ISTANBUL BİLGİ UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES

FACTORS AFFECTING ATTITUDE AND PURCHASE INTENTION TOWARDS GRAY MARKET GOODS IN TURKEY AND IN THE U.S.: A COMPARATIVE ANALYSIS

PhD DISSERTATION

Mesut ÇİÇEK

Department of Business Administration

Marketing Programme

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Türkiye'de ve Amerika'da Gri Pazar Ürünlerine Yönelik Tutum ve Satın Alma Niyetine Etki Eden Faktörler: Karşılaştırmalı Analiz

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1) Gray Marketing
2) Parallel Import
3) Consumer Electronics
4) Attitude
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To "Funda" and "Eren",

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ABSTRACT

Gray Marketing is the importation and distribution of genuine products without the permission of the authorized distributors and manufacturers. Since these activities affect the strategies of the authorized distributor, more study is needed to be conducted in this field. In this context, the objectives of the study are twofold.

The first objective of the study is the reveal which personal (price consciousness, price-quality inferences, risk averseness, ethical judgment, consumer innovativeness and involvement) and social (informative and normative susceptibility) factors affect consumers' attitude towards gray market goods and intention. To develop a better model, a qualitative research, focus group, was conducted. Then, a survey method was applied to test the proposed model. In addition, a comparative study (Turkey vs. the U.S.) was applied to find out whether the effects of these personal and social factors differ across countries. The model was tested through multi-group structural equation modelling. The results indicated that price consciousness, risk averseness, price-quality, ethical judgment of the Turkish consumers affects their attitudes towards gray market goods. It can be stated that, only the ethical judgment of gray market activities affects the U.S. consumers' attitude towards gray market goods. In addition, the effect of ethical judgment on attitude is stronger for the U.S. consumers than the Turkish consumers. Furthermore, attitude has a positive effect on intention both in Turkey and in the U.S.

The second objective of the study is to reveal the antecedents and consequences of gray market activities in consumer electronics market. Therefore, an in-depth interview technique was conducted to the eight middle and top level managers. The results

indicated that there are several antecedents and consequences of gray market activities. Some of the antecedents are the proliferation of online marketplaces, illegal issues, price differences between countries, government policies, lack of service quality, and free-riding potential. There are also several consequences of gray market activities such as decrease in sales, profit and market share of the authorized distributors, brand image problems, dealer and consumer dissatisfaction.

Based on the findings of the qualitative and quantitative research, several strategies for the authorized distributors, manufacturers and gray marketers were suggested. In addition, this study provides valuable information to the gray marketing literature.

ÖZET

Gri pazarlama orjinal ürünlerin yetkili distibütör ve üreticilerin izni olmadan başka firmalar tarafından ithal edip satılması olarak tanımlanabilir. Gri pazar aktiviteleri yetkili distribütörlerin stratejilerini önemli ölçüde etkilediği için bu konuda daha fazla çalışma yapılması gerekmektedir. Bu bağlamda bu çalışmanın iki ana amacı vardır.

Çalışmanın ilk amacı gri pazar ürünlerine yönelik tutum ve niyetlere etki edebilecek bireysel (fiyat bilinci, fiyat-kalite çıkarsaması, riskten kaçınma, etiksel değerlendirme, tüketici yenilikçiliği ve ürün bağlılığı) ve sosyal (bilgisel ve normatif) faktörleri ortaya çıkarmaktır. Daha iyi bir model geliştirebilmek için öncelikle bir odak grup çalışması yapılmıştır. Sonrasında ise önerilen modeli test edebilmek için nicel bir araştırma uygulanmıştır. Tutum ve niyete etki eden faktörlerin farklı ülkelerdeki tüketicilere göre değişip değişmediğini ortaya çıkarmak amacıyla çok-gruplu yapısal eşitlik modellemesi ile Türkiye ve Amerika karşılaştırılması yapılmıştır. Analiz sonucunda Türk tüketicileri açısından fiyat bilinci, fiyat-kalite çıkarsaması, riskten kaçınma, etiksel değerlendirme faktörlerinin tutum üzerine etkisi olduğu görülmüştür. Amerikan tüketicilerde ise sadece

etiksel değerlendirmenin tutum üzerinde etkili olduğu ortaya çıkarılmıştır. Ayrıca, Etiksel değerlendirmenin tutum üzerine etkisi Amerikan tüketicilerinde Türk tüketicilere göre daha güçlü olduğu belirlenmiştir.

Çalışmanın ikinci amacı ise gri pazar aktivitelerine neden olan öncüller ile gri pazar aktivitelerinin pazarda neden olduğu sonuçları ortaya çıkarmaktır. Bu nedenle elektronik sektöründe faaliyet gösteren firmaların sekiz orta ve üst yöneticisi ile derinlemesine mülakat gerçekleştirilmiştir. Sonuçlar gri pazar aktivitelerine neden olan çeşitli öncüller ve sonuçlar olduğunu ortaya çıkarmıştır. Gri pazar aktivitelerinin nedenleri arasında sanal pazar mağazalarının artması, illegal aktiviler, ülkeler arasındaki fiyat farklılıkları, devlet politikaları, servis problemleri, ve bedavacılık potensiyeli bulunmaktadır. Diğer bir taraftan, gri pazar aktivitelerinin şirketlerin marka imajına zarar verdiği, müşteri ve bayi tatminsizliğine yol açtığı, yetkili distribitörlerin satışlarının, karlılıklarının ve pazar payının azalmasına yol açtığı belirlenmiştir.

