# THE PERCEPTION OF ORGANIC APPAREL AND ITS EFFECT ON THE PURCHASE BEHAVIOR OF CONSUMERS

ZERRİN EKŞİOĞLU

BOĞAZİÇİ UNIVERSITY

2019

# THE PERCEPTION OF ORGANIC APPAREL AND ITS EFFECT ON THE PURCHASE BEHAVIOR OF CONSUMERS

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Management

by

Zerrin Ekşioğlu

Boğaziçi University

2019

The Perception of Organic Apparel

and Its Effect on the Purchase Behavior of Consumers

The thesis of Zerrin Ekşioğlu

has been approved by:

Assist. Prof. Hüseyin Sami Karaca
(Thesis Advisor)

Prof. Özlem Hesapçı Karaca

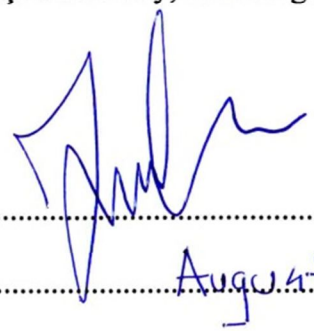
Assist. Prof. Hande Bilsel Engin
(External Member)

June 2019

DECLARATION OF ORIGINALITY

I, Zerrin Ekşioğlu, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.



Signature.....

Date.....August 1, 2019

ABSTRACT

The Perception of Organic Apparel

and Its Effect on the Purchase Behavior of Consumers

This thesis is a study on the topic of consumer behavior and attitude concerning organic apparel in Turkey. The purpose of this thesis is to present an overall view of Turkish organic textile market and to discover consumers' behavior and attitude towards organic textile products. In the research, Theory of Planned Behavior (TPB) was used to examine behaviors toward organic apparel products and purchasing intentions of customers. To fulfill the research objectives, primary and secondary data collection methods have been utilized. The main sources of secondary data were collected from different online sources such as reports, surveys, websites of research institutes, published books, online journals and papers. The primary data has been gained by utilizing both qualitative & quantitative methods of semi-structured questionnaire and survey instruments. Responses from 400 consumers from seven different regions of Turkey and various occupations were collected with a questionnaire. According to our research results, perceived benefits, perceived risks, perceived consumer effectiveness, anti-fashion attitude and green consumption values had significant and positive contribution to attitudes towards organic apparel. Research findings also confirm the positive influence of attitude, subjective norm and perceived behavioral control and negative influence of the occupation of being student on consumers' intention regarding organic apparel. Their intentions, in turn, were also seen to affect their green purchase behavior. Frequent online shopping behavior was also a significant antecedent which had negative impact on purchase behavior.

# ÖZET

## Organik Giyim Algısı ve Tüketici Satın Alma Davranışına Etkisi

Bu tez, Türkiye'deki organik giysilerle ilgili tüketici davranışları ve tutumları üzerine bir çalışmadır. Bu tezin amacı, Türkiye organik tekstil piyasasına genel bir bakış açısı sunmak ve tüketicilerin organik tekstil ürünlerine yönelik davranışlarını ve tutumlarını keşfetmektir. Araştırmada organik hazır giyim ürünlerine yönelik davranışları ve müşterilerin satın alma niyetlerini incelemek için Planlı Davranış Teorisi (TPB) kullanılmıştır. Araştırma amaçlarına ulaşmak için birincil ve ikincil veri toplama yöntemleri kullanılmıştır. İkincil verilerin ana kaynakları raporlar, anketler, araştırma enstitüleri web siteleri, yayınlanmış kitaplar, çevrimiçi dergiler ve bildiriler gibi farklı çevrimiçi kaynaklardan toplanmıştır. Birincil veriler hem nitel hem de nicel yarı yapılandırılmış anket yöntemleri ve anket araçları kullanılarak elde edilmiştir. Türkiye'nin yedi farklı bölgesinden 400 tüketiciden gelen yanıtlar online bir anketle toplanmıştır. Araştırma sonuçlarımıza göre algılanan faydalar, algılanan riskler, algılanan tüketici etkinliği, moda karşıtı tutum ve yeşil tüketim değerleri organik giyime yönelik tutumlara önemli ve olumlu katkı sağlamıştır. Araştırma bulguları ayrıca tutum, sübjektif norm ve algılanan davranış kontrolünün tüketicinin organik giysilerle ilgili satın alma niyeti üzerinde olumlu ve öğrenci olma durumunun ise tüketicinin organik giysilerle ilgili satın alma niyeti üzerinde olumsuz etkisini de ortaya koymaktadır. Niyetlerin ise organik tekstil ürünleri satın alma davranışlarını pozitif etkilediği görülmüştür. Son olarak, sık sık internet üzerinden alışveriş yapma öncesinin de, organik tekstil ürünleri satın alma davranışı üzerinde olumsuz etki yarattığı görülmüştür.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION ..... 1

1.1 Purpose of the research ..... 5

1.2 Contribution of the research ..... 7

CHAPTER 2: LITERATURE REVIEW ..... 9

2.1 The theory of reasoned action ..... 9

2.2 The theory of planned behavior ..... 10

2.3 Predicting pro-environmental choices in the TPB ..... 11

2.4 The TPB and green apparel literature in general and in Turkey ..... 13

CHAPTER 3: RESEARCH METHODOLOGY ..... 17

3.1 Research design ..... 17

3.2 Qualitative study ..... 17

3.3 Sampling ..... 17

3.4 Findings ..... 18

3.5 Hypothesis ..... 24

3.6 Quantitative study ..... 26

CHAPTER 4: RESEARCH RESULTS ..... 44

4.1 Model of the research ..... 44

4.2 Collection of data ..... 44

4.3 Findings ..... 45

CHAPTER 5: CONCLUSION AND DISCUSSION ..... 61

REFERENCES ..... 69

APPENDIX: QUESTIONNAIRE ..... 72

LIST OF TABLES


Table 1. Demographic Properties of Participants .....46

Table 2. Reliability Results of Constructs in the Research Questionnaire.....47

Table 3. Construct Means and Standard Deviations .....48

Table 4. Correlation Analysis Results.....49

Table 5. Regression Analysis Results for Effects of Selected Consumer Preferences On Attitude.....50

Table 6. Regression Analysis Results for Effects of Attitude, Subjective Norm and Perceived Behavioral Control on Intention .....52

Table 7. Regression Analysis Results for Effect of Intention on Behavior.....53

Table 8. Regression Analysis Results for the Effects of Selected Constructs on Attitude with Demographic Variables .....54

Table 9. Regression Analysis Results for the Effects of Attitude, Subjective Norm and Perceived Behavioral Control on Intention with Demographic Variables .....56

Table 10. Regression Analysis Results for the Effect of Intention on Behavior with Demographic Variables.....58

# ABBREVIATONS

| | |
|---|---|
| EFA | Eco-friendly apparel |
| LOHAS | Lifestyles of Health and Sustainability |
| PBC | Perceived behavioral control |
| PCE | Perceived consumer effectiveness |
| TPB | Theory of planned behavior |
| TRA | Theory of reasoned action |

# CHAPTER 1

# INTRODUCTION

The Earth cannot sustain the current levels and styles of excessive consumption. We are consuming finite resources at an accelerated pace while negatively impacting the environment in the process, to such a degree that our levels of consumption have become unsustainable. In order to achieve sustainable consumption, we need to consume less and differently.

Sustainable consumption is the use of products and services in a way that minimizes the impact on the environment, so that human needs can be met not only in the present but also for future generations. When sustainable consumption is practiced, resources are used wisely, and waste products and pollution are minimized. The main way this is achieved is by doing more and better with less. In other words, we can find ways to meet our needs and desires without depleting our planet's finite natural resources. Sustainable consumption and production drivers are communal and ecological problems that endanger both humanity and the earth such as soil degradation, global warming, pollution, depletion of non-renewable resources, scarcity and starvation. Unsustainable models of utilization and manufacturing of goods which comprises the incompetent use of world reserves, considerably contribute to these challenges (United Nations Environment Programme, 2009).

Ultimately, the consequences of living beyond the means of our planet’s eco systems and resources will come to affect everyone, which means that achieving and maintaining sustainable consumption is an individual as well as a societal problem.

The manufacturing and utilization of textile goods give rise to huge harm to the natural world thus this study is conducted on textile products. Cotton growers around the world use roughly $ 2.6 billion of pesticides each year (Harkin, 2007). Chemical pesticides and fertilizers damage the natural world and society by disrupting the diversity of plant and animal life in surrounding habitats, poising the soil and water and leading serious fatal illness complications associated with the vulnerability to toxic pesticides (Fletcher, 2008). Cotton fiber is indispensable for the textile business thus textile business reinforces the hazardous agricultural applications through the usage of conventional cotton fiber.

The textile industry has long been evaluated as one of the most non-eco-friendly commercial activity (Allwood, Laursen, Rodríguez, and Bocken, 2006). First of all, the production processes of the goods from fibers to fabrics in other words from farm to the end products, use immense amount of resources and release millions of barrels of industrial waste each year (Thiry, 2011). Secondly, harmful chemical substances used in the pretreatment processes, jeopardize environment and can lead serious fatal injuries for the people participated (Allwood et al., 2006; Ha-Brookshire and Norum, 2011). In addition, fashion industry is heavily affected by trends in which products must be constantly renewed in order to remain desired therefore, it causes unrestrained spending and contamination.

On the other hand, increasing consumer sensitivity towards pro-environmental issues and growing internal awareness in the industry, affect numerous textile companies to present various eco-friendly clothing. Fibers like bamboo, cotton, modal, viscose, jersey and jute mixture are extensively used in organic apparel production and they all can be simply recycled and reused (Ghosh, 2010).

Organic cotton is the most popular fiber in the organic apparel industry. Conversion to organic cotton manufacturing provides a reduction in the generated toxicity by 93% (Fletcher, 2008).

Organic cotton is cotton that originates from organic agriculture. Agricultural production is considered “organic” when it has been certified organic by independent inspection and certification bodies according to the rules and regulations that apply in that particular country, region, or consumer market.

The certified production and consumption of organic cotton dates back to the early 1990s, when pioneers in the United States and Turkey started to create markets for cotton that was grown as a rotational crop on certified organic farms. Up to 2000, the market for organic cotton and eco-textiles was shaped by a few committed and leading companies (Patagonia, OTTO, Coop, Nike, Hess Natur), together with a wide range of small and medium-sized textile and clothing companies. Since then many new brands and retailers have started an organic cotton blending or conversion program. The number of small and medium-sized companies entering the organic cotton market has also expanded rapidly to a current estimated total of 2,000 (Klein, 2006).

Data from the 2016 Organic Cotton Market Report by Textile Exchange indicates that organic cotton presently has a global market of 15.8 billion USD. It is expected that the market will grow further with the development of new techniques and technologies and the increase of both the reserve of organic cotton and the request for organic cotton products. The commitment by many leading global textile companies to source all their cotton from sustainable origins by 2020 signals that the demand for organic cotton fibers will also increase.

Organic cotton production is growing in importance in Turkey. Textile Exchange data shows that in 2016 Turkey ranks third (7 % in organic cotton production in the World, coming after India (67 %), and China (12 %). Across Turkey, the Aegean Region and the Southeast Anatolia Region are the leaders. Especially after the implementation of "Southeast Anatolia Project (GAP)" which is a comprehensive cross-industrial geographical growth enterprise aiming to foster regional prosperity, eliminate regional disparities, and put regional water and soil resources to the best use, it is expected that both the quality and the quantity of organic cotton grown in the region will boost.

In spite of significance of organic cotton production in Turkey, there is no prominent Turkish apparel brand which has developed environmentally friendly marketing strategies and practices yet. Mavi jeans and Taç Linens (Zorlu Group) present some organic collections using 100% first quality organic Aegean cotton however since they do not have a clear green marketing strategy, their initiatives are quite impotent.

One of the consumer segments that has the greatest potential to buy more organic certified products is called "Lifestyles of Health and Sustainability (LOHAS)". LOHAS is a consumer segment interested, amongst other things, in sustainability, health, sustainable living, pleasure and justice. LOHAS is defined by both values and behavior. The LOHAS concept originated in the United States, where it has long been established, but as a response to the increased awareness by many consumers about health and sustainable development, interest has also grown in Turkey. There is a potential in the LOHAS lifestyle pattern for companies and organizations that want to promote products and services in the area of sustainability because LOHAS consumers have higher purchasing power. These are the people,

who adopt a harmonious lifestyle while living and consuming. Since sustainable products are more expensive, living a LOHAS life requires higher income levels. LOHAS people have successful careers, above-average educational and in-come levels, and they also have ample means to maintain their quality of life. LOHAS life-style is also defined as expensive, i.e. green luxury. According to Kronsbein (2005), LOHAS people love to consume, and would like to enjoy life without compromising on entertainment and feeling guilty about anything. These people want to stay physically and mentally active for a long time.

The number of studies that specifically examine Turkish LOHAS' consumers' or in general Turkish consumer's attitudes towards organic cotton apparel is limited. For the consumption level, the studies in Turkey focused on only pro-environmental choices

## 1.1 Purpose of the research

This research aims to provide customer insight regarding organic apparel by analyzing the elements that motivates or prevents the purchase behavior. The current study aims to understand Turkish consumers' attitude towards organic cotton apparel and factors shaping their purchase intention and behavior.

In the research, an expanded TPB model was used to evaluate the main determinants of customer attitude, intention and buying behaviors relating to eco-friendly apparel.

Research Objectives

To determine consumer levels of:

- Subjective organic textile knowledge
- Perceived benefits
- Perceived risks
- Fashion leadership
- Anti-fashion attitude
- Regulatory focus orientation
- Perceived consumer effectiveness
- Labor reading behavior
- Green consumption values

To examine the relationships between subjective knowledge, benefits, risks, fashion leadership, anti-fashion attitude, regulatory focus orientation, perceived consumer effectiveness, labor reading behavior and green consumption values on attitude towards green apparel consumption.

To examine the relationships between perceived behavior control, subjective norm and attitudes on intention and purchase behavior for green apparel products.

## 1.2 Contribution of the research

Since Turkey is a significant producer and consumer of organic cotton and textile, Turkey is an ideal context for this research.

The findings are expected to provide valuable insights that will help brands in this industry to develop strategies.

In literature, research on environmentally concerned are generally conducted in western samples (Gam, Cao, Farr, and Kang, 2010; Ellis, McCracken, and Skuza, 2012). However, there has been restricted research on non-western countries. This research provides source for this gap.

This study provides new insight into connecting sustainable production with sustainable consumption which means understanding current green consumption patterns and harnessing behavior change initiatives. This research can help to identify opportunities for sustainable value creation for consumers, businesses and society as a whole.

The research identifies consumers' levels of subjective knowledge, benefits, risks, fashion leadership, anti-fashion attitude, regulatory focus orientation, perceived consumer effectiveness, labor reading behavior, green consumption values and attitudes and determine the impact of these factors upon purchase intention and actual purchase behavior and contributes to a better understanding of benefit-behavior relationships in Eco-Apparel consumer behaviors. Practitioners can use this data to feed their planning process, driving innovation and guiding key business decisions, including pricing, packaging and distribution.

This study, explaining consumers' attitude, intention and factors affecting purchase decision will help suppliers in the industry. The results will show what strategies can be effective to form positive attitudes and increase purchase intention.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 The theory of reasoned action

The Theory of Reasoned Action (TRA) was initially developed in 1967 as an expansion of the expectancy-value model and is used to predict and understand individuals' behavior. It asserts that humans are rational beings who utilize the information they come across in an organized fashion (Azjen and Fishein, 1980). Azjen and Fishbein argue that people evaluate the consequences of what they do before they decide to take action. Thus, the concept became known as "a theory of reasoned action" (Azjen and Fishbein, 1980).

The TRA was developed to understand the association between attitude and behavior. TRA theory argues that the intent of an individual is determined by two factors: personal component and social influence (Azjen and Fishbein, 1980). An attitude, or a personal factor, reflects a person's point of view as to the behavior or situation in question, be it positive or negative. The second factor that influences human intention is known as subjective norm which can be described as how a person perceives the social leverages he/she encounters and how these influences the way he/she acts (Azjen and Fisbein, 1980). The subjective norm is an evaluation of the attitudes of other socially important individuals (Azjen and Fishbein, 1980).

While commonly used as a predictor of behavior, some researchers have considered the variables included in the TRA to not sufficiently predict behavior in every case. The lack of balance between the predictive ability of attitudinal and

normative components was noted by Ajzen (1991) in his overview of the Theory of Planned Behavior (TPB).

Using the TRA, the TPB was developed through the incorporation of an additional construct called perceived behavioral control.

## 2.2 The theory of planned behavior

Azjen established the TPB in the mid 1980s. Soon after, it came to be one of the most accepted and used models for diverse fields of study in social sciences to understand and predict social behavior (Sheppard, Hartwick, and Warshaw, 1988). The theory suggests a positive relationship between intention and behavior, asserting that human behavior can be anticipated in advance via this link. Ajzen argues that behaviors should be able to be explained in light of the intention to perform the behavior in question as well as perceived behavior control (Ajzen, 2011). He goes on to assert that intentions should be able to foresee via looking at the attitude underlying the behavior, the subjective norm and perceived behavioral control.

According to the theory, attitudes and subjective norms shape intensions which in turn act as the most salient determining factors behind behavioral decisions.

Attitude refers to a person's comprehensive appraisal of performing the behavior in question whereas subjective norm is his/her perception of what his/her significant others would think about when the behavior is performed (Pavlou and Fygenson, 2006). Both attitude and subjective norm are motivational factors. However there also non-motivational factors behind behavior decision such as availability of opportunities and resources. Collectively, these factors represent

people's actual control over the behavior which is called perceived behavioral control.

Perceived behavioral control is added to the theory in an article of Ajzen (1991), as a relevant category, thus the initial theory of reasoned action came to be known as "the theory of planned behavior".

The TPB has been applied to various types of behaviors. For instance, Pavlou and Fygenson (2006) used the model to understand the electronic commerce adoption, Boldero, Moore, and Rosenthal (1992) to predict safe sexual practice, Dianne Parker et. al. (1992) on accounting for drivers' intentions to commit driving violations, and Black and Babrow (1991) on attitude to health for smoking cessation Figure 1 illustrates the conceptual model of TPB.

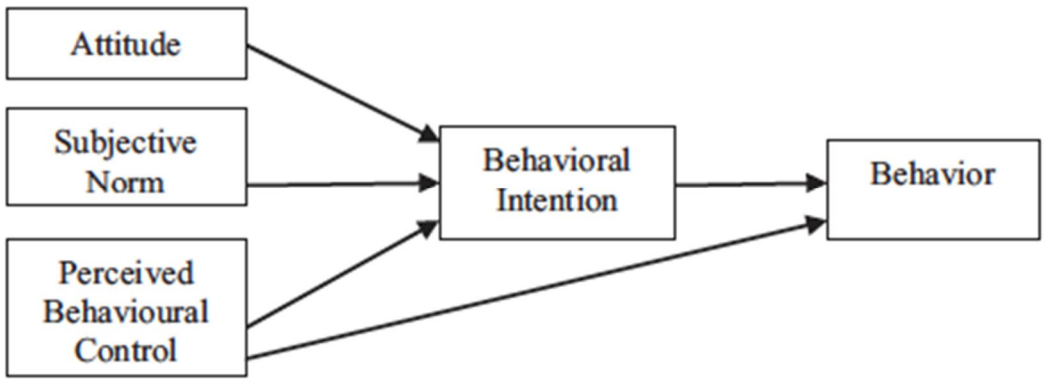



Figure 1. TPB Model, adopted from Ajzen, 1991

## 2.3 Predicting pro-environmental choices in the TPB

Shaul Oreg and Tally Katz-Gerro (2006) applied the TPB and value-belief-norm theory to a model to predict people's environmental choices with culture-level values

in their analysis. According to Oreg and Katz-Gerro, studies on pro-environmental choices within the TPB can be classified under two headings: First are those taking sociodemographic variables into account and second are those focusing on social-psychological constructs such as values, attitudes, and beliefs. In pro-environmental literature, there are many studies concentrating on values besides the TBP. Han (2015) studied how travelers' pro-environmental intentions were shaped in eco-friendly vocational settings via using value-belief-norm theory and the theory of planned behavior. He asserted that there was a satisfactory level of prediction involving nine constructs and twelve causal linkages for eco-friendly customer retention.

De Leeuw and Schmidt (2015) conducted a study using the theory of planned behavior to understand the convictions that impact high school students' pro-environmental behavior. Besides the TPB constructs, the research team, including Ajzen, employed descriptive norms, moral norms, sex, and empathic concern into the theory. In an effort to understand young students' involvement in environmental activism, Fielding, McDonald, and Louis (2008) developed a measurement that utilized standard TPB constructs as well as self-identity and environmental group membership for environmental activism. The TPB has been utilized to grasp an understanding of a range of environmentally responsible behaviors: Botetzagias, Dima, and Malesios (2015) used it to understand recycling and the role of moral norms and of demographic predictors in recycling behavior, Graham-Rowe, Jessop, and Sparks (2015) studied household food waste reduction to predict recycling, Yadav and Pathak (2016) employed the TPB to understand eco-friendly consumption behavior among young people in India and they included two additional constructs in the TPB being the environmental concern and environmental knowledge. They

concluded that intention of young individuals in India to consume green products is possible to predict owing to these factors: subjective norm, attitude, environmental concern, perceived behavioral control and environmental knowledge. Sparks and Shepher's (1992) study revealed that there is a link between eco-friendly consumption, subjective norms and perceived behavioral control, and intention to consume organic vegetables. Arvola et. al. (2008) extended the TPB model with moral and effective attitude variables in order to estimate intentions to purchase organic food in Italy, Finland, and UK. They found that the result varies from one country to another and moral attitude measurement was partially successful in prediction .

## 2.4 The TPB and green apparel literature in general and in Turkey

Purchasing green apparel products within the TPB has been subject to some studies in various contexts. Bong Ko and Jin (2017) studied the impact of two determinants, namely man-nature orientation and environmental knowledge, to anticipate purchase intention with respect to green textile products in USA and China and suggested that in both countries consumers' environmental knowledge strongly influenced the attitude to purchase green products. Tae-Im Han studied (2018) organic cotton apparel consumption in the U.S.A. and South Korea with a comparative perspective. In spite of different results in each country, he found out that perceived behavioral control (PBC) and descriptive norms were important in purchase intentions and "injunctive norms" play a role in attitudes.

Another factor to be considered in environmentally friendly product consumption is eco-fashion. D'Souza et. al. (2015) studied men's purchase intent

with regard to eco-fashion trends. According to them, there are four significant external variables in male intention to buy eco-fashion: “environmental concern, sustainable pricing, sustainable behavior and sustainable branding”. Consumption of environmentally sustainable textile and apparel products among young people (in China, US, and South Korea) has been studied by Kang, Liu, and Kim (2013) and they asserted that product knowledge, perceived consumer effectiveness and perceived personal relevance are important factors defining consumers’ choices.

For the consumption level, the studies on Turkey focused on pro-environmental choices. Bulut, Çımrin, and Doğan (2017)investigated consumers’ sustainable consumption behavior and considered gender and generation-related individual differences as variables. They argued that women have a higher level of sustainable consumption behavior in reusing products and consuming. While the baby boomer generation was consuming the highest level of unneeded consumption the Gen-Zers have less unnecessary consumption level. Turkyilmaz, Uslu, and Durmus (2015) studied the factors that shape consumers’ inward and outward environmental attitudes as well as the outcomes. The study showed that a person’s inward environmental attitude depends on these notions: collectivism, political action, liberalism, nationalism, patriotism, deontology and law obedience sensitivity. They argued that assumed long-term orientation did have no impact on inward environmental attitude. However, the study does not directly engage with the TPB.

Aksoy, Caber, and Albayrak (2013) examined the influence of environmental concern and skepticism on green purchase behavior through the TPB. They applied a survey with users of e-invoicing of Turk Telekom's program and found that customers with a high level of environmental concern, but less skeptical, reflect a positive attitude, have a high positive subjective norm and perceived behavior

control. These are factors that motivate them to have stronger intentions to become subscribers of e-invoices and these results are in line with TPB.

Konuk, Rahman, and Salo's (2015) comparative study from Turkey, Finland, and Pakistan investigated the relationships between green satisfaction, green trust, green equity and behavioral intentions and found out that these are important factors in determining green consumption behaviors. Şahin's ( 2013) study focused on energy conservation behaviors among the teacher candidates by using value-belief-norm theory.

Organic food consumption constitutes another focus of study in terms of consumer environmental behavioral approach in Turkey. İlter and Yılmaz (2016) worked on the determinants of organic food consumption in İzmir. Sibel Gülse Bal (2013) focused on organic milk consumption behavior in Tokat, and she asserted that there is a growing interest in Turkey for organic products due to the environmental degradation, pesticide and hormone remains in food products and animal welfare issues. However, as many others indicated, consumers in Turkey find organic food very expensive and this is one of the reasons determining their consumption trend. Therefore, as indicated Demirtas, Parlakay, and Tapki (2015), consumers' education and income levels, and their earlier experience of organic food consumption and life standards play an important role.

As studies such as Alkaya and Demirer's (2014); Asıoğlu and Sengun's (2017) showed, environmental awareness in Turkey is growing in terms of the production level of sustainable textile production and this will be useful in country's global competition. In accordance with this fact, studies on Turkey and Turkish consumption of organic apparel/textile are increasing in number recently. In 2013,

"Textile Exchange" a global non-profit that aims at "driving industry transformation in preferred fibers, integrity and standards and responsible supply networks," prepared an organic cotton sourcing guide on Turkey to be presented at its Istanbul convention. The guide details the collaborative attitudes of governments, the United Nations, and the private sector in Southeast Anatolia as organic cotton has been considered an instrument to cope with poverty in the region (Textile Exchange 2013). Kanat and Atılgan (2014) wrote an article titled "Green Marketing in Textile and Clothing Sector: Turkish Case" in which they indicated that green marketing in Turkey is growing in the recent years. They asserted that Turkey is striving for protecting its place in world's textile production and green marketing is an important element in achieving that. Their findings include that consumers' awareness, legal and bureaucratic regulations of public institutions for sustainability and the development of enterprises' awareness in social responsibility are the factors that contribute to the growing of green marketing in Turkey. (Baydar, Ciliz, and Mammadov (2015) conducted a study on the production of eco t-shirts and conventional t-shirts with organic cotton and they asserted that further studies should focus on the consumer behavior and sustainable practices in the use phase of the products in order to improve a more sustainable production trend in Turkey.

# CHAPTER 3

# RESEARCH METHODOLOGY

## 3.1 Research design

Both qualitative and quantitative research techniques are used in this study. Since we wanted to investigate a practical problem: to understand EFA consumption behavior of customers, and to evaluate the antecedents of attitude and intention to purchase EFA, we started with qualitative research method. In-depth interviews were conducted to gather deeper and richer information about perception and behavior of respondents. We generated hypotheses from both our qualitative study and literature review work to be tested through the quantitative approach.

## 3.2 Qualitative study

The main data collection method used in the study was semi-structured interview with consumers. In data sampling process, snowball sampling method was used with 20 individuals. The interviews that lasted approximately 90 minutes were conducted at coffee shops. Participants were asked open-ended questions which were designed to assess how they viewed environmentally responsible ways of acting and identify the dynamics behind their organic apparel acquisition behaviors.

## 3.3 Sampling

Relative heterogeneous demographic sampling method was selected in order to get a high representation power of population. The participants were students (10 %) and

non-students (90 %), females (60 %), and males (40 %), ages of participants were ranged from 21 to 55 years, they came from different socio-economic classes (A, B, C1, C2) and had diverse majors which include cloths, design, arts, teaching, psychology, consulting, engineering, housewives and finance. As to educational status, participants were either high school or university graduates. Some of the university graduates had bachelor's degrees whereas the rest had master's degrees. More than half of them (60 %) were using internet for shopping (search and purchase). Thus, it was provided that the findings were not only the preserve of a particular gender, income level, or major.

## 3.4 Findings

It is evaluated from opinions of participants to discuss clothing buying behavior, environmental attitudes, environmental clothing (EFA), and EFA buyers' behavior over the past year. It was found that all participants voiced a positive attitude towards the environment, regardless of whether they described themselves as environmentalist or not. Yet their purchasing behavior regarding EFA was certainly not influenced by their attitude towards environmental issues. In other words, if they prefer it, it would not be because of environmental concerns. Participants simply wanted to meet their needs. Health related concerns compromise an example.

"I do not take environmental issues into consideration when I buy clothes (Participant1)."

"One person's effort is useless. This phenomenon needs more substantial precautions (P5)."

“Consumers’ efforts are impotent, the government & private sector should take more responsibility and offer more effective solutions. (P9)”.

On the other hand, more than half of the participants stated the positive attitude towards eco-clothing. Contradictory with certain former reviews such as Salomon and Rabolt’s study (2004), we observed a strong correlation between EFA attitude and EFA purchasing behavior.

EFA’s benefits were identified from multi-perspectives; resource saving (less water consumption), environmental protection (clean water and clean soil), health, benefits for the next generation, farmers’ health, unique texture, sweat absorbing texture, protection from allergy and skin related diseases. Nearly 90 percent of the participants, who have positive EFA attitudes were regularly buying EFA. Most of the regular buyers have children under seven and they first bought EFA for their babies. Even, the first time they considered buying EFA was during their pregnancy periods. Thus, having a baby or small child seems to be the most important motive for buying EFA. 90% of the EFA buyers were female participants. Besides under seven children mothers, there were another EFA buyer-group: ‘Label Readers’. Despite the lack of marketing and merchandising efforts of the brick and mortar retailers and stores for the EFA, since these people never buy a product before perusing the label, they were able to discover organic textile products before anyone else. Thus, we suggest that they are the early adopters of EFA.

Lastly, online shopping behavior has also been a motivator for EFA purchasing behavior since it eliminates the convenience and assortment problems which was defined as one of the main barriers against EFA purchase behavior.

“Internet shopping is a better way to buy organic apparel rather than physical stores (P14)”.

Other participants had very specific negative attitudes towards eco-clothing because of lack of knowledge, and insufficient advantages of product (costly, poorer design and no special function) and shortcomings in personal cost advantages (availability, assortment and too much effort).

Inferior design was the most important factor that the participants gave for the negative purchase decision for organic cotton clothes.

“It’s not stylish, it certainly does not appeal to me or my children (P5)”.

“I don’t buy anything for me or my kids unless I like its design (P3)”.

“It’s always unattractive clothes like shopping bags, not good looking, no good colors no catchy design (P11)”.

“I don’t buy eco-apparel unless high end fashion brands produce them (P15).”

“Eco-apparel products are not fitting my aesthetic style (P19).”

“Eco-Apparel products are not matching with my other clothes (P20)”.

Expensiveness and perceived expensiveness were the second reason.

“The price of organic cotton products is usually very high (P17).”

“It is probably over-priced, when I consider organic food’s prices, I am sure I cannot afford to buy, government should support in order to decrease prices (P9).”

The third reason given was that organic cotton clothing was not easy to access. Convenience may be described as a perceived time risk. This risk plays important role in eco-apparel customer buying behavior. Participants did not want to put forth extra effort to buy eco-apparel products.

"I do not use online shopping and in my shopping district there are very few stores selling eco-apparel (P1)."

"It's impossible to find eco-apparel in the stores, there is no special merchandising or a corner for these products, even sales representatives are unaware that they are selling eco-apparel (P12)."

Except for one consumer, one benefit-behavior connection was derived from the participants' interviews: "product benefits". Only Participant 8 talked about emotional benefit of feeling good due to doing the right thing for the environment. Organic textile products are favored by participants because 1) they are air-permeable, 2) they absorb moisture and 3) they do not contain health threatening chemicals. These product features appear to be the main reasons behind preferring eco-clothing.

"I had allergy and skin related diseases before I changed my home textile products, since they are from 100% organic cotton my allergy passed away (P4)."

"Once you touch 100% organic cotton products, you can never give up buying; it's as soft as your baby's skin (P13)."

"I always buy 100% organic cotton denim; it keeps the moisture of my skin (P2)."

Half of the participants were either unaware of the benefits of organic products or wrongly informed.

"100% cotton means organic (P1)."

"There is no chemical in cotton products (P12)."

Participants stated that it is difficult to buy organic clothes whenever such a need arises because there are a number of obstacles on the way. Lack of knowledge about the what is organic and what is not, where to obtain such products and the benefits of organic products is a one of the main problems. People have negative attitudes about EFA, as well. Some find EFA products unstylish, saying that such products do not appeal to their taste. Along these, EFA products are not easily found in the market. One needs to put more effort to purchase them. Economic reasons compromise yet another obstacle as many people do not want to pay the higher costs such products have. Salespeople in retail shops fail to promote organic products because they themselves are not properly equipped with sufficient knowledge.

The main difficulty is negative attitude about attributes and characteristics of organic apparel. For example, organic apparel is less stylish when compared with main stream apparel, which is stated by participants.

Second prominent constraint is lack of knowledge. Participants of the study had restricted awareness of the relationship between environmental issues and the production and consumption of clothing. The lack of understanding of the impact of clothing production on the environment also serves as a barrier. In particular, there is a misperception that natural fibers are better for the environment as compared to man-made fibers. Many of the participants also indicate that they have limited

knowledge of sources for the procurement of organic clothing. We see that consumers have little knowledge about green products and are highly reliant on ecolabels to make an informed choice since sales representatives are lacking adequate organic product knowledge.

Restricted availability of supply sources and limited accessibility of clothes with the desired attributes are two significant external barriers that limit participants' organic apparel purchase behavior. The other major external barrier is economic resources, with most participants claiming that their financial circumstances do not allow them to obtain EFA on a consistent basis. An additional external barrier identified by the participants is merchandising. Because of unorganized merchandising of organic apparels consumers are not able to find the products in the stores.

To conclude we can say that, companies which differentiate their organic apparel presentations and educate their sales team, give importance designs of their products and offer variety of products with a proper price strategy can easily go one step ahead in the competition.

We based theoretical framework of our study on TPB model and used its main conceptual elements (i.e., attitude, subjective norms and perceived behavior control [PBC]). After reviewing the literature and evaluating the results of 20 in-depth interviews, we included additional constructs i.e. Perceived Consumer Efficiency [PCE], EFA knowledge, perceived benefits, perceived risks, fashion leadership, anti-fashion attitude, regulatory focus orientation, perceived consumer efficiency and label reading behavior) to enhance the interpretive power of the original TPB.

## 3.5 Hypothesis

Based on this review of literature and our qualitative research results, we formed hypotheses for the proposed study. They are given below.

H1: Consumers' subjective knowledge level will be predictor of consumers' attitude regarding organic apparels.

H2: Perceived benefits derived from the use of organic cotton apparel products, will positively relate to attitude toward purchasing organic apparels.

H3: There will be a prominent relationship between the attitude of the participants and risks related with organic apparels.

H4: There will be a positive relationship between the perceived consumer effectiveness of the use of organic cotton textiles and the attitudes of the consumers regarding organic apparels.

H5: Green consumption values will positively affect consumers' attitudes toward organic apparels.

H6: Fashion leadership will have a significantly negative effect on attitudes of the consumers for organic apparels.

H7: Consumers' anti-fashion attitudes will positively affect their attitudes toward organic apparels.

H8: There will be a prominent relationship between attitudes of the consumers for organic clothing and their promotion focus orientation.

H9: Consumers' prevention focus orientations will have a positive impact on their attitudes about purchasing organic cotton textile products.

H10: Label reading behavior is a positively associated with the attitudes of the participants about buying organic apparels.

H11: Attitudes of the participants about buying organic apparels will have a positive relationship with their intention to buy organic apparels.

H12: Consumers' perceived behavior control about the use of organic cotton textile products will influence positively their intentions towards buying organic apparels.

H13: Subjective norms will positively influence intentions towards buying organic apparels.

H14: Positive intentions towards buying organic apparels will positively influence purchase behavior.

The research design for this study is depicted in the operational model presented in the figure below (Figure 2).

The independent variables of this research are: EFA subjective knowledge, perceived EFA benefits, perceived EFA risks, consumer fashion leadership, anti-fashion attitude, consumer regulatory focus orientation, perceived consumer effectiveness, consumer label reading behavior, green consumption values, attitude towards green apparel consumption, subjective norm and perceived behavior control.

The two dependent variables include: consumer apparel purchase intention and purchase behavior.

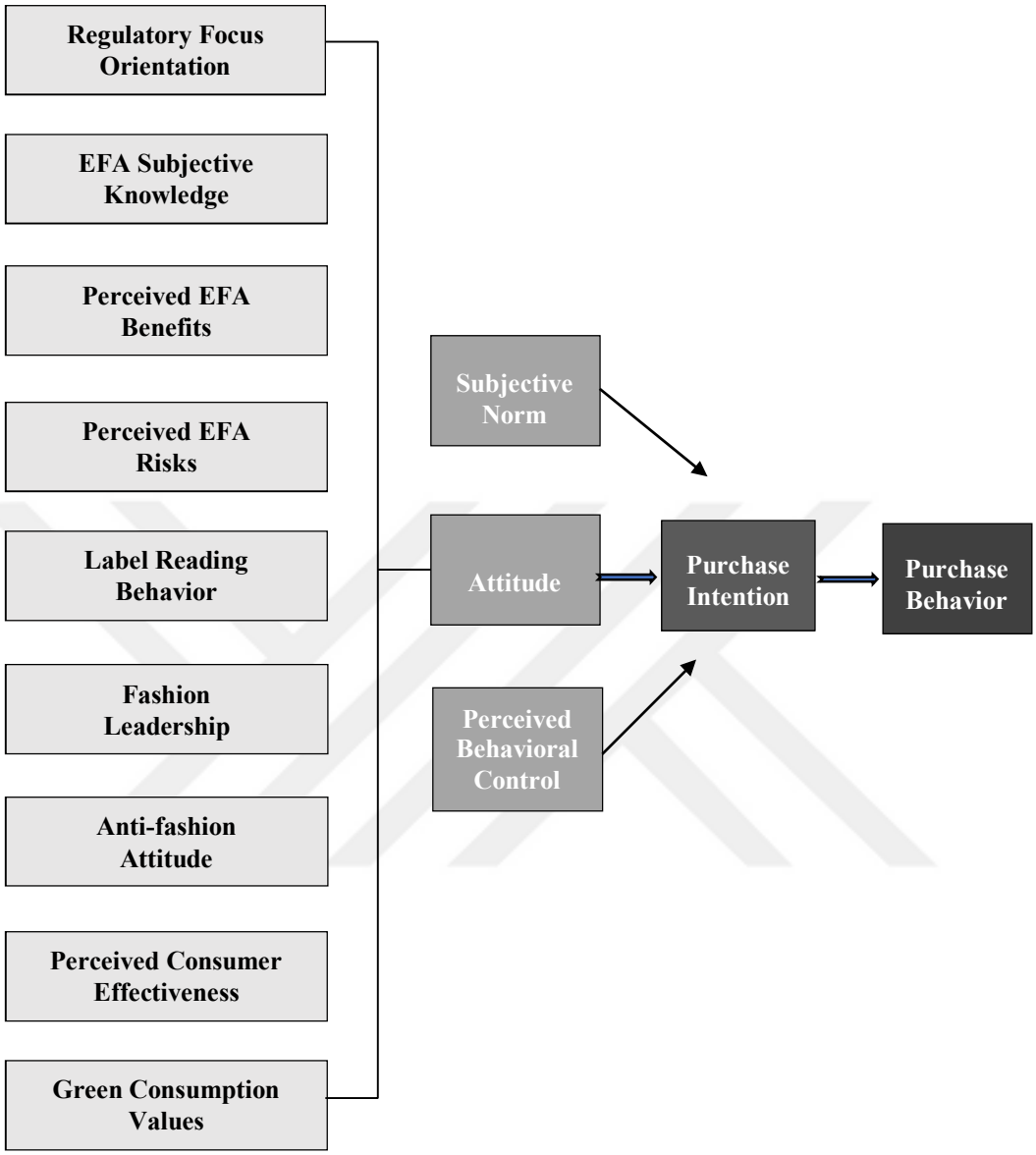



Figure 2. Operational Model

### 3.6 Quantitative study

The main aim of the study is to reveal the participant's opinions about the use of textiles made from organic cotton with the obtained data. For this purpose; It will be revealed whether there is a significant relationship between the attitudes of the

participants in the opinions about the usage of textile products made from organic cotton, the level of subjective knowledge, benefits, risks, perceived consumer effectiveness, green consumption values, fashion orientation, regulatory focus orientation and label reading behavior. Another aim of the study is to determine whether there is a significant relationship between the intention and attitude, perceived behavioral control, behavior and subjective norm in the opinions about the use of organic cotton textile products. Finally, the aim of the study is to find out whether there is a significant difference between the participants' behaviors, intentions and attitudes, and the gender and children ownership of the participants.

The survey method was chosen for this study because it allows for relatively inexpensive access to a large group of consumers and provides a high level of general capability in representing a large population. Surveying is a powerful method that serves to obtain systematic information about variables that are not easy to assess, such as attitudes and intentions. (Hair et al., 2008). It is widely used to get to descriptive data, and when carefully designed possible biases can be ruled out (Hustvedt, 2006).

### 3.6.1 Sampling

Data were collected through a Web-based survey of 400 Turkish residents older than 18 years of age and AB socioeconomics class. This study included only AB socioeconomics class participants because they tend to be the major target consumers for EFA.

We used two instruments in this study; individual in-depth interviews and a self-administered questionnaire. Based on the extensive literature review and our

qualitative research results we developed a research model with 14 hypotheses proposed to reveal the antecedents of consumer EFA purchase intention and behavior.

### 3.6.2 Measurement

The questionnaire (Appendix) given to consumers measured the following variables: knowledge, benefits, risks, fashion orientation, regulatory focus orientation, perceived consumer effectiveness, labor reading behavior, attitude towards green apparel consumption, subjective norm and perceived behavior control and their influence on intention and purchase behavior of environmentally friendly apparel products. Items to measure these variables were adapted from existing items used in literature.

### 3.6.3 Independent variables

Eco-friendly apparel (EFA) knowledge:

Several studies argue that consumer knowledge of organic products affects their attitude towards organic products. Lodorfos and Dennis (2008) reported that most consumers did not know the benefits of organic products. Consumers with a limited amount of product information or their understanding are less likely to buy them. The knowledge items included in the questionnaire were designed to aid apparel manufacturers in the improvement of their labelling strategies for environmentally friendly apparel products. Dickson (2001) found that the “No Sweat” label influenced purchasing behavior. All respondents reported that they were more

inclined to buy the product with such a label if it also had the desired design, fabric and price. Presenting relevant information on the label could help raise both awareness and concern. Manufacturers can use labels as sources of information.

Consumers' ability to differentiate organic cotton clothing from conventional cotton products largely depends on the information they come across about organic cotton clothing. Literature points out to a positive correlation between knowledge and purchase behavior (Park et al., 1994; Raju et al., 1995). Consumers with more subjective knowledge appear to rely on their decision to buy in a more confident manner (Raju et al., 1995).

Knowledge is conceptualized in two different forms: objective knowledge and subjective knowledge. The former refers to information at face value; it does not include any interpretation. It is precise and unbiased. The latter is, as the name suggests, about the person's perceptions, meaning how he/she makes sense of the information encountered through his/her own lenses (Selnes and Gronhaug, 1986). The distinction between these two types of knowledge is important since they have distinctive reflections on consumer behavior (Feick et al., 1992; Selnes and Gronhaug, 1986).

We put 3 statements to measure subjective EFA knowledge which were adapted from Lee and Lee (2009). The variables were measured with a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree).

- I know pretty much about organic cotton.
- I do not feel very knowledgeable about organic cotton.
- Compared to most other people, I know more about organic cotton clothing.

We put 9 statements in order to evaluate consumers' objective EFA knowledge; five items were true (4, 7, 10, 11, and 12) and four items were false (5, 6, 8, and 9). For each statement participants answered 'true' or 'false'. They obtained a score of 1 for each correct answer and a score of 0 for each incorrect answer.

1 Chemical pollutants are produced during manufacturing of synthetic or manufactured fibers such as polyester

2 Chemical pollutants are not produced during processing of natural fibers such as cotton

3 Fibers such as cotton and wool cannot be commercially recycled

4 Natural fibers are usually biodegradable

5 The use of larger quantities of natural fibers will significantly decrease energy consumption

6 Nationally mandated standards for clean air and water have not yet been imposed on textile companies

7 Air pollution can occur during some common dyeing processes of textiles

8 Dyeing and finishing processes use a lot of water

9 Special finishes on fabrics may create problems for recycling

Perceived benefits:

Making decisions about consumptions includes various benefits such as personal benefits, product costs and emotional benefits. The ecological attribute Eco-clothing is usually not a decision-maker's variable. It's hard to persuade consumers to give up personal costs, product benefits, or emotional benefits to support ecology and consume green products. The good benefits of Eco-Apparel products motivate consumers to buy Eco-clothing.

The perceived benefits items included in the questionnaire were designed to aid Eco-apparel marketing employees in order to prioritize their slogans and promotion messages. They were adapted from Lea and Worsley, 2005; McEachern and McClean, 2002 study.

The variables were measured with a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree).

- Organic cotton is good for the skin due to moisture absorbency.
- Organic cotton clothing is worth paying extra for its uniquely breathable fabric.
- Organic cotton farming provides non-chemical safer cotton products to wear.
- Organic cotton is better for the environment than conventionally grown cotton.
- Organic cotton is produced in an environmentally friendly way.
- Organic cotton is healthier than conventionally grown cotton because it has no pesticide residues

Perceived risks:

The concept "perceived risk" was coined by Bauer (1960). It rapidly drew a lot of attention in the field of consumer behavior. As in many other areas of life, perceived risks have a strong impact on attitudes regarding purchasing decisions. The greater the perceived risk, the more negative the attitude becomes.

Risk is perceived in several dimensions: financial, performance, social, psychological, physical and time/convenience (Peter and Ryan, 1976). Among these six dimensions of perceived risk, we addressed three of them: The risk of time and convenience, psychological risk and financial risk.

The perceived risks items included in the questionnaire were designed to aid Eco-apparel manufacturers and brands in order to reconsider their pricing, design and store merchandising policies. They were adapted from (Ko et al., 2009). The variables were measured with a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree).

Time & Convenience Risk

- I do not want to spend time on searching organic cotton apparel
- Organic cotton clothing is not easy to access because not a lot of stores carry this kind of merchandise near where I leave.

Psychological risk

- Organic cotton clothing would be hard to match with my other clothes.

- Organic cotton clothing would not fit my style. Organic cotton clothing does not come in various styles to meet my need.

Financial risk

- The price of organic cotton clothing is out of my price range.
- Organic cotton clothing is not practical to wear considering the price.

Fashion orientation:

Consumers with passion in fashion who allocated more resources (e.g. time and money) for apparels, shopped more frequently and were eager to acquire brand new fashion items were called "fashion leaders" (Bertrandias and Goldsmith, 2006; Goldsmith, Heitmeyer, and Freiden, 1991). Generally, fashion leaders are probably trying new things and looking for unique and innovative products, but in our in-depth interviews they were not ready to buy EFA because their motive was design and style. On the other hand, participants with anti-fashion attitudes tend to have more exposure to EFA information and were subsequently defined as early fashion adopters according to our qualitative research results.

Fashion orientation and shopping orientation scale and items were adapted from Gutman and Mills (1982), having 5-point Likert type statement ranging from strongly disagree (1) to strongly agree (5).

Fashion leadership and interests

- I am aware of fashion trends and want to be one of the first to try them.

- Clothes are one of the most important ways I have of expressing my individuality.
- I am the first to try new fashion: therefore, many people regard me as being a fashion leader.
- Because of my active life style. I need a wide variety of clothes.
- I always buy at least one outfit of the latest fashion.

Anti-fashion attitude

- I never read fashion magazines or pay attention to fashion trends.
- I resent being told what to wear by so-called fashion experts.
- Fashion in clothing is just a way to get more money from the consumer.
- I buy clothes I like, regardless of current fashion

Regulatory focus orientation:

The regulatory focus theory asserts that behavior rests on two different motivational systems, namely promotion and prevention, that have distinctive innate functions (Higgins, 1997, 1998). Both serve a purpose regarding survival.

Promotion focus orientation denotes to attention to desires and potential gains whereas prevention focus orientation addresses attention to obligations and potential losses. Promotion focus refers to will to achieve personally important aspirations, ideals, and ambitions. In contrast, prevention focus is about being concerned to fulfill

duties, obligations, and responsibilities. These either stem from interactions with parents or other authority figures or are a function of the desire to abide social roles such as parenting or teaching. According to our qualitative research results, parenting was the number one driving motive behind positive EFA attitude and fashion icon aspirations was the main barrier. Therefore, we want to elaborate the effects of regulatory focus orientations on EFA attitude. Items were measured with a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree) and were adapted from Higgins (1997).

Promotion Focus

- Right now, I am focused on achieving positive outcomes
- I typically focus on the success I hope to achieve in the future
- I frequently imagine how I will achieve my hopes and aspirations
- When good things happen to me, it affects me strongly
- I see myself as someone who is primarily striving to reach my 'ideal-self'—to fulfill my hopes, wishes, and aspirations

Prevention Focus

- I frequently think about how I can prevent failures in my life
- I am anxious that I will fall short of my responsibilities and obligations
- Right now, I am focused on avoiding negative outcomes
- I worry about making mistakes

- I often imagine myself experiencing bad things that I fear might happen to me

Perceived consumer effectiveness (PCE):

PCE was first proposed by Kinnear, Taylor, and Ahmed (1974). They conceptualized PCE as a measure of the extent to which a person believes that an individual consumer can be effective in pollution abatement. According to Laskova (2007), PCE represents the belief of a consumer that his/her actions will contribute to the solving of a problem at hand. Laskova' s study revealed that PCE was a strong moderator in the relationship between eco-friendly attitude and the behavior manifested.

Five-point Likert scale (1 = strongly disagree to 5 = strongly agree) is used in the measurement and items were adapted from Nilsson 2008.

- By purchasing EFA, every consumer can have a positive effect on the environment. 6.2 Every person has the power to influence environmental problems by purchasing EFA

- It does not matter whether I purchase EFA or not since one person acting alone cannot make a difference.

Label reading behavior:

Eco-labels appear to be utilized as a promotional instrument to enhance marketing practices (Rahbar and Wahid, 2011). The basic objective behind implementation of eco-label programs is to promote the products in question via providing customers

with relevant information. Yet when today's eco-label programs are evaluated, it is not clear whether they serve the purpose intended. Besides, according to our qualitative research results, labels were the main instruments to dig out EFA in the brick and mortar stores. Thus, we wanted to elaborate the effects of label reading behavior on EFA attitude. We measured consumers' label reading behavior with five items from D'Souza et al. (2007) We used Five-point Likert scale (1 = strongly disagree to 5 = strongly agree)

- I read labels on products.
- I pay attention to Eco-friendly labeling before deciding to buy.
- The material information on the label affects my purchase decision.

Attitude towards EFA:

The theory of reasonable action (TRA) and the theory of planned behavior (TPB) was established as a backbone in our study. Building blocks of TRA are three constructs that are the intention of behavior, attitude and subjective norm. TRA suggests that the intention behind behavior is a function of the underlying attitude and the related subjective norms. The attitude consists of a conviction of the consequences of behavior (Ajzen and Fishbein, 1973). The probability of coming up with a positive intention with respect to a behavior is more when the attitude behind the behavior is positive (Manaktola and Jauhari, 2007).

Additionally, in the literature, we see numerous work that have found a strong correlation between attitude and purchasing behavior concerning organic products (Grunert and Juhl, 1995; Hustvedt and Dickson, 2009; Magnusson et al.,

2001). Likewise, Lodorfos and Dennis (2008) found a strong positive relation between attitude and intention in a study looking at an individual's intention to eat organic vegetables. We adapted attitude items from Hustvedt (2006) study on consumer preferences for blended organic cotton apparel and used 1 to 5 Likert type scale to measure the items.

- Compared to other apparel products, I prefer EFA items.
- I think that buying green EFA is good for me.
- I think that buying EFA is good for the community.
- I think recyclable apparel is a good idea.
- I think there is no hype on environmental products.

Subjective norm:

Subjective norm is about attributions made to significant others' thoughts and expectations with respect to a behavior and includes the intent of the person to meet such expectations (Ajzen and Fishbein, 1973). As such, when a person believes that someone he/she cares about expects him/her to perform a specific behavior and if he/she gets motivated to do so, it is very likely that he/she will realize it (Maya, López-López, and Munuera, 2011).

We measured consumers' subjective norm with five items from Wang et al. (2006) using a 1 to 5 Likert type scale (1 = not at all, 5 = very often).

- Does your family (parents, siblings, extended family) have an influence on your green purchasing?

- Does your friends/peers have an influence on your green purchasing?

- Do the media (newspaper, internet, television, radio) influence your green purchasing?

Perceived behavioral control (PBC):

Ajzen (1991) added another construct, namely PBC, to his model to enhance the predictive power of TRA. His new model came to be known as TPB. He suggested that people are inclined to control various factors when performing a behavior is at issue. These factors pertain to the person's abilities and willpower. They are indicative of the extent of the effort and the degree of readiness of individuals to try to generate the behavior in question (Lee, 2008). In Ajzen's view, PBC indicates the person's perception as to how easy or difficult it will be to engage in the behavior of interest.

We measured consumers' PBC with three items from Taylor and Todd (1995) using a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree).

- Purchasing EFA was entirely within my control.

- I had the resources and ability to acquire EFA.

- I have complete control over the number of EFA that I will buy for personal use.

Green consumption values:

Green consumption values signify an individual's tendency to reflect environmental protection motives by his/her practices and behaviors [i.e. behaviors pertaining to buying and spending decisions] (Haws et al., 2013). They indicate consumers' overall appraisal behind consuming eco-friendly products. Consumers base their appraisal on their ecological sensitivities, environmental realities and needs as well as sustainability concerns (Patterson and Spreng, 1997). Green consumption values reflect individuals' motives towards environmental protection. Hence, they play an important role in a person's displaying of pro-environmental behaviors (Kim and Moon, 2012). Literature is limited on the relation between green consumption values and intent of eco-friendly purchase behavior. Yet a study conducted by Haws and his colleagues revealed that people who adhere to green consumption values more appear to engage in purchasing behaviors that aim to give minimum harm to the environment (Haws et al., 2013).

Green consumption values were assessed using a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree) adapted from Haws et al., 2013.

- It is important to me that the products I use does not harm the environment.
- My purchase habits are affected by my concern for our environment.
- I would describe myself as environmentally responsible.

### 3.6.4 Dependent variables

EFA purchase intension:

The two items of the intent of purchase used in this study are adapted from Bello, Pitz and Etzel (1983) "I will actively look for a product" and "I will buy a product for myself or as a gift", and the other three items are adapted from Chan (2001). Items were measured with a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree).

- For future purchases, I plan to seek out environmental products.
- For future purchases, I plan to buy environmental apparel for myself or as gifts.
- I will consider switching to other brands for environmental protection reasons.
- I will switch to environmentally friendly alternatives of an apparel product.
- I would gladly buy more certified organic apparel if I could find it.

EFA purchase behavior:

We measured the dependent variable, purchase, using the scales we developed for this study with a 1 to 5 Likert type scale (1 = strongly disagree, 5 = strongly agree).

- I frequently purchase EFA.
- I frequently search for brands that are known to offer EFA.

- I normally put a lot of effort into purchasing apparel that is environmentally friendly.

- I have an influence on my family (parents, siblings, extended family) and friends on their green purchasing behavior.

The research consists of two parts; In the first part, we collected responses to the EFA's pre-existing buyers' behavior in the proposed model and we asked them about past behavior in buying green products from different industries and their values of green consumption, in the second part we collected demographic information.

For all constructs, previously identified measures from relevant research were used. The original questionnaire was produced in English, and then translated to Turkish.

The 3 items are a measure of EFA subjective knowledge (Kim and Damhorst 1998). Six subjects are a measure of the observed benefits (Lea and Worsley, 2005; McEachern and McClean, 2002), including three items in favor of health and three items in favor of the environment. Six items are a measure of perceived risk (Ko et al., 2009), including two items at risk for time and convenience, two items in psychological risk and two items in financial risk. Nine items measured the fashion orientation (Gutman and Mills, 1982). Ten items measured regulatory focus orientation (Higgins, 1997). Three items measured perceived consumer effectiveness (Nilsson, 2008). Three items measured labor reading behavior D'Souza et al. (2007). Five items measured attitude Hustvedt (2006). Three items measured subjective norm Wang et al. (2006). Three items measured perceived behavior control Taylor and Todd (1995). Five items measured purchase intention Bello, Pitz, and Etzel

(1983) and Chan (2001). Four items measured purchase behavior. The questionnaire also includes 9 items that measured the demographic characteristics of respondents such as age, household income, education level and employment status, and six items that assessed their past behavior in relation to green consumption.

# CHAPTER 4

# RESEARCH RESULTS

## 4.1 Model of the research

In this research, a relational screening model was used. As it is known, the relationship between the variables that are the subject of the research in relational screening models is revealed. Participants' opinions on the use of organic cotton textiles and their attitudes, subjective knowledge level, benefit, risk, perceived consumer effectiveness, sensitivity to the environment, trend of fashion, regulatory focus orientation and label reading behavior, intention, behavior control perception, behavior and the relationship between subjective norms led this research to relational model.

## 4.2 Collection of data

In this study, the questionnaire method was used to obtain the data and the questionnaire questions were delivered to the participants by using the face to face survey technique. The name and surname information of the employees were not requested during the questionnaires. Therefore, it was supported to give objective answers to the questions in the questionnaire. SPSS (Statistical Package for the Social Science) 25 package program was used to analyze the data obtained from the application. The data obtained is presented in the related sections.

## 4.3 Findings

Demographic properties of participants were given in the Table 1.

50% of participants were male, and 50% of were female. Age distribution showed that 27.5% of participant had age between 18-25, 26.3% of had age between 26-35, 26.3% of participants had age between 36-45, and 20.0% of had age between 46-55. 3.5% of participants were high school graduated, 90.3% of participants were license graduated, and 6.3% of participants had postgraduate level education. 73.0% of participants had full time occupation, whereas 2.0% of them had part time occupation. 35.2% of participants were single, and 64.8% of them were married. 39.2% of participants stated that they do not have any child, whereas 39.5% of them had at least on child under seven ages, and 21.3% of them had children above seven ages. 11.0% of participants stated that they make shopping 3-4 times in a week, 22.3% of them make shopping 1-2 times in a week, 25.5% of them make shopping 3-4 times in a month and 41.2% of them make shopping 1-2 times in a month.

Table 1. Demographic Properties of Participants

| Parameter | Frequency (n) | Percent (%) |
|---|---|---|
| *Gender* | | |
| Male | 200 | 50.0 |
| Female | 200 | 50.0 |
| *Age* | | |
| 18-25 | 110 | 27.5 |
| 26-35 | 105 | 26.2 |
| 36-45 | 105 | 26.3 |
| 46-55 | 80 | 20.0 |
| *Education* | | |
| High school | 14 | 3.5 |
| License | 361 | 90.2 |
| Postgraduate | 25 | 6.3 |
| *Occupation* | | |
| Full time | 292 | 73.0 |
| Part time | 8 | 2.0 |
| Student | 58 | 14.4 |
| Unemployed | 39 | 9.8 |
| Retired | 3 | 0.8 |
| *Marital status* | | |
| Single | 141 | 35.2 |
| Married | 259 | 64.8 |
| *Child* | | |
| None | 157 | 39.2 |
| Have, at least one under 7 ages | 158 | 39.5 |
| Have, above 7 ages | 85 | 21.3 |
| *0nline Shopping frequency* | | |
| 3-4 times in a week | 44 | 11.0 |
| 1-2 times in a week | 89 | 22.3 |
| 3-4 times in a month | 102 | 25.5 |
| 1-2 times in a month | 165 | 41.2 |

Reliability results of constructs in the research questionnaire were given in the Table 2.

Table 2. Reliability Results of Constructs in the Research Questionnaire

| Construct | Number of items | Deleted items | Initial Cronbach Alpha | Final Cronbach Alpha |
|---|---|---|---|---|
| 1. Subjective knowledge | 2 | S1_r2 | -0.197 | 0.813 |
| 2. Perceived benefits | 6 | - | 0.899 | 0.899 |
| 3. Perceived risks | 6 | - | 0.786 | 0.786 |
| 4. Objective knowledge | 9 | 9 | 0.495 | 0.495 |
| 5. Attitude | 5 | - | 0.852 | 0.852 |
| 6. Perceived consumer effectiveness | 3 | S6_r3 | 0.242 | 0.705 |
| 7. Perceived behavioral control | 3 | - | 0.797 | 0.797 |
| 8. Intention | 6 | - | 0.918 | 0.918 |
| 9. Behavior | 4 | - | 0.888 | 0.888 |
| 10. Frequency | 10 | - | 0.866 | 0.866 |
| 11. Green consumption | 3 | - | 0.862 | 0.862 |
| 12. Fashion leadership | 5 | - | 0.834 | 0.834 |
| 13. Anti-fashion attitude | 4 | - | 0.690 | 0.690 |
| 14. Promotion focus orientation | 5 | - | 0.821 | 0.821 |
| 14. Prevention focus orientation | 5 | - | 0.817 | 0.817 |
| 15. Label reading | 3 | - | 0.826 | 0.826 |
| 16. Subjective norm | 3 | - | 0.833 | 0.833 |

According to Table 2, all scales except objective knowledge have cronbach alpha reliability levels more than 0.60 suggesting internal consistency (Malhotra, 2008). In subjective knowledge construction, second item was reducing the reliability. Thus, this item was deleted from construction. In perceived consumer effectiveness construction, third item was reducing the reliability, and this item was removed from construction. In objective knowledge construction, all items were tested for if item deleted analysis, but reliability levels were still under 0.60 level for all items. Thus, this construction was not used in the analysis. Construct means and standard deviations were given in the Table 3.

Table 3. Construct Means and Standard Deviations

| Construct | Item Means | |
|---|---|---|
| | Mean | SD |
| Subjective knowledge | 3.27 | 0.98 |
| Perceived benefits | 4.13 | 0.67 |
| Perceived risks | 3.32 | 0.72 |
| Attitude | 4.21 | 0.61 |
| Perceived consumer effectiveness | 4.12 | 0.69 |
| Perceived behavioral control | 3.69 | 0.80 |
| Intention | 4.01 | 0.65 |
| Behavior | 3.38 | 0.93 |
| Frequency | 3.22 | 0.74 |
| Green consumption values | 4.17 | 0.64 |
| Fashion leadership | 3.17 | 0.88 |
| Anti-fashion attitude | 3.92 | 0.69 |
| Promotion focus orientation | 4.08 | 0.60 |
| Prevention focus orientation | 3.79 | 0.73 |
| Label reading | 3.47 | 0.93 |
| Subjective norm | 2.94 | 0.94 |

Table 3 shows construction means and standard deviations. In order to compare constructs, mean values of total items were also calculated. In calculation of means, all scores were divided to number of items. According to table, it is seen that attitude construct has the highest score (Mean: 4.21) suggesting that respondents had favorable thoughts of the green movement and environmentally friendly apparel.

It was followed by green consumption values (Mean: 4.17), perceived benefits (Mean: 4.13), and perceived consumer effectiveness (Mean: 4.12),

The respondents, in general, exhibited above average knowledge of ecological issues (Mean: 3.27), and they demonstrated a very strong emotional attachment to the issues. Specifically relating to the respondents' attitudes toward green purchases and green purchase intention, the findings were encouraging. Along a 5-point measurement scale, the mean scores were 4.21 and 4.01 respectively.

Apparently, the encouraging attitudes and intention were also effectively translated into green purchase behavior. On average, the respondents' self-reported shopping frequency (Mean: 3.38) along a 5-point measurement scale, was also quite above the mid-value of 2.5. Correlation results were given in the Table 4.

Table 4. Correlation Analysis Results

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Subjective knowledge | 1 | | | | | | | | | | | | | | |
| 2. Perceived benefits | .405** | 1 | | | | | | | | | | | | | |
| 3. Perceived risks | .035 | .026 | 1 | | | | | | | | | | | | |
| 4. Attitude | .263** | .584** | .186** | 1 | | | | | | | | | | | |
| 5. Perceived consumer effectiveness | .359** | .490** | .075 | .636** | 1 | | | | | | | | | | |
| 6. Perceived behavioral control | .315** | .272** | -.079 | .325** | .385** | 1 | | | | | | | | | |
| 7. Intention | .360** | .554** | -.019 | .656** | .647** | .583** | 1 | | | | | | | | |
| 8. Behavior | .534** | .387** | .046 | .343** | .474** | .563** | .607** | 1 | | | | | | | |
| 9. Frequency | .267** | .214** | -.181** | .217** | .240** | .284** | .334** | .381** | 1 | | | | | | |
| 10. Green consumption | .305** | .464** | .051 | .595** | .469** | .391** | .598** | .417** | .355** | 1 | | | | | |
| 11. Fashion leadership | .328** | .162** | .117* | .133** | .248** | .437** | .348** | .568** | .210** | .226** | 1 | | | | |
| 12. Anti-Fashion attitudes | .040 | .258** | .295** | .432** | .298** | .087 | .251** | .103* | .016 | .316** | -.092 | 1 | | | |
| 13. Promotion focus orientation | .196** | .462** | .167** | .624** | .464** | .280** | .550** | .307** | .153** | .502** | .285** | .363** | 1 | | |
| 14. Prevention focus orientation | .190** | .258** | .213** | .396** | .333** | .260** | .386** | .334** | .083 | .369** | .303** | .255** | .582** | 1 | |
| 15. Label reading | .181** | .252** | -.257** | .274** | .297** | .123* | .297** | .186** | .409** | .302** | -.026 | .025 | .168** | .087 | 1 |
| 16. Subjective norm | .190** | .144** | -.113* | .146** | .189** | .169** | .248** | .322** | .429** | .202** | .250** | -.056 | .151** | .179** | .397** |

Correlation analysis results showed that attitude had positive and significant correlation with subjective knowledge ($r = 0.263$; $p < 0.01$), perceived benefits ($r = 0.584$; $p < 0.01$) and perceived risks ($r = 0.186$; $p < 0.01$).

Intention had positive and significant correlation with subjective knowledge ($r = 0.360$; $p < 0.01$), perceived benefits ($r = 0.554$; $p < 0.01$), attitude ($r = 0.656$; $p < 0.01$), perceived consumer effectiveness ($r = 0.647$; $p < 0.01$) and perceived behavioral control ($r = 0.583$; $p < 0.01$).

Behavior had positive and significant correlation with subjective knowledge ($r = 0.534$; $p < 0.01$), perceived benefits ($r = 0.387$; $p < 0.01$), attitude ($r = 0.343$; $p < 0.01$), perceived consumer effectiveness ($r = 0.474$; $p < 0.01$), perceived behavioral control ($r = 0.563$; $p < 0.01$) and intention ($r = 0.607$; $p < 0.01$).

Regression analysis results for effects of selected consumer preferences on attitude were given in the Table 5.

Table 5. Regression Analysis Results for Effects of Selected Consumer Preferences On Attitude

| | Unstandardized Coefficients | | Standardized Coefficients | t | p |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | .776 | .924 | | .841 | .401 |
| Subjective knowledge | -.091 | .057 | -.058 | -1.588 | .113 |
| Perceived benefits | .202 | .030 | .267 | 6.763 | .000 |
| Perceived risks | .085 | .024 | .121 | 3.494 | .001 |
| Fashion leadership | -.025 | .024 | -.036 | -1.016 | .310 |
| Anti-Fashion Attitude | .152 | .040 | .138 | 3.757 | .000 |
| Perceived consumer effectiveness | .745 | .088 | .340 | 8.436 | .000 |
| Label reading | .068 | .039 | .062 | 1.738 | .083 |
| Green consumption | .426 | .063 | .269 | 6.804 | .000 |
| Adjusted $R^2$: 0.604; F:76.924; $p < 0.01$ | | | | | |

Results of the regression analysis showed that perceived benefits, perceived risks, anti-fashion attitude, perceived consumer effectiveness and green consumption values had significant and positive contribution to attitude ($p < 0.001$). According to

adjusted R square, model has 60.4% explanatory level. Approximately 60% of variance in purchase attitude was explained by the five predictor variables.

The regression model of the hypothesis was given in the below.

Attitude = 0.202 * (Perceived benefits) + 0.085 * (Perceived risks) + 0.152 * (Anti fashion attitude) + 0.745 * (Perceived consumer effectiveness) + 0.426 * (Green consumption)

According to regression model, it was seen that the most effective factor for attitude was perceived consumer effectiveness (PCE) with 0.745 regression coefficient level. It was followed by green consumption values with 0.426 regression coefficient level. PCE significantly affected EFA purchase intention. This showed that a higher-level confidence in individual contribution to environment through purchasing EFA lead to greater EFA purchase attitude. Green consumption values had the second most significant influence on consumers' purchase attitude which showed that consumers were concerned about the issues related to the environment and were considering them while purchasing organic products. Perceived benefits were also a stronger contributor over attitudes ($\beta = 0.202$, $t = 6.763$, $p < 0.01$). Consumers who indicated being more knowledgeable about the benefits of organic apparels, reported to hold stronger attitudes about these issues. Anti-fashion attitude ($\beta = 0.152$, $t = 3.757$, $p < 0.01$) had a moderately strong effect on attitude. It was statistically predictive of consumers' purchase attitude of EFA. Consumers who have higher interest in being well dressed rather than being fashionable, have a stronger purchase attitude regarding EFA. Perceived Risks ($\beta = 0.085$, $t = 3.494$, $p < 0.01$) had also a positive influence on attitude toward organic apparels. It did not hold consumers back from adopting new and innovative organic products which could be

due to consumers' perception regarding organic apparels were in line with the defined risks.

The effects of subjective environmental apparel knowledge, fashion leadership and label reading behavior on EFA purchase attitude were insignificant. This showed that these constructs had no significant effect on consumers' EFA purchase attitude.

Regression analysis results for effects of attitude, subjective norm and perceived behavioral control on intention were given in the Table 6.

Table 6. Regression Analysis Results for Effects of Attitude, Subjective Norm and Perceived Behavioral Control on Intention

| | Unstandardized Coefficients | | Standardized Coefficients | T | p |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 1.806 | .954 | | 1.892 | .059 |
| Attitude | .655 | .044 | .511 | 15.034 | .000 |
| Subjective norm | .146 | .045 | .105 | 3.232 | .001 |
| Perceived behavioral control | .649 | .055 | .399 | 11.694 | .000 |
| Adjusted $R^2$: 0.590; F:193.306; $p < 0.01$ | | | | | |

According to regression analysis results; all the variables of TPB; attitude, subjective norm and perceived behavioral control were significantly and positively related to the consumers' intention to buy organic products ($p < 0.01$). Adjusted R square showed that the proposed model has 59.0% explanatory level. Approximately 59% of variance in purchase intention was explained by the three predictor variables.

Based on regression coefficients, the model was given in the below.

Intention = 0.655 * (Attitude) + 0.146 * (Subjective norm) + 0.649 * (Perceived behavioral control)

According to the statistical results, perceived behavioral control had an influence on purchase intention similar to that of attitude. In other words, the standardized path coefficient value of the relationship between attitude and purchase intention ($\beta = 0.655$, $t = 15.034$, $p < 0.01$), was similar to the value of the relationship between perceived behavioral control and purchase intention ($\beta = 0.649$, $t = 11.694$, $p < 0.01$). The roles of attitude and perceived behavioral control were confirmed to be key elements that determine behavioral intention, as suggested by the TPB. In addition, the relationship between subjective norm and intention towards EFA purchase was also positively significant ($\beta = 0{,}146$, $t = 3.232$, $p < 0.01$).

Regression analysis results for effect of intention on behavior were given in the Table 7.

Table 7. Regression Analysis Results for Effect of Intention on Behavior

| | Unstandardized Coefficients | | Standardized Coefficients | T | P |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | -.412 | .925 | | -.446 | .656 |
| Intention | .579 | .038 | .607 | 15.251 | .000 |
| Adjusted $R^2$: 0.367; F:232.587; $p < 0.01$ | | | | | |

According to regression analysis results; intention had significant and positive contribution to behavior ($\beta = 0.579$, $t = 15.251$, $p < 0.01$). Adjusted R square showed that the model explains 36.7% of cumulative variance indicating that 36.7% of variance in behavior was explained by the predictor variable intention. The model was given in the below.

Behavior = 0.579 * (Intention)

Regression coefficient shows that intention had 0.579 times contribution to the behavior with 36.7% of variance.

Regression analysis results for the effects of selected constructs on attitude with demographic variables were given in the Table 8.

Table 8. Regression Analysis Results for the Effects of Selected Constructs on Attitude with Demographic Variables

| | Unstandardized Coefficients | | Standardized Coefficients | T | P |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | .984 | 2.039 | | .483 | .630 |
| Subjective knowledge | .006 | .072 | .004 | .079 | .937 |
| Perceived benefits | .165 | .035 | .235 | 4.655 | .000 |
| Perceived risks | .070 | .032 | .104 | 2.205 | .028 |
| Fashion leadership | -.032 | .032 | -.050 | -1.008 | .314 |
| Anti-Fashion Attitude | .082 | .050 | .081 | 1.645 | .101 |
| Perceived consumer effectiveness | .722 | .118 | .337 | 6.134 | .000 |
| Label reading | .013 | .053 | .012 | .235 | .814 |
| Green consumption | .484 | .080 | .318 | 6.020 | .000 |
| Gender (Male) | .346 | .246 | .064 | 1.407 | .161 |
| Age (18-25) | -.457 | .496 | -.077 | -.922 | .357 |
| Marital status (Single) | -.266 | .424 | -.048 | -.629 | .530 |
| Child ownership (None) | .024 | .487 | .004 | .048 | .961 |
| Age (26-35) | -.393 | .408 | -.065 | -.962 | .337 |
| Occupation (Full time) | 1.445 | 1.162 | .056 | 1.244 | .215 |
| Child ownership (Under 7) | .176 | .372 | .032 | .473 | .636 |
| Online shopping frequency (1-2 times a week) | .322 | .393 | .037 | .822 | .412 |
| Age (36-45) | -.254 | .387 | -.040 | -.656 | .513 |
| Occupation (Student) | .688 | .460 | .091 | 1.497 | .136 |
| Online shopping frequency (3-4 times a month) | .043 | .300 | .007 | .145 | .885 |
| Occupation (Unemployed) | .235 | .458 | .024 | .514 | .608 |
| Promotion Prevention | -.318 | .276 | -.051 | -1.152 | .250 |
| Adjusted $R^2$: 0.519; F:14.762; $p < 0.01$ | | | | | |

With dummy demographic variables; perceived benefits ($\beta = 0.165$, $t = 4.655$, $p < 0.01$), perceived risks ($\beta = 0.070$, $t = 2.205$, $p < 0.05$), perceived consumer effectiveness ($\beta = 0.722$, $t = 6.134$, $p < 0.01$) and green consumption values ($\beta = 0.484$, $t = 6.020$, $p < 0.01$) had significant and positive contribution to attitude. According to adjusted R square, model had 51.9% explanatory level. The regression model of the hypothesis was given in the below.

Attitude = 0.165*(Perceived benefits) + 0.070*(Perceived risks) + 0.722*(Perceived consumer effectiveness) + 0.484*(Green consumption)

According to regression model, it was seen that the most effective factor for attitude was still perceived consumer effectiveness with ($\beta$: 0.722). The least effective factor was perceived risks with ($\beta$: 0.070). Before dummy variables, perceived benefits, perceived risks, anti-fashion attitude, perceived consumer effectiveness and green consumption values had significant and positive contribution to attitude ($p < 0.001$). But after dummy variables, perceived benefits, perceived risks, perceived consumer effectiveness and green consumption values had significant and positive contribution to attitude ($p < 0.001$). It was seen from results that effect of anti-fashion attitude was not significant after the involvement of dummy variables. Further, the effects of demographic variables on EFA purchase attitude were insignificant. This showed that these constructs had no significant effect on consumers' EFA purchase attitude.

Regression analysis results for the effects of attitude, subjective norm and perceived behavioral control on intention with demographic variables were given in the Table 9.

Table 9. Regression Analysis Results for the Effects of Attitude, Subjective Norm and Perceived Behavioral Control on Intention with Demographic Variables

| | Unstandardized Coefficients | | Standardized Coefficients | T | p |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 4.554 | 2.444 | | 1.864 | .064 |
| Attitude | .621 | .061 | .472 | 10.238 | .000 |
| Subjective norm | .188 | .060 | .141 | 3.151 | .002 |
| Perceived behavioral control | .560 | .074 | .359 | 7.575 | .000 |
| Gender (Male) | .442 | .325 | .062 | 1.358 | .176 |
| Age (18-25) | .321 | .649 | .041 | .494 | .622 |
| Marital status (Single) | .479 | .549 | .065 | .872 | .384 |
| Child ownership (None) | -.040 | .641 | -.005 | -.062 | .951 |
| Age (26-35) | -.057 | .533 | -.007 | -.107 | .915 |
| Occupation (Full time) | -.977 | 1.531 | -.029 | -.638 | .524 |
| Child ownership (Under 7) | .498 | .485 | .068 | 1.028 | .305 |
| Online shopping frequency (1-2 times a week) | -.436 | .512 | -.038 | -.852 | .395 |
| Age (36-45) | .081 | .504 | .010 | .160 | .873 |
| Occupation (Student) | -1.186 | .599 | -.119 | -1.979 | .049 |
| Online shopping frequency (3-4 times a month) | -.530 | .383 | -.062 | -1.384 | .168 |
| Occupation (Unemployed) | .359 | .595 | .028 | .604 | .547 |
| Promotion Prevention | -.169 | .359 | -.020 | -.470 | .639 |
| Adjusted $R^2$: 0.517; F:18.945; $p < 0.01$ | | | | | |

According to regression analysis results; attitude ($\beta = 0.621$, $t = 10.238$, $p < 0.01$), subjective norm, ($\beta = 0.188$, $t = 3.151$, $p < 0.01$) and perceived behavioral control ($\beta = 0.560$, $t = 7.575$, $p < 0.01$) had significant and positive contribution to the intention ($p < 0.01$). Occupation of being student had negative contribution to the intention ($\beta = -1.186$, $t = -1.979$, $p < 0.05$) showing that green apparel did not fit students' evoked set of needs regarding style, price, brand name and fashion. Adjusted R square showed that the proposed model has 51.7% explanatory level. Based on regression coefficients, the model was given in the below.

Intention = 0.621 * (Attitude) + 0.188 * (Subjective norm) + 0.560 * (Perceived behavioral control) – 1.186 * (Occupation / being student)

Regression coefficients showed that occupation of being student was the most effective factor for intention with 1.186 regression coefficient level, followed by attitude with 0.621 regression coefficient level. The least effective factor was subjective norm with 0.188 regression coefficient level. In the first set of regressions, attitude, subjective norm and perceived behavioral control had significant and positive contribution to the intention ($p < 0.01$). In the second set of regressions, attitude, subjective norm, perceived behavioral control had again significant and positive contribution to the intention ($p < 0.01$) yet an additional parameter, occupation of being student appeared to be significant.

Regression analysis results for the effect of intention on behavior with demographic variables were given in the Table 10.

Table 10. Regression Analysis Results for the Effect of Intention on Behavior with Demographic Variables

| | Unstandardized Coefficients | | Standardized Coefficients | T | P |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 1.694 | 2.899 | | .584 | .559 |
| Intention | .604 | .051 | .590 | 11.954 | .000 |
| Gender (Male) | -.623 | .371 | -.085 | -1.680 | .094 |
| Age (18-25) | -.454 | .750 | -.057 | -.605 | .546 |
| Occupation (Full time) | -.268 | .698 | -.032 | -.383 | .702 |
| Marital status (Single) | -.485 | .637 | -.065 | -.761 | .447 |
| Child ownership (None) | .952 | .741 | .129 | 1.285 | .200 |
| Age (26-35) | .292 | .614 | .036 | .476 | .635 |
| Occupation (Part time) | -.599 | 1.762 | -.017 | -.340 | .734 |
| Child ownership (Under 7) | .090 | .563 | .012 | .160 | .873 |
| Online shopping frequency (1-2 times a week) | -1.956 | .588 | -.166 | -3.327 | .001 |
| Age (36-45) | -.107 | .585 | -.013 | -.184 | .855 |
| Occupation (Student) | -.825 | .445 | -.095 | -1.851 | .065 |
| Occupation (Unemployed) | -.072 | .951 | -.005 | -.076 | .939 |
| Promotion Prevention | .486 | .416 | .058 | 1.168 | .244 |
| Adjusted $R^2$: 0.376; F:12.542; $p < 0.01$ | | | | | |

According to regression analysis results; intention had significant and positive contribution ($\beta = 0.604$, $t = 11.954$, $p < 0.01$) to behavior. Online shopping frequency (1-2 times in a week) had negative contribution ($\beta = -1.956$, $t = -3.327$, $p < 0.01$) to the behavior which could be explained due to lack of touching experience in the online channels since unique texture was the main product benefit regarding organic apparels.

Adjusted R square showed that the model explains 37.6% of cumulative variance. The model was given in the below. Before dummy variables, intention had significant and positive contribution to behavior with 0.579 regression coefficient. After the involvement of dummy variables, effect of intention on behavior increased to 0.604 regression coefficient.

Behavior = 0.604*(Intention) -1.956*(Online shopping frequency / 1-2 times a week)

Evaluation of Hypothesis

| Hypothesis | | Result |
|---|---|---|
| H1: | Consumers' subjective knowledge level will be predictor of consumers' attitude regarding organic apparels. | Rejected |
| H2: | Perceived benefits derived from the use of organic cotton apparel products, will positively relate to attitude toward purchasing organic apparels. | Not Rejected |
| H3: | There will be a prominent relationship between the attitude of the participants and risks related with organic apparels. | Not Rejected |
| H4: | There will be a positive relationship between the perceived consumer effectiveness of the use of organic cotton textiles and the attitudes of the consumers regarding organic apparels. | Not Rejected |
| H5: | Green consumption values will positively affect consumers' attitudes toward organic apparels. | Not Rejected |
| H6: | Fashion leadership will have a significantly negative effect on attitudes of the consumers for organic apparels. | Rejected |
| H7: | Consumers' anti-fashion attitudes will positively affect their attitudes toward organic apparels. | Not Rejected |
| H8: | There will be a prominent relationship between attitudes of the consumers for organic clothing and their promotion focus orientation. | Rejected |
| H9: | Consumers' prevention focus orientations will have a positive impact on their attitudes about purchasing organic cotton textile products. | Rejected |
| H10: | Label reading behavior will be positively associated with the attitudes of the participants about buying organic apparels. | Rejected |
| H11: | Attitudes of the participants about buying organic apparels will have a positive relationship with their intentions to buy organic apparels. | Not Rejected |
| H12: | Consumers' perceived behavior control will influence positively their intentions toward organic apparels. | Not Rejected |
| H13: | Subjective norms will positively influence intentions toward organic apparels. | Not Rejected |
| H14: | Positive intentions toward buying organic apparels will positively influence purchase behavior. | Not Rejected |

Among the 14 hypotheses, nine were supported while five were rejected. All the variables of TPB; attitude ($\beta = 0.655$, $t = 15.034$, $p < 0.01$), subjective norm ($\beta = 0{,}146$, $t = 3.232$, $p < 0.01$) and perceived behavioral control ($\beta = 0.649$, $t = 11.694$, $p < 0.01$) were significantly related to the consumers' intention to buy organic apparels which supported the hypothesis H11, H12 and H13 respectively. In addition, the relationship between intention towards EFA purchase and EFA purchase was positively significant ($\beta = 0.579$, $t = 15.251$, $p < 0.01$), supporting H14. The additional constructs included in the TPB i.e. perceived benefits ($\beta = 0.202$, $t = 6.763$, $p < 0.01$), perceived risks ($\beta = 0.085$, $t = 3.494$, $p < 0.01$), anti-fashion attitude ($\beta = 0.152$, $t = 3.757$, $p < 0.01$), perceived consumer effectiveness ($\beta = 0.745$, $t = 8.436$, $p < 0.01$), and green consumption values ($\beta = 0.426$, $t = 6.804$, $p < 0.01$), also had a significant positive influence on the attitude to purchase the organic apparels, that supported the hypothesis H2, H3, H4, H5 and H7 in the order given. Further, the effects of subjective knowledge, fashion leadership, label reading behavior, promotion focus orientation, prevention focus orientation on attitude to purchase the organic apparels were insignificant thus rejected the hypothesis H1, H6, H8, H9 and H10.

# CHAPTER 5

# CONCLUSION AND DISCUSSION

In recent years, production and consumption of organic textiles has increased. Organic textiles are produced without damaging chemical input or genetically modified seeds which are harmful for environment and human health. It is essential that the organic fiber is produced in accordance with the established standards (Altun, 2012).

The textile sector, ecological consciousness, requires that all goods used in production consist of elements with recyclable properties. Especially in recent years, increasing environmental awareness and keeping individuals' personal health levels at the forefront increased the demand for organic textile products. This research was carried out in order to reveal the participants' opinions about the use of organic cotton textiles. The TPB has been a very useful framework in predicting a wide range of behavior across various fields including proenvironmental behavior in Turkey. However, this study is one of the initial attempts in the Turkish context that has used TPB for determining purchase attitude, intention and behavior of green products.

As a result of our study, a positive correlation was found between attitudes and perceived product benefits, perceived product risks, perceived consumer effectiveness green consumption values and anti-fashion attitudes. In line with Laskova' s (2007) study, our study showed that perceived consumer effectiveness (PCE) was the strongest moderator in the environmental attitude–behavior relationship. Research findings reveal that consumers' attitudes towards EFA

consumption become more positive if they come to believe that their consumption behavior would indeed contribute to the cause of protecting the environment. As can be expected, when attitudes are positive EFA consumption becomes more likely. This finding is compatible with what Roberts (1996) suggested as well as the findings put forth by various other researchers (Kim and Choi, 2005; Vermeir and Verbeke, 2008; Wesley et al., 2012). PCE has a significant impact on consumers' attitudes to purchasing EFA. Companies should do more to convince consumers that consumption of EFA will contribute to environmental protection and human welfare. Ads may underline that it is possible to alleviate environmental degradation through an individual's EFA consumption behavior. Only when they believe it, consumers become more willing to buy these products. At the company level, PCE can be increased among consumers by providing transparent EFA production information, such as how consumers report how products are produced, which materials are used, and that the new production process is less effective for the natural environment. It is critical that consumers educate the difference between EFA and traditional clothing in terms of their qualities and environmental impact.

Following, perceived consumer effectiveness, green consumption values was the second strongest moderator which was also parallel with Kim and Moon's (2012) and Haws et al., (2013) studies. Perceived product benefits, anti-fashion attitudes and products risks were also positively related with attitudes respectively. Among the most effective motives behind consumers' attitudes regarding green consumption, having green consumption values and comprehending product benefits come to the fore. These consumers were motivated by their beliefs about the beneficial outcomes of the purchase, for themselves and the environment. One outcome of purchasing organic cotton apparel that consumers found important was "improving my health or

the health of my family". Unlike organic food producers, organic cotton apparel manufacturers and retailers do not typically make health related claims about their products. Nonetheless, these results suggest that organic cotton apparel benefits from the aura of health associated with organic food products. And because respondents agreed that organic farming is good for the environment, it is clear that marketing about how organic cotton apparel supports organic farming is another way to market the environmental benefits of purchasing organic cotton apparel. As such, labeling becomes an important ground to create awareness in people with respect to eco-friendly products. Exhibition of green certifications and providing relevant arguments regarding environmental issues would enhance attitudes towards EFA, which is the single most effective factor behind intentions to purchase such products. Another implication of the findings is that targeting people who are more concerned with the environment and more eager to make a difference via their own green consumption behavior would be a good business decision for green practitioners (Lee et al., 2014).

This study did not observe a statistically significant relationship between fashion leadership and purchase attitude regarding EFAhowever it observed a significant positive relationship between anti-fashion attitude and purchase attitude regarding EFA. This result may imply that fashion leaders do not show their intention to purchase EFA because currently available EFA might not be innovatively fashionable yet. Our qualitative research result also revealed that most of the participants who answered they did not purchase EFA in the past because they did not like the available designs. Merchandisers and marketers of EFA need to make an effort to attract fashion leaders because they will encourage its widespread adoption among general consumers

In the study conducted by Rah et al. (2004), it has been shown that the attitude affects the subjective norm and perceived behavioral control and positively affects women's soy consumption intentions. In their study, Kim and Chung (2011) reported that attitudes, subjective norms, and perceived behavioral control over green consumers' behaviors were effective variables.

Our study results were in line with these two research results, in our study all these three antecedents had a positive effect on intention. Attitude was the most significant positive factor on intention. Perceived behavior control was the second most important positive determinant on intention and it was followed by subjective norm.

The present study revealed that when it comes to the intention to green consumption, attitudes are more influential as opposed to subjective norms. Marketers should aim at building societal awareness as to the topic via effective communication of the messages regarding environmental benefits of eco-friendly products. This is important because social influences may have a very persuasive impact on individual behaviors which holds true for intention to purchase green products as well (Chan and Lau, 2002). Lastly, just like attitudes, perceived behavioral control (i.e. personal will to purchase a specific product) appeared to be a more effective factor regarding intentions behind green consumption as opposed to subjective norm. This may imply that when eco-friendly products are brought into the forefront in distribution channels, likelihood of consumers' seeing such products would increase, which may well increase their will to purchase them to a greater extent.

On the other hand, when we added demographic factors such as gender, age, marital status, occupation, children ownership, online shopping frequencies and regulatory focus orientations in our research, it changed slightly the results.

Before adding demographic variables, perceived benefits, perceived risks, anti-fashion attitude, perceived consumer effectiveness and green consumption values had significant and positive contribution to attitude. But when we included demographic variables, perceived benefits, perceived risks, perceived consumer effectiveness and green consumption values still had significant and positive contribution to attitude whereas the effect of anti-fashion attitude was eliminated.

Before putting in the demographic variables, attitude, subjective norm and perceived behavioral control had significant and positive contribution to the intention. After the involvement of demographic variables, attitude, subjective norm, perceived behavioral control had again significant and positive contribution to the intention however an additional parameter, “occupation of being student” appeared to be significant and it had important negative impact on intention. This could be a function of purchasing power. Students generally have a tight budget and organic apparels usually have higher prices as opposed to other options. Another reason may be their dislike as to the design of such products, given that at younger ages fashion and brand concerns may be a stronger driving force behind purchase behavior. Lastly, organic products are not readily available, and one needs to put effort to obtain them. Younger people may be less motivated to do so as they have various other concerns that are more at the front. Eco-friendly consumption may be down at their priority list.

Before demographic variables, intention had significant and positive contribution to behavior. After demographic variables added to the study, intention had once more important positive effect on behavior yet an additional factor "frequent online shopping behavior" came up and it negatively affected the behavior. Not all product types are preferred to be purchased online. When the price is relatively high and the product is not standard, online shopping is perceived to be risky. Given that people do not have a chance to touch and examine the product before purchase when they do online shopping (Comegys et al., 2009), they are less likely to engage in green apparel purchase through online channels (Goldsmith and Flynn, 2005). It is also known that viewing a product through a screen is one thing and seeing it in the store is another (Federal Trade Commission, 2003), and when it comes to organic purchase this difference becomes more important because the main product benefit is the unique fabric of such products. Lastly, saving time is a very strong motive for online shoppers. They tend to gravitate towards standardized products. Since finding as well as learning about organic products require extra time and effort, online shoppers may avoid in engaging in purchasing behavior.

Other researchers have indicated that gender plays a role in shaping attitudes, behavior, and knowledge about ecologically friendly items (Abdul-Muhmin, 2007; Butler and Francis, 1997; Banerjee and McKeage, 1994; McIntyre et al., 1993; Balderjahn, 1988) but the results of this study did not support this inference.

Finally, O'Reilly (2006) maintains that retailers do not provide the ideal shopping environment for organic fiber products. This study's findings also suggested that the potential market for organic cotton products is under-developed and under-studied. Retailers may be able to expand the consumer base for organic cotton products by developing marketing strategies based on making organic

products more visible in the marketplace such as designing store layout that is easy for fashion consumers to find eco-fashion to enhance shop convenience or using more signage to indicate where the eco-fashion is placed in the store, providing benefit to fashion consumers in terms of time saving for finding the eco-fashion they want and speeding up their purchasing process.

Limitations of the study and suggestions:

This study aims to contribute to the literature on consumer research. It specifically focused on consumer attitudes, intentions and behaviors regarding organic textile products. Even though it generated valuable insights as to the topic, it is not without limitations.

The study was conducted on Turkish consumers, which limits its generalizability to other cultures.

Due to the emerging nature of green consumerism, one limitation is the lack of definitions and clarification of terms for consumers. Studies have shown that consumers are confused by claims in the market. Terms such as environmentally friendly, green, eco-friendly, organic and natural are all relative and are often interpreted differently by each individual (Kavilanz, 2008).

Various other factors could have been included in the TPB model to increase the explanatory power of customer behaviors with regard to eco-friendly consumption. Consumers' skepticism as to whether what is claimed to be organic is really organic or not is an important variable to study (Yiridoe, Bonti-Ankomah, and Martin, 2005). Habitual decisions are yet another factor that impact buying behavior. It would provide a richer picture if these variables were included in the study.

Additionally, there is a need for further research linking self-reported behavior (as represented by the majority of existing studies) with empirical data on real behavior, because self-reported behavior is a poor descriptor or predictor of real behavior.

This research reveals perceptions regarding the use of organic cotton textile products of 400 participants. This is also a significant limit of the research, and for future researchers, increasing the number of participants will be able to produce healthier results.

Finally, the effects of price and objective knowledge variables on attitude and behavior are not investigated. However, the price and objective knowledge variables are considered to be the determinant of organic textile perception. Therefore, it is recommended that other studies on the subject take into account these variables.

# REFERENCES


Abdul-Muhmin, A.G. (2007). Explaining consumers willingness to be environmentally friendly. *International Journal of Consumer Studies*, *31*, 237-47.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2),179–211.

Ajzen, I. (2011). The theory of planned behavior, reactions and reflections. *Psychology & Health*, *26*(9), 1113–1127.

Aksoy, Ş., Caber, M., and Albayrak, T. (2013). The effect of environmental concern and scepticism on green purchase behavior. *Marketing Intelligence & Planning 31*(1), 27–39.

Alkaya, E., and Demirer, G.N. (2014). Sustainable textile production: a case study from a woven fabric manufacturing mill in Turkey. *Journal of Cleaner Production, 65*, 595–603.

Arvola, A., Vassallo, M., Dean, P., Lampila, A., Saba, L., and Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the theory of planned behavior. *Appetite, 50*(2), 443–454.

Asıoğlu, V., and Sengun, H.I. (2017). Practice of green marketing activities in the organic agricultural sector in Turkey. *Green marketing and environmental responsibility in modern corporations*, edited by T. Esakki. Hershey: IG Global.

Bal, S.B. (2013). Consumer characteristics influencing organic milk consumption preference in Tokat, Turkey. *Journal of Food, Agriculture and Environment, 11*(1), 159–164.

Baydar, G., Ciliz, N., and Mammadov, A. (2015). Life cycle assessment of cotton textile products in Turkey. *Resources, Conservation & Recycling, 104*, 213–223.

Beaudoin, P., Moore, M.A., and Goldsmith, R.E. (2000). Fashion leaders' and followers' attitudes toward buying domestic and imported apparel. *Clothing and Textile Research Journal,18*(1), 56-64.

Belleau, B., Nowlin, K., Summers, T. and Xu, Y. (2001). Fashion leaders' and followers' attitudes towards exotic leather apparel products. *Journal of Fashion Marketing & Management, 5*(2), 133-144.

Boldero, J., Moore, S., and Rosenthal, D., (1992). Intention, context, and safe sex: Australian adolescents' responses to AIDS. *Journal of Applied Social Psychology, 22*(17), 1374–1396.

Bong Ko, S., and Jin, B. (2017). Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management, 21*(1), 70–87.

Botetzagias, I., Dima, A.F., and Malesios, C. (2015). Extending the theory of planned behavior in the context of recycling: The role of moral norms and of demographic predictors. *Resources, Conservation and Recycling, 95*, 58–67.

Bulut, Z.A., Çımrin, F.K., and Doğan, O. (2017). Gender, generation and sustainable consumption: Exploring the behavior of consumers from Izmir, Turkey. *International Journal of Consumer Studies, 41*(6), 597–604.

D'Souza, C., Andrew J.G., Hartmann, P., Ibáñez, V.A., and Sullivan-Mort, G. (2015). Male eco-fashion: A market reality. *International Journal of Consumer Studies 39*(1), 35–42.

De Leeuw, A., Valois, P., Ajzen, I., and Schmidt, P. (2015). Using the theory of planned behavior to identify key beliefs underlying pro-environmental behavior in high-school students: Implications for educational interventions. *Journal of Environmental Psychology 42*, 128–138.

Demirtas, Bekir, Oğuz Parlakay, and Nuran Tapki. 2015. "Organic Food Awareness in Turkey." *Emirates Journal of Food and Agriculture* 27(5), 407–15.

Fielding, K.S., McDonald, R., and Louis, W.R. (2008). Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology 28*(4), 318–326.

Graham-Rowe, E., Jessop, D.C., and Sparks, P. (2015). Predicting household food waste reduction using an extended theory of planned behaviour. *Resources, Conservation & Recycling 101*, 194–202.

Han, H. (2015). Travelers' pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior. *Tourism Management 47*, 164–177.

Han, T.I. (2018). Determinants of organic cotton apparel purchase: A comparison of young consumers in the U.S.A. and South Korea. *Sustainability 10*(6), 20-25.

İlter, B., and Yılmaz, B.S. (2016). Understanding determinants of organic food consumption: Turkey example. *Acta Universitatis Danubius: Oeconomica 12*(4), 372–389.

Kanat, S., and Atılgan, T. (2014). Green marketing in textile and clothing sector: Turkish case. *ISEM*. Adıyaman, Akademik Platform. Retrieved from http://www.cekud.org.tr/wp-content/uploads/isem-2014-bildiri-kitapcik.pdf

Kang, J., Liu, C., and Kim, S.H. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *International Journal of Consumer Studies 37*(4), 442–452.

Konuk, F.A., Rahman, S.U., and Salo, J. (2015). Antecedents of green behavioral intentions: A cross-country study of Turkey, Finland and Pakistan. *International Journal of Consumer Studies, 39*(6), 586–596.

Oreg, S., and Katz-Gerro, T. (2006). Predicting pro-environmental behavior cross-nationally: Values, the theory of planned behavior, and value-belief-norm theory. *Environment and Behavior, 38*(4), 462.

Organic Exchange (2007), Organic cotton market report: preliminary highlights, available at: www.organicexchange.org/Documents/market_high_fall07.pdf. Retrieved 18 April, 2019.

Parker, D., Manstead, A.S., Stradling, S.G., and Reason, J.T. (1992). Intention to commit driving violations: An application of the theory of planned behavior. *Journal of Applied Psychology, 77*(1), 94–101.

Pavlou, P.A., and Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS Quarterly, 30*(1), 115.

Sahin, E. (2013). Predictors of Turkish elementary teacher candidates' energy conservation behaviors: An approach on value-belief-norm theory. *International Journal of Environmental and Science Education, 8*(2), 269–283.

Sheppard, B.H., Hartwick, J., and Warshaw, P.R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research, 15*(3), 325–343.

Sparks, P., and Shepher, R. (1992). Self-Identity and the theory of planned behavior: Assessing the role of identification with green consumerism. *Social Psychology Quarterly, 55*(4), 388.

Textile Exchange. (2013). Organic Cotton Sourcing Guide. *Textile Exchange*. Retrieved April 3, 2019 from http://textileexchange.org/wp-content/uploads/2018/01/Textile-Exchange_OC-Sourcing-Guide_Turkey.pdf.

Turkyilmaz, C.A., Uslu, A., and Durmus, B. (2015). Antecedents and outcomes of consumers' inward and outward environmental attitudes: Evidence from Turkey. *Procedia - Social and Behavioral Sciences, 175*, 90–97.

Yadav, R., and Pathak, G.S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior." *Journal of Cleaner Production, 135*, 732–739.

# APPENDIX

## QUESTIONNAIRE

We are researching the use of textile products made from organic cotton. We would like to hear from you about why you are using or not using these products. This information will be used for a dissertation study at Boğaziçi University. The survey will only take 5 minutes and your answers will be completely anonymous.

You can only answer the survey once. If you have any questions about the survey, please send us an e-mail: zerrin.eksioglu@boun.edu.tr

Thank you very much for your contribution!

Part 1:

1. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).
   1.1 I know pretty much about organic cotton.
   1.2 I do not feel very knowledgeable about organic cotton.
   1.3 Compared to most other people, I know more about organic cotton clothing.

2. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).
   2.1 Organic cotton is good for the skin due to moisture absorbency.
   2.2 Organic cotton clothing is worth paying extra for its uniquely breathable fabric.

2.3 Organic cotton farming provides non-chemical safer cotton products to wear.

2.4 Organic cotton is better for the environment than conventionally grown cotton.

2.5 Organic cotton is produced in an environmentally friendly way.

2.6 Organic cotton is healthier than conventionally grown cotton because it has no pesticide residues

3. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

3.1 I do not want to spend time on searching organic cotton apparel.

3.2 Organic cotton clothing is not easy to access because not a lot of stores carry this kind of merchandise near where I leave.

3.3 Organic cotton clothing would be hard to match with my other clothes.

3.4 Organic cotton clothing would not fit my style. Organic cotton clothing does not come in various styles to meet my need.

3.5 The price of organic cotton clothing is out of my price range.

3.6 Organic cotton clothing is not practical to wear considering the price.

4. In the parenthesis left blank at the beginning of the following sentences, type T if the information given in the sentences is correct and F if the information is incorrect.

( ) Chemical pollutants are produced during manufacturing of synthetic or manufactured fibres such as polyester.

( ) Chemical pollutants are not produced during processing of natural fibres such as cotton.

( ) Fibres such as cotton and wool cannot be commercially recycled.

( ) Natural fibres are usually biodegradable.

( ) The use of larger quantities of natural fibres will significantly decrease energy consumption.

( ) Nationally mandated standards for clean air and water have not yet been imposed on textile companies.

( ) Air pollution can occur during some common dyeing processes of textiles.

( ) Dyeing and finishing processes use a lot of water.

( ) Special finishes on fabrics may create problems for recycling.

5. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

   5.1 Compared to other apparel products, I prefer EFA items.

   5.2 I think that buying green EFA is good for me.

   5.3 I think that buying EFA is good for the community.

   5.4 I think recyclable apparel is a good idea.

   5.5 I think there is too much hype on environmental products.

6. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

   6.1 By purchasing EFA, every consumer can have a positive effect on the environment.

   6.2 Every person has the power to influence environmental problems by purchasing EFA

6.3 It does not matter whether I purchase EFA or not since one person acting alone cannot make a difference.

7. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

7.1 Purchasing EFA was entirely within my control.

7.2 I had the resources and ability to acquire EFA.

7.3 I have complete control over the number of EFA that I will buy for personal use.

8. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

8.1 For future purchases, I plan to seek out environmental products.

8.2 For future purchases, I plan to buy environmental apparel for myself or as gifts.

8.3 I will consider buying EFA because they have less negative environmental impact.

8.4 I will consider switching to other brands for environmental protection reasons.

8.5 I will switch to environmentally friendly alternatives of an apparel product.

8.6 I would gladly buy more certified organic apparel if I could find it.

9. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

9.1 I frequently purchase EFA.

9.2 I frequently search for brands that are known to offer EFA.

9.3 I normally put a lot of effort into purchasing apparel that is environmentally friendly.

9.4 I have an influence on my family (parents, siblings, extended family) and friends on their green purchasing behavior.

10. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

10.1 It is important to me that the products I use does not harm the environment.

10.2 My purchase habits are affected by my concern for our environment.

10.3 I would describe myself as environmentally responsible.

11. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

11.1 I am aware of fashion trends and want to be one of the first to try them.

11.2 Clothes are one of the most important ways I have of expressing my individuality.

11.3 I am the first to try new fashion: therefore, many people regard me as being a fashion leader.

11.4 Because of my active life style. I need a wide variety of clothes.

11.5 I always buy at least one outfit of the latest fashion.

11.6 I never read fashion magazines or pay attention to fashion trends.

11.7 I resent being told what to wear by so-called fashion experts.

11.8 Fashion in clothing is just a way to get more money from the consumer.

11.9 I buy clothes I like, regardless of current fashion

12. Please indicate to what extent you agree with the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree).

    12.1 Right now, I am focused on achieving positive outcomes.

    12.2 I typically focus on the success I hope to achieve in the future.

    12.3 I frequently imagine how I will achieve my hopes and aspirations.

    12.4 When good things happen to me, it affects me strongly.

    12.5 I see myself as someone who is primarily striving to reach my 'ideal-self'—to fulfill my hopes, wishes, and aspirations.

    12.6 I frequently think about how I can prevent failures in my life.

    12.7 I am anxious that I will fall short of my responsibilities and obligations.

    12.8 Right now, I am focused on avoiding negative outcomes.

    12.9 I worry about making mistakes.

    12.10 I often imagine myself experiencing bad things that I fear might happen to me.

13. Please indicate how often you do the following statements (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Continuous).

    13.1 I read labels on products.

    13.2 I pay attention to Eco-friendly labeling before deciding to buy.

    13.3 The material information on the label affects my purchase decision.

14. Please indicate how often you do the following statements (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Continuous).

    14.1 Does your family (parents, siblings, extended family) have an influence on your green purchasing?

14.2 Does your friends/peers have an influence on your green purchasing?

14.3 Do the media (newspaper, internet, television, radio) influence your green purchasing?

Part 2:

1. Gender:

( ) Male

( ) Female

2. Age:

( ) 18-25

( ) 26-35

( ) 36-45

( ) 46-55

( ) 55+

3. Education level:

( ) Primary education

( ) Secondary education

( ) High school

( ) University education and higher

4. Employment Status:

( ) Working full time

( ) Working part time

( ) Student

( ) Unemployed

( ) Retired

5. In what range is your approximate monthly household income?

( ) Up to 5.000 TL

( ) From 5.000 TL to 10.000 TL

( ) From 10.000 TL to 30.000 TL

( ) More than 30.000 TL

6. What is your marital status?

( ) Single

( ) Married

7. Do you have children?

( ) No

( ) Yes, I have min 1 children under 7

( ) Yes, I have children over 7

( ) No

8. Frequency of online shopping?

( ) Never

( ) 1-2 times a week

( ) 3-4 times a week

( ) 1-2 times a month

( ) 3-4 times a month