifestyle studies apply AIO (Activities, Interest, and Opinions) method developed by Pessemier & Tigert(1996). Activity refers "the ways of spending time, such as working, shopping or exercising". Interest is " the degree of excitement liked to objective events such as food or fashion". Opinion "is a statement about other people, places, ideas, product, political, social and religious belief"(B. I. Goetzke & Spiller, 2014) . Generally, large number of AIO items are collected then analytically reduced to few. The resulting space is then used to classify consumers on the remaining dimensions, which leads to lifestyle segments(Brunsø & Grunert, 1998). There are other well-known instruments such as, CCA (Centre de Communication Avance´), RISC (Research Institute of Social Change), and VALS (Values and Life Styles) are also applying to life style segmentation (Scholderer et al., 2004).

Brunsø & Grunert (1998) have defined lifestyle based on means-end chain theory,

which are absolutely breaks with the AIO tradition. They propose a lifestyle model based on hierarchical cognitive structure formulation, on the top level of hierarchy is personal value, defined as abstract, trans-situational aggregated cognitive categories. On the bottom level, product perceptions are defined as situation-specific input to a categorization process. Lifestyle is then defined as an intervening system of cognitive structures that link situation-specific product perceptions to increasingly abstract cognitive categories and finally to personal values(Brunsø et al., 2004a).

With the introduction of domain specific lifestyle by W. Fred & Verhallen(1994), the food-related lifestyle (FRL) (Karen&Grunert, 1995), housing related lifestyle (HRL) (Thøgersen, 2017a), web-usage related lifestyle (WebRL) (Smith & Swinyard, 2001), wine related life style(WRL) (Bruwer et al. 2002), food-related family lifestyle (Verzeletti et al. 2010), fruit-specific lifestyle study (Shim et al. 2000) and convenience food lifestyle (CFL) (Buckley et al. 2007) are proposed and applied in lifestyle researches. The below sections are the detailed introduction of different types of product-specific life style.

2.4.1 Food-related life style (FRL)

Food-related lifestyle research first started by "Centre for Research on Consumer Relations in the Food Sector (MAPP)", Denmark in 1995. The main goal of FRL is characterize consumers by how they use food and eating to obtain life values(M. de Boer, McCarthy, & Cowan, 2004). Karen & Grunert (1995) defined FRL " as a system of cognitive categories, scripts and associative networks relating a set of food-related behaviors to a set of values". As showed in Figure 2-1, FRL is the intermediate level of hierarchical cognitive system, on the top level is personal value and on the bottom level product perception and behavior(Grunert, 2006). The bottom–up route is driven by external input; the product perception, which is assumed as " a trigger of hierarchical categorization process that finally results in the activation of the most abstract conceptual level which is called personal values"(O'Sullivan, Scholderer, & Cowan, 2005). The top–down route, is driven by stable individual differences in personal values (Brunsø et al., 2004a).

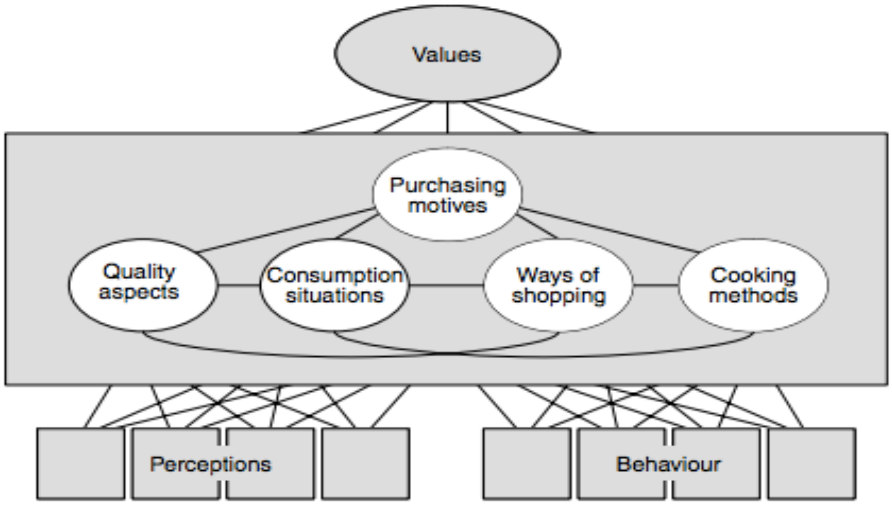


Figure 2-3 A model of food related life style

Source: Grunert, K.G., 2006. Future trends and consumer lifestyles with regard to meat consumption. *Meat Science*, 74(1), pp.149–160.

The FRL instrument covers five interrelated life domains including ways of shopping, quality aspects for evaluating food products, cooking methods, consumption situations, and purchasing motives(Karen & Grunert, 1995). And consists of 69 items, measuring 23 dimensions, each belonging to one of the five major life domains.

- **Ways of Shopping (WS)** reflects consumer's food shopping behavior regarding to how they shop for food products, do they read labels and other product information, or do they rely on the advice of experts, like friends or sales personnel, do they shopping in specialty food shops(O'Sullivan et al., 2005).
- **Cooking Methods (CM)** refers to "how the products obtained are transformed into meals such as: how are the products purchased transformed into meals, how much time is used for preparation, is preparation characterized by efficiency, or by indulgence, is it a social activity, or one characterized by family division of labor, to which extent is it planned or spontaneous"(Grunert et al., 2001).
- **Quality Aspects (QA)** refers to "attitudes to health, nutrition, freshness and the luxury attributes of a product"(O'Sullivan et al., 2005).

- **Consumption Situations (CS)** refers to “how meals are spread over in a day, how important is eating out”(O’Sullivan et al., 2005).
- **Purchasing Motives (PM)** examines “ how consumers’ links food-related activities to the value level, what is expected from a meal, and what is the relative importance of these various consequences, how important are social aspects, hedonism, tradition and security”(Grunert et al., 2001).

The FRL tool first has been utilized in European countries to find out valuable consumer segments all across Europe. Then it was successfully applied to other countries, such as United States, Australia, Republic of China, and Korea(Jang, Kim, & Bonn, 2011; Lobo & Chen, 2012; Nie & Zepeda, 2011; Reid, Brunso, & Grunert, 2005),but not in Turkey. And its cross-cultural validity has been tested and proved stable over time(Brunsø, Scholderer, & Grunert, 2004b; Grunert et al., 2011, 2001, 1993). FRL has been found to a elaborate tool in consumer segmentation(Grunert et al., 2001; Ryan et al., 2004). And also can predict a range of specific food-related behavior, including consumers preference towards vegetables and fruits(Dimech, Caputo, & Canavari, 2011), new food product(Cullen & Kingston, 2009), meat consumption(Buitrago-Vera, Escribá-Perez, Baviera-Puig, & Montero-Vicente, 2016; Grunert, 2006), organic food choices(Lobo & Chen, 2012; Zepeda & Nie, 2012).

2.4.2 Housing related lifestyle

Considering the relationship between lifestyle and household energy consumption, Thøgersen (2017) proposed the housing related lifestyle(HRL). Following the Grunert et al. (1993) FRL model, the HRL includes two types of cognitive categories include “house related acquisition motives” and “quality aspects”, as well as three house related mental scripts such as “way of shopping” , “home improvement” and “living situations”. These five cognitive elements assumed to capture the characteristics of an individual’s housing-related lifestyle. As shown in Figure 2-4, a person’s HRL is part of a hierarchical, cognitive-behavioral system that links it to the person's goals or values. The person's HRL functions as a mediator, determining how his or her general goals and values are manifested in specific housing related perceptions, choices and actions(Thøgersen, 2017a). Below, detailed explanation of the five elements of HRL(Thøgersen, 2017a).

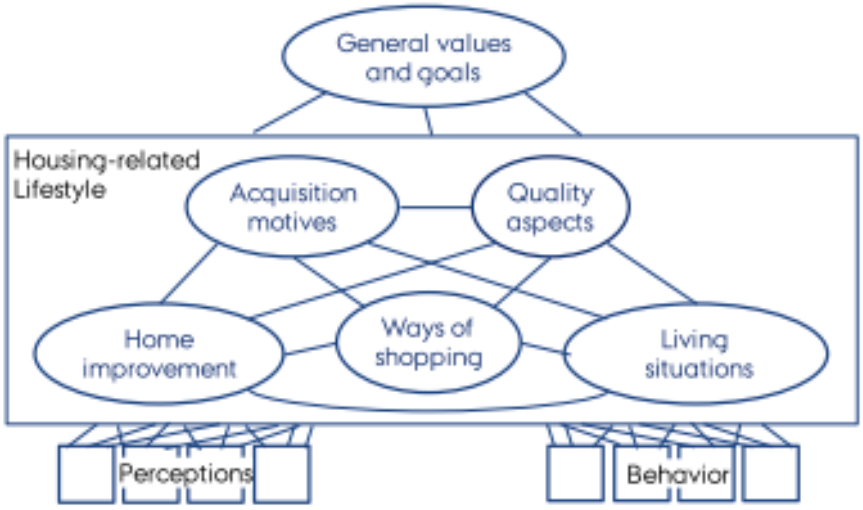


Figure 2-4 the housing related lifestyle

Source: Thøgersen, J., 2017. Housing-related lifestyle and energy saving: A multi-level approach. *Energy Policy*, 102(November 2016), pp.73–87.

- **Acquisition motives** regarding the core reason to have home, like shelter safety and privacy(Jansen, 2013). For example, some homemakers just want "a place to crash" while others view their home as their "castle" or as the "safe haven" for their family.
- **Purchase motives** refers to " the social value of sharing the home with the family and guests"(Thøgersen, 2017a).
- **Quality aspects** refer to "the general characteristics that the consumer values in a home, such as roominess, material and artisan quality, amenities, and energy efficiency" (Thøgersen, 2017a) .
- **Ways of shopping** refers to "how consumers actually shop for homes and home products, that is, do they find the task enjoyable, do they visit stores and/or shop online, do they deliberate extensively (or not) when making a decision, how much to they consider the price and other product information" (Thøgersen, 2017a).
- **Living situations** refer to "issues such as the amount of time spent at home, home-related activities and also the social aspect of sharing the home with other family members and guests in the home" (Thøgersen, 2017a).

2.4.3 Web-usage related lifestyle (WebRL)

The WebRL measurement instruments developed by (Smith & Swinyard, 2001) to better understand the psychology of online users. The instrument analyzes two main categories of online behaviors: information search behavior and product purchase decisions (Haubl & Trifts, 2000) and identifies six basic dimensions: "Internet convenience", "Perceived self-inefficacy", "Internet logistics", "Internet distrust", "Internet offer", and "Internet window-shopping"(Smith & Swinyard, 2001). The instrument, firstly developed to segment American online shoppers and non-shoppers, and it's cross-cultural validity test by two studies: a study conducted by Brengman et al. (2005) in Belgium and (Ye, Li, & Gu, 2011) in china. And the WebRL scale remains valid for online users.

2.4.4 Wine-related lifestyle (WRL)

Bruwer et al. (2002) created the WRL to segment Australia wine market, the author propose that wine consumers are not alike—they often differ widely regarding to their needs, wants, desires and personal characteristics. Understanding of the lifestyle segments of wine consumers enables business to create more effective marketing strategies.

The first version of WRL is created by Bruwer et al.(2001), which is based on the AIO theory, which is reflecting a person's activities, interests and opinions (or AIOs) (Wells, 1975). Due to the increasing criticisms against the AIO lifestyle measurement instruments, as stated in previous part, Bruwer et al. (2002) developed the new WRL instrument which followed the same rule with the FRL, the WRL consists of five dimensions that contribute to the link between wine and values. These dimensions are "wine consumption situations", "ways of shopping", "quality attributes", "drinking rituals", and "consequences of wine consumption". Below is the detailed explanation of the five dimensions(Johan Bruwer et al., 2002):

- **Desired quality or attributes**: Relates to how aspects such as country or region of origin, grape variety, alcohol content, price, recommendations by others, awards or show medals won, and bottle shape and label design fit with the attainment of values(Johan Bruwer et al., 2002).

- **Ways of shopping:** refers to "How and where do people shop for wine? Is their decision-making process characterized by impulsiveness or careful deliberation? What information is used in the decision? Do they rely on advice from others? Do they buy large quantities of wine?" (Johan Bruwer et al., 2002).
- **Wine consumption situations**: Refers to "In which environment is wine consumed? In a social setting or privately? At what type of place is wine consumed? Formal or informal? Is it a celebration or part of everyday life?" (Johan Bruwer et al., 2002).
- **Wine drinking rituals**: Refers to "How is the wine 'prepared' before consuming it? Is special equipment used in the transformation? How is wine consumed? To what extent is the drinking process planned or unplanned?" (Johan Bruwer et al., 2002).
- **Desired consequences of wine consumption**: Refers to "What are the expectations from the consuming of wine? What is the relative importance of these various consequences? How important are emotional/feeling consequences and hedonism versus image, power or enjoyment achievement?" (Johan Bruwer et al., 2002).

2.4.5 Other food specific life style

There are some other lifestyle researches, such as ***food-related family life style***, which proposed by Verzeletti et al. (2010). The food-related family life style instrument includes three dimensions: "dinner with parents", "family food rules", and "television viewing behaviors". The theory used to explore the effect of "food-related family lifestyle" on food consumption.

The ***fruit-specific lifestyle*** study by Shim et al. (2000) to segment Japanese fruit market. The fruit-specific life style instrument uses the five domains of FRL as a main basis and created 60 fruit-specific lifestyle statements.

The ***convenience food life style*** (CFL) is the another form of life style which is used to market segmentation for convenience food. Buckley et al. (2007) created the CFL statement to segment British convenience food market. The CFL scales include some statement from FRL questionnaire and also other statements that can reveal convenience food related life style.

This study applied FRL to segment Turkish food consumers, and also to understand

how FRL affects their organic food purchase behavior by mediate the relationship between consumption value and behavior. There are several reasons to do that, first and foremost, FRL focused on food choice in general, is one of the most elaborate food segmentation tools and cross-culturally valid and reliable(Brunsø et al., 2004b; Grunert et al., 2011, 2001, 1993). Second, the domain specific lifestyle can better predict consumer's lifestyle regarding specific products compare to general lifestyle tools (W. Fred & Verhallen, 1994), as the generally used lifestyle theory involving hundreds of questions, explain consumers behavior in general rather focus in specific areas. And also assumed having lack of conceptual clarity, theoretical foundation, and cross-cultural validity(Grunert et al., 1993,2001).Next, as best as can be ascertained, there is no previous research has been applied this theory in segmenting food shoppers and predict motives behind food purchase behavior in Turkey. Finally, in the literature, most of the researches mainly focused the direct effects of FRL in food purchase behavior. However, limited research extended to the mediating role of FRL between value and food purchase behavior. As defined above, the overall FRL model is a system of interacting elements in which personal values are (part of) the foundation of purchasing motives (Thøgersen, 2017b). This can be a main predictor of FRL mediating role between the relationship of basic value and food-related behavior. So exploring the FRL segments and understanding the mediating role of FRL not only can give a overview about the food shopper but also can address value action gap, and also provide additional validation of basic assumption underlying the FRL concept.

2.5 FRL and consumer segmentation

Consumer segmentation is important in understanding specific consumer groups attitudes and motivations (Nie & Zepeda, 2011). The FRL instrument assumed as one of the important tool to segment food shoppers(Dimech et al., 2011). As cited by Nie & Zepeda (2011), Demby (1974) stated several advantages of lifestyle segmentation " compared to demographic segmentation, it reflects consumers' psychological profiles, such as values and attitudes, so that the motivation of a behavior can be captured. And also can provide insight into who are the current and potential consumers". Besides, "unlike product-specific attitudes or preference, lifestyle is concerned with more general and more observable characteristics of consumers, which helps practitioners develop communication strategies"(Wells, 1975).

Previous studies regarding the FRL segmentation summarized in Table 2-5, and the segmentations and it's percentages identified by researches using nationally representative data also listed in Table 2-6 below.

Table 2-5 Studies related to the FRL segmentation

Title	Author	Year	Journal	Outcomes
Segmenting Irish Food Consumers Using the Food-Related Lifestyle Instrument	Isabel Ryan, Cathal Cowan, Mary McCarthy& Catherine O'sullivan	2004	Journal of International Food & Agribusiness Marketing	Identified six different food-related lifestyle segments. They are: hedonistic segment, representing 28 percent of consumers; conservative consumers (21%); extremely uninvolved consumers (16%); enthusiastic consumers (14%); moderate consumers (13%); adventurous consumers (8%).
The Convenience Consumer and Food-Related Lifestyles in Great Britain	Marie Buckley, Cathal Cowan, Mary McCarthy & Catherine O'Sullivan	2005	Journal of Food Products Marketing	The convenience oriented consumer segments are snacking (20%), careless (14%) and the uninvolved food consumers (14%). The rational (26%), adventurous (17%) and conservative (9%) food consumers were less convenience oriented.
Market segmentation in the republic of Croatia according to Food-Related lifestyle.	Tanja Kesić, Sunčana Piri Rajh, Helena Kesić	2008	Marketing Communicatio ns	Five different segments were identified, they are: Relaxed (22%); Modern (24%); Experimentalists (18%); Concerned Nutritionists (26%); Traditionalists (10%).
Food-Related Life Style Segments in Australia: What's the trend?	Mike Reid, Karen Brunso, and Klaus Grunert	2005	ANZMAC: Consumer behavior conference	_
Lifestyle segmentation of US food shoppers to examine organic and local food consumption	Cong Nie, Lydia Zepeda	2011	Appetite	Four FRL groups identified: rational (29.23l%), adventurous (24.06%), careless (17.85%), and conservative and uninvolved consumers (28.85%).
An analysis of national & cross-national consumer segments using the FRL instrument in Denmark, France, Germany and Great Britain.	Brunsø, K., Grunert, K. G., & Bredahl, L.	1996	MAPP Working Paper	Four cross-national segments identified, include conservative, uninvolved, adventurous, and careless food consumers segment.
Food-Related Lifestyle: A Segmentation Approach to European Food Consumers	Klaus G. Grunert· Karen Bruns0. Lone Bredahl. Anne C. Bech	2001		The uninvolved, careless, conservative, rational and adventurous food consumer segments appeared to common across the countries.
Market segmentation on the basis of food-related lifestyles of Croatian families.	Kesic, T., & Piri-Rajh, S	2003	British Food Journal,	Five consumer groups identified, they are relaxed (13%), traditional (27%), modern (32%), concerned (11%), and hedonists (17%).
Speciality food orientation of food related lifestyle (FRL) segments in Great Britain	Aoife Wycherley, Mary McCarthy, Cathal Cowan	2008	Food Quality and Preference	The adventurous (17%) and rational (24%) are more specialty orientated compare to remaining four segments: careless (21%); snacking (17%); conservative (12%); uninvolved (9%).
Generation Y consumers' selection attributes and behavioral intentions concerning green restaurants	Yoon Jung Janga, Woo Gon Kimb, Mark A. Bonnc	2011	International Journal of Hospitality Management	The consumer segments identified are adventurous consumer (29.8%), Convenience- oriented consumer (29.2%), health-conscious consumer (30.4%), and uninvolved consumers (10.6%).
Analysis of Rural and Urban Consumer Behavior Toward New Food Products Using a Food-Related Lifestyle Instrument	Frank CULLEN & Heather KINGSTON	2009	Journal of Foodservice Business Research	Identified six FRL segments: Hedonistic food consumers (23%), Uninvolved consumers (22%), Adventurous food consumers (17%), Careless food consumers (14%), Conservative food consumers(17%), and Rational food consumers(7%) .

Food-Related Lifestyle Segments in Taiwan: Application of the Food Related Lifestyle Instrument.	Cheng-Hsi Fang and Hwang-Jaw Lee	2009	American Journal of Applied Sciences	The four segments include: traditional (23.54%), adventurous (27.61%), uninvolved (24.07%) and astute consumers (24.78%).
Food-Related Lifestyle Segments and Mature Consumers' Attitudes to Home Meal Replacement	Yoon Jung Jan Woody G. Kim and Il Sun Yang	2009	International CHRIE Conference	Identify five consumer segments, include health managing (17.7%), convenience-oriented (16%), taste-oriented (20.2%), unpracticed (23.4%) and diet unconcerned (16%).
Attitudes of Maltese Consumers Towards Quality in Fruit and Vegetables in Relation to Their Food-Related Lifestyles	Marco Dimech , Vincenzina Caputo and Maurizio Canavari	2011	International Food and Agribusiness Management Review	Four segment identified: hedonistic households (31%), adventurous households (30%), bargain seeker house- holds (20%) and traditional households (19%).
Is food-related lifestyle (FRL) able to reveal food consumption patterns in non-Western cultural environments? Its adaptation and application in urban China	Klaus G. Grunert, Toula Perrea, Yanfeng Zhoub, Guang Huang, Bjarne T. Sørensen , Athanasios Krystallis	2011	Appetite	Three consumer segments were identified, labeled as concerned (45%), uninvolved (33%) and traditional (21%).

Source: created by researcher using Google scholar & science direct

Table 2-6 FRL Segments and percentages identified in number of countries using nationally representative data

Researchers	**(Brunsø, Grunert, & Bredahl, 1996)**				**(Ryan et al., 2004)**	**(Kesić´ & Piri-Rajh, 2003)**	**(Nie & Zepeda, 2011)**
Coutries	Denmark	France	Germany	Great Britain	Ireland	Croatia	United States
Rational	11	35	26	33			29
Adventurer	25		24	12	8		24
Careless	23		11	27			18
Conservative	11	13	18	19	21		
Uninvolved	11	18	21	9			
Relaxed						13	
Modern						32	
Traditional						27	
Hedonic		18			28	17	
Moderate		16			13		
Extremely uninvolved					16		
Enthusiastic					14		
Eco-moderate	20					11	
Consevative&Uninvolved							29

Source: created by researcher using Google scholar & science direct

As shown in Table 2-5, FRL tools used to segment food consumers to generally understand food consumers (Fang & Lee, 2009; Grunert et al., 2001; Kesić, Rajh, & Kesić, 2008; Ryan et al., 2004) and also for specific products, such as organic food and local

food(Nie & Zepeda, 2011) convenience food (Buckley et al., 2005), green restaurant(Jang et al., 2011) rabbit meat consumption(Buitrago-Vera et al., 2016), new food product (Cullen & Kingston, 2009), fruit and vegetable(Dimech et al., 2011),home-meal consumption (Jang, Kim, & Yang, 2009), and specialty food (Wycherley, McCarthy, & Cowan, 2008). As seen from Table 2-6, some similarities in consumer segments were identified across countries: for instance, conservative, adventurous, careless, uninvolved and rational consumer group. And this five segments cross cultural validity among European countries such as Denmark, France, Germany, and the United Kingdom has been tested by Grunert et al. (2001) research work named "Food-Related Lifestyle: A Segmentation Approach to European Food Consumers", one of the mostly referred article in FRL segmentation study. In the article the author defined the segments as follows:

- **Uninvolved consumers**: "quite indifferent most aspects of food. Their food-related lifestyle is characterized by the fact that they hardly use food to achieve basic values at all. Whatever it is these consumers want to achieve in their lives, they achieve it through other channels than food"(Grunert et al., 2001).
- **Careless consumer**: "attaches little importance to food as a means of achieving basic values, but who are often tempted by new products - as long as they don't require a greater effort or new cooking skills"(Grunert et al., 2001).
- **Conservative consumers**: " give high value for food in their lives. Food and food products create stability and security in their lives. This is reflected in the careful planning of cooking, and an aversion to anything new"(Grunert et al., 2001).
- **Rational consumers**: " assume food products as an important part of their lives, and are essential for achieving such basic values as self-fulfillment, recognition, and security. This gives rise to an interested-critical shopping behavior"(Grunert et al., 2001).
- **Adventurous consumer** "evaluates food and food products as an important element in their consumers' lives. Cooking is a creative and social process for the whole family"(Grunert et al., 2001).

However, some different segments were also found, as shown in Table 2-5 research outcomes. For example, in Ireland study done by Ryan et al.(2004), FRL instrument used to segment Irish food consumers. The segments identified were named as "Hedonistic", "Conservative", "Extremely uninvolved", "Enthusiastic", "Moderate", and "Adventurous". In Croatia, the FRL consumer segment were labeled as "Traditionalist", "Modern", "Concerned Nutritionist", "Relaxed" and "Experimentalist"(Kesić et al., 2008). Even though, the FRL consumer segments labeled with different name they still share similar characteristics.

To sum up, FRL cluster consumers into following several types of consumers group: conservative or traditional consumers who like to keep traditional way; uninvolved and careless consumers who is quite uninterested cooking or shopping; adventurous or enthusiastic or moderate consumers assume cooking as an enjoyable task and like to try new recipes and different food products; convenience-oriented consumer who like easy way to prepare food; and rational or conservative consumers who like to planning their shopping and cooking(Uimonen, 2011).

2.6 Food purchase behavior

Food eating, is an important everyday activity, is one of the oldest consumption behaviors(Hauser, 2013). Food consumption is one the most complex consumer behavior (Uimonen, 2011) that the people living in the same place and within the same culture always show great difference with one another. Eating is not only about when, how, where, and with whom we eat. Eating, at the same time, satisfying individual's preference, achieving their life goals and building identity (Uimonen2011). In this section, the important factors affect consumer's food purchase behavior in general context and determents of organic food purchase behavior concluded. Table 2-7 below illustrates various factors influencing food choice, indicating differences and similarities among writers: N.Gains (1994), Shepherd & P.Sparks,(1994), Conner & Armitage (1998; 2002), Rozin (2006), Sobal et al., (2006), , Earle et al., (2007) and Kittler, Sucher, & Nelms (2011) in five different books related to food research (measurement of food preference, the social psychology of food, Frontiers in Nutritional Science, food product development and food and culture) reached through Google search engine.

Table 2-7.Factors influence food choice

Factors	**(N.Gains, 1994)**	**(Shepherd & P.Sparks, 1994)**	**(Conner & Armitage, 1998; 2002)**	**(Rozin, 2006)**	**(Sobal et al., 2006)**	**(Earle et al., 2007)**	**(Kittler et al., 2011)**
Advertisement/marketing	No	Yes	Yes	No	No	Yes	Yes
Appearance of food	No	Yes	Yes	No	No	Yes	No
Brand	No	Yes	No	No	No	No	Yes
Context: time, place, circumstance.	Yes	Yes	Yes	No	Yes	No	No
Convenience/availability	No	No	No	No	Yes	Yes	Yes
Cost/price	Yes	Yes	Yes	No	Yes		Yes
Country of origins	No	No	No	No	No	No	No
Culture	Yes	Yes	Yes	Yes	Yes		No
Demographic: age, location, education level, income	No	Yes	Yes	No	Yes	No	Yes
Ethical concerns	No	No	Yes	Yes	No	Yes	No
Habits	Yes	Yes	No	No	Yes	No	No
Health issues	No	Yes	Yes	Yes	No	No	Yes
Memories	Yes	No	No	No	Yes	No	No
Natural content: additives	No	No	No	No	No	No	No
Nutritional composition	Yes	Yes	Yes	No	Yes	No	No
Packaging	Yes	No	No	No	No	Yes	No
Physiological factors: appetite, thirst	Yes	Yes	Yes	Yes	Yes	No	Yes
Psychological factors: mood, emotion, personality,influnce of others	Yes	Yes	Yes	Yes	Yes	No	No
Quality	No	No	No	No	No	No	No
Religion	No	Yes	Yes	Yes	No	Yes	No
Self-expression/image	Yes	Yes	No	Yes	Yes	No	Yes
Sensory characteristics: taste, texture	Yes	Yes	Yes	No	Yes	Yes	Yes
Variety of food	No	No	No	No	No	Yes	Yes
Well-being	No	No	No	No	Yes	No	Yes
Social class	No	No	Yes	Yes	Yes	Yes	No

Source: created by researcher using Google scholar & Google books

As we can see from Table 2-7, the complexity of intervening variables that drive food choice are the reasons why there is no single commonly accepted theory of food choice. Conner & Armitage (1998; 2002)grouped the factors that can influence complex food choice behavior into three main categories: first one is the food itself, such as the physiological effects, sensory perception of food product. Second is the person that engaged in food consumption, which include the biological, psychological, socio-demographic factors. And the third category is the environment such as economic, cultural, marketing factors(Conner & Armitage, 1998; 2002). Rozin(2006)and Earle et al. (2007)support the view of (Conner & Armitage, 1998; 2002) in regard to personal and environmental influnce on food choice. Rozin (2006) claim "the integration of biological, social, cultural and psychological factors shape individual's food choice behavior". Earle et al. (2007) also support the view by stating some external and internal environmental factors. In the name of external environmental factor the availability of food, social factors, appearance, packaging, and visual and taste factors are stated while individual's ethnicity, social group, variety of food preference claimed as a internal factor. Sobal et al., (2006) also state that influences on food choice include an extensive scope of biological, behavioral, psychological, cultural, economic, social, geographical, political, historical, environmental and other influences that are iteratively considered both simultaneously and sequentially in food choice decision- making in conscious and subconscious ways. And clustered the influence factors in to five types: ideals, personal factors, resources, social factors and contexts(Sobal et al., 2006):

- Personal factors are characteristics of the individual that influence food choices. Personal factors include physiological factors (sensory, endocrinological, genetic, etc.), psychological or emotional characteristics (preferences, personalities, moods, phobias, etc.) and relational factors (identities, self-concept, etc.)
- Ideals are the standards people have learned through socialization and acculturation that they use to make food choices, mostly include deals about proper meals, appropriate manners and health.
- Resources are assets available to people for making food choices Resources include tangible physical capital such as money, equipment, transportation and space; intangible human capital such as time, skills and knowledge; and intangible social capital such as help from others, advice and emotional support.

- Social factors are relationships in which people are embedded that influence food choices. Roles, families, groups, networks, organizations, communities and other social units provide opportunities and obligations for constructing eating relationships and food choices.
- Contexts are the broader environments within which people make food choices. Contexts include physical surroundings and behavior settings, social institutions and policies, and seasonal and temporal climate.

Organic food purchase behavior

As we discussed above the food choice behavior is a complex task. The following sections summaries the current state of knowledge regarding the determinants of consumers's organic food purchase behavior.

Organic food motives include:

- ***Health consciousness*** and ***food safety concerns*** are the most influencing factor on organic food purchase(Bryła, 2016; B. Goetzke, Nitzko, & Spiller, 2014; Hwang, 2016; H.-J. Lee & Hwang, 2016; Teng & Lu, 2016; Yadav & Pathak, 2016). Consumers perceive organic food as more *healthy* than conventional food (Ahmad & Juhdi, 2010; Huber, Bakker, Dijk, Prins, & Wiegant, 2012)
- A belief in the **high quality** (Ahmad & Juhdi, 2010; Bryła, 2016; Kahl et al., 2012) of organic food, ***nutritional benefits***(Truong, Yap, & Ineson, 2012) , and ***better taste***(Bryła, 2016; Stobbelaar et al., 2007) are drive the consumers purchase behavior.
- ***Environmental concerns***, and ***animal welfare***(Bryła, 2016; Magnusson, Arvola, Hursti, Åberg, & Sjödén, 2003; Stobbelaar et al., 2007; Teng & Lu, 2016; Ueasangkomsate & Santiteerakul, 2016; Van Doorn & Verhoef, 2015) are also the main factors that influence purchase behavior.
- ***Local origin*** (Bryła, 2016; Tobin, Larkin, & Moane, 2011; Ueasangkomsate & Santiteerakul, 2016) is also considered buy consumers when they purchase organic food.
- ***Ethical concerns and religion***(Mohamad et al., 2014) are also influencing purchase behavior.

- ***Attitude toward organic food*** can predict purchase behavior (Chen, 2007; Magnusson et al., 2001; Padilla Bravo et al., 2013; Stobbelaar et al., 2007; Tarkiainen & Sundqvist, 2005), ***Utilitarian and hedonic attitude***(H. J. Lee & Yun, 2015)**,** and ***moral attitude***(Arvola, Vassallo, Dean, Lampila, Saba, L??hteenm??ki, et al., 2008; Yadav & Pathak, 2016) are also effect purchase behavior.
- ***Knowledge*** about organic food influence purchase behavior (Nie & Zepeda, 2011).
- ***Food related personality,*** such as food involvement and food neophobia can be main factor (Chen, 2007)
- Value effect organic buying behavior, ***personal value*** (Dreezens et al. 2005, Baker et al. 2004) and ***consumption value***(Finch, 2006)
- Lifestyle factors such as ***Health-improving lifestyle***(B. I. Goetzke & Spiller, 2014)**,** ***Food-related life style***(Lobo & Chen, 2012)(Nie & Zepeda, 2011; Zepeda & Nie, 2012) influence food purchase behavior.
- ***Demographical factors: gender, age, level of education, level of income*** (Nie & Zepeda, 2011; Omar et al., 2016)**,** Such as *females, older individuals*(Hasimu, Marchesini, & Canavari, 2017)*, wealthy, and highly educated* (Bellows, Alcaraz V., & Hallman, 2010)**.*** ***The presence of children*** (Thompson & Kidwell, 1998)within the household has also been regarded as a positively influencing factor in organic buying behavior, as cited in (Fotopoulos & Krystallis, 2002; Omar et al., 2016). And Wier & Calverley(2002) improve the role of ***age of the children*** on organic buying, said that the lower the age the propensity to buy organic food.

It can be observed that there are various factors that can affect consumer's food purchase behavior. This research mainly focused on the internal environmental factors-the personal factors, especially psychological elements such as food-related lifestyle, and personal consumption value as the main driver of organic food purchase behavior, as well as demographical elements are also considered.

2.7 Value-FRL-Behavior

Human values are both powerful explanation of and influence on human behavior(Homer & Kahle, 1988), are a abstract concept or belief representing desired goals(Rokeach, 1973), can provide the motivation for human behavior in situations where

choices are involved(Brunsø et al., 2004b). And the empirical relation between value and behavior is generally weak(Brunsø et al., 2004a) that the abstract personal values have to be transformed into specific goals and linked to behavioral routines before they can initiate goal-directed action(Brunsø et al., 2004a). To address the gap between value and behavior, a number of research applied attitude as mediating constructs (Goldsmith, Freiden, & Henderson, 1995; Homer & Kahle, 1988; Thøgersen, Zhou, & Huang, 2014; Valette-Florence & A. Jolibert, 2008) and the assumption that FRL mediate the relationship between value and behavior also has been tested (Brunsø et al., 2004a, 2004b; Scholderer, Brunso, & Gruner, 2002).

In food-related consumption, the mediating role of FRL is getting prevalent because the FRL theory includes value aspect and assumed to be strict mediator as defined above. The research done by (Brunsø et al., 2004a) and (Brunsø et al., 2004b) confirmed the mediating role of FRL between value and behavior where the personal value measured by List of value (LOV) instrument (Kahle, 1983) and "Schwartz value survey (SVS)" instrument (Schwartz, 1992). However, both of the LOV and SVS are measure broader general human values, which are more concentrated on intrinsic human requirements. For instance SVS include 10 motivational domains which mainly focused on "biological needs, social interaction requirements for interpersonal coordination, and societal demands for group welfare and survival"(Brunsø et al., 2004b), and LOV consists of nine items measuring " sense of belonging, fun and enjoyment, warm relationships with others, self-fulfillment, excitement, being well respected"(Kahle, 1983). Both of the two value measurements do not include extrinsic characteristics associated with consumer's food choice, as literature often cite extrinsic characteristics with the organic food choice, such worsening environmental condition (Ueasangkomsate & Santiteerakul, 2016), product quality/price(Ahmad & Juhdi, 2010; Chen, 2007) and or some. The Consumption value theory proposed in this study includes both intrinsic and extrinsic reason and motivation that claimed to be important underlies purchasing most of the goods and services(Long & Schiffman, 2000), and most importantly, it is specific to capture consumer's product specific consumption value. As defined above, the theory of consumption value reveals that "consumer choice is a function of multiple consumption values, includes functional value, social value, emotional value, epistemic value, and conditional value, and each value contribute to the choice behavior

independently"(Sheth et al., 1991). These value components are used as the basis upon which consumers develop their intrinsically and extrinsically motivated choice behavior.

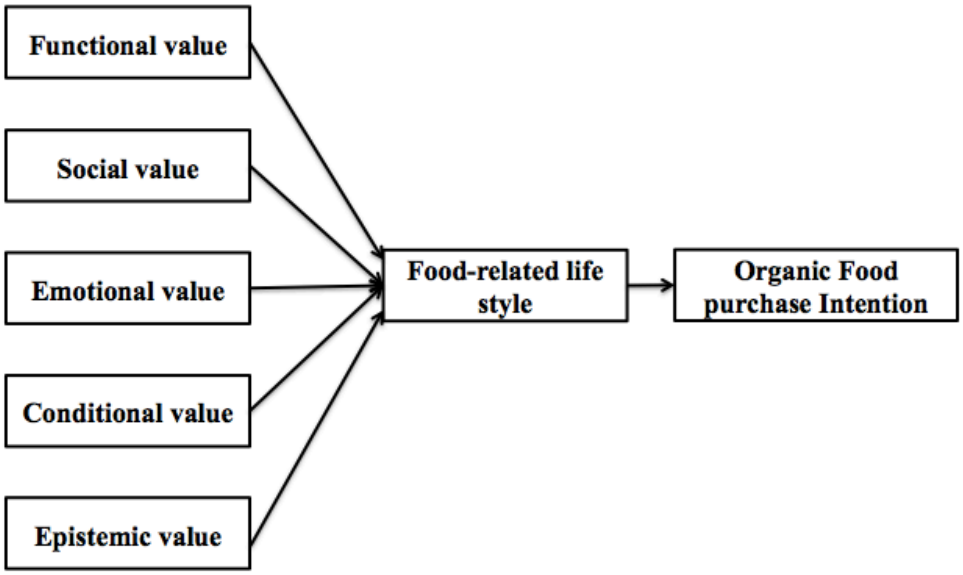


Figure 5 proposed research models

Source: created by research based on literatures

Based on the literature, the primary simple framework of this study is proposed as **Figure 5**. Mainly propose that five personal consumption values (functional value, social value, emotional value, epistemic value, and conditional value) predict FRL, and FRL predicts organic purchase behavior. By analyzing personal consumer consumption value and food purchase behavior relationship to aspects of FRL, can provide deeper insight into underlying motives for organic food purchase behavior.

3 BACK GROUND OF THE STUDY

Organic production in Turkey originated in the Aegean region in 1980s. As cited by Demiryürek et al. (2008),Tate (1994) state that the organic agriculture firstly introduced to Turkish farmers by certain European companies, due to the fact that some types of products can not be grow in Europe. The first organic good produced in Turkey is the Sultana grapes. After 1980s, parallel with the increasing demand for exportation and domestic consumption both the amounts and types of organic goods are increased. In 2015, according to the "global organic trade guide" report, Turkey became 23rd largest market in the world by value. Total market size for organic packaged food and beverages is US$97.9 million, $1.3 per capita and expecting a strong growth rate (12.9%) in 2020. Turkey also is the 7th biggest organic producer in the world as shown in Figure 2-1 in previous chapter. According to statistics of Ministry of Food, Agriculture and Livestock (MinFAL) there are around 200 kinds of organic products. And there are around 70,000 active organic good producers in the market with the total production of 1,829,291 Tons, as displayed in Table 3-1. The largest companies by sales in organic packaged food and beverages in Turkey are Yaşar Holding AS, which maintains 26.2% of total sales followed by City Farm Organik Urunler and Hipp GmbH & Co Vertrieb KG.

Table 3-1. Organic production in Turkey

Year	Number of Products	Number of Producers	Area (Hectares)	Production (Tons)
2005	205	14 401	203 811	421 934
2006	203	14 256	192 789	458 095
2007	201	16 276	174 283	568 128
2008	247	14 926	166 883	530 224
2009	212	35 565	501 641	983 715
2010	216	42 097	510 033	1 343 737
2011	225	42 460	614 618	1 659 543
2012	204	54 635	702 909	1 750 127
2013	213	60 797	769 014	1 620 387
2014	208	71 472	842 216	1 642 235
2015	197	69 967	515 268	1 829 291

Source: Ministry of Food, Agriculture and Livestock 2016

Turkey is one of the most important producers and exporters of organic products due to its favorable climate, natural conditions, which allow a high diversity of production(Gubbuk, Polat, & Pekmezci, 2004). Most of the organic production in Turkey is for exportation. The European union is the largest export destination of Turkish organic product, United States, Canada, Australia, Iraq, Switzerland and Japan also import organic products from Turkey (Surrett & Sawatzki, 2016).In 2014, as shown in Table 3-2, Turkey export more than $76 million organic product in total, among, over $19 million of organic products exported to Germany and USA respectively.

Table 3-2 Countries Importing Organic Products from Turkey, 2014

Country	Quantity (MT)	Value ($)	% Value
Germany	3,335	19,248,646	24.4
USA	3,782	19,053,760	24.2
France	1,488	8,507,402	10.8
Netherlands	1,254	7,075,308	9
Switzerland	1,190	6,217,360	7.9
UK	998	4,446,227	5.6
Sweden	808	4,360,203	5.5
Italy	389	2,775,607	3.5
Japan	296	1,910,147	2.4
Denmark	250	1,201,498	1.5
Australia	211	1,038,758	1.3
Belgium	136	471,784	0.6
TOTAL	14,143	76,306,700	96.9

Source: Ministry of Food, Agriculture and Livestock, 2015 Importing

Below is the organic farming distribution map. At the beginning, the organic production located in Aegean region. Over decades, it has expanded very quickly throughout the country. As shown in Figure 3-1(Karaarslan, 2011), the Eastern Anatolia is the big producer of organic crops in Turkey, occupy 45,6% of total production. Following is Black Sea region and Aegean region; produce 12.95%, 12.1% of total organic production respectively. The Mediterranean and south Eastern Anatolia region also occupy more than 6% of the total organic production. Last is the Central Anatolia and Marmara Region; the

percentages in total production are 3.5% and 1.5% for each.

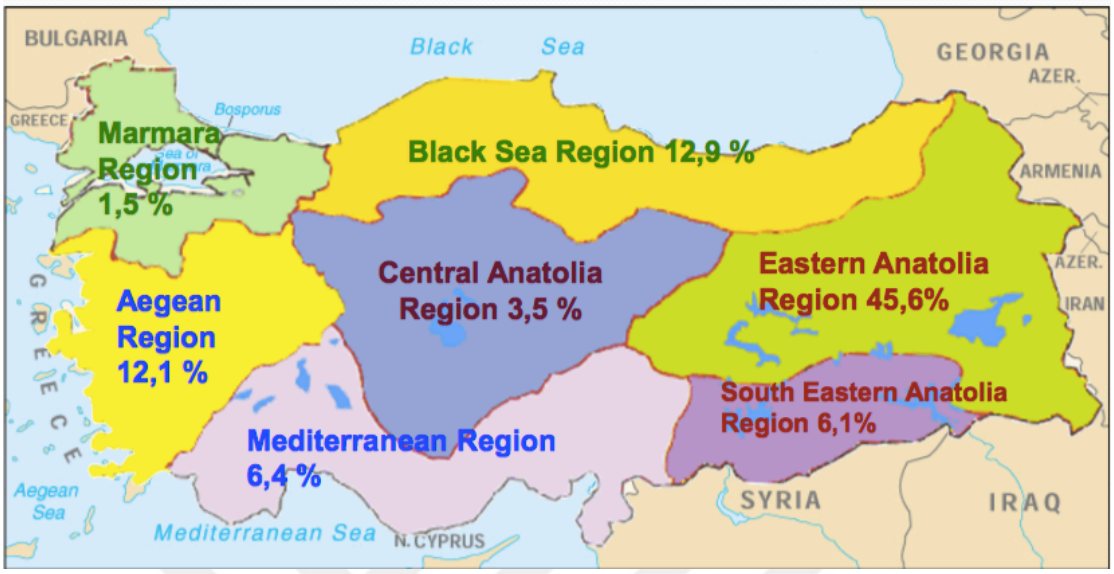


Figure 3-12.The Distribution of Organic Farming Area in Turkey 2010

Source: Karaarslan, V. (2011). *Organic Farming in Turkey*.

To boost organic production an consumption, MinFAL launch a strategic management plan from 2013 to 2017 aimed "to spread the environment and human health friendly production systems in animal, plant and aquaculture production that require inspection and certification within the framework of certain rules on all stages from obtaining input to marketing."(Surrett & Sawatzki, 2016). In accordance with the Organic Law of 2004, "the state television company (TRT) must broadcast an educational or promotional program on the organic sector for at least 30 minutes per month"(Surrett & Sawatzki, 2016).The government also encourages the organic consumption by organizing Organic open market, which is open once in a week , are available in every part of Istanbul city. Now there are seven open markets; Zeytinburnu Organik Halk Pazar ı,Feriköy Organik Pazarı, Kadıköy Belediyesi Organik Halk Pazarı, Beylikdüzü Organik Pazarı, Bakırköy Organik Halk Pazarı, Küçükçekmece % 100 Ekolojik Pazar, Kartal Belediyesi Ekolojik Pazar. In these markets very type of organic products can be found, such as organic food products, cosmetics, textiles etc.

In recent years, the local organic consumption demand started to grow, but with a

small rate(Akgüngör et al., 2007). Organic products have became available in supermarkets, specialty shops and organic bazaars in urban area(Oraman & Unakitan, 2010). The Internet also became one of the important sources of organic purchase with the popularity of online shopping. Surrett & Sawatzki (2016) concluded the reason behind the domestic growth as speeding urbanization, increasing of purchasing power of population, and Çakici (2009) add the lifestyle change, improved health concern. However, the domestic awareness and consumption of organic products is still at its early stage(Akgüngör et al.2001).Organic products are often viewed by consumers as a luxury item(Surrett & Sawatzki, 2016). Most of the organic buyers are more health conscious(Akgüngör et al., 2007; Oraman & Unakitan, 2010) and care environmental effects of their consumption behaviors (Çabuk, Tanrikulu, & Gelibolu, 2014; Ergin & Ozsacmaci, 2011; Ilyasoğlu, Temel, & Özçelik, 2010). Main barrier of organic consumption is high price and lack of availability(Ilyasoğlu et al., 2010). Most of the consumers not aware of the benefits of organic food, and cannot distinguish organic products from conventional products(Mehmetoglu & Demirkol, 2007; Özc¸Elik & Uçar, 2008), Akgüngör et al. (2001) found only 10% of the 1,005 households have heard of the concept of ‘‘labeled organic products in their research conducted in Izmir. Consumers in Turkey often trust their local supermarkets’ brands, and prefer to buy “what they know”(Surrett & Sawatzki, 2016).

Regarding to the demographics of organic consuemrs, there have been mixed findings(Aygen, 2012; İlter & Yılmaz, 2016). Kara(2007) find that above middle-aged people with a higher income preferred organic food. In one other study conducted by Çiğdem (2008) no significant relationship have been found about the impact of gender, age and marital status on organic purchase. Despite these contradictory, some consistent results have also emerged such as organic food consumers in Turkey have higher income levels, high educational background, and generally live in urban areas(Akgüngör et al., 2007, 2001; Ergin & Ozsacmaci, 2011; Ilyasoğlu et al., 2010).

From these previous research outcomes, the Turkish organic consumers profile can be summarize as:

- Highly educated. Those who have university and above educational back ground
- High-income level. Those who belong middle to upper class.

- Living in big cities
- Health motivated. Those who believe eating good food helps with keep healthy. And have the perception that organic product have higher nutritional value and carry low health risk.
- Environmentally conscious, who believe that choosing organic rather than conventional product helps to reduce environmental waste and contribute to the environment.

Regardless of some disadvantages, Turkish organic market still has high growing potentials. According to Akgüngör et al. (2007) consumer willingness to pay for organic product is up to 36%, thus representing a strong demand potential for organic products in Turkey's urban markets. The total market size expected to reach $170 million by 2020 with 12.9% growth rate(Global organic trade guide, 2016). By better understanding organic consumers and the determents behind their purchase, the businesses and government organization could better use the advantages to increase domestic consumption.

4 RESEARCH METHODOLOGY

This section includes research objectives, research questions, research methodologies, and also states research design and data collection method, and the conceptual model of the research.

4.1 Problem definition

In many countries, the increasing number of food crisis and the worsening environmental condition made the consumers anxious about the food they eat. Consumers began to switch their focus on the healthy and environmental friendly food products in the market. Considering the customers' expectation and preference about food product, companies spend amount of money investing on product development and marketing.

As we discuss above, domestic awareness and consumption of organic products is still at its early stage in Turkey. The management problem, here appear to be lack of information about who is the organic consumers are, how the consumers respond to organic foods in the market, and what is the driving motives that lead to organic food purchase behavior.

A better understanding of consumers behavior should allow the business to set right marketing strategies. Given this objective, the specific research problem within this study is the identification of consumer's demographics, psychographics (consumption values, food-related life style) and how these factors affect their purchase behavior.

4.2 Objective of research

In general, the research attempt to provide overall understanding of consumer's knowledge, consumption values, food-related lifestyle and behavior as well as demographical data regarding to organic food product.

The key objective of the research can be listed as follows:

- To understand food-related lifestyle (FRL) of food shopper
- To identify demographics, consumption values and organic purchase behavior of different FRL segments

- To identify psychographic (FRL, value) profile of organic buyers/non buyers
- To identify behavior profile of organic buyers/not buyers
- To identify main determents of organic food purchase intention applying the theory of consumption value
- To understand FRL role in addressing value -behavior gaps in organic food purchase behavior
- To propose strategies for the business and government organization to facilitate organic food sector's on-going expansion in Turkey
- Make a contribution to the literature of organic food consumption and food related life style of Turkish consumers.

4.3 Research design

This study adopts two phases of research: exploratory and descriptive. Firstly, literature review and pilot test have been conducted, as a form of exploratory research model. Literature review used to find out variables to be measured in the descriptive research and also to find out the relationship of the findings of the study with existing literature. And pilot test applied to reduce FRL items and also to avoid wording, misundersatanding, and also to prevent ambiguity. The second part is descriptive research; a questionnaire survey has been conducted to collect data.

4.4 Data collection instruments and design

In data collection process, both primary and secondary sources have been used. Secondary data have been obtained from books, journal publications, student thesis, and also Internet web pages for the exploratory literature research. Questionnaire has been used as primary data collection instrument of this study. The master questionnaires were developed in English and have translated to Turkish by means of back- translation. After the development of the survey questionnaire following a literature survey a pilot study has been conducted. Using a convenience sample method, data were collected from 43 respondents, after the data analysis process related changes were made within the questionnaire.

The main aim of the pilot test is reduce FRL items and restructure the questionnaire. The reliability and applicability of reduced FRL items have been confirmed by several studies

(i.e. Bernués, Ripoll, & Panea, 2012; M. de Boer et al., 2004; Buitrago-Vera et al., 2016; Jang et al., 2011, 2009; Wycherley et al., 2008) with the desirability of short recruitment questionnaire, as this would increase the response reliability and would save time. In this study, the original 69 items of FRL reduced into 45 items based on the statistical analysis results of factor analysis and reliability test outcomes.

The final form of the questionnaire has been distributed via Internet as online survey, data is collected by the questionnaire filled in through the website: https://docs.google.com. Questionnaire link distributed through social media from January 27, 2017 to 15th of March 2017, total of 538 answers has been collected. However, 513 valid responses were included in data analysis since 25 questionnaires were not suitable for analysis due to incompleteness or the respondent's age did not fit the targeted age group for this research. A response rate of 95.4% was obtained. Multivariate skewness and Kurtosis statistics combined with z-score test are conducted to check whether the normal distributional assumption are met, as the K-means cluster analysis and SEM tests are very sensitive to outliners(Chawla & Gionis, 2013). Considering research sample size, the z-score cut-off point(±3.29) and z-score outliner limits(0.1%) are decided(Mayers, 2013).Total of 10 sample removed as serious outliners , and 503 sample used to statistical analysis.

In the questionnaire, interval, nominal and ordinal scales were used. Open-ended questions were also used in order to get direct answers, then categorized and coded based on master response categories.

4.5 Sampling design process

Target population of the study consisted of males and females in the age above 18 living in Istanbul. Sample size was 503. A non-probabilistic convenience sampling approach was used in the study. 18 have been determined as the minimum acceptable age since respondents below the age of 18 may not be the decision maker in food purchase.

4.6 Questionnaire and research variables

As displayed in Table 4-1, in the research questionnaire 17 questions were asked, in order to measure 87 variables of interest. The questionnaire consisted of a combination of nominal, ordinal and interval scales of measurement, and also two open-ended questions were

included. Scales of measurement used, and the related variables are specified below. The questionnaire is presented in the appendix part of the study.

The questionnaire consists of four main parts.

Part 1: In the first part, questions related to demographic characteristic of the respondents and organic purchase behaviors were asked.

- The demographic variables used in the study are as follows:(V1-8)
    - ✓ Gender
    - ✓ Age
    - ✓ Marital status
    - ✓ Children
    - ✓ Education level
    - ✓ Occupation
    - ✓ Income level
- V9 is a filter question
- The organic buying behavior variables are as follows: (V10-13)

Purchase behavior, purchase frequencies, total percentages of organic spending, types of organic products used to buy.

Part 2. In this part, questions related to the FRL were asked including:

- Way of shopping included importance of product information, attitudes to advertising, enjoyment from shopping, attitudes to specialty shops, price sensitivities and shopping list habits (V14-25)
- Quality aspect included attitudes towards health effect, taste and freshness of food product, and attitudes towards organic product are also included. (V26-37)
- Cooking methods includes attitudes towards cooking, interest new recipe, family involvement in cooking etc. (V38-49)
- Consumption situation includes eating habit- snack vs. meals (V50-52)
- Purchasing motives includes self- fulfillment in food, social meaning of food and also attitudes towards food security (V53-58)

Part3, in this part of the questionnaire, consumer's knowledge about organic are tested with two questions and also includes variable related to consumption values and purchase intentions.

- Consumption value variables:
    - ✓ Functional value-quality (V61-64)
    - ✓ Functional value- price (V65-68)
    - ✓ Social value (V69-72)
    - ✓ Emotional value (V73-75)
    - ✓ Conditional value (V76-79)
    - ✓ Epistemic value (V80-83)

Last four variables measured the purchase intentions of the respondents (V84-87)

Table 4-1. Variables of the study

Question number	Variable Number	Dimension	Question/Items	Type of scales & Answer options	Source
Q1	V1	Demographics	Gender	Women	Developed by researcher
				Men	
Q2	V2		Age	Open ended question	
Q3	V3		Marital states	Single	
				Married	
				Divorced	
Q4	V4		Children	Yes	
				No	
Q5	V5		Number of children	Open ended question	
Q6	V6		Education level	Elementary and below	
				Secondary school	
				High school	
				College (2 year)	
				Bachelor Degree	
				Master Degree	
				Doctor Degree	
Q7	V7		Occupation	Salaried employee (government)	
				Salaried employee (private sector)	
				Business owner	
				Retired	
				Housewife	
				Not working	
				Student	
Q8	V8		Income level	<1000TL	
				1000-2000 TL	

Question number	Variable Number	Dimension	Question/Items	Type of scales & Answer options	Source
				2000-5000 TL	
				5000-10000 TL	
				>10000TL	
Q9	V9	Food purchase	Do you purchase food product for your family consumtion? (Filter question)	Yes	
				No	
				I/my relatives produce	
Q10	V10	Organic food purchase habit	Did you purchase Organic food in previous six month?	Yes	
				No	
Q11	V11		How often do you purchase organic food	Every day	
				Once a week	
				Once a month	
				Several times a year	
				Once a year	
Q12	V12		What is the percentage of organic food purchase among total food purchase expenditures	Very little	
				Little	
				Middle	
				Very	
Q13	V13		What type of organic food do you purchase?	Vegetables	
				Fruit	
				Milk products	
				Meat	
				Egg	
				Packaged Good	
				Oil	
				Bread	
				Others	
Q14	V14-25	Way of shopping	To me product information is of high importance. I need to know what the product contains.	Likert scale 1-5(Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)	(Grunert et al. 2001)
			I compare labels to select the most nutritious food.		
			I compare product information labels to decide which brand to buy.		
			I have more confidence in food products that I have seen advertised than in unadvertised products.		
			I am influenced by what people say about a food product.		
			Information from advertising helps me to make better buying decisions.		
			I just love shopping for food.		
			I like buying food products in specialty stores where I can get expert advice.		
			I like to know what I am buying, so I often ask questions in stores where I shop for food.		
			I always check prices, even on small items.		
			Before I do a large food shopping, I make a list of everything I need.		
			I make a shopping list to guide my food purchases.		
	V26-37	Quality aspect	To me the naturalness of the food that I buy		

Question number	Variable Number	Dimension	Question/Items	Type of scales & Answer options	Source
			is an important quality.		
			I prefer to buy natural products, i.e. products without preservatives.		
			I always try to get the best quality for the best price.		
			I compare prices between product variants in order to get the best value for money.		
			It is important for me to know that I get quality for all my money.		
			I love trying cooking recipes from foreign countries.		
			I like to try new foods that I have never tasted before.		
			I always buy organically grown food products if I have the opportunity.		
			I make a point of using natural or organic products.		
			I find the taste of food products important.		
			I prefer fresh products to canned or frozen products.		
			It is important to me that food products are fresh.		
	V38-49	Cooking method	Cooking is a task that is best over and done with.		
			I don't like spending too much time on cooking*.		
			I like to try out new recipes.		
			I look for ways to prepare unusual meals.		
			Recipes and articles on food from other culinary traditions make me experiment in the kitchen.		
			I use a lot of frozen foods in my cooking.		
			The kids always help in the kitchen; for example they peel the potatoes and cut up the vegetables.		
			My family helps with other mealtime chores, such as setting the table and washing up.		
			When I do not feel like cooking, I can get one of the kids or my husband to do it.		
			Cooking needs to be planned in advance.		
			I consider the kitchen to be the woman's domain.		
			It is the woman's responsibility to keep the family healthy by serving a nutritious diet.		
	V50-52	Consumption situation	I eat before I get hungry, which means that I am never hungry at meal times.		
			I eat whenever I feel the slightest bit hungry. F38		
			In our house, nibbling has taken over and replaced set eating hours.		
	V53-58	Purchasing motives	Being praised for my cooking adds a lot to my self-esteem.		

Question number	Variable Number	Dimension	Question/Items	Type of scales & Answer options	Source
			Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved. It is a very exciting sensation.		
			I dislike everything that might change my eating habits.		
			A familiar dish gives me a sense of security.		
			I find that dining with friends is an important part of my social life.		
			Over a meal one may have a lovely chat with friends.		
Q15	V59	Organic Knowledge	Do you know what is organic?	Yes	Developed by researcher
				No	
Q16	V60		Is the organic product in your thinking similar to the given definition?(After give the definition)	Yes	
				No	
Q17	V61-64	Functional value-quality	The organic product has consistent quality	Likert scale 1-5(Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)	(Sweeney & Soutar 2001)
			The organic product is well made		
			The organic food product has an acceptable standard of quality		
			The organic food product would perform consistently		
	V65-68	Functional value-price	The organic food product is reasonably priced.		
			The organic food product offers value for money.		
			The organic food product is a good product for the price.		
			The organic food product would be economical.		
	V69-72	Social value	Buying the organic food product would help me to feel acceptable.		
			Buying the organic food product would improve the way that I am perceived.		
			Buying the organic food product would make a good impression on other people.		
			Buying the organic food product would give its owner social approval.		
	V73-75	Emotional value	Buying the organic food product instead of conventional products would feel like making a good personal contribution to something better.		(Arvola et al. 2008)
			Buying the organic food product instead of conventional products would feel like the morally right thing.		
			Buying the organic food product instead of conventional products would make me feel like a better person.		
	V76-79	Conditional value	I would buy the organic food product instead of conventional products under worsening environmental conditions.		(Lin & Huang 2012)
			I would buy the organic product instead of conventional products when there is a		

Question number	Variable Number	Dimension	Question/Items	Type of scales & Answer options	Source
			subsidy for organic products.		
			I would buy the organic food product instead of conventional products when there are discount rates for organic products or promotional activity.		
			I would buy the organic food product instead of conventional products when organic products are available.		
	V80-83	Epistemic value	Before buying the product, I would obtain substantial information about the different makes and models of products.		
			I would acquire great deal of information about the different makes and models before buying the product		
			I am willing to seek out novel information.		
			I like to search for the new and different product information.		
	V84-87	Organic food Purchase intention	I intent to buy an organic product in the near future.		Çakici (2009)
			I would buy an organic product just because it has a lower polluting effect.		
			I do no find a reason to switch to organic product since I am satisfied with the attributes of conventional product		
			I would encourage friends and relatives to purchase organic food		(Lobo & Chen, 2012)

Source: Created by researcher based on literature review

4.7 Conceptual model of this research

In this study primary research model has been proposed after literature review on consumption value, lifestyle research and organic food buying behavior. The model was developed to examine the hypothesized relationship between the independent and dependent variables concerned in this study. The hypothesized relation will be tested on data collected by participants of the survey.

The variables and their hypothesized relations are shown in the Figure 4-1. The independent variables include functional value for quality, functional value for price, social value, emotional value, conditional value and epistemic value. The mediating variable is food-related life style. The dependent variable is organic food purchase intention.

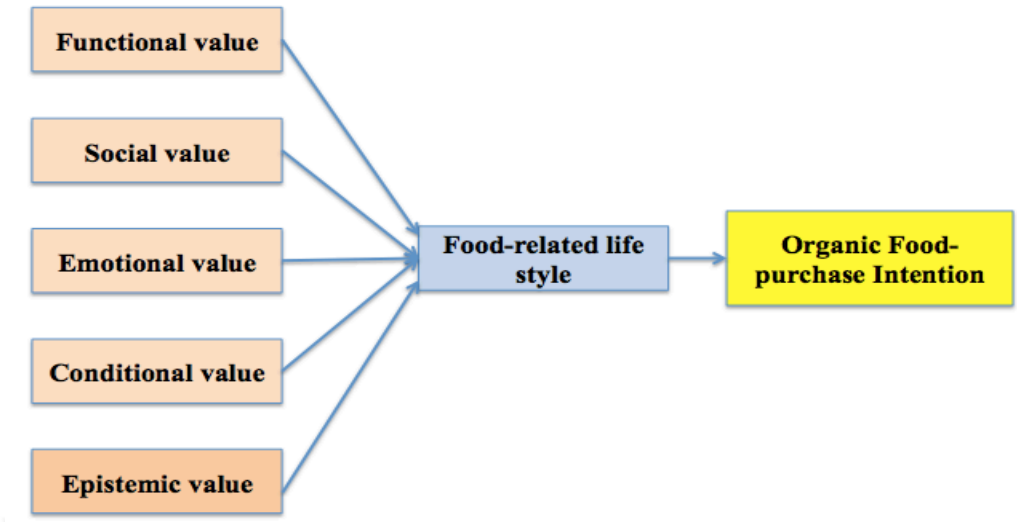


Figure 4-1 primary research model of this research

Source: Created by researcher based on literature

4.8 Methods of the data analysis

The questionnaire was analyzed using advanced data analysis utilities of SPSS statistics version21.0 (statistical package for social sciences) and Amos graph version 24.0. First of all, descriptive analyses were used to describe the sample. Frequencies were used for nominal variables and descriptive were used for interval variables. Factor analysis was used to understand the structure of the variables. Cluster analysis applied to segment food shoppers. Independent sample t-test, ANOVA was used to see statistical difference between groups. Structural equation model (SEM) test using AMOS program was conducted to test the mediation role of FRL between consumption value factors and organic purchase intention.

5 RESEARCH FINDINGS

In this study, combinations of several statistical analyses were conducted as stated above data analysis methods part. The following section includes findings of frequency, descriptive, factor analysis and reliability test, cluster analysis, cross-tabulation and chi-square test, independent T-test, correlation, one-way ANOVA and also structural equation model (SEM) test.

5.1 Descriptive statistics

In this study, frequency distribution and descriptive analyses used to describe the sample.

5.1.1 Characteristics of the respondents

In order to understand the distribution of the responses regarding to numbers and percentages a frequency analysis was conducted to nominal variables. Demographic characteristics, organic food purchase habit and organic knowledge of 503 research participants are summarized in this part of the study.

5.1.1.1 Demographic characteristics of the sample

Sample demographic characteristics include gender, age, marital status, number of children, education level, working status, and income. The results of the frequency analysis are summarized in Table 5-1.The result shows that 50.3%of respondents consist of females, and 49.7% consist of male. Majority of respondents (78.7%) fall into 18-35 age group, which means that the research sample have younger demographic profile. Most of the respondents' are single (55.9%) while 41.9% are married. Among the respondents', 34.0 % have child when 66.0% are not. Majority of respondents have small family size, 12.5 % just have one child, and 12.9% have two children. Majority of respondents are university graduates (45.9%). Considering postgraduate, doctorate and university graduates together, university and upper level graduates consist of 56.8 % of the sample. Also 12.3% own college certificate and 26.6% are high school graduates. It indicates higher education profile of the respondentse. 45.5% respondents are workers with salaries, among 17.9% are government employees, and 27.6 % are working at private sector. The percentages of students are also quite high (31.0%).

And majority of respondents (50.3%) have an income between 2000TL to 5000TL which means the sample have middle and upper class profile.

Table 5-1 Demographic Characteristics of the Sample

Demographical elements		**Frequency**	**Percentage**
Gender	Women	253	50.3
	Men	250	49.7
Age	18-25	211	41.9
	26-35	185	36.8
	36-45	65	12.9
	45-59	34	6.8
	60+	8	1.6
Marital Status	Single	281	55.9
	Married	211	41.9
	Divorced	11	2.2
Children	No	332	66.0
	1	63	12.5
	2	65	12.9
	3	29	5.8
	4+	14	2.8
Education	Elementary and below	6	1.0
	Secondary school	16	3.0
	High school	140	26.6
	College (2 year)	63	12.5
	Bachelor Degree	233	45.9
	Master Degree	48	9.5
	Doctor Degree	7	1.4
Occupation	Salaried employee (government)	90	17.9
	Salaried employee (private sector)	139	27.6
	Business owner	41	8.2
	Retired	13	2.6
	Housewife	21	4.2
	Not working	43	8.5
	Student	156	31.0
Income	<1000TL	40	8.0
	1000-2000 TL	114	22.7
	2000-5000 TL	253	50.3
	5000-10000 TL	76	15.1
	>10000TL	20	4.0

5.1.1.2 Organic purchase habits

Respondents were categorized as being an organic buyers and non-buyers according to their self-reported organic purchase behavior in previous six months. The respondents who "did not "purchase, categorized as being non-organic buyers whereas the respondents who had purchased organic food product were categorized as organic buyers. As seen in the Table 5-2, 81.5% of the study subjects declared buying organic food, while 18.5% were non-organic buyers.

Table 5-2. Did you purchase organic food product in previous six month?

Organic buyers/non-buyers	Frequency	Percentage
Yes	410	81.5
No	93	18.5

The respondents who had purchased organic food were asked about the frequency of buying, the level of organic food spending in comparison to total food expenditure and the types of organic products purchased were also asked.

When it comes to the frequency of buying, as seen in Table 5-3, the sample was highly diversified regarding the frequency of purchasing such products. As a result, we can distinguish the segments of regular and occasional consumers of this type of food. Among the organic buyers, only 4.4% of our respondents claim they buy organic food every day, and 42.7% report they do it once a week. 29.0% reported average frequency- once in a month. And 22.2 % of the subjects claim that they purchase organic food several times in a year.

Table 5-3. How often do you buy organic food?

	Frequency	Percentage
Every day	18	4.4
Once a week	175	42.7
Once a month	119	29.0
Several times a year	91	22.2
Once a year	7	1.7

As seen Table 5-4, the respondents who declared purchase of organic food were asked what share of food bought is organic. It turned out that 35.6 % of respondents mentioned their spending on organic food product occupy a decent part (middle) of their total food spending whereas 28.8 % spend very little, 28.5% little.

Table 5-4. What is the percentage of organic food purchase among total food purchase expenditures?

	Frequency	Percentage
Very little	118	28.8
Little	117	28.5
Middle	146	35.6
Very	29	7.1

As shown in Table 5-5, vegetables (66.8%), milk products (66.8%), fruits (58.5%) as well as eggs (57.8%) belong to the most frequently bought organic product categories. Further positions are taken by meat (40.0%), oil (35.1%), and bread (28.3%). As lowest shares, study subjects mentioned they purchase packaged food (22.7%). And 14.6% of the respondents indicate they bought organic product that are not listed in the catalogue of answers.

Table 5-5. What type of organic food do you purchase?

	Frequency	Percentage
Vegetables	274	66.8
Fruit	240	58.5
Milk products	274	66.8
Meat	164	40.0
Egg	237	57.8
Packaged Good	93	22.7
Oil	144	35.1
Bread	116	28.3
Others	60	14.6

5.1.1.3 Organic knowledge

Respondents were asked Yes/No questions, if they know what is organic. 99.0 % of the respondents mention they know the meaning of organic as seen from Table 5-6.

Table 5-6. Do you know what is organic?

	Frequency	Percentage
Yes	498	99.0
No	5	1.0

After the previous question, a detailed definition of organic has been introduced and again the respondents were asked whether the definition is the same with what he/she thinks about organic. Table 5-7 presents the results. It's seen that 94.0% of the respondents really know what is organic, 6.0% have misunderstood the meaning of organic.

Table 5-7 Is the organic product in your thinking similar to the above definition?

	Frequency	Percentage
Yes	473	94.0
No	30	6.0

5.1.2 Descriptive analyses

The descriptive analyses were conducted to explain the mean and standard deviation of the dependent and independent variables.

5.1.2.1 Food-related life style (FRL)

In this study, the FRL instrument contains 45 items out of 69 items in the original scale. The descriptive analyses conducted separately for five different domains of FRL: way of shopping, quality aspects, cooking methods, consumption situation, and purchasing motives. Respondents were asked their level of agreement or disagreement about different FRL statements on a 5-point Likert scale. The lowest score"1" implied strong disagreement and "5" implied strong agreement

Below are descriptive analysis results:

1. **Way of shopping**

As shown in Table 5-8, the responses' mean values have changed between 2.59 and 4.26. The statements "To me product information is of high importance. I need to know what the product contains" and "I just love shopping for food" got the highest mean scores (4.26, 4.07). The two other items, "I compare labels to select the most nutritious food"(3.97) and "I compare product information labels to decide which brand to buy"(3.90), also got relatively high mean score which imply higher agreement about the importance about product information. The standard deviation score for all the "way of shopping items" are high, range from 0.99 to 1.343, which means there are different sub-groups exist in the sample.

Table 5-8. To what extent do you agree or disagree with the following statements?

Variables		Mean	Std. Deviation
Way of shopping	To me product information is of high importance. I need to know what the product contains.	4.26	0.99
	I compare labels to select the most nutritious food.	3.97	1.095
	I compare product information labels to decide which brand to buy.	3.90	1.108
	I have more confidence in food products that I have seen advertised than in unadvertised products.	2.81	1.343
	I am influenced by what people say about a food product.	3.49	1.174
	Information from advertising helps me to make better buying decisions.	2.59	1.231
	I just love shopping for food.	4.07	1.073
	I like buying food products in specialty stores where I can get expert advice.	3.40	1.252
	I like to know what I am buying, so I often ask questions in stores where I shop for food.	3.77	1.138
	I always check prices, even on small items.	3.47	1.311
	Before I do a large food shopping, I make a list of everything I need.	3.73	1.296
	I make a shopping list to guide my food purchases.	3.61	1.314

2. Quality aspect

As can be seen on the Table 5-9, respondents expressed high agreement towards to the importance of taste and freshness, with mean score 4.65 and 4.60 respectively. These statements standard deviation values are the lowest (0,695and 0,718), which means respondents agreed with these statements. The statement "I love trying cooking recipes from foreign countries." got the lowest mean score (2.53), which means the respondents interest level about foreign recipes, are below the average. The mean score for the statements "It is important for me to know that I get quality for all my money"(4.49), "I always try to get the best quality for the best price"(4.24), and "I always try to get the best quality for the best price" (4.22) are also high. It means that respondents care about the price and quality as well as health issue when they do food shopping.

Table 5-9. To what extent do you agree or disagree with the following statements?

Variables		Mean	Std. Deviation
Quality aspect	To me the naturalness of the food that I buy is an important quality.	4.15	0.919
	I prefer to buy natural products, i.e. products without preservatives.	4.22	0.916
	I always try to get the best quality for the best price.	4.24	0.9
	I compare prices between product variants in order to get the best value for money.	4.02	1.084
	It is important for me to know that I get quality for all my money.	4.49	0.757
	I love trying cooking recipes from foreign countries.	2.53	1.428
	I like to try new foods that I have never tasted before.	3.23	1.38
	I always buy organically grown food products if I have the opportunity.	3.79	1.109
	I make a point of using natural or organic products.	3.83	1.075
	I find the taste of food products important.	4.65	0.695
	I prefer fresh products to canned or frozen products.	4.07	1.195
	It is important to me that food products are fresh.	4.60	0.718

3. Cooking methods

In cooking method, as shown in Table 5-10, the statement "Cooking is a task that is best over and done with" got the highest mean value (4.36) and the standard deviation value is 0.919, is the lowest, which means that respondents think cooking is a task that one should spend more effort on it, and most of the respondents agree upon this statement. The lowest mean score appeared for the statement" I use a lot of frozen foods in my cooking."(2.51).

Table 5-10.To what extent do you agree or disagree with the following statements?

Variables		Mean	Std. Deviation
Cooking method	Cooking is a task that is best over and done with.	4.36	0.919
	I don't like spending too much time on cooking*.	2.73	1.349
	I like to try out new recipes.	3.62	1.269
	I look for ways to prepare unusual meals.	3.52	1.301
	Recipes and articles on food from other culinary traditions make me experiment in the kitchen.	2.90	1.43
	I use a lot of frozen foods in my cooking.	2.51	1.212
	The kids always help in the kitchen; for example they peel the potatoes and cut up the vegetables.	3.32	1.388
	My family helps with other mealtime chores, such as setting the table and washing up.	3.45	1.311
	When I do not feel like cooking, I can get one of the kids or my husband to do it.	3.69	1.322
	Cooking needs to be planned in advance.	3.59	1.219
	I consider the kitchen to be the woman's domain.	3.17	1.516
	It is the woman's responsibility to keep the family healthy by serving a nutritious diet.	3.24	1.427

*Item reverse coded in order to obtain a positive statement

4. Consumption situation

As illustrated in Table 5-11, the mean score for the three items in consumption situation are relatively low. The highest mean value gained by the statement for "I eat whenever I feel the slightest bit hungry" (2.86), the other two statement mean values are 2.33 and 2.15, which imply that having main meal is a important part of eating habits compare to snakes for respondents.

Table 5-11.To what extent do you agree or disagree with the following statements?

Variables		Mean	Std. Deviation
	I eat before I get hungry, which means that I am never hungry at meal times.	2.33	1.242
	I eat whenever I feel the slightest bit hungry. F38	2.86	1.261
	In our house, nibbling has taken over and replaced set eating hours.	2.15	1.260

5. Purchasing motives

As shown in Table 5-12, for purchasing motives the responses' mean values have changed between 3.53 and 4.35. The statement "A familiar dish gives me a sense of security" got the highest mean score (4.35). This statement also obtained the lowest standard deviation value (0.872), which imply that respondents agreed upon these statements.

Table 5-12.To what extent do you agree or disagree with the following statements?

Variables		Mean	Std. Deviation
	Being praised for my cooking adds a lot to my self-esteem.	3.94	1.183
	Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved. It is a very exciting sensation.	4.26	0.969
	I dislike everything that might change my eating habits. F42	3.53	1.243
	A familiar dish gives me a sense of security.	4.35	0.872
	I find that dining with friends is an important part of my social life.	4.01	1.066
	Over a meal one may have a lovely chat with friends.	4.25	0.948

5.1.2.2 Consumption value descriptive analysis

In this study, the personal consumption value instrument contains 23 items. The descriptive analyses conducted separately for five different domains of consumption value: Functional value, social value, emotional value, conditional value, and epistemic value. Respondents were asked their level of agreement or disagreement about their consumption value towards organic food product on a 5-point Likert scale. The lowest score"1" implied strong disagreement and "5" implied strong agreement. Below are descriptive analysis results:

1. Functional value

As seen in Table 5-13, for functional value about quality, the mean value for all four items is equally high. The highest mean score (3.89) was acquired for two statements: "The organic product has consistent quality" and "The organic food product has an acceptable standard of quality". These two statements also show lowest standard deviation values that that the respondents agreed with these statements.

However, for functional value-price scales, the mean values for two statements: "The organic food product is reasonably priced" and "The organic food product would be economical" are below the average (2.39,2.04), which imply that respondents think the organic product are expensive. The standard deviation scores for these four statements are ranged between 1.251 and 1.363, which imply that not all respondents agreed upon these statements.

Table 5-13.To what extent do you agree or disagree with the following statements?

Variables		Mean	Std. Deviation
Functional value-quality	The organic product has consistent quality	3.89	1.008
	The organic product is well made	3.87	1.011
	The organic food product has an acceptable standard of quality	3.89	0.951
	The organic food product would perform consistently	3.46	1.127
Functional value-price	The organic food product is reasonably priced.	2.39	1.352
	The organic food product offers value for money.	3.23	1.257
	The organic food product is a good product for the price.	3.08	1.232
	The organic food product would be economical.	2.04	1.276

2. Social value

As stated in Table 5-14, the highest mean values (3.30, 3.15) were acquired for two statements: "Buying the organic food product would improve the way that I am perceived" and "Buying the organic food product would make a good impression on other people". However, the statement "Buying the organic food product would give its owner social approval" got the lowest mean value (2.63). The standard deviation values are quite high for all the items, above 1.310, which imply not all the respondents agree with the statements.

Table 5-14. To what extent do you agree or disagree with the following statements?

Variables	Mean	Std. Deviation
Buying the organic food product would help me to feel acceptable.	2.98	1.313
Buying the organic food product would improve the way that I am perceived.	3.30	1.317
Buying the organic food product would make a good impression on other people.	3.15	1.351
Buying the organic food product would give its owner social approval.	2.63	1.331

3. Emotional value

As shown in Table 5-15, the mean values for all tree statements are above 3.00. The highest value acquired for the statement "Buying the organic food product instead of conventional products would feel like the morally right thing". The standard deviation values, same for the previous tables, were quite high (1.360,1,328, 1.247), which imply that not all the respondent agrees with the emotional value statements, there is sub-groups exist.

Table 5-15. To what extent do you agree or disagree with the following statements?

Variables	Mean	Std. Deviation
Buying the organic food product instead of conventional products would feel like making a good personal contribution to something better.	3.09	1.360
Buying the organic food product instead of conventional products would feel like the morally right thing.	3.65	1.247
Buying the organic food product instead of conventional products would make me feel like a better person.	3.37	1.328

4. Conditional value

For the conditional values statements, as shown in Table 5-16, the statement "I would buy the organic food product instead of conventional products when there are discount rates for organic products or promotional activity" got the highest mean value (4.25), and the second highest value (4.07) acquired by the statement "I would buy the organic product instead of conventional products when there is a subsidy for organic products". For the condition the price element plays important role and most of the respondents agreed upon these statement with the lowest standard deviation values (1.004, 1.074).

Table 5-16. To what extent do you agree or disagree with the following statements?

Variables	Mean	Std. Deviation
I would buy the organic food product instead of conventional products under worsening environmental conditions.	3.53	1.165
I would buy the organic product instead of conventional products when there is a subsidy for organic products.	4.07	1.074
I would buy the organic food product instead of conventional products when there are discount rates for organic products or promotional activity.	4.25	1.004
I would buy the organic food product instead of conventional products when organic products are available.	3.90	1.103

5. Epistemic value

For the Epistemic value statements, the mean values were generally high, ranged between 3.49 and 3.92. The statement "I am willing to seek out novel information." Got the highest mean value (3.92). In the meanwhile, the standard deviation value was the lowest, which imply that most of the respondents agree with the statement. The statement with the lowest mean value (3.49) was the statement "I would acquire great deal of information about the different makes and models before buying the product".

Table 5-17 To what extent do you agree or disagree with the following statements

Variables	Mean	Std
Before buying the product, I would obtain substantial information about the different makes and models of products.	3.58	1.149
I would acquire great deal of information about the different makes and models before buying the product	3.49	1.148
I am willing to seek out novel information.	3.92	1.084
I like to search for the new and different product information.	3.77	1.111

5.1.2.3 Purchase Intention

As shown in Table 5-18,the highest mean value (4.02) and lowest values for standard deviation (1.087) acquired by the statement "I will recommend my friends and relatives to use organic product", which means respondents agreed upon these statements. The reverse coded statement "I do no find a reason to switch to organic product since I am satisfied with the attributes of conventional product" got the lowest mean value (3.52) among the behavioral intention statements, and the standard deviation value are the highest (1.392), which means that not all the respondents were agree with the statement.

Table 5-18 To what extent do you agree or disagree with the following statements

Variables	Mean	Std
I intent to buy an organic product in the near future.	3.66	1.192
I would buy an organic product just because it has a lower polluting effect.	3.81	1.135
I do no find a reason to switch to organic product since I am satisfied with the attributes of conventional product*	3.52	1.392
I would encourage friends and relatives to purchase organic food	4.02	1.087

*Item reverse coded in order to obtain a positive statement

5.2 Factor analysis and reliability test

The purpose of factor analysis is to understand the structure of a set of variables, to construct a questionnaire to measure an underlying variable, and to reduce a data set to a more manageable size while retaining as much of the original information as possible(Field, 2009).

In order to reduce the interval variables of the study into meaningful factors, factor analysis was conducted in two different way; using the variables without separating by topic

and separately conducted to each main topic, such as FRL, consumption values and behavioral intention. Unfortunately, the factor outcomes are different in two different ways, so the results of factor analysis by topic are used in this study. Reliability test conducted for each factor and also for whole measurement items. The result of Cronbach's alpha for whole items is 0.923. The reliability test results for separate factors were given in following sections.

5.2.1 FRL factor analysis &reliability test

From the factor analysis for 45 FRL items, three items are deleted due to the low factor reliability, lower than 0.60(Mayers, 2013). There emerged 11 factors, as shown in Table 5-19, the "Kaiser-Meyer-Olkin (KMO)" measure of sampling adequacy is .843, which falls in the acceptable range (>.50)(Mayers, 2013). Reliability analysis is further conducted to all items and also for each of the factors determined and reliability results are above the recommended level of 0.60.

The factors were named as "positioning food in my life", "Adventure" "knowing what I buy", "Price- quality-food relationship", "Sharing the responsibility", "Importance of product information", "Contrary to the traditional habit", "Attitude to food related communication", "Shopping list", "Women's task" and "Social relationship". These factors further used to find food-related life style segments of food consumers.

Table 5-19 Food-related life style factor analysis

Factors	**Factor loading**	**Cronbach alpha**
Factor1: positioning food in my life		.702
A familiar dish gives me a sense of security.	.662	
Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved. It is a very exciting sensation.	.647	
Being praised for my cooking adds a lot to my self-esteem.	.616	
I dislike everything that might change my eating habits.	.562	
Cooking needs to be planned in advance.	.461	
Factor 2:Adventure		.848
Recipes and articles on food from other culinary traditions make me experiment in the kitchen.	.826	
I look for ways to prepare unusual meals.	.808	
I like to try out new recipes.	.761	
I like to try new foods that I have never tasted before.	.726	
I love trying cooking recipes from foreign countries.	.724	
Factor 3: knowing what I buy		.820
I make a point of using natural or organic products.	.826	
I always buy organically grown food products if I have the opportunity.	.820	
To me the naturalness of the food that I buy is an important quality.	.710	

Factors	Factor loading	Cronbach alpha
I prefer to buy natural products, i.e. products without preservatives.	.583	
I like to know what I am buying, so I often ask questions in stores where I shop for food.	.472	
I like buying food products in specialty stores where I can get expert advice.	.401	
Factor 4: Price- quality-food relationship		.794
It is important for me to know that I get quality for all my money.	.684	
I always try to get the best quality for the best price.	.650	
I compare prices between product variants in order to get the best value for money.	.608	
I always check prices, even on small items.	.529	
I find the taste of food products important.	.529	
It is important to me that food products are fresh.	.480	
Cooking is a task that is best over and done with.	.466	
Factor 5: sharing the responsibility		.855
My family helps with other mealtime chores, such as setting the table and washing up.	.868	
The kids always help in the kitchen; for example they peel the potatoes and cut up the vegetables.	.849	
When I do not feel like cooking, I can get other family members to do it.	.820	
Factor 6: Importance of product information		.780
I compare labels to select the most nutritious food.	.801	
I compare product information labels to decide which brand to buy.	.753	
To me product information is of high importance. I need to know what the product contains.	.690	
Factor7: contrary to the traditional habit		.697
I eat before I get hungry, which means that I am never hungry at meal times.	.793	
In our house, nibbling has taken over and replaced set eating hours.	.723	
I eat whenever I feel the slightest bit hungry.	.715	
I use a lot of frozen foods in my cooking.	.529	
Factor 8: **attitude to food related communication**		.744
Information from advertising helps me to make better buying decisions.	.844	
I have more confidence in food products that I have seen advertised than in unadvertised products.	.780	
I am influenced by what people say about a food product.	.707	
Factor 9: shopping list		.925
I make a shopping list to guide my food purchases.	.863	
Before I do a large food shopping, I make a list of everything I need.	.846	
Factor 10: women's task		.821
I consider the kitchen to be the woman's domain.	.876	
It is the woman's responsibility to keep the family healthy by serving a nutritious diet.	.862	
Factor 11: Social relationship		
I find that dining with friends is an important part of my social life.	.723	.745
Over a meal one may have a lovely chat with friends.	.691	
Cronbach's Alpha	.847	
Kaiser-Meyer-Olkin measure of sampling Adequacy	.843	
Bartlett's Test of Sphericity — Approx. Chi-Square	10115.485	
df	861	
sig	.000	

5.2.2 Consumption values factor analysis & reliability test

Factor analysis conducted using 23 personal consumption value items, 5 factors extracted, named as "Social & emotional value", "Functional value-quality", "Epistemic value", "Conditional value" and "functional value-price". As seen in Table 5-20, the KMO equals to .907 falls in the acceptable range (>.50)(Mayers, 2013). Reliability analysis is further conducted to all items and also for each of the factors determined and reliability results are above the recommended level of 0.60. The result very much similar to the original factors, except the factor "social & emotional value", which is the combination of original two separate factors; social value and emotional value.

Table 5-20 Consumption values factor analysis

Factors	Factor loading	Cronbach alpha
Factor 1: Social & emotional value		.910
Buying the organic food product would make a good impression on other people.	.807	
Buying the organic food product instead of conventional products would feel like making a good personal contribution to something better.	.801	
Buying the organic food product instead of conventional products would make me feel like a better person.	.775	
Buying the organic food product would give its owner social approval.	.763	
Buying the organic food product would improve the way that I am perceived.	.738	
Buying the organic food product would help me to feel acceptable.	.677	
Buying the organic food product instead of conventional products would feel like the morally right thing.	.613	
Factor 2 : Functional value-quality		.875
The organic food product has an acceptable standard of quality.	.878	
The organic product is well made.	.859	
The organic product has consistent quality.	.842	
The organic food product would perform consistently.	.634	
Factor 3: Epistemic value		.869
I like to search for the new and different product information.	.863	
I am willing to seek out novel information.	.827	
I would acquire great deal of information about the different makes and models before buying the product.	.771	
Before buying the product, I would obtain substantial information about the different makes and models of products.	.731	
Factor4: Conditional value		.823
I would buy the organic product instead of conventional products when there is a subsidy for organic products.	.819	
I would buy the organic food product instead of conventional products when there are discount rates for organic products or promotional activity.	.736	
I would buy the organic food product instead of conventional products when organic products are available.	.711	
I would buy the organic food product instead of conventional products under worsening environmental conditions.	.667	
Factor 5: functional value-price		.831

Factors			Factor loading	Cronbach alpha
The organic food product is reasonably priced.			.857	
The organic food product would be economical.			.773	
The organic food product is a good product for the price.			.636	
The organic food product offers value for money.			.571	
Cronbach's Alpha .		.918		
Kaiser-Meyer-Olkin measure of sampling Adequacy		.907		
Bartlett's Test of Sphericity	Approx. Chi-Square	7454.655		
	df	253		
	sig	.000		

5.2.3 Purchase intention factor & reliability analysis

Factor analysis also conducted with 4 items of behavioral intention. One item deleted due to the low factor loading (<.30). Factor loadings for remained three items and the chronbach's alpha results displayed in Table 5-21 below. The KMO equal to .700, in an acceptable range (>.50)(Mayers, 2013). And the reliability results are also above the recommended level of 0.60.

Table 5-21. Purchase intention factor analysis

Factors			Factor loading	Cronbach alpha
Purchase intention				.787
I would encourage friends and relatives to purchase organic food.			.857	
I would buy an organic product just because it has a lower polluting effect.			.843	
I intent to buy an organic product in the near future.			.814	
Kaiser-Meyer-Olkin measure of sampling Adequacy		.700		
Bartlett's Test of Sphericity	Approx. Chi-Square	449.744		
	df	3		
	sig	.000		

5.3 Cluster analysis

The Clustering method used to identify food consumer segments was "K-means" an iterative partitioning method. The cluster analysis classified food shoppers into four consumer segments, each segment was profiled and labeled based on segment's primary characteristics obtained from their differences in respect to lifestyle factors and also based on similar food-related clusters identified by earlier studies.

Table 5-22 shows results of final cluster center for four segments (positive results means respondents have interest about related factors in their food-related activities, vise versa, negative means, factor far from the cluster center and not the interested criteria for the segment). Cross-tabulation and chi-square test are also conducted to reveal the demographic characteristics of four food-related lifestyle segments as shown

Table 5-23. The four clusters are named and each segment explained in details in the following section.

Table 5-22. Results of final cluster center of k-means cluster analysis

Factors	**F-ratio**	**P-value**	**Cluster1 Food focused (25.4%)**	**Cluster2 Rational (34.1%)**	**Cluster3 Careless (24.7%)**	**Cluster4 Uninvolved (18.5%)**
Knowing what I buy	**109.69**	**0.00**	**0.68**	**0.31**	**-0.25**	**-1.12**
I make a point of using natural or organic products.	53.25	0.00	0.44	0.14	-0.64	-0.86
I always buy organically grown food products if I have the opportunity.	43.71	0.00	0.41	0.15	-0.61	-0.74
To me the naturalness of the food that I buy is an important quality.	108.84	0.00	0.46	0.39	-0.82	-1.21
I prefer to buy natural products, i.e. products without preservatives.	80.23	0.00	0.42	0.36	-0.77	-1.00
I like to know what I am buying, so I often ask questions in stores where I shop for food.	60.76	0.00	0.51	0.05	-0.63	-0.94
I like buying food products in specialty stores where I can get expert advice.	25.78	0.00	0.39	-0.06	-0.42	-0.61
Importance of product information	**74.96**	**0.00**	**0.43**	**0.34**	**-0.04**	**-1.11**
I compare labels to select the most nutritious food.	26.76	0.00	0.29	0.20	-0.49	-0.70
I compare product information labels to decide which brand to buy.	34.71	0.00	0.39	0.09	-0.53	-0.75
To me product information is of high importance. I need to know what the product contains.	53.15	0.00	0.39	0.20	-0.52	-1.28
Price- quality-food relationship	**116.74**	**0.00**	**0.67**	**0.16**	**0.03**	**-1.25**
It is important for me to know that I get quality for all my money.	87.67	0.00	0.40	0.22	-0.40	-1.93
I always try to get the best quality for the best price.	52.23	0.00	0.38	0.25	-0.63	-0.97
I compare prices between product variants in order to get the best value for money.	39.87	0.00	0.37	0.18	-0.58	-0.79
I always check prices, even on small items.	14.81	0.00	0.24	0.12	-0.42	-0.31
I find the taste of food products important.	134.78	0.00	0.35	0.10	0.07	-2.56
It is important to me that food products are fresh.	111.48	0.00	0.35	0.26	-0.29	-2.28
Cooking is a task that is best over and done with.	28.94	0.00	0.20	-0.03	-0.06	-1.48
Adventure	**37.02**	**0.00**	**0.39**	**0.34**	**-0.61**	**-0.30**

Factors	F-ratio	P-value	Cluster1 Food focused (25.4%)	Cluster2 Rational (34.1%)	Cluster3 Careless (24.7%)	Cluster4 Uninvolved (18.5%)
Recipes and articles on food from other culinary traditions make me experiment in the kitchen.	52.23	0.00	0.52	-0.66	-0.21	0.14
I look for ways to prepare unusual meals.	58.05	0.00	0.57	0.35	-0.20	-0.65
I like to try out new recipes.	59.48	0.00	0.57	-0.65	-0.22	-0.28
I like to try new foods that I have never tasted before.	23.07	0.00	0.35	0.31	-0.01	-0.50
I love trying cooking recipes from foreign countries.	27.26	0.00	0.36	-0.56	-0.08	0.26
Contrary to the traditional habit	**20.93**	**0.00**	**0.47**	**-0.41**	**-0.02**	**0.09**
I eat before I get hungry, which means that I am never hungry at meal times.	6.56	0.00	0.11	-0.24	-0.06	0.54
In our house, nibbling has taken over and replaced set eating hours.	4.29	0.01	-0.02	-0.16	0.06	0.54
I eat whenever I feel the slightest bit hungry.	9.52	0.00	0.25	-0.30	-0.12	0.08
I use a lot of frozen foods in my cooking.	15.33	0.00	-0.01	-0.42	0.33	0.43
Attitude to food-related communication	**26.94**	**0.00**	**0.48**	**-0.48**	**0.16**	**-0.06**
Information from advertising helps me to make better buying decisions.	5.18	0.00	0.10	-0.29	0.14	-0.08
I have more confidence in food products that I have seen advertised than in unadvertised products.	3.92	0.01	-0.05	-0.17	0.24	0.02
I am influenced by what people say about a food product.	4.40	0.01	0.15	-0.17	0.02	-0.39
Shopping list	**86.51**	**0.00**	**0.66**	**0.35**	**-0.79**	**-0.46**
I make a shopping list to guide my food purchases.	43.76	0.00	0.50	0.16	-0.59	-0.24
Before I do a large food shopping, I make a list of everything I need.	36.04	0.00	0.47	-0.15	-0.51	-0.38
Women's task	**104.41**	**0.00**	**0.80**	**-0.82**	**0.19**	**0.05**
I consider the kitchen to be the woman's domain.	4.49	0.00	-0.01	-0.25	0.18	-0.17
It is the woman's responsibility to keep the family healthy by serving a nutritious diet.	3.32	0.02	0.10	-0.08	-0.22	0.10
Sharing responsibility	**33.71**	**0.00**	**0.43**	**0.28**	**-0.54**	**-0.35**
My family helps with other mealtime chores, such as setting the table and washing up.	63.59	0.00	0.53	0.73	-0.01	-0.62
The other family members always help in the kitchen; for example they peel the potatoes and cut up the vegetables.	56.62	0.00	0.50	-0.75	0.00	-0.35
When I do not feel like cooking, I can get other family members do it.	39.78	0.00	0.38	-0.61	0.14	-0.72
Social relationship	**52.28**	**0.00**	**0.53**	**0.04**	**0.11**	**-0.94**
I find that dining with friends is an important part of my social life.	14.44	0.00	0.28	0.10	-0.17	-0.79
Over a meal one may have a lovely chat with friends.	28.41	0.00	0.34	-0.13	0.13	-1.22
Positioning food in my life	**85.91**	**0.00**	**0.77**	**0.06**	**-0.12**	**-1.00**
A familiar dish gives me a sense of security.	50.53	0.00	0.31	0.02	-0.12	-1.77
Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved.	53.58	0.00	0.40	-0.16	-0.10	-1.68

Factors	F-ratio	P-value	Cluster1 Food focused (25.4%)	Cluster2 Rational (34.1%)	Cluster3 Careless (24.7%)	Cluster4 Uninvolved (18.5%)
It is a very exciting sensation.						
Being praised for my cooking adds a lot to my self-esteem.	21.68	0.00	0.37	-0.26	-0.15	-0.76
I dislike everything that might change my eating habits.	15.80	0.00	0.29	-0.11	-0.16	-0.83
Cooking needs to be planned in advance.	35.24	0.00	0.46	-0.38	-0.18	-0.81

Table 5-23: Demographic characteristics of four FRL segments

Consumers	Food focus	Rational	Careless	Uninvolved	Total
Gender					
Female	61(47.7 [a])	96(60.8)	54(43.5)	42 (45.2)	253(50.3)
Male	67(52.3)	62(39.2)	70 (56.5)	51 (54.8)	250(49.7)
Age					
18-25	52(40.6)	57(36.1)	56(45.2)	46(49.5)	211(41.9)
26- 35	50(39.1)	59(37.3)	42(33.9)	34(36.6)	185(36.8)
36-45	17(13.3)	27(17.1)	12(9.7)	9(9.7)	65(12.9)
45-59	7(5.5)	13(8.2)	11(8.9)	3(3.2)	34(6.8)
60+	2(1.6)	2(1.3)	3(2.4)	1(1.1)	8(1.6)
Marital staus					
Single	68(53.1)	81(51.3)	77(62.9)	55(59.1)	281(55.9)
Married	58(45.3)	70(44.3)	46(37.1)	37(39.8)	211(41.9)
Divorced	2(1.6)	7(4.4)	1(0.8)	1(1.1)	11(2.2)
Number of children					
No children	86(67.2)	95(60.1)	83(66.9)	68(73.1)	332(66.0)
1	15(11.7)	25(15.8)	11(8.9)	12(12.9)	63(12.5)
2	15(11.7)	27(17.1)	16(12.9)	7(7.5)	65(12.9)
3	9(7.0)	7(4.4)	8(6.5)	5(5.4)	29(5.8)
4+	3(2.3)	4(2.5)	6(4.8)	1(1.1)	14(2.8)
Educational background					
Elementary and below	2(1.6)	1(0.6)	2(1.6)	0(0.0)	5(1.0)
Secondary school	3(2.3)	3(1.9)	3(2.4)	6(6.5)	15(3.0)
High school	33(25.8)	33(20.9)	37(29.8)	31(33.3)	134(26.6)
College(two year)	22(17.2)	13(8.2)	12(9.7)	16(17.2)	63(12.5)
Bachelor degree	54(42.2)	85(53.8)	61(49.2)	31(33.3)	231(45.9)
Graduate degree	14(10.9)	23(14.6)	9(7.2)	9(9.7)	55(10.8)

Consumers	Food focus	Rational	Careless	Uninvolved	Total
Occupation					
Salaried employee (government)	26(20.3)	33(20.9)	18(14.5)	13(14.0)	90(17.9)
Salaried employee (private sector)	36(28.1)	44(27.8)	34(27.4)	25(26.9)	139(27.6)
Business owner	14(10.9)	10(6.3)	12(9.7)	5(5.4)	41(8.2)
Retired	2(1.6)	3(1.9)	5(4.0)	3(3.2)	13(2.6)
Housewife	7(5.5)	6(3.8)	5(4.0)	3(3.2)	21(4.2)
Not working	10(7.8)	16(10.1)	12(9.7)	5(5.9)	43(8.5)
Student	33(25.8)	46(29.1)	38(30.6)	39(41.9)	156(31.0)
Income level					
<1000TL	9(7.0)	12(7.6)	9(7.3)	10(10.8)	40(8.0)
1000-2000 TL	27(21.1)	28(17.7)	32(25.8)	27(29.0)	114(22.7)
2000-5000 TL	68(53.1)	85(53.8)	57(46.0)	43(46.2)	253(50.3)
5000-10000 TL	21(16.4)	26(16.5)	20(16.1)	9(9.7)	76(15.1)
>10000TL	3(2.3)	7(4.4)	6(4.8)	4(4.3)	20(4.0)

*a:percentages within cluster

Cluster 1: Food focused

Total of 128 participants (25.4%) are included in this segment. Food focused consumers are interested in all food-related activities. They like to know what they buy: like to shop in specialty stores where they can get expert advice, because they give more value to the naturalness of the product. These types of consumers tend to pay extra attention to product labels before purchases, like to buy advertised food products. And they are also price conscious, always try to get best quality for best price, assume freshness and taste as important quality. Food focused consumers' score above average in adventure, they like to taste various cuisines and are most keen on cooking new and unusual recipes from different culture. And they also like to eat snack food. Food focused consumers share responsibility in the kitchen. They position food as an important part of their life: enjoy cooking and do not like anything that may change eating habits. They enjoy eating out with friends. This group considers dining with friends or family an important social activity.

In terms of demographics, food focused consumers comprise both male (47.7%) and female (52.3%), 79,7% of them are between 18-35 years old, single (53.15) with no children (67.2), have bachelor degree (42.2%), and salaried employee with an income level 2000-5000 TL.

Cluster 2. Rational consumers

Cluster two was the "rational consumers", accounted for 31.4%(158) of the sample, they know about what they buy: naturalness of food is important for them and they like to ask questions about product. Not surprisingly, they like to check labels to know the product and differentiate brands. These types of consumers consider price-quality–food relationship in some degree. They check prices, probably, not to find cheapest product but to get best quality for best price because quality is important for them. They like to cook, taste and freshness of food product are important for this segment. And they like adventurers in their eating and cooking, like to try new and different food. Most important characteristic of rational consumer group is that they are very organized, like to make shopping list before go food shopping.

Rational consumers are not very much affected by advertisements and also don't buy food simply based on word-of-mouth referrals. They like to keep the traditional cooking and eating habits, as they do not much use convenience food products and give value to sit-eating rather than snacking. Moreover, these types of food consumers are strongly against the idea that cooking is solely a woman's task. Food is an important part of their life, Self-fulfillment and social relationship are important purchasing motives.

Demographically, rational consumers are females (60.8%) between ages 18 to 35 (73.4%), and the older age group, over 36 also comprise more in rational consumer group compare to other segments. In terms of marital status, most of them are single (51.3%), and the numbers of married respondents are higher compare to other segments. Majority of rational consumers have no children (60.1%), people with one (15.8%) or two (17.1%) children are also belongs to this segment, the percentages are higher compare to other segments. In terms of education level, the percentages of bachelor (53.8%) and graduate degree (14.6%) holders are highest among segments. Most of the rational consumers are students (29.1%) and private sector employees (27.8%) with an income level of 2000-5000

TL, and the numbers of respondents with an income range between 5000-10,000 TL are also higher compare to other segments.

Cluster 3. Careless

Careless consumers comprise 124 people (24.7%) of the sample. These types of consumers are less interested in many aspects of food. They do not know what they buy because they do not like to check product information; they score low on giving importance to product information. In the food- price- quality aspects, consumers in this segment are not interested in price, quality, and freshness of food products. They do not like cooking very much, and taste is the only important criteria in their eating. They are not interested in novelty, and not very adventurous in both cooking and consumption of food. And also do not prefer snacks. They are the spontaneous buyers; they do not like making shopping list. They agree with the idea that cooking is women's task and do not like to share responsibility in the kitchen. Most of the obvious characteristics of this type is their attitude towards food related communication, they buy advertised products, they are effected by peers' opinion in their food choice. These types of consumers do not assume food as an important part of their life, and also give little importance to food as a means of achieving social values.

Demographically, most of the careless consumers are male (56.5%), between18-25 years old (49.5%) and single (62.9%). Majority of careless consumers have bachelor degree (49.2%), the number of respondents with high school diploma are higher compare to other segments. Most of the careless consumers are students (30.6%) and private sector employees (27.4%). In terms of income level, most of them (46.0%) have an income level 2000-5000 TL, and the numbers of respondents with an income range between 1000-2000 TL are also higher compare to other segments.

Cluster 4. Uninvolved

Based on the sample, a total of 93 consumers (18.5%) are in this segment. On the whole, these consumers are not interested in any food-related activities compared to other segments. They show no interest in any kind of food-related information, they do not like to make efforts to know the product they buy; do not see any reason to buy specialty items, do not care whether it's organic or conventional product. It is also expressed with their attitude on importance of product information. These types of consumers will not be influenced by

food advertisement, never make shopping list. They are agree the idea that cooking is women's task and do not share responsibility in the kitchen. They do not care much about taste, freshness or the price/quality relationship of food, compared to other consumers. Not surprisingly, this group doesn't want to waste much time in cooking and are the ones most interested in quick and easy cooking methods. Food is not a very important part of their life, this group does not consider dining with friends or family an important social activity. However, they appreciate foods from different countries and different culture in some degree. Thus, these types of food consumers typically purchase instant or frozen foods, and much prefers eat snacks frequently to cover regular meals. In brief, food is not a central element in these consumers' lives.

In terms of demographics, most of the uninvolved consumers are male (54.8%), age between 18 to 25, and single (59.1%). Most of them have high school (33.3%) or bachelor degree (33.3%) with and income level of 2000-5000 TL (46.2%).

Among all the demographic variables only the gender and education level show significant difference among four FRL segments. Below is the results of cross-tabulation and chi-square test.

Table 5-24.Gender and FRL cross-tabulation

Gender		**FRL segments**				**Total**
		Food focused	Rational	Careless	Uninvolved	
Female	Count	61	96	54	42	253
	% Within gender	24.1%	37.9%	21.3%	16.6%	100%
Male	Count	67	62	70	51	250
	% Within gender	26.8%	24.8%	28.0%	20.4%	100%

The percentages of female respondents (37.9%) comprise bigger percentages in rational consumer group whereas more males (28.0%) fall into the careless consumer segment. This data will be used for Chi-square analyses applications in order to determine whether a significant relationship exists between gender and FRL segments.

Test for Hypothesis 1:

H_0 1:There is no relationship between gender and individual's food-related lifestyle.

$H_1$1: There is a relationship between gender and individual's food-related lifestyle.

Table 5-25.Chi-square test for hypothesis

	Value	**df**	**Sig. (2-tailed)**
Pearson Chi-Square	10.516*	3	.015
Likelihood Ratio	10.580	3	.014
Linear-by-linear Association	1.513	1	.219
Symmetric Measures			
Phi	.145		.015
Cramer's V	.145		.015

*0 cells (0.00%) have expected count less than 5. The minimum expected count is 46.22.

The results of Chi-square test shows that x^2= 10.516 and p=0.015<0.05. Therefore, there is is a relationship between gender and person's food-related lifestyle. Cramer's V value of 0.145 indicates low association.

Table 5-26.Education level and FRL cross-tabulation

Education level		**FRL segments**				**Total**
		Rational	Food focused	Careless	Uninvolved	
Elementary school	Count	2	1	2	0	5
	% Within Education level	40.0%	20.0%	40.0%	0.0%	100%
Secondary school	Count	3	3	3	6	15
	% Within Education level	20.0%	20.0%	20.0%	40.0%	100%
High school	Count	33	33	37	31	134
	% Within Education level	24.6%	24.6%	27.6%	23.1%	100.0%
College (2 year)	Count	22	13	12	16	63
	% Within Education level	34.9%	20.6%	19.0%	25.4%	100.0%
Bachelor Degree	Count	54	85	61	31	231
	% Within Education level	23.4%	36.8%	26.4%	13.4%	100.0%
Master Degree	Count	12	19	8	9	48
	% Within Education level	25.0%	39.6%	16.7%	18.8%	100.0%
Doctor Degree	Count	2	4	1	0	7
	% Within Education level	28.6%	57.1%	14.3%	0.0%	100.0%

Most of the respondents in this study have bachelor degree, and most of them (36.8%) are belong to rational consumers. People with master and doctors also comprise more in rational consumers segment. The segment with lower educational background are uninvolved consumers, have 13.4% bachelor, lowest among segments.

Test for Hypothesis 2:

$H_0$2**:** There is no relationship between education level and individual's food-related lifestyle.

$H_1$2: There is a relationship between education level and individual's food-related lifestyle.

Table 5-27. Chi-square test for hypothesis

	Value	**df**	**Sig. (2-tailed)**
Pearson Chi-Square	29.117*	18	.047
Likelihood Ratio	30.490	18	.033
Linear-by-linear Association	4.396	1	.036
Symmetric Measures			
Phi	.241		.047
Cramer's V	.139		.047

* 12cells (42.9%) have expected count less than 5. The minimum expected count is .92.

The results of Chi-square test shows that x^2= 29.117 and p=0.047<0.05. Therefor there is a relationship between education level and person's food-related lifestyle. Cramer's V value of 0.139 indicates low association.

5.4 Cross-tabulations and Chi-square analysis

Cross-tabulation analyses were performed on the research data in order to explain the research's two or more categorical variables simultaneously. In order to assess the statistical significance and strength of relationship of cross-tabulated variables Chi-square analyses were conducted. In the Chi-square analyses, when p<0.05, the null hypothesis will be rejected and the alternative hypothesis accepted. Cramer's V coefficient was used to interpret the data. The adjustment is such that V will range from 0 to 1. A large value of V merely indicates a high degree of relationship. As a general rule, values of V below 0,3 indicate low relationship, values between 0,3 to 0,6 low to moderate relationship, and values above 0,6 indicate strong relationship between the variables (Malhotra, 2002, 494).

5.4.1 Organic purchase habit of food-related lifestyle segments

In order to reveal the organic purchase habits, such as organic purchase behavior, frequency, total expenditure, among the FRL segments the cross-tabulation and chi-square test is conducted. Below are the results of significant relationship.

As seen from the Table 5-28, most of the consumers with organic purchase experience (32.7%) are rational food consumers. The non-organic buyers are fall in uninvolved (31.2%) consumer category.

Table 5-28. Organic purchase behavior and FRL segments cross-tabulation

Purchase organic food in recent 6 month		**FRL segments**				**Total**
		Food focused	Rational	Careless	Uninvolved	
Yes	Count	108	134	104	64	410
	% Within organic purchase	26.3%	32.7%	25.4%	15.6%	100%
No	Count	20	24	20	29	93
	% Within Organic purchase	21.5%	25.8%	21.5%	31.2%	100%

Test for Hypothesis 3:

H_0**3:** There is no relationship between organic purchase and individual's food-related lifestyle.

$H_1$3: There is a relationship between organic purchase and individual's food-related lifestyle.

Table 5-29.Chi-square test for hypothesis

	Value	df	Sig. (2-tailed)
Pearson Chi-Square	12.239*	3	.007
Likelihood Ratio	11.048	3	.011
Linear-by-linear Association	7.035	1	.008
Symmetric Measures			
Phi	.156		.007
Cramer's V	.156		.007

* 0cells (0.0%) have expected count less than 5. The minimum expected count is 17.19

The results of Chi-square test shows that x^2= 12.239, p=0.007<0.05 and Cramer's V value is 0.156. Therefore there is a weak relationship between organic purchase behavior and person's food-related lifestyle.

Table 5-30. Organic expenditure and FRL segments cross-tabulation.

Expenditure for Organic		FRL segments				Total
		Food focused	Rational	Careless	Uninvolved	
Very little	Count	23	41	25	29	118
	% Within expenditure	19.5%	34.7%	21.2%	24.6%	100%
Little	Count	26	38	40	13	117
	% Within expenditure	22.2%	32.5%	34.2%	11.1%	100%
Middle	Count	48	41	35	22	146
	% Within expenditure	32.9%	28.1%	24.0%	15.1%	100%
Very	Count	11	14	4	0	29
	% Within expenditure	37.9%	48.3%	13.8%	0.0%	100%

As seen from Table 5-30, most of the respondents' (32.9%) whose expenditure for organic food product comprises middle level among total food spending's is food focused consumer group. And careless consumer groups, on the other hand, most of the consumers (34.2%) spend little part of their food expenditure in organic products.

Test for Hypothesis 4:

$H_0$4**:** There is no relationship between organic spending and individual's food-related lifestyle.

$H_1$4: There is a relationship between organic spending and individual's food-related lifestyle.

Table 5-31.chi-square test for hypothesis

	Value	**df**	**Sig. (2-tailed)**
Pearson Chi-Square	28.154*	9	.001
Likelihood Ratio	31.606	9	.000
Linear-by-linear Association	12.500	1	.000
Symmetric Measures			
Phi	.262		.001
Cramer's V	.151		.001

* 1cells (6.3%) have expected count less than 5. The minimum expected count is 4.53.

The results of Chi-square test shows that x^2= 28.154, p=0.001<0.05, and Cramer's V value of 0.151. Therefor there is a low level of relationship between organic spending and person's food-related lifestyle.

5.4.2 Demographics and organic purchase habit

Cross-tabulation and chi-square test are conducted to obtain relationship between sample demographics and their organic purchase habit. Significant relationships are reported.

Table 5-32. Income level and organic purchase behavior cross-tabulation

Income		**Organic Buyer or not**		**Total**
		Yes	No	
<1000TL	Count	29	11	40
	% Within income	72.5%	27.5%	100.0%
1000-2000 TL	Count	81	33	114
	% Within income	71.1%	28.9%	100.0%
2000-5000 TL	Count	215	38	253
	% Within income	85.0%	15.0%	100.0%
5000-10000 TL	Count	67	9	76
	% Within income	88.2%	11.8%	100.0%
>10000 TL	Count	18	2	20
	% Within income	90.0%	10.0%	100.0%

As shown in the Table 5-32, the percentages of organic buyers are get higher by the increase in income level, 90% of respondents with a income above 10000 TL purchased organic food product in previous six month. The percentages are above 80 among consumers with the income level of 2000-5000TL and 5000-10000 TL.

Test for Hypothesis 5:

$H_0$5**:** There is no relationship between income level and organic purchase behavior.

$H_1$5: There is a relationship between income level and organic purchase behavior.

Table 5-33.chi-square test for hypothesis

	Value	**df**	**Sig. (2-tailed)**
Pearson Chi-Square	15.634*	4	.004
Likelihood Ratio	15.005	4	.005
Linear-by-linear Association	12.052	1	.001
Symmetric Measures			
Phi	.176		.004
Cramer's V	.176		.004

* 1cell (10.0%) have expected count less than 5. The minimum expected count is 3.70

The results of Chi-square test shows that x^2= 15.634, p=0.004<0.05, and Cramer's V=0.176. Therefor the there is a relationship between income level and organic purchase behavior with low association indicates low association.

Table 5-34. Number of children and organic spending cross-tabulation

Number of children		**Organic spending**				**Total**
		Very little	Little	Middle	Very	
0	Count	81	73	99	12	265
	% Within Number of children	30.6%	27.5%	37.4%	4.5%	100%
1	Count	12	16	22	7	57
	% Within Number of children	21.1%	28.1%	38.6%	12.3%	100%
2	Count	18	16	9	8	51
	% Within Number of children	35.3%	31.4%	17.6%	15.7%	100%
3	Count	6	5	15	1	27
	% Within e Number of children	22.2%	18.5%	55.6%	3.7%	100%
4+	Count	1	7	1	1	10
	% Within e Number of children	10.0%	70.%	10.0%	10.0%	100%

As shown in Table 5-34, most of the respondents in this study do not have children. Respondents who have one child (38.6%) claim their spending on organic food product among total food expenditure comprise middle level. Most of the respondents with two children claim their spending as very little (38.6%).

Test for Hypothesis 6:

$H_0$6**:** There is no relationship between number of children and organic spending.

$H_1$6: There is a relationship between number of children and organic spending.

Table 5-35. chi-square test for hypothesis

	Value	**df**	**Sig. (2-tailed)**
Pearson Chi-Square	31.435*	12	.002
Likelihood Ratio	30.330	12	.002
Linear-by-linear Association	.982	1	.322
Symmetric Measures			
Phi	.277		.002
Cramer's V	.160		.002

- 7cells (35.0%) have expected count less than 5. The minimum expected count is 0.71.

The results of Chi-square test shows that x^2= 31.435, p=0.002<0.05, Cramer's V=0.176. Therefor the consumers with one child are spending more (middle level) on organic product.

Table 5-36. Occupation and organic spending cross-tabulation.

Occupation		**Organic spending**				**Total**
		Very little	Little	Middle	Very	
Salaried employee (government)	Count	27	16	27	7	77
	% Within Occupation	35.1%	20.8%	35.1%	9.1%	100%
Salaried employee (private sector)	Count	37	38	28	6	109
	% Within Occupation	33.9%	34.9%	25.7%	5.5%	100%
Business owner	Count	9	11	7	7	34
	% Within Occupation	26.5%	32.4%	20.6%	20.6%	100%
Retired	Count	3	2	7	1	13
	% Within Occupation	23.1%	15.4%	53.8%	7.7%	100%
Housewife	Count	4	6	7	1	18
	% Within Occupation	22.2%	33.3%	38.9%	5.6%	100.%
Not working	Count	6	15	16	0	37
	% Within Occupation	16.2%	40.5%	43.2%	0.0%	100.%
Student	Count	32	29	54	7	122
	% Within Occupation	26.2%	23.8%	44.3%	5.7%	100.%

As shown from Table 5-36, most of the students (44.3%) organic food spending comprises middle level of their total food purchase. Majority of retired workers (53.8%)and housewife's (38.9%) are also claim their organic food spending as middle level. Salaried worker in private sector (34.9%) and the business owners (32.4%)spend little part of their food expenditure on organic foods.

Test for Hypothesis 7:

$H_0$7**:** There is no relationship between occupations and organic spending.

$H_1$7: There is a relationship between occupations and organic spending.

Table 5-37. Chi-square test for hypothesis

	Value	**df**	**Sig. (2-tailed)**
Pearson Chi-Square	34.155*	18	.012
Likelihood Ratio	34.463	18	.011
Linear-by-linear Association	2.852	1	.091
Symmetric Measures			
Phi	.289		.012
Cramer's V	.167		.012

* 7cells (25.0%) have expected count less than 5. The minimum expected count is 0.92.

The results of Chi-square test shows that x^2= 34.155, p=0.012<0.05, Cramer's V=0.167. Therefor there is as low level of relationship between occupation and organic purchase behavior.

5.5 Statistics for comparison of means

In this section, results of the statistical analysis conducted to test the formulated hypotheses through independent t-tests and ANOVA will be given in detail. A t-test is used to see if there are any significant statistical differences in the means of different two groups. An Independent Samples t-Test is used with groups that do not share pairs of scores. While conducting the t-tests, the independent variable was measured on a nominal scale and the dependent variable measured on an interval scale. When comparing more than two groups; Games-howll and Tukey tests are used as Post Hoc Test to determine the groups, which have significant differences between them.

5.5.1 Independent t-tests

In this part of the study, the hypotheses related with difference between groups in terms of purchase intention and consumption value are analyzed. The significant results of the analyses can be found in detail below.

Test for hypothesis 8:

$H_0$8: there will be no significant difference in purchase intention between consumers who had purchased organic food and not purchased in previous six month.

$H_1$8: there will be significant difference in purchase intention between consumers who had purchased organic food and not purchased in previous six month.

Table 5-38. Group statistics for Hypothesis

	Organic purchase experience	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**
Organic purchase intention	Yes	410	11.8049	2.59697	0.12825
	No	93	10.0753	3.41110	0.35371

Based on the results displayed in Table 5-39, there is significant difference in purchase intention between consumers who had purchase experience (Mean=11.80, SD =2.59) and without experience (Mean=10.08, SD= 3.41); t (117.33)=4.59, p = 0.00.

Table 5-39. Independent sample Test between organic buyers and non-buyers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Purchase intention	Equal variances assumed	16.320	0.000	5.447	501	0.000	1.72961	0.31752	1.10578	2.35344
	Equal variances not assumed			4.597	117.326	0.000	1.72961	0.37625	0.98449	2.47473

Test for Hypothesis 9:

$H_0$9: There will be no significant difference in Functional value for quality between organic buyers and non-buyers.

$H_1$9: There will be significant difference in Functional value for quality between organic buyers and non-buyers.

Table 5-40. Group statistics for Hypothesis

	Organic purchase experience	N	Mean	Std.Deviation	Std.Error Mean
Functional value-quality	Yes	410	15.2732	3.39257	0.16755
	No	93	14.4194	3.70758	0.38446

Table 5-41 Independent sample Test between organic buyers and non-buyers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Functional value-quality	Equal variances assumed	1.633	0.202	2.153	501	0.032	0.85382	0.39655	0.07472	1.63291
	Equal variances not assumed			2.036	129.216	0.044	0.85382	0.41938	0.02407	1.68356

According to the results, there is significant difference in functional value for quality between consumers who had purchase experience (Mean=15.27, SD =3.39) and without experience (Mean=14.42, SD= 3.71); t (501)=2.15, p = 0.032.

Test for Hypothesis 10:

H_0 10: There will be no significant difference in epistemic value between organic buyers and non-buyers.

$H_1$10: There will be significant difference in epistemic value between organic buyers and non-buyers.

Table 5-42. Group statistics for Hypothesis

	Organic purchase experience	**N**	**Mean**	**Std.Deviation**	**Std.Error Mean**
Epistemic value	Yes	410	14.9512	3.68869	0.18217
	No	93	13.9462	4.09763	0.4249

Table 5-43. Independent sample Test between organic buyers and non-buyers

		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Epistemic value	Equal variances assumed	2.754	0.098	2.323	501	0.021	1.00498	0.43267	0.15491	1.85506
	Equal variances not assumed			2.174	127.958	0.032	1.00498	0.46231	0.09022	1.91974

According to the results, there is significant difference in epistemic value between consumers who had purchase experience (Mean=14.95, SD =3.69) and without experience (Mean=13.95, SD= 4.09); t (501)=2.32, p = 0.021.

Test for Hypothesis 11:

H_0 11: There will be no significant difference in conditional value between organic buyers and non-buyers.

$H_1$11: There will be significant difference in conditional value between organic buyers and non-buyers.

Table 5-44. Group statistics for Hypothesis

	Organic purchase experience	N	Mean	Std.Deviation	Std.Error Mean
Conditional value	Yes	410	16.1927	3.04481	0.15037
	No	93	13.8172	4.4403	0.46044

Table 5-45.Independent sample Test between organic buyers and non-buyers

		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Conditional value	Equal variances assumed	28.458	0.000	6.183	501	0.000	2.37548	0.38419	1.62066	3.1303
	Equal variances not assumed			4.904	112.384	0.000	2.37548	0.48437	1.4158	3.33516

According to the results, there is significant difference in conditional value between consumers who had purchase experience (Mean=16.19, SD =3.04) and without experience (Mean=13.81, SD= 4.44); t (112.38)=4.904, p = 0.000.

5.5.2 ANOVA test

Test for Hypothesis 12:

H_0 12: There will be no significant difference in social & emotional value between different age groups.

$H_1$12: There will be significant difference in social & emotional value between different age groups.

Table 5-46. Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
Social & emotional value	Age group					Lower Bound	Upper Bound
	18-25	211	23.711	7.193	0.495	22.735	24.687
	26-35	185	21.589	7.390	0.543	20.517	22.661
	36-45	65	20.015	7.576	0.940	18.138	21.893
	45-59	34	19.706	6.873	1.179	17.308	22.104
	60+	8	23.000	8.832	3.123	15.617	30.384
	Total	503	22.171	7.438	0.332	21.519	22.823

Table 5-47. Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Social & emotional value	0.293	4	498	0.883

Table 5-48. ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Social & emotional value	Between Groups	1077.109	4	269.277	5.024	0.001
	Within Groups	26692.187	498	53.599		
	Total	27769.296	502			

According to the results of Levene's test for homogeneity of variance, p=0.883 greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(4,498)=5.024, P=0.001 < 0.05. Thus, there is significant difference in social & emotional value between different age groups. Respondents aged between 18-25 have highest mean for social & emotional value (23.711) than the mean of 26-36(21.589), 36-45(20.015), 45-59(19.706) and this difference is statistically significant ($p < 0.05$) according to the post-hoc test result.

Test for Hypothesis 13:

$H_0$13: There will be no significant difference in functional value-quality between different age groups.

$H_1$13: There will be significant difference in functional value-quality between different age groups.

Table 5-49 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
	Age group					Lower Bound	Upper Bound
Functional value-quality	18-25	211	15.678	3.195	0.220	15.244	16.111
	26-35	185	15.038	3.505	0.258	14.529	15.546
	36-45	65	14.369	3.503	0.434	13.501	15.237
	45-59	34	13.412	3.924	0.673	12.043	14.781
	60+	8	15.375	4.241	1.499	11.830	18.920
	Total	503	15.115	3.465	0.155	14.812	15.419

Table 5-50 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Functional value-quality	0.82	4	498	0.513

Table 5-51. ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Functional value-quality	Between Groups	203.243	4	50.811	4.345	0.002
	Within Groups	5824.069	498	11.695		
	Total	6027.312	502			

According to the results of Levene's test for homogeneity of variance, p=0.513, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(4,498)=4.345, P=0.002 < 0.05. Therefore, there is significant difference in functional value-quality between different age groups. Respondents aged between 18-25 have highest mean for functional value for quality (15.678) than the mean of 45-59(13.412) and this difference is statistically significant ($p < 0.05$).

Test for Hypothesis 14:

H_0 14: There will be no significant difference in functional value-price between different age groups.

H_1 14: There will be significant difference in functional value-price between different age groups

Table 5-52. Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
	Age group					Lower Bound	Upper Bound
Functional value-Price	18-25	211	15.678	3.195	0.220	15.244	16.111
	26-35	185	15.038	3.505	0.258	14.529	15.546
	36-45	65	14.369	3.503	0.434	13.501	15.237
	45-59	34	13.412	3.924	0.673	12.043	14.781
	60+	8	15.375	4.241	1.499	11.830	18.920
	Total	503	15.115	3.465	0.155	14.812	15.419

Table 5-53 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Functional value-price	0.071	4	498	0.991

Table 5-54 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Functional value-price	Between Groups	385.29	4	96.323	5.743	0.000
	Within Groups	8352.543	498	16.772		
	Total	8737.833	502			

According to the results of Levene's test for homogeneity of variance, p=0.991, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(4,498)=5.743, P=0.000< 0.001. Therefore, there is significant difference in functional value-price between different age groups. Respondents aged between 18-25 have highest mean for functional value for price (15.678) than the mean of 26-36(15.038), and 45-59(13.412) and this difference is statistically significant ($p < 0.05$).

Test for Hypothesis 15:

H_0 15: There will be no significant difference in social & emotional value between respondents with different number of children.

H_1 15: There will be significant difference in social & emotional value between respondents with different number of children.

Table 5-55 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
Social & emotional value	Number of child					Lower Bound	Upper Bound
	0	332	22.877	7.346	0.403	22.083	23.670
	1	63	20.667	7.725	0.973	18.721	22.612
	2	65	21.277	7.466	0.926	19.427	23.127
	3	29	19.310	7.677	1.426	16.390	22.231
	4+	14	22.286	5.483	1.465	19.120	25.452
	Total	503	22.171	7.438	0.332	21.519	22.823

Table 5-56 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Social & emotional value	0.982	4	498	0.417

Table 5-57 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Social & emotional value	Between Groups	597.28	4	149.32	2.737	0.028
	Within Groups	27172.016	498	54.562		
	Total	27769.296	502			

According to the results of Levene's test for homogeneity of variance, p=0.417 greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(4,498)=2.737, P=0.028 < 0.05. Thus, there is significant difference in social & emotional value among respondents who have different number of children.

Test for Hypothesis 15:

H_0 15: There will be no significant difference in conditional value between respondents with different income level.

$H_1$15: There will be significant difference in conditional value between respondents with different income level.

Table 5-58 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
Conditional value	Income level					Lower Bound	Upper Bound
	<1000	40	14.675	3.931	0.622	13.418	15.932
	1000-2000	114	15.281	3.516	0.329	14.628	15.933
	2000-5000	253	16.032	3.327	0.209	15.620	16.444
	5000-10000	76	16.290	3.072	0.352	15.588	16.991
	>10000	20	15.050	4.662	1.042	12.868	17.232
	Total	503	15.754	3.467	0.155	15.450	16.057

Table 5-59 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Conditional value	1.897	4	498	0.11

Table 5-60 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Conditional value	Between Groups	123.31	4	30.828	2.598	0.036
	Within Groups	5910.121	498	11.868		
	Total	6033.431	502			

According to the results of Levene's test for homogeneity of variance, p=0.11, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(4,498)=2.598, P=0.036< 0.05. There is significant difference in conditional value between different income levels.

Test for Hypothesis 16:

H_0 16: There will be no significant difference in conditional value between respondents with different occupation.

$H_1$16: There will be significant difference in conditional value between respondents with different occupation.

Table 5-61 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
	Occupation					Lower Bound	Upper Bound
Conditional value	Salaried employee (government)	90	16.233	3.152	0.332	15.573	16.894
	Salaried employee (private sector)	139	15.950	3.397	0.288	15.380	16.519
	Business owner	41	16.902	3.680	0.575	15.741	18.064
	Retired	13	16.462	1.713	0.475	15.426	17.497
	Housewife	21	16.095	3.345	0.730	14.573	17.618
	Not working	43	15.791	3.321	0.506	14.769	16.813
	Students	156	14.885	3.668	0.294	14.304	15.465
	Total	503	15.754	3.467	0.155	15.450	16.057

Table 5-62 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Conditional value	1.853	6	496	0.087

Table 5-63 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Conditional value	Between Groups	206.995	6	34.499	2.937	0.008
	Within Groups	5826.437	496	11.747		
	Total	6033.431	502			

According to the results of Levene's test for homogeneity of variance, p=0.087, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(6,496)=2.937, P=0.008 < 0.05. There is significant difference in conditional value between different income occupations. Students have lowest mean for conditional value (14.885) than the mean of government workers (16.233) and business owners (16.902) and this difference is statistically significant (p < 0.05).

Test for Hypothesis 17:

H_0 17: There will be no significant difference in social &emotional value between different lifestyle segments.

H_1 17: There will be significant difference in social &emotional value between different lifestyle segments.

Table 5-64 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Social & emotional value	Food focus	128	26.625	7.443	0.658	25.323	27.927
	Rational	158	21.146	6.906	0.549	20.060	22.231
	Careless	124	20.379	7.071	0.635	19.122	21.636
	Uninvolved	93	20.172	6.274	0.651	18.880	21.464
	Total	503	22.171	7.438	0.332	21.519	22.823

Table 5-65 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Social & emotional value	1.556	3	499	0.199

Table 5-66 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Social & emotional value	Between Groups	3475.212	3	1158.404	23.794	0.000
	Within Groups	24294.085	499	48.686		
	Total	27769.296	502			

According to the results of Levene's test for homogeneity of variance, p=0.199, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(3,499)=23.794, P=0.000 < 0.001. There is significant difference in social& emotional value between different FRL segments.

Food focused segment have highest mean for social & emotional value (26.625) than the mean of rational (21.146), careless (20.379) and uninvolved (20.172) and this difference is statistically significant (p < 0.001).

Test for Hypothesis 18:

H_0 18: There will be no significant difference in functional value-quality between different lifestyle segments.

H_1 18: There will be significant difference in functional value-quality between different lifestyle segments.

Table 5-67 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Functional value-quality	Food focus	128	16.625	3.246	0.287	16.057	17.193
	Rational	158	15.095	3.275	0.261	14.580	15.610
	Careless	124	14.508	3.397	0.305	13.904	15.112
	Uninvolved	93	13.882	3.470	0.360	13.167	14.596
	Total	503	15.115	3.465	0.155	14.812	15.419

Table 5-68 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Functional value-quality	0.17	3	499	0.916

Table 5-69. ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Functional value-quality	Between Groups	479.045	3	159.682	14.361	0.000
	Within Groups	5548.267	499	11.119		
	Total	6027.312	502			

According to the results of Levene's test for homogeneity of variance, p=0.916, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(3,499)=14.361, P=0.000 < 0.001, that there is significant difference in Functional value-quality between different FRL segments. Food focused segment have highest mean for functional value for quality (16.625) than the mean of rational (15.095), careless (14.508) and uninvolved (13.881) and this difference is statistically significant (p < 0.001). The uninvolved consumers also significantly different with rational consumers group (p < 0.001) in their functional value for quality.

Test for Hypothesis 19:

H0: There will be no significant difference in epistemic value between different lifestyle segments.

H1: There will be significant difference in epistemic value between different lifestyle segments.

Table 5-70. Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Epistemic value	Food focus	128	17.008	3.392	0.300	16.415	17.601
	Rational	158	15.481	3.259	0.259	14.969	15.993
	Careless	124	13.919	3.351	0.301	13.324	14.515
	Uninvolved	93	11.591	3.173	0.329	10.938	12.245
	Total	503	14.765	3.784	0.169	14.434	15.097

Table 5-71 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Epistemic value	0.791	3	499	0.499

Table 5-72. ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Epistemic value	Between Groups	1750.216	3	583.405	53.553	0.000
	Within Groups	5436.102	499	10.894		
	Total	7186.318	502			

According to the results of Levene's test for homogeneity of variance, p=0.499, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(3,499)=53.553, P=0.000 < 0.001, that there is significant difference in epistemic value between different FRL segments.

There is a obvious difference in mean values of four FRL segments, they show significantly difference (p < 0.001) with regard to the epistemic value among one each other.

Test for Hypothesis 20:

H_0 20: There will be no significant difference in conditional value between different lifestyle segments.

H_1 20: There will be significant difference conditional value between different lifestyle segments.

Table 5-73. Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Conditional value	Food focus	128	17.391	2.895	0.256	16.884	17.897
	Rational	158	16.127	3.115	0.248	15.637	16.616
	Careless	124	15.605	3.305	0.297	15.017	16.192
	Uninvolved	93	13.065	3.397	0.352	12.365	13.764
	Total	503	15.754	3.467	0.155	15.450	16.057

Table 5-74. Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Conditional value	0.793	3	499	0.498

Table 5-75 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Conditional value	Between Groups	1040.244	3	346.748	34.653	0.000
	Within Groups	4993.187	499	10.006		
	Total	6033.431	502			

According to the results of Levene's test for homogeneity of variance, p=0.498, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(3,499)=34.653, P=0.000 < 0.001, there is significant difference in conditional value between different FRL segments.

Food focused segment have highest mean for conditional value (17.391) than the mean of rational (16.127), careless (15.605) and uninvolved (13.065) and this difference is statistically significant (p < 0.001). The uninvolved consumers also significantly different with rational and careless consumers group (p < 0.001) in their conditional value.

Test for Hypothesis 21:

H_0 21: There will be no significant difference in functional value- price between different lifestyle segments.

H_1 21: There will be significant difference in functional value- price between

different lifestyle segments.

Table 5-76 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Functional value- price	Food focus	128	12.203	4.840	0.428	11.357	13.050
	Rational	158	10.089	3.634	0.289	9.518	10.660
	Careless	124	10.177	3.901	0.350	9.484	10.871
	Uninvolved	93	10.559	3.949	0.410	9.746	11.373
	Total	503	10.736	4.172	0.186	10.370	11.101

Table 5-77 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Functional value- price	6.226	3	499	0

Table 5-78 Robust test of equality means

		Statistic	df1	df2	Sig.
Functional value-price	Welch	6.169	3	256.989	0
	Brown-Forsythe	7.561	3	447.071	0

According to the results of Levene's test for homogeneity of variance, p=0.00, less than 0.05, means homogeneity of variance are violated, so Welch's test resulted referred, F(3,256.989)=7.632, p=0.000<0.001). There is significant difference in conditional value between different FRL segments.

Food focused segment have highest mean for functional value for quality (12.203) than the mean of rational (10.089), careless (10.177) and uninvolved (10.559) and this difference is statistically significant ($p < 0.001$).

Test for Hypothesis 22:

H_0 22: There will be no significant difference in purchase intention between different lifestyle segments.

$H_1$22: There will be significant difference in purchase intention between different lifestyle segments.

Table 5-79 Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Purchase intention	Food focus	128	12.836	2.357	0.208	12.424	13.248
	Rational	158	12.158	2.262	0.180	11.803	12.514
	Careless	124	11.097	2.571	0.231	10.640	11.554
	Uninvolved	93	9.000	3.014	0.313	8.379	9.621
	Total	503	11.485	2.842	0.127	11.236	11.734

Table 5-80 Test of Homogeneity of Variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Purchase intention	1.771	3	499	0.152

Table 5-81 ANOVA test results

		Sum of Squares	df	Mean Square	F	Sig.
Purchase intention	Between Groups	898.2	3	299.4	47.317	0.000
	Within Groups	3157.438	499	6.328		
	Total	4055.638	502			

According to the results of Levene's test for homogeneity of variance, p=0.152, greater than 0.05, means variance are equal. Therefore we use the ANOVA results, F(3,499)=47.317, P=0.000 < 0.001. There is significant difference in purchase intention between different FRL segments.

Food focused segment have highest mean for purchase intention (12.836) than the mean of careless (11.097) and uninvolved (9.000) and this difference is statistically significant (p < 0.001). Rational consumers show significant difference with careless and uninvolved segment. The careless and uninvolved show significantly difference among all the four FRL segments.

5.6 Structural equation model (SEM) for relationship between consumption value and purchase behavior

AMOS graph is used to generate structural equation model (SEM) to test the proposed mediation role of FRL between consumption values (social& emotional value, functional value for quality, conditional value, epistemic value and functional value for quality) and the organic food purchase intention. The results of factor analysis are used for variables in the model. SEM applied to test the mediation because SEM provides unbiased estimates of mediation, and that the bias-corrected bootstrap confidence intervals perform best in testing for mediation and suppression effects(Cheung & Lau, 2008).

In the first estimation of the proposed model Figure 5-1, t-value of the paths from social& emotional value to FRL (t=.067, p>.05), functional value for quality to purchase intention(t=0.00, p>.05) ,FRL to factor 7(t=.007, p>.05), and FRL to Factor 8 (t=.051, p>.05) show insignificance of the parameter value.

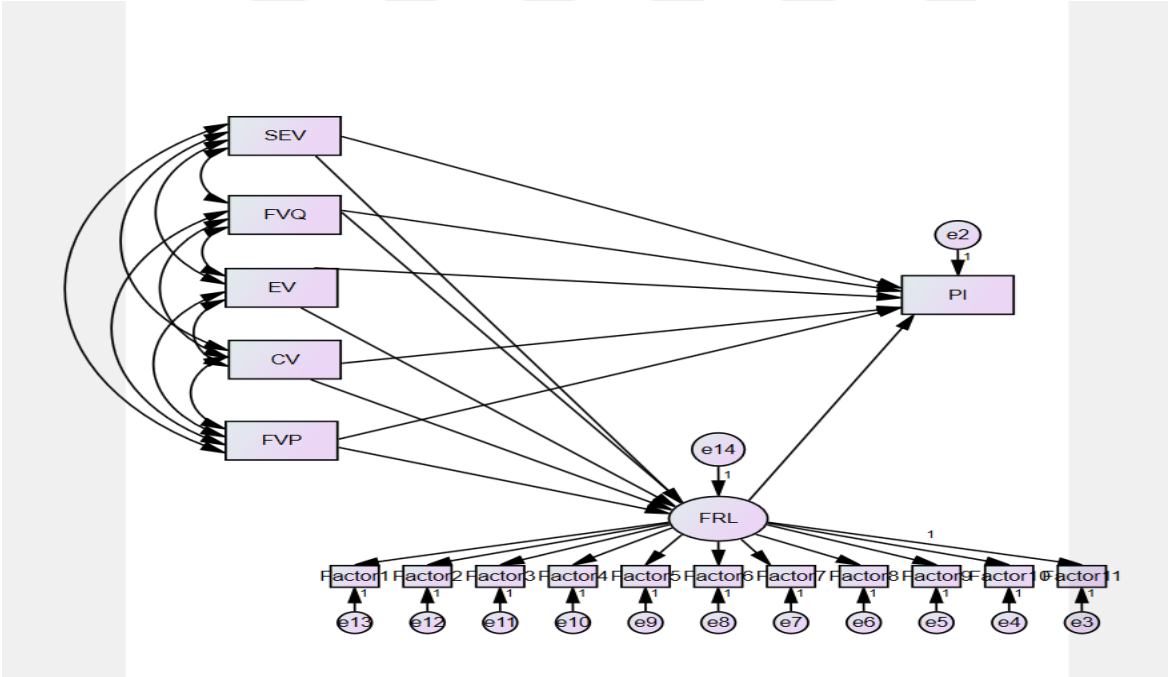


Figure 5-1. Proposed structural model

Notes:

Factor1: positioning food in my life, Factor 2:Adventure, Factor 3: knowing what I buy, Factor 4: Price-quality-food relationship, Factor 5: sharing the responsibility, Factor 6: Importance of product information, Factor7: contrary to the traditional habit, Factor 8: attitude to food related communication, Factor 9: shopping list, Factor 10: women's task, Factor 11: Social relationship, SEV: social &emotional value, FVQ: Functional value for quality, EV: Epistemic value, CV: Conditional value, and FVP: Functional value for price.

After eliminating the insignificant paths, refereeing the modification indices and previous literature, the factor 1(positioning food in my life) and factor11 (social relationship) error terms are correlated and the model fitness are increased. The factor positioning food in my life and the social relationship can be correlated because both of the factors are aim to measure common aspect of food related activities-the purchasing motives in original FRL instrument. And also combined into one factor in a research conducted by Fang & Lee (2009). After go through all these evaluation process, the model accepted according to the fit measures indicated in Table 5-82. The CFI shows a value, which is lower than acceptable fit according to the rule of thumb. However, according to Hooper Coughlan & Mullen (2008) and Kline (2015), If the goodness-of-fit index (GFI) and comparative fit index (CFI) should exceed 0.7, root mean square error of approximation (RMSEA) should be less than 0.08, and the ratio of chi-square and degree of freedom(X2 /df) should less than 5 model can be accept. So considering the different cut-off points referred in the literature and also for not to lose data by excluding variable the final structural equation model is accepted as shown in the Figure 5-2.

Table 5-82 Recommendations for Model Evaluation: Some Rules of Thumb

Fit Measure	**Good Fit**	**Acceptable Fit**	**Revised Model**
$\chi 2$	$0 \leq \chi^2 \leq 2df$	$2df < \chi^2 \leq 3df$	209.23
$\chi 2/df$	$0 \leq \chi 2/df \leq 2$	$2 < \chi 2/df \leq 3$	2.75
RMSEA	$0 \leq$ RMSEA ≤ 0.05	$0.05 <$ RMSEA $\leq .08$	.076
GFI	$0.95 \leq$ GFI ≤ 1.00	$0.90 \leq$ GFI < 0.95	.926
AGFI	$0.90 \leq$ AGFI ≤ 1.00	$0.85 \leq$ AGFI < 0.90	.883
NFI	$0.95 \leq$ NFI ≤ 1.00	$0.90 \leq$ NFI < 0.95	.870
CFI	$0.97 \leq$ CFI ≤ 1.00	$0.95 \leq$ CFI < 0.97	.899

Note. $\chi 2$: Chi-Square Value df: Degrees of Freedom; RMSEA: Root Mean Square Error of Approximation , GFI = Goodness-of-Fit-Index, AGFI = Adjusted Goodness-of-Fit-Index, NFI = Normed Fit Index, CFI = Comparative Fit Index.
Sources:(Schermelleh-Engel, Moosbrugger, & Müller, 2003)

Considering the effect size of individual path and the effect of mediator, effect size smaller than 0.13 considered "small" effect, effect size between 0.13-0.26 considered as "medium" effect and above 0.26 considered as " large" effect(Cohen, 1988).

As concluded in Table 5-83, consumption value has both direct and indirect effect on Organic food purchase intention. The social& emotional value only have direct effect to organic purchase intention, no mediation exist. FRL fully mediate the relationship between

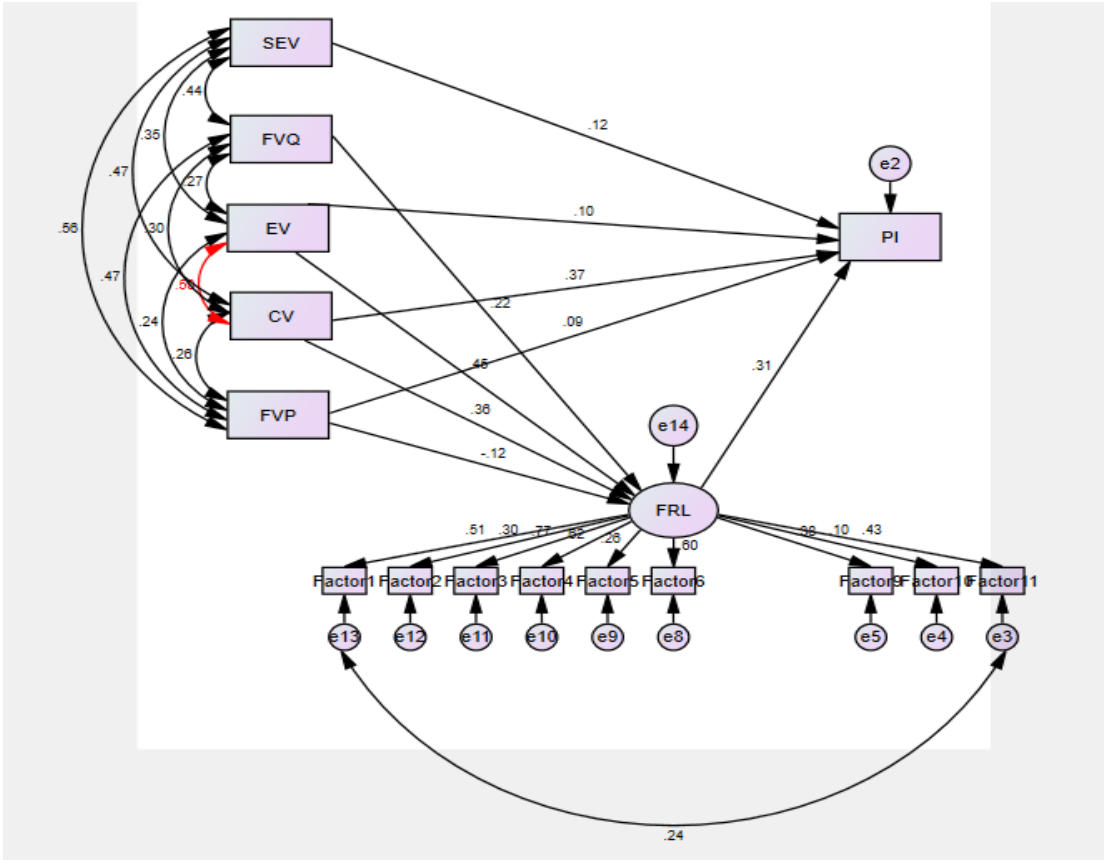
Functional value for quality and organic purchase intention, with small effect size (0.069). FRL partially mediate the relationship between epistemic value and organic purchase relation, with medium effect size (0.10+0.141=0.241). And the FRL also partially mediates relationship between conditional value and organic purchase intention, the effect size equal to 0.484, a large effect size. For the path between functional value for price and organic purchase, FRL negatively mediate the relationship, in other words suppress the relationship. Opposite to mediator, a suppressor is defined as a third variable that increases the regression coefficient between the independent variable and dependent variable by its inclusion in a regression equation (Conger, 1974), Suppression occurs when an indirect effect has a sign that is opposite to that of the total effect, and thus omission of the suppressor might lead the total effect to appear small or non-significant(Rucker et all., 2011). In brief, suppression concluded when the indirect effect is negative, and the direct effect increases when enters the mediator factor. The FRL suppress the relation between functional value for price and organic purchase behavior.

Table 5-83 The results of mediation for different path

Relationship	**Direct effect without mediator**	**Standardized Direct effect with mediator[a]**	**Standardized Indirect effect[a]**	**Results**
SEV-FRL--PI	.128(.001)	.12(.007)	.000	No mediation
FVQ-FRL-PI	.066(.054)	Not-significant	.069(.002)	Full mediation
EV-FRL-PI	.244(***)	.10(.029)	.141(.002)	Partial mediation
CV-FRL-PI	.479(***)	.37(.002)	.114(.002)	Partial mediation
FVP-FRL-PI	.052(.158)	.09(.006)	-.038(.019)	Suppression

Note. a: standardized direct and indirect effect and the P value uses the bootstrapping results

Figure 5-2 Revised structural Equation mode of this study



6 DISCUSSION AND CONCLUSION

In this section of the study the research finding will be compared with previous researches mentioned in the literature part. It's important to notice that, there is no previous research explored the FRL of food shoppers in Turkey, and testing the mediation role of FRL between consumption values and organic purchase intention also is the first attempt. Thus, obviously the results reveal some differences in comparison with previous researches that conducted in different culture and contexts. Following that, implications of the study as well as suggestions for different stakeholders will be mentioned. Lastly, research limitations and recommendation for future research will be included.

6.1 Discussion

The main objective of this study were providing overall understanding of food shopper FRL, identify the demographical, behavioral and psychographic (lifestyle and value) difference of organic buyers and non-buyers. Another important proposes was to develop and consumers response framework to organic food purchase intention in the context of consumption values taking into consideration of the mediating affect of FRL. Therefore, the result of the study were evaluated through statistical methods including frequency and descriptive analyses; cluster analysis; cross-tabulation and chi-square test; t-test and ANOVA and also structural equation modeling.

Prior to conducting descriptive research, a literature survey has been conducted find variables to form the theoretical framework of this study. Then after the research was conducted and results were evaluated, this theoretical framework was revised according to the results of the study.

Before going into the details of the main results, Some results of the factor analysis, FRL factors and one consumption value factor, needed detailed explanation for their expending meanings as they show difference with the original structure of instrument.

FRL factors and explanations

Factor 1: Positioning food in my life

- A familiar dish gives me a sense of security.

- Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved. It is a very exciting sensation.
- Being praised for my cooking adds a lot to my self-esteem.
- I dislike everything that might change my eating habits.
- Cooking needs to be planned in advance.

This factor includes 5 items, combination of the items from three different dimensions in the original instrument, self-fulfillment in food, security and planning, which links food-related activities to the value level(Grunert, et all, 2001). What is expected from a meal, and what is the relative importance of these various consequences? How important is the tradition, security and planning? These items express how an individual position food in their life(Brunsø & Grunert, 1998).

Factor 2: Adventure

- Recipes and articles on food from other culinary traditions make me experiment in the kitchen.
- I look for ways to prepare unusual meals.
- I like to try out new recipes.
- I like to try new foods that I have never tasted before.
- I love trying cooking recipes from foreign countries.

This factor is the combination of two dimensions; Novelty and looking for new way. Items can express individuals adventure mind both in food preparation and eating.

Factor 3: Knowing what I buy

- I make a point of using natural or organic products.
- I always buy organically grown food products if I have the opportunity.
- To me the naturalness of the food that I buy is an important quality.
- I prefer to buy natural products, i.e. products without preservatives.
- I like to know what I am buying, so I often ask questions in stores where I shop for food.
- I like buying food products in specialty stores where I can get expert advice.

This factor is combination of three dimensions, organic product, and health and

specialty shop, which all express high involvement aspect of food product. When consumers express their preference to organic, natural and healthy product, which all require high involvement from the consumer to know what it is and how to differentiate from conventional product, and consumers also like to buy in specialty store, that means they know or try to know about what they are going to buy.

Factor 4: Price-quality-food relationship

- It is important for me to know that I get quality for all my money.
- I always try to get the best quality for the best price.
- I compare prices between product variants in order to get the best value for money.
- I always check prices, even on small items.
- I find the taste of food products important.
- It is important to me that food products are fresh.
- Cooking is a task that is best over and done with.

This factor includes several dimensions from original instrument, such as price criteria, price quality relation, taste, freshness and interest in cooking. Deals with procedural knowledge on how the products obtained should transformed into meals, and what they expect, such as taste, freshness, price and also quality.

Factor 5: Sharing responsibility

- My family helps with other mealtime chores, such as setting the table and washing up.
- The kids always help in the kitchen; for example they peel the potatoes and cut up the vegetables.
- When I do not feel like cooking, I can get one of my family members to do it.

This dimension" whole family" renamed as sharing responsibility as the items can measure how the whole family share responsibility in the kitchen.

Factor 6: Importance of product information

- I compare labels to select the most nutritious food.

- I compare product information labels to decide which brand to buy.
- To me product information is of high importance. I need to know what the product contains.

This factor poses same item and same label with the original instrument that measures how checking the product information is important.

Factor 7: Contrary to the traditional habit

- I eat before I get hungry, which means that I am never hungry at meal times.
- In our house, nibbling has taken over and replaced set eating hours.
- I eat whenever I feel the slightest bit hungry.
- I use a lot of frozen foods in my cooking.

This factor includes items of two dimensions: snack versus meal and convenience. Turkey is a collectivistic society, belong to a group such as family and friends are important(ITIM International, 2015). This kind of collectivism culture builds their eating habit. In Turkish culture eating homemade meals with family and friends is important part of their eating habit(Tezcan, 2017). The items measure how different the respondents eating habit with the tradition.

Factor 8: Attitude to food related communication

- Information from advertising helps me to make better buying decisions.
- I have more confidence in food products that I have seen advertised than in unadvertised products.
- I am influenced by what people say about a food product.

This factor includes same items with the factor named attitude to advertising in the original instrument. It renamed as attitude to food related communication because the items measure not only the effects of controlled communication tool by business, but also measure how they react to the WOM, which is not controlled by the business.

Factor 9: Shopping list

- I make a shopping list to guide my food purchases.
- Before I do a large food shopping, I make a list of everything I need.

This factor is same with the dimension in the original instrument. This factor measure how do people shop for food product, organized or spontaneous? (Brunsø & Grunert, 1998).

Factor 10: Women's task

- I consider the kitchen to be the woman's domain.
- It is the woman's responsibility to keep the family healthy by serving a nutritious diet.

This factor used measures women's role in the kitchen. In several studies (Buitrago-Vera et al., 2016; Fang & Lee, 2009; John Thøgersen, 2017; Kesić et al., 2008; Uimonen, 2011) this factor appeared important in FRL segmentation, while several studies(Buitrago-Vera et al., 2016; Grunert et al., 2011) excluded this factor for being less important. In this study, the factor loading is high and the items also have a mean above the average that consumers agree with the statement.

The perception about the women's responsibility in kitchen is sourced by the culture of the society. Even though, majority of the respondents of this study is young population, women are though to be major player in kitchen work in Turkey. Contrary to this studies finding, in Uimonen (2011) study, there is a large majority against leaving these tasks merely on a woman's shoulders in Finland, since 61 percent disagreed with these statements. In the research done by Thøgersen (2017), the consumers in ten European countries have been studied, except Italy and Finland sample, the respondence in other eight european countries against the idea that cooking should be women's task.

Factor 11: Social relationship

- I find that dining with friends is an important part of my social life.
- Over a meal one may have a lovely chat with friends.

This factor used to measure importance of social aspects of food related activities (Grunert et al., 2001). Family and friend is important is important in collectivist Turkish culture, specially, eating together with family is important part in Turkish eating habit(Tezcan, 2017)

Consumption value

In consumption value factors, social value and emotional value combined and named as social & emotional value and other factors keep same with the original instrument.
The combination of social value and emotional value can be explained by the characteristics of Turkish culture. Turkish people are very emotional, this also expressed their collectivistic social construct that people prefer to belong to 'in groups' that take care of them in exchange for loyalty(ITIM International, 2015).

Factor 1: Social & emotional value

- Buying the organic food product would make a good impression on other people.
- Buying the organic food product instead of conventional products would feel like making a good personal contribution to something better.
- Buying the organic food product instead of conventional products would make me feel like a better person.
- Buying the organic food product would give its owner social approval.
- Buying the organic food product would improve the way that I am perceived.
- Buying the organic food product would help me to feel acceptable.
- Buying the organic food product instead of conventional products would feel like the morally right thing.

6.1.1 Organic VS non-organic

Respondents organic purchase behavior, organic knowledge and how the organic buyers and non-buyers are different in terms of demographics and consumption values are evaluated. The descriptive research result shows that majority (81.5%) of the respondents are organic buyers. This can be explained by the sample demographics of this study: young, educated and middle-income consumers, which is the main profile of the organic buyers in Turkey (Akgüngör et al., 2007; Ergin & Ozsacmaci, 2011; Ilyasoğlu et al., 2010).Contrary to the findings Aygen's (2012) study who claim the lower purchase frequency, most of the organic buyers in this study purchase organic food frequently-in weekly manner. The respondents' spending on organic foods is quite high that expenditure for organic food is occupying middle level of total food expenditure. In terms of organic knowledge, huge percentage of respondents correctly knows what is organic. This finding is also quiet different

with the study conducted by Akgüngör et al. (2001) that the author indicate low organic awareness among consumers. Therefore, these findings point out that consumer's knowledge about organic food increased. Organic consumption also shows a positive increasing trend in Turkey, both in frequency and spending.

In terms of the types of food product that mostly purchased, milk products, vegetables and fruits came to be mostly purchase product type. In Surrett & Sawatzki's (2016) report named "Turkish organic market overview" milk product reported as one of the most consumed organic food in Turkey due to it's importance in Turkish cuisine. Other than milk, this study finds vegetables and fruits also among the mostly consumed organic food products, as vegetables and fruits are perishable items grown under environmentally demanding situations where the difference between an organic and a non-organic vegetable is most prominent and the benefits of an organic vegetable most obvious to the consumer(Peart, 2013).

The organic and non-organic buyers are different in terms of their demographics and consumption values. And their purchase intentions of organic food are also different. The following section includes detailed discussion about these findings.

In terms of demographic factors, income level shows significant difference among organic buyers and non-buyers. Consistent with the Çiğdem's (2008) study, no significant result obtained in terms of gender, age, marital status, education and occupation. The research result of this study shows that most of the organic buyers have an income above of 2000TL, and the percentage of organic buyers increased following by the income level. Supporting the findings in literature(Akgüngör et al., 2007; Finch, 2006; Nie & Zepeda, 2011; Omar et al., 2016) that income level affect purchase behavior of organic foods and the high price assumed to be the main barrier in organic food consumption in Turkey(Ilyasoğlu et al., 2010). Among organic buyers, the organic food expenditure shows difference in terms of number of children. When there is one child in the family, the respondents spend middle level of their total food budget on organic food, and spend very little when there are two children. The decreasing of percentages of total expenditure when the number of children increase can be explained with a common sense that when parents have first child they always very conscious and emotional and try to offer best for their child. When there is a two children, the economic burden will

increase and also the parents became experienced to raising a child, and would not be very sensitive compare to their previous experience. These could be the reason of decreasing expenditure to organic foods when the number of children is increased. Of course the real wisdom behind this relationship has not been tested in this study. The relationship between organic food purchase and existence of children(Omar et al., 2016) with lower aged(Wier & Calverley, 2002) have been confirmed in the literature, but there is no evidence about the effect of number of children and organic spending's. Research should be done in future study.

The research result indicates consumption values shape consumers' market choice motives with respect to organic foods. Three factors of consumption values, functional value for quality, epistemic value and conditional value, made significant contributions to differentiate between organic buyers and non-buyers. In the literature, Finch (2006) emphasized the importance of consumption value for price in organic buying rather than consumption value for quality. Contrary to the literature, in this study, functional value for quality rather than price is the main factor that distinguishes organic buyers from non-buyers. This maybe explained as organic foods value added by consumers and generally accepted as a premium product. However, the attitudes and beliefs towards to the organic food quality are different among buyers and non-buyers. The epistemic value also significantly different among buyers and non- buyers, resulting in consumers who like novelty and with a strong curiosity or desire for knowledge, being more likely to choose organic food. As epistemic value concerns not only the provision of knowledge of products but also styles of presentation for them, all with potentially positive effects on choice behavior(Lin & Huang, 2012). In the literature, several research confirmed the role of epistemic value on sustainable food consumption, such as green foods (Biswas & Roy, 2015b;Gonçalves et al., 2016; Lin & Huang, 2012; Mohd Suki, 2015) and organic food(Finch, 2006). Consistent with Finch (2006) research, the conditional value found out as the main factor that differentiate the organic buyers from non-organic buyers. The worsening environment, government subsidy and promotions are the main conditions that drive consumers sustainable consumption behavior (Biswas & Roy, 2015a, 2015b; Lin & Huang, 2012).

The purchase intention between organic buyers and non-buyers are also appeared to be different, consumers who had purchased organic foods are more likely to have high

purchase intention. That means consumers satisfied with their previous experience.

6.1.2 Food-related lifestyle segmentation

For exploring food-related lifestyle segments in Turkey, this study used 11 factors of FRL factors in K-means cluster analysis. Four food-related lifestyle identified, which include; rational (34.1 %), food focus (25.4%), careless (24.7%) and uninvolved (18.5%). Each segment is different in terms of food-related life style and demographics. The demographics, organic purchase habit, consumption values and purchase intentions are also show significant difference among different segment.

6.1.2.1 FRL and demographic characteristic of segments

The food focused and uninvolved consumers segments are the two extreme lifestyle group. Food focused consumers segment score above average in every FRL factors. Consumers in this segment pay attention every single aspect of food. Vise versa, uninvolved food consumers do not show any interest. The uninvolved segment does not care what they buy, never consider any health, quality aspect of food and they are not price conscious at all. They do not pay attention any type of food related communication: advertisement or word-of –mouth (WOM). They do not attach social value to the food consumption. But they consume snack foods and use convenience food product. Most of the countries have consumers with such two extreme interests towards food. In Irish study, Ryan named the consumer group who is very indifferent in every aspect of food as extremely uninvolved consumer segment. Buitrago-Vera et al.,(2016) name this type of consumer as unconcerned, and (Fang & Lee, 2009;Grunert et al., 2001) called them as uninvolved. In all study, the uninvolved consumers does not active in all aspects of food-related activities, Snacks have replaced fixed meals to a greater extent among these consumers. In regard to size of population of this segment, the uninvolved consumers segments vary in size from over 20% to over 40% of the population in the literature. In our study, uninvolved consumers comprise 18.5% of the population, close to the findings in the literature. The food focused segment, on the other hand, are the consumers who holds open attitudes towards any kind of food-related activities. This segment also showed in many countries such as Ireland(Ryan et al., 2004) named enthusiastic consumers group, United states(Nie & Zepeda, 2011)Taiwan (Fang & Lee, 2009) named as adventurer

because this types of consumers are have strong interest for all aspects of food- from shopping, to cooking and consuming. And the percentages of these types of segment ranged between 12%-25%, mostly same with the percentage food focused respondents in this study.

Rational consumers are females with high educational background, (Buitrago-Vera et al., 2016; Fang & Lee, 2009; Nie & Zepeda, 2011), are novel consumers: they like to check product information and they really know what they buy. They are very organized, for them cooking needs to be planned in advance and like to guide their shopping with making shopping list. Not like food focused consumer group, they keep traditional habit in their food consumption. And assume food consumption as a way to earn sell-fulfillment and social value. This rational segment in this study share similar characteristics with the rational consumers in Grunert et al.,(1996); (2001), and Nie & Zepeda, (2011) study. The moderate consumer segment in Ireland(Ryan et al., 2004) and the astute consumer segment in Taiwan(Fang & Lee, 2009) appear some difference in their attitude towards the freshness, healthiness of food, but in other aspect of food related activities, these two segments are also same with the rational segment in this study.

The careless consumers, resemble with uninvolved consumer group (Grunert et al., 2001), not very active in their food related activities. Most of them are male and have lower level of educational background(Cullen & Kingston, 2009; Fang & Lee, 2009; Ryan et al., 2004). The most distinct difference between this two group are their attitude towards “food related communication”, “Price-quality–food relationship” and “contrary to traditional habit” factors. Careless consumers have positive attitude towards the advertisement and price conscious that contrary to uninvolved consumers segment. However, careless consumers group are not as snack food lovers as uninvolved consumers. In other factors, both of the two segment score below the average, just the level is different- uninvolved segment score most below the average. Most of the careless consumers are between age 18-25, and students. That means, they are learning about food, they influenced by advertisements and people opinions. This types of consumer segment did not enjoy cooking, for them any of the food characteristics are not important, except convenience (Grunert et al., 2001; Nie & Zepeda, 2011).

6.1.2.2 Organic purchase habit and FRL segment

Consumers belong to the different lifestyle segment show different level of involvement in organic food consumption(Nie & Zepeda, 2011). Most of the rational consumers had purchased organic food in previous six month where most of the careless consumers do not purchased organic food. And most of the food-focused consumers spend decent part of their total food budget on organic foods, and the careless consumers came out less like to spend money organic foods. The findings suggest that food focused and rational consumers who have knowledge about what they buy, enthusiastic about checking product information and also give high value to product attributes such as quality, freshness likely to be active organic food buyers(J. de Boer, Hoogland, & Boersema, 2007; Wier & Calverley, 2002; Zepeda & Nie, 2012)

6.1.2.3 Consumption value, purchase intention and FRL segments

All consumption value factors that consumers attach to organic food and their purchase intentions are significantly different among four food related life style segments. Food focused and rational consumers show higher consumption value towards organic food. For instance the food focused and rational consumers attach higher social and emotional value. This can be explained by the characteristic of the two segments that both of the food focused and rational consumers assume food as way of achieving self- fulfillment and recognition(Grunert et al., 2001) and enjoyed the social aspect of food(Kesić et al., 2008). They also attach high value to the quality and believe that organic food have good value for the money. This is also consistent with the main characteristic of food focused and rational consumers. Both of the two consumer segment tent to pay high attention to the price-quality relationship(Rexiti & Cobanoglu, 2017)and they are the major organic buyers(Nie & Zepeda, 2011). The food focused and rational consumers also evaluate conditions such as worsening environment and promotion in their purchase. Epistemic value also high in these two segments compare to other segments. The food focused and rational consumers have higher desire for knowledge that they like to check information's and product labels when they do shopping (Kesić et al., 2008;Rexiti & Cobanoglu, 2017). Lastly, the food focused and rational consumers were active organic food buyers (Nie & Zepeda, 2011). And they also have higher intention to buy organic foods. The results indicate that rational and food focused consumers

are attached high value to the organic foods and they are the potential organic buyers with the high intention to buy in the near future, can be the main target for organic food product. More importantly, these findings give evidence that the personal consumption value expressed in individuals food-related activities.

6.1.3 Mediating role of FRL

The structural equation model developed to reveal the relationship between consumption value, food-related lifestyle and organic purchase intention. Empirical results reveal that consumer's different consumption value regarding organic product independently effect their purchase decision (Sheth,et al., 1991).And food-related life style mediate the relationship between consumption value and food related behavior (Brunsø et al., 2004a, 2004b; Scholderer et al., 2002).

Specifically, the social& emotional value only have direct effect to the purchase intention, no mediation exist. That means this value domain expresses something that is not achieved best through one's food-related lifestyle. This might sourced from the collectivistic culture base of Turkish people, that they are very emotional, and social effect of their action always is the main concerns(ITIM International, 2015). So consumers organic purchase motivated by their social and emotional values that consumers attached to the organic product without the effects of food-relate lifestyle.

FRL fully mediate the relationship between functional value for quality and organic purchase intention. As displayed in Table 5-83, without mediator, the relationship between consumer's functional value for quality and their purchase intention are not statistically significant. After take consumer's food-related lifestyle into consideration the relationship appears significant. The result is contrary to the mainstream research findings(Ahmad & Juhdi, 2010; Bryła, 2016), which demonstrate the perceived belief in high quality of organic food is the main driver of organic food purchase. The research results further confirm the value behavior gap and the importance of FRL in analyzing food choice behavior. In other words, even though the consumers' believe in the higher quality of the organic food, this could not drive purchase behavior, rather, individuals FRL is the main influence factor.

The conditional value appeared to effect purchase intention of organic food directly and indirectly. The consumers purchase organic food out of their environmental concerns(Bryła 2016; Stobbelaar et al. 2007) and the main barrier of the organic purchase is the high price and low availability organic food products(Bryła, 2016). So the presence of situational variables, such as worsening environment, availability of the product, government subsidy and discount, will arise conditional value and as a result increase purchase intention. Of course, some individuals who has a very conscious FRL appeared to be potential organic food buyers (Lobo & Chen, 2012; Rexiti & Cobanoglu, 2017), even though the conditional value is weak, this type of consumers' would continue to express high organic purchase intention.

The epistemic value also effect purchase intention both directly and indirectly. Consumer's curiosity or desire for knowledge (epistemic value) in consumption would affect individual's food-related lifestyle and also purchase intention(Finch, 2006). Laroche et al(2001) have shown that consumers with product knowledge are prone to adopt new products. And Chan (1999) state that knowledge about ecological issues is a significant predictor of environmentally friendly behavior. So the epistemic value can be confirmed as a driver of organic food purchase intention. FRL, as mentioned above, will effect organic food purchase and also mediate the relationship.

The functional value for price effect purchase intention both direct and indirect way, and FRL negatively mediate the relationship, in other words suppress the relationship. It means that the effects of consumer's FVP on organic food purchase intention are strengthened, not weaken, by including individuals FRL (suppressor). Even though, the price is one of the main barrier in organic purchase behavior(Bryła, 2016), Because consumers add high value to the organic food that they agree with charging of premium price for organic foods(Aschemann-Witzel & Zielke, 2017). Consumers who is emphasizing the health, fitness, and freshness of food product in their lifestyle perceive food as means of obtain life value, (Nie & Zepeda, 2011) would attach higher value to the organic food price. So this can further prove the results that individuals FRL can strength the relationship between their FVP and purchase intention.

6.2 Conclusion

The research findings provided demographical, psychographic and behavioral profile of organic buyers and non-buyers. And also confirmed the effects on consumption values on purchase behavior considering the mediating role of FRL (Brunsø et al., 2004a, 2004b; Sheth et al., 1991). The results also provide new insights about the organic consumption behavior and organic consumers in Turkey.

The research finding reveals increasing trend in organic consumption both in purchase frequency and amount of spending. The continued availability and expansion of organic foods likely to appeal more organic practitioners.

The research finding also suggests some imperatives for practitioners. For the practical standpoint, it has enhanced the importance of business pay attention to the psychographic factors in targeting and creating marketing strategies to satisfy potential market as well as expend the market by attract non-buyers attention.

Specifically, food-focused and rational consumers are the current organic buyers who spend decent amount of money to organic foods and also have strong intention to buy again. To appeal food focused consumers' marketers can strengthen the link between healthiness and organic food in advertisements. In addition to that, introducing organic and low-calorie fitness product could appeal their interest, as they have very active lifestyle and young consumers with higher income. For rational consumers, marketer should offer detailed information in their commiunication as they like to check product information and pay high attention to the attributes. Managers can use the specialty stores rather than super market as a distribution channel because these types of consumers are give value to shopping in specialty store as consuming of organic food have a hedonic meaning for them. Food companies also should pay attention to the design of product labels and information tags since this group of consumers are trusting on product labels. As they are females and like to cook, cooking classes should provided using social media with the aim to increase awareness about the benefits of organic food consumption.

Careless and uninvolved consumers rarely use organic foods and express lower purchase intention. To target careless consumers and encourage them to use organic foods,

the producer should pay attention the convenience aspect in product design and emphasize the convenience of their products in their advertisement. And also increase availability of organic food as "seeing and buying" is the pattern of this groups food purchase and the trial of organic food increase their intention. To affect their choice behavior finding opinion leaders are important as this group of consumers is affected by pears opinion. Education programs on meal preparation and food nutrition could be targeted to careless consumers to encourage then to change careless attitude towards food for the final propose to get these careless consumers to organic buyers basket. Social media can be the main channel for the communication as most of the careless consumers are young and open to food related communication. Uninvolved consumers, like careless consumers, were looking for food products that can be quickly and easily prepared. Companies could provide ready to eat products in organic context. Besides, educating this group of consumers about the importance of food both for physical health and in social life is vital, as this segment comprise relatively big part of consumers (18.5%). They should be getting involved to the food-related activities. For this segment, companies and public policy could launch a social marketing campaign, which emphasize the importance of healthy eating habit.

The consumption values and FRL effect on organic purchase intention has emerged the importance of businesses and organization's incorporating social& emotional value, functional value, conditional value, epistemic value and individuals FRL in all their business activities, such as strength the hedonic aspect of organic food in marketing campaign to evoke consumers' social & emotional value that subsequently translate into higher purchase intention. In addition to that, consumers consider the price and quality of organic product, they believe the selling quality of organic products with maximum economic and ecological benefits, at the same time perceive organic foods offering tangible benefits though charge premium price (Aschemann-Witzel & Zielke, 2017), however this could not directly drive the purchase intention, individuals FRL mediate the relationship. Due to this, marketers and manufacturers should highlight the consumption of organic food as a means of lifestyle in their communication and also promote conscious and food focused lifestyle in their marketing communications and public relations. Next, consumers epistemic value could be strengthened by impart more knowledge to consumers about organic products and also stimulate curiosity by style presentation. For example, organic foods can be introduced as part of healthy

lifestyle via mass media, most importantly, refer the importance of organic foods in personal and public health and the environmental protection. Manufacturers also can take the product design in their consideration, and apply the design and style consideration in their promotion to stimulate consumers curiosity for try different and new products. Lastly, governments and green groups must emphasize the significance of weather changes and worsening environment conditions. In addition, governments and the business could provide discounts or promotions for organic products, and increase the availability of organic food for creating greater opportunities for boosting consumer's conditional value. And also promote the establishment of conscious FRL among population.

The findings of this study may helpful to public policy makers and health practitioners, too. They provide insights about whom to target healthy-eating education and what information strategies to emphasize. For instance, food focused consumers were have open attitude towards food and health and are willing to prepare healthy and different meals. To reach rational consumers group it may be helpful to focus on naturalness, freshness and quality of food. Strategies for careless and uninvolved consumers could emphasize the importance relationship between diet and health, as well as introduce recipes that are easy to prepare but healthy. The two groups of consumers comprise quite higher percentages and most of then are young. Public health organizations should pay close attention targeting these two groups. Health education programs at schools and TV programs are needed.

The finding of this study also contributes to the literature. The FRL segmentation of food shopper, while providing new insight about the psychographic profile of food shoppers in Turkey and also proved the cross-cultural validity of FRL tools and also its applicability in Turkish culture. By confirming the mediation role of FRL and consumption value, the study also introducing new insight into the FRL role in addressing value-behavior gap and also provide additional validation of basic assumption underlying the FRL concept.

6.3 Limitation and suggestions for future research

This study has not free from limitations. Since the survey used non-probabilistic sample method (convenience sampling) respondents are not representative to the target population -respondents are mostly are young between ages of 18-35 years old and have university or above educational back ground, and most of them have not child that can affect

the conclusions of the study. In the future, analyzing a higher number of cases that are more diverse in their demographics, would increase the validity of the test, using of nationality representative data would be much better to increase the applicability.

Regarding to the design of questionnaire, the statistic analysis of the question which aiming to find out the types of organic product reveal that the percentages of the option "other"(14.6%) is bigger than 10%, that means that there are other types of mostly consumed product which is not offered in the option list, an open ended questions should added in the future study to gain better understanding of product type consumed frequently. In addition to that, to better understand careless and uninvolved consumers segment a question that can measure the frequency of the eating out could add to the questionnaire.

Another limitation is that the study only focuses on the inter-environment-lifestyle and value, to find out the purchase intention motives. There are so many other external factors that can affect purchase behavior of food product, such as, advertisement, availability, family composition etc. The statistical analysis of this study shows that the expenditures of organic food are affected by number of children on the household. And the reason behind this relationship were not tested by this study and there is also no existing research regarding to the effect of number of children on organic purchase behavior, this can be assumed as a research gap that future research can be done regarding to this issue.

From this study we cannot identify how one moves from one FRL consumer segment to another; for that, we would need panel data to explore the dynamics of factors affecting lifestyle therefore the public policy makers and the companies can work efficiently on get the uninvolved consumers segment involved into food.

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Appendix1: Questionnaire in Turkish

İyi günler. Marmara Üniversitesi Sosyal Bilimler Enstitüsü tez çalışması için bir araştırma yürütmekteyim. Bir tüketici olarak sizin de görüşlerinizi almak istiyorum. Vereceğiniz tüm bilgiler istatistiksel amaçla değerlendirilecek ve gizli tutulacaktır. Katkılarınız için teşekkür ederim

1. Bölüm

1. Cinsiyetiniz?
   - ☐ Erkek
   - ☐ Kadın
2. Yaşınız?

   lütfen yazınız----------.
3. Medeni durumunuz?
   - ☐ Bekar
   - ☐ Evli
   - ☐ Dul/ boşanmış
4. Çocuğunuz var mı?
   - ☐ Evet
   - ☐ Hayır
5. Eğer 4. Soruya yanıtınız "Evet" ise kaç tane Çocuğunuz var?

   lütfen yazınız----------.
6. Eğitim Seviyesi
   - ☐ İlkokul mezunu
   - ☐ Ortaokul mezunu
   - ☐ Lise mezunu
   - ☐ Yüksek okul mezunu
   - ☐ Üniversite mezunu
   - ☐ Yüksek lisans mezunu
   - ☐ Doktora mezunu
7. Aylık hanehalkı geliriniz nedir?
   - ☐ <1000TL
   - ☐ 1000-2000 TL
   - ☐ 2000-5000 TL
   - ☐ 5000-10000 TL
   - ☐ >10000TL
8. Mesleğiniz nedir?
   - ☐ maaşlı çalışan (devlet memuru)
   - ☐ maaşlı çalışan (özel sektör)

☐ işyeri sahibi

☐ emekli

☐ ev kadını

☐ çalışmıyorum

☐ öğrenci

9. Evinizde tüketim için gıda ürünleri satın alır mısınız?

☐ Evet

☐ Hayır

☐ Ben satın almıyorum, ailem veya kendim üretiyorum

Eğer yanıt hayır ise, anketi sona erdirin

10. Son altı ay içinde organik gıda ürünü satın aldınız mı?

☐ Evet

☐ Hayır

Eğer "hayır" yanıtı verdiyseniz lütfen 2.bölüme geçiniz

11. Eğer 10 numaralı soruya verdiğiniz yanıt "Evet" ise, genellikle ne sıklıkla organik gıda satın alıyorsunuz?

☐ Her Gün

☐ Her Hafta

☐ Her Ay

☐ Yılda birkaç kez

☐ Yılda bir kez

12. Toplam gıda satın alma harcamaları arasında organik gıda satın alma yüzdesi nedir?

☐ çok az

☐ az

☐ orta

☐ çok

13. Hangi türde organik gıda satın alıyorsunuz?(Birden fazla yanıt olabilir)

☐ sebze ☐ meyve ☐ süt ürünleri ☐ et

☐ yumurta ☐ bakliyat ☐ yağ ☐ ekmek

☐ diğer

2.Bölüm Aşağdaki ifadelere ne ölçüde katılıp katılmadıgınızı belirtir misiniz?

		Kesinlikle katılmıyorum	Katılmıyorum	Ne katılıyorum ne Katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
1	Ürün bilgileri benim için çok önemlidir. Gıdaların içeriğini bilmeliyim.	☐	☐	☐	☐	☐
2	En besleyici gıdayı seçmek için gıda markalarını karşılaştırırım.	☐	☐	☐	☐	☐
3	Hangi gıda markasını alacağıma karar verirken ürünlerin bilgi etiketlerini karşılaştırırım.	☐	☐	☐	☐	☐
4	Reklamını gördüğüm ürünleri alırken daha güvende hissederim.	☐	☐	☐	☐	☐
5	Yiyecek konusunda insanların söyledikleri beni etkiler.	☐	☐	☐	☐	☐
6	Reklamlardaki bilgiler satın alma konusunda daha doğru kararlar vermemi sağlar.	☐	☐	☐	☐	☐
7	Yiyecek için alışveriş yapmayı severim.	☐	☐	☐	☐	☐
8	Yiyecekleri, konusunda uzman kişilerin görüşlerine başvurabileceğim özellikli ürün mağazalarından almayı severim.	☐	☐	☐	☐	☐
9	Ne aldığım benim için önemlidir, dolayısıyla alışveriş yaptığım yiyecekler hakkında sorular sorarım.	☐	☐	☐	☐	☐
10	Önemli olmayan ürünlerde bile fiyatları sürekli kontrol ederim.	☐	☐	☐	☐	☐
11	Yiyecek alışverişi yapmadan önce ihtiyaç listesini çıkartırım.	☐	☐	☐	☐	☐
12	Yiyecek satın alacağım zaman alışverişimi liste yaparak yönlendiririm.	☐	☐	☐	☐	☐
13	Aldığım yiyeceklerin doğal ürünler olması benim için	☐	☐	☐	☐	☐

		Kesinlikle katılmıyorum	Katılmıyorum	Ne katılıyorum ne Katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
	önemlidir.					
14	Katkı maddesi içermeyen doğal ürünler satın almayı tercih ederim.	☐	☐	☐	☐	☐
15	Her zaman, en iyi ürünü en iyi fiyata almaya çalışırım.	☐	☐	☐	☐	☐
16	İstediğim ürünü en uygun fiyata satın almak için aynı ürünün farklı markalarını karşılaştırırım.	☐	☐	☐	☐	☐
17	Paramın karşılığında kalite alacağımı bilmek benim için önemlidir.	☐	☐	☐	☐	☐
18	Yabancı ülkelerin yemek tariflerini denemeyi severim.	☐	☐	☐	☐	☐
19	Daha önce tatmadığım yeni yiyecekleri denemeyi severim.	☐	☐	☐	☐	☐
20	Fırsat buldukça organik yiyecekler satın alırım.	☐	☐	☐	☐	☐
21	Doğal ve organik ürünler kullanmaya özen gösteririm.	☐	☐	☐	☐	☐
22	Yiyeceklerin tadı benim için önemlidir.	☐	☐	☐	☐	☐
23	Dondurulmuş veya konserve ürünler yerine taze yiyecekleri tercih ederim.	☐	☐	☐	☐	☐
24	Yiyeceklerin taze olması benim için önemlidir.	☐	☐	☐	☐	☐
25	Yemek pişirmek, üzerinde çalışılması gereken bir iştir.	☐	☐	☐	☐	☐
26	Yemek yapmak için çok zaman harcamayı sevmem.	☐	☐	☐	☐	☐
27	Yeni yemek tarifleri denemeyi severim.	☐	☐	☐	☐	☐
28	Farklı yemekler pişirmeyi denerim.	☐	☐	☐	☐	☐
29	Farklı kültürlerin mutfak geleneklerinden yemek tarifleri ve makalelerle mutfakta farklı yemekler pişirmeyi denerim. .	☐	☐	☐	☐	☐
30	Evimizde hazır gıdaları çok kullanırız.	☐	☐	☐	☐	☐

		Kesinlikle katılmıyorum	Katılmıyorum	Ne katılıyorum ne Katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
31	Ailemin diğer üyeleri mutfakta bana yardımcı olurlar. Örnek olarak patates ve sebze doğrarlar..	☐	☐	☐	☐	☐
32	Ailem yemek vaktinde yardımcı olurlar.	☐	☐	☐	☐	☐
33	Yemek yapmak istemediğimde ailemin diğer üyelerinden yapmasını isteyebilirim.	☐	☐	☐	☐	☐
34	Yemek yapmak önceden planlanmış olmalıdır.	☐	☐	☐	☐	☐
35	Bana göre mutfak kadının sorumluluğundadır.	☐	☐	☐	☐	☐
36	Sağlıklı yiyecekler yaparak ailenin sağlığını korumak kadının sorumluluğundadır.	☐	☐	☐	☐	☐
37	Acıkmadan yemek yerim böylece hiçbir zaman yemek saatlerinde acıkmam.	☐	☐	☐	☐	☐
38	Ufak bir acıkma hissettiğim an yemek yerim.	☐	☐	☐	☐	☐
39	Evde sofraya oturup yemek yerine oldukça fazla atıştırmalık yiyoruz.	☐	☐	☐	☐	☐
40	Yemeklerimin övülmesi kendime olan saygımı ve moralimi arttırır.	☐	☐	☐	☐	☐
41	Bana göre; yemek yerken dokunmanın, koklamanın, tatmanın ve görmenin önemi vardır. Yemek tüm bu duyuları kapsar ve bu da heyecan verici bir histir.	☐	☐	☐	☐	☐
42	Yemek düzenimi değiştiren hiçbir şeyi sevmem.	☐	☐	☐	☐	☐
43	Bildiğim yiyecekler güvende hissettirir	☐	☐	☐	☐	☐
44	Arkadaşlarım ile yemek, sosyal yaşamımın önemli bir parçasıdır.	☐	☐	☐	☐	☐
45	Yemek sırasında hoş bir sohbet ortamı oluşur.	☐	☐	☐	☐	☐

3.Bölüm

Organik ürünün ne olduğunu biliyor musunuz?

☐ Evet

☐ Hayır

Organik ürün, üretimde kimyasal girdi kullanmadan, üretimden tüketime kadar her aşaması kontrollü ve sertifikalı tarımsal üretim biçimiye uygun, çevreye duyarlı ve sağlığa zararsız üretim şeklini ifade eden üründür.

Sizin düşüncenizdeki organik ürün, yukarıda yer alan tanım ile benzer midir?

☐ Evet

☐ Hayır

Aşağdaki ifadelere ne ölçüde katılıp katılmadığınızı belirtir misiniz?

		Kesinlikle katılıyorum	Katılıyorum	Ne katılıyorum ne Katılmıyorum	Katılmıyorum	Kesinlikle katılmıyorum
1	Organik gıda ürünleri uygun kaliteye sahiptir.	☐	☐	☐	☐	☐
2	Organik gıda ürünleri organik üretime uygun üretilmiştir.	☐	☐	☐	☐	☐
3	Organik gıda ürünleri, kabul edilebilir kalite standartlarına sahiptir.	☐	☐	☐	☐	☐
4	Organik gıda ürünlerinin kullanımı, standarttır .	☐	☐	☐	☐	☐
5	Organik gıda ürünleri makul fiyatlandırılmıştır.	☐	☐	☐	☐	☐
6	Organik gıda ürünleri, kendileri için ödenen fiyatın hakkını verir.	☐	☐	☐	☐	☐
7	Organik gıda ürünleri fiyatlarına göre iyi ürünlerdir.	☐	☐	☐	☐	☐
8	Organik gıda ürünlerin fiyatları daha uygundur.	☐	☐	☐	☐	☐

		Kesinlikle katılıyorum	Katılıyorum	Ne katılıyorum ne Katılmıyorum	Katılmıyorum	Kesinlikle katılmıyorum
9	Organik gıda ürünleri almak kendimi kabul görür hissetmeme yardımcı olur.	☐	☐	☐	☐	☐
10	Organik gıda ürünleri almak bilgimi ve farkındalığımı artırır.	☐	☐	☐	☐	☐
11	Organik gıda ürünleri almak diğer insanlar üzerinde iyi bir algı yaratır.	☐	☐	☐	☐	☐
12	Organik gıda ürünleri almak, ürünü alan kişiye sosyal ortamda kabul edilebilirlik sağlar.	☐	☐	☐	☐	☐
13	Alışılagelmiş ürünler yerine organik gıda ürünleri almak daha yüksek bir kişisel katkı yaptığımı hissettirir.	☐	☐	☐	☐	☐
14	Alışılagelmiş ürünler yerine organik gıda ürünleri almak manevi açıdan daha iyi hissettirir.	☐	☐	☐	☐	☐
15	Alışılagelmiş ürünler yerine organik gıda ürünleri almak, kendimi daha iyi bir insan gibi hissettirir.	☐	☐	☐	☐	☐
16	Kötüleşen çevresel koşullar nedeniyle, alışılagelmiş ürünler yerine organik gıda ürünleri alırım.	☐	☐	☐	☐	☐
17	Organik ürünler için devlet destek verdiği takdirde, alışılagelmiş ürünler yerine organik gıda ürünleri alırım.	☐	☐	☐	☐	☐
18	Organik ürünlerde promosyon veya indirim olduğunda, alışılagelmiş ürünler yerine organik gıda ürünleri almayı tercih ederim.	☐	☐	☐	☐	☐
19	Organik ürünler mevcut ise alışılagelmiş ürünler yerine organik gıda ürünleri alırım.	☐	☐	☐	☐	☐
20	Bir ürünü almadan önce o ürünün farklı yapımları ve çeşitleri hakkında önemli bilgiler edinirim.	☐	☐	☐	☐	☐
21	Ürünü almadan önce farklı markalar ve modeller hakkında çok					

		Kesinlikle katılıyorum	Katılıyorum	Ne katılıyorum ne Katılmıyorum	Katılmıyorum	Kesinlikle katılmıyorum
	fazla bilgi edinirim.					
22	Değişik bilgiler araştırmaya hevesim vardır.	☐	☐	☐	☐	☐
23	Yeni ve farklı ürünlerin bilgilerini araştırmayı severim.	☐	☐	☐	☐	☐
24	Yakın zamanda organik ürünler almayı planlıyorum.	☐	☐	☐	☐	☐
25	Organik ürünleri çevreye daha az zarar verdikleri için satın alırım.	☐	☐	☐	☐	☐
26	Alışılagelmiş ürünlerin özellikleri beni memnun ettiği için organik ürün almaya ihtiyaç duymuyorum.	☐	☐	☐	☐	☐
27	Arkadaşlarım ve akrabalarıma Organik gıdaları kullanımını tavsiye edeceğim					

TESEKKÜR EDERIM!

Appendix 2: Questionnaire in English

Have a nice day. I am conducting a research for the dissertation of Marmara University Institute of Social Sciences. As a consumer I want to get your views. All information you provide will be evaluated for statistical purposes and kept confidential. Thank you for your contributions

1. Bölüm

14. Your gender:

☐ Male

☐ Female

15. Your age:

Please write ----------.

16. Marital status

☐ Single

☐ Married

☐ Widow/divorced

17. Do you have child?

☐ Yes

☐ No

18. If the answer is "Yes" How many children do you have ?

Please write ----------.

19. Education level (last graduated level)

☐ Elementary and below

☐ Secondary school

☐ High school

☐ College (2 year)

☐ Bachelor Degree

☐ Master Degree

☐ Doctor Degree

20. Your income:

☐ <1000TL

☐ 1000-2000 TL

☐ 2000-5000 TL

☐ 5000-10000 TL

☐ >10000TL

21. Your occupation:

☐ Salaried employee (government)

☐ Salaried employee (private sector)

☐ Business owner

☐ Retired

☐ Housewife

☐ Not working

☐ Student

22. Do you purchase food products for family consumption?

☐ Yes

☐ No

☐ Me/my relatives produce

If the answer is "No",please end the questionnair

23. Did you purchase Organic food in previous six month??

☐ Yes

☐ No

If the answer is "No", please continue with part two

24. If the answer is "Yes" for question Number10, how often do you purchase organic food?

☐ Every day

☐ Once a week

☐ Once a month

☐ Several times a year

☐ Once a year

What is the percentage of organic food purchase among total food purchase expenditures ?

☐ Very little

☐ Little

☐ Middle

☐ Very

25. What type of organic food do you purchase??(Multipal choice questions)

☐ Vegetables ☐ Fruit ☐ Milk product ☐ Meat

☐ Egg ☐ Packaged good ☐ Oil ☐ Bread

☐ Others

Part 2. To what extent do you agree or disagree with the following statements?

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	To me product information is of high importance. I need to know what the product contains.	☐	☐	☐	☐	☐
2	I compare labels to select the most nutritious food.	☐	☐	☐	☐	☐
3	I compare product information labels to decide which brand to buy.	☐	☐	☐	☐	☐
4	I have more confidence in food products that I have seen advertised than in unadvertised products.	☐	☐	☐	☐	☐
5	I am influenced by what people say about a food product.	☐	☐	☐	☐	☐
6	Information from advertising helps me to make better buying decisions.	☐	☐	☐	☐	☐
7	I just love shopping for food.	☐	☐	☐	☐	☐
8	I like buying food products in specialty stores where I can get expert advice.	☐	☐	☐	☐	☐
9	I like to know what I am buying, so I often ask questions in stores where I shop for food.	☐	☐	☐	☐	☐
10	I always check prices, even on small items.	☐	☐	☐	☐	☐
11	Before I do a large food shopping, I make a list of everything I need.	☐	☐	☐	☐	☐
12	I make a shopping list to guide my food purchases.	☐	☐	☐	☐	☐
13	To me the naturalness of the food that I buy is an important quality.	☐	☐	☐	☐	☐
14	I prefer to buy natural products, i.e. products without preservatives.	☐	☐	☐	☐	☐
15	I always try to get the best quality for the best price.	☐	☐	☐	☐	☐
16	I compare prices between product variants in order to get the best value for money.	☐	☐	☐	☐	☐

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
17	It is important for me to know that I get quality for all my money.	☐	☐	☐	☐	☐
18	I love trying cooking recipes from foreign countries.	☐	☐	☐	☐	☐
19	I like to try new foods that I have never tasted before.	☐	☐	☐	☐	☐
20	I always buy organically grown food products if I have the opportunity.	☐	☐	☐	☐	☐
21	I make a point of using natural or organic products.	☐	☐	☐	☐	☐
22	I find the taste of food products important.	☐	☐	☐	☐	☐
23	I prefer fresh products to canned or frozen products.	☐	☐	☐	☐	☐
24	It is important to me that food products are fresh.	☐	☐	☐	☐	☐
25	Cooking is a task that is best over and done with.	☐	☐	☐	☐	☐
26	I don't like spending too much time on cooking*.	☐	☐	☐	☐	☐
27	I like to try out new recipes.	☐	☐	☐	☐	☐
28	I look for ways to prepare unusual meals.	☐	☐	☐	☐	☐
29	Recipes and articles on food from other culinary traditions make me experiment in the kitchen.	☐	☐	☐	☐	☐
30	I use a lot of frozen foods in my cooking.	☐	☐	☐	☐	☐
31	The kids always help in the kitchen; for example they peel the potatoes and cut up the vegetables.	☐	☐	☐	☐	☐
32	My family helps with other mealtime chores, such as setting the table and washing up.	☐	☐	☐	☐	☐
33	When I do not feel like cooking, I can get one of the kids or my husband to do it.	☐	☐	☐	☐	☐
34	Cooking needs to be planned in advance.	☐	☐	☐	☐	☐
35	I consider the kitchen to be the woman's domain.	☐	☐	☐	☐	☐
36	It is the woman's responsibility to keep the family healthy by serving a nutritious diet.	☐	☐	☐	☐	☐
37	I eat before I get hungry, which means that I am never hungry at meal times.	☐	☐	☐	☐	☐
38	I eat whenever I feel the slightest bit hungry. F38	☐	☐	☐	☐	☐
39	In our house, nibbling has taken over and replaced set eating	☐	☐	☐	☐	☐

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	hours.					
40	Being praised for my cooking adds a lot to my self-esteem.	☐	☐	☐	☐	☐
41	Eating is to me a matter of touching, smelling, tasting and seeing, all the senses are involved. It is a very exciting sensation.	☐	☐	☐	☐	☐
42	I dislike everything that might change my eating habits.	☐	☐	☐	☐	☐
43	A familiar dish gives me a sense of security.	☐	☐	☐	☐	☐
44	I find that dining with friends is an important part of my social life.	☐	☐	☐	☐	☐
45	Over a meal one may have a lovely chat with friends.	☐	☐	☐	☐	☐

Part 3

Do you know what is organic?

☐ Yes

☐ No

Organic product is a product that is sensitive to environment and harmless to health, without using chemical inputs in production, every step from production to consumption, controlled and certified agricultural production pattern.

Is the organic product in your thinking similar to the given definition?

☐ Yes

☐ No

To what extent do you agree or disagree with the following statements?

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	The organic product has consistent quality	☐	☐	☐	☐	☐
2	The organic product is well made	☐	☐	☐	☐	☐
3	The organic food product has an acceptable standard of quality	☐	☐	☐	☐	☐
4	The organic food product would perform consistently	☐	☐	☐	☐	☐
5	The organic food product is reasonably priced.	☐	☐	☐	☐	☐
6	The organic food product offers value for money.	☐	☐	☐	☐	☐
7	The organic food product is a good product for the price.	☐	☐	☐	☐	☐
8	The organic food product would be economical.	☐	☐	☐	☐	☐
9	Buying the organic food product would help me to feel acceptable.	☐	☐	☐	☐	☐
10	Buying the organic food product would improve the way that I am perceived.	☐	☐	☐	☐	☐
11	Buying the organic food product would make a good impression on other people.	☐	☐	☐	☐	☐
12	Buying the organic food product would give its owner social approval.	☐	☐	☐	☐	☐
13	Buying the organic food product instead of conventional products would feel like making a good personal contribution to something better.	☐	☐	☐	☐	☐
14	Buying the organic food product instead of conventional products would feel like the morally right thing.	☐	☐	☐	☐	☐
15	Buying the organic food product instead of conventional products would make me feel like a better person.	☐	☐	☐	☐	☐
16	I would buy the organic food product instead of conventional products under worsening environmental conditions.	☐	☐	☐	☐	☐
17	I would buy the organic product instead of conventional products when there is a subsidy for organic products.	☐	☐	☐	☐	☐
18	I would buy the organic food product instead of conventional products when there are discount rates for organic products or promotional activity.	☐	☐	☐	☐	☐
19	I would buy the organic food product instead of conventional products when organic products are available.	☐	☐	☐	☐	☐

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
20	Before buying the product, I would obtain substantial information about the different makes and models of products.	☐	☐	☐	☐	☐
21	I would acquire great deal of information about the different makes and models before buying the product					
22	I am willing to seek out novel information.	☐	☐	☐	☐	☐
23	I like to search for the new and different product information.	☐	☐	☐	☐	☐
24	I intent to buy an organic product in the near future.	☐	☐	☐	☐	☐
25	I would buy an organic product just because it has a lower polluting effect.	☐	☐	☐	☐	☐
26	I do no find a reason to switch to organic product since I am satisfied with the attributes of conventional product	☐	☐	☐	☐	☐
27	I would encourage friends and relatives to purchase organic food					

Thank you!