Yapılan nicel ve nitel çalışmaların sonuçları ışında yetkili distribütörlere, üreticilere ve gri pazarlama yapan ithalatçılara yönelik strateji önerilerinde bulunulmuştur. Ayrıca bu çalışmanın sonuçları gri pazar literatürüne çok değerli bilgiler sağlamıştır.

1 INTRODUCTION

Gray marketing, which is also known as parallel import, is defined as the “distribution of genuine products outside the manufacturer’s authorized channels” (Lansing & Gabriella 1993, p. 75). Gray market activities have been threatening the companies incrementally (Assmus & Wiese, 1995) and the volume of gray marketing continuously arises (Myers, 1999). In addition, the proliferation of internet has enabled gray marketers to act more effectively. Gray marketers can open online stores and also launch online compaigns which decrease their costs (Bandyopadhyay, 2010). The ignorance of gray marketing activities may lead to irrevocable consequences for the authorized channel members in a market. Therefore, authorized distributors and manufacturers should be aware of hazards of gray market activities and they should carefully analyze and respond to gray market activities.

1.1 The Aim of the Study

Authorized dealers and manufacturers should assess some strategies to combat gray marketers. In order to be successful, they should consider several factors such as consumer related factors, gray marketer related factors, authorized distributor related factors, price related factors, and so on, which may affect increase or decrease of gray market activities. In this study, it is aimed to focus on personality factors which may affect consumers’ attitude towards gray market goods and their purchase intention.

However, since there is little information about the gray market activities in the market, there needs to be an analysis to reveal whether the effects of gray market activities are strong or ignorable. If the effects of gray market activities are very strong in a market, authorized distributors should adjust their marketing strategies considering gray market activities. If the effects of gray market activities are so weak and ignorable so there will be no need for adjustment. Therefore, prior to the testing the effects of personality factors of the consumers on the attitude towards gray market goods, a qualitative study is aimed to be conducted to reveal the antecedents and consequences of the gray market activities in the market. Thus, the managers will be recommended to use more effective strategies.

In the literature, there are some studies related to the antecedents and consequences of the gray market activities, and possible strategies to combat gray market activities (Antia, Bergen, & Dutta, 2004; Assmus & Wiese, 1995; Çavuşgil & Sikora, 1988; Cespedes, Corey, & Rangan, 1988; Duhan & Sheffet, 1988; Myers & Griffith, 1999; Myers, 1999; Weigand, 1991). Most of these studies were conceptual and outdated. However, in the beginning of the 90's the Internet was not common, online shopping was not possible for the customers and international transportation systems was not that advanced. Most of the studies that were conducted previously, cannot include the effects of technological developments. Today, the proliferation of online marketplaces and social media tools provide unique opportunities for the gray marketers. Gray marketers may open an online store which is almost for free and may promote their products via forums, social networking sites and price comparison sites almost for free as well. In addition, gray marketers may get information about the product and price opportunities from all over the world through the Internet. These opportunities provided by the technological developments provide substantial cost advantage for the gray marketers (Bandyopadhyay, 2010).

Therefore, in this study, it is aimed to fill the gaps in the literature by providing up-to-date information through qualitative research pertaining to the antecedents and consequences of gray market activities, and authorized distributors' strategies to combat gray market activities.

While forming their strategies against gray market activities authorized distributors should take the personal factors which affects consumers' attitudes towards gray market goods into the consideration. In the literature, there are only limited studies related to the factors affecting consumer' attitude towards gray market goods and the results of these studies were very contradictory. Therefore, the main aim of this study is to reveal underlying factors affecting consumers' attitude towards gray market goods. In addition, the contradictory results in the literature will be tried to be explained by taking cultural differences of the consumers from different countries into consideration. Thus, authorized distributors may develop more effective strategies to prevent gray market activities. However, since the extant literature is not sufficient, first a qualitative research will be applied to probe more comprehensive information from the consumers and the model will be developed by considering both literature and qualitative research.

1.2 The Scope of the Study

In the literature, there is no study which is conducted in Turkey and in the U.S. to analyze the effects of consumers' personality factors on the attitude and intention towards gray market goods. Therefore, this study is aimed to be the pioneer in this field.

This study will be conducted in Turkish and American consumers to reveal the differences about the factors affecting attitude towards gray market goods. The reason of the selection of these countries is the cultural and economic differences between these countries. Turkey and the U.S. are maybe the only countries which are located in different cells at the each dimension of the cultural maps proposed by Hofstede (1980). Turkey is considered as collectivist, while the U.S. individualist; Turkey has a Feminine culture, while the U.S. masculine; while uncertainty avoidance is high in Turkey, it is low in the U.S., power distance is high for Turkey, while it is low in the U.S. As it is seen, these two countries are culturally different and these differences may affect consumers' attitudes towards gray market goods. In addition, the economic status and market prices are different for these two countries which may also affect the consumers' attitudes towards gray market goods. Price differences between countries is one of the most important determinant of gray marketing (Çavuşgil and Sikora, 1988), and the price differences between Turkey and the U.S. are too much. For example, the price of an iPhone 6 is $649 in the U.S. (Apple.com, 2015), while it is $ 960 in Turkey (Apple.com.tr, 2015). The huge price differences may cause a change in factors affecting consumers' attitude towards gray market goods from one country to another.

A variety of product categories such as automobiles, perfumes, watches, drugs, drinks, and consumer electronic products are provided through gray marketers (Antia et al., 2006; Mathur, 1995). However, consumer electronics have been one of the most affected sectors by the gray market activities. Bandyopadhyay (2010, p. 97) purported that there are four reasons why gray marketing is so popular in consumer electronics market. 1) Substantial differences in prices of consumer electronics products between the United States and other countries, particularly in the Far East, that appeal to the profit motives of gray marketers; 2) the high growth of online retail sales of electronics; 3) price sensitivity of consumers buying electronics products; and 4) virtually no legal protection against gray marketing of consumer electronics (unlike pharmaceuticals or tobacco). Therefore, in this study, gray marketing in consumer electronics sector will be evaluated.

1.3 Research Questions

In the light of the objectives and scope of the study, the following research questions have been identified.

- Which personal and social factors affect consumers' attitudes towards gray market good?
- What are the causes and effects of gray market activities in the consumer electronics sector?
- What are the effective strategies for authorized channel members to combat gray market activities in the consumer electronics sector?

1.4 Definition of Gray Marketing

For more than thirty years, manufacturers and authorized distributors have faced a problem which is called "Gray Marketing" (Bardakçı, 2010). Since gray market has not been known publicly, this concept is confused with counterfeit market and black market. In addition, the difference between authorized original goods and gray market goods is blurred. The differences between the concepts are indicated in Table-1. As it is seen, in the gray market, goods are original, all the operations are legal, however, the goods are distributed through unauthorized channel members.

Table 1: Types of goods Regarding the Originality, Legality and Distribution

Market	Goods	Operations	Distribution
Original /Authorized Goods	Genuine	Legal	Authorized
Gray Market Goods	Genuine	Legal	Unauthorized
Black Market Goods	Genuine /Imitated	Illegal	Unauthorized
Counterfeit Goods	Imitated	Illegal	Unauthorized

On the other hand, in the literature, gray marketing has three different meanings. In the first meaning, gray marketing is used for the marketing focused on elder people (Militello and Coleman, 1995). In addition, Zhuang and Tsang (2008, p. 87) defined gray marketing as "the ethically problematic selling practices used by sales agents". They included all the ethically problematic marketing activities in the gray marketing definition. However, in this study, gray marketing is used to define "distribution of genuine products outside the manufacturer's authorized channels" (Lansing & Gabriella

1993, p. 75). In the literature, gray marketing is also called as “Parallel Imports” (Chen, 2002), “Arbitrage”, “Product Diversion” (Ahmadi & Yang, 2000), and “Water Goods” (Chang, 1993). On the other hand, some authors claimed that parallel imports and Gray Marketing concepts cannot be used interchangeably. For example, Chang (1993) claimed that parallel importation is the international version of gray marketing. In addition, Assmus and Wiese (1995) claimed that there are three types of gray markets as it is indicated in the Figure-1.

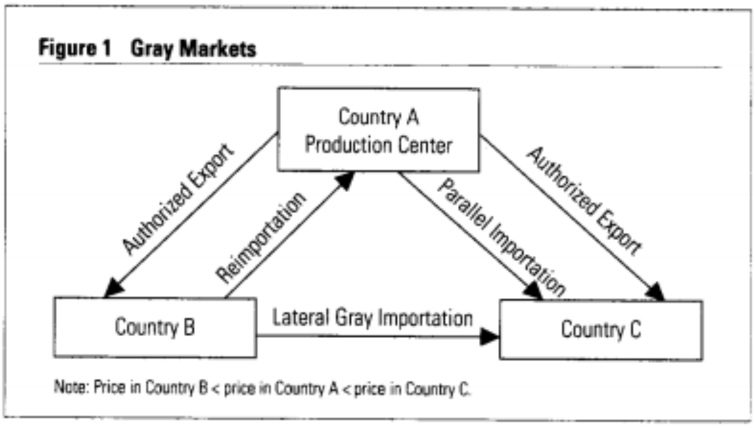

Figure 1 Types of Gray Marketing

Source: Assmus and Weise (1995)

If a gray marketer takes advantage of the price difference from the home market to export market, it is called as Parallel Importation, Re-importation occurs if the price of a product in the home market is more expensive than the foreign markets, and Lateral Gray Importation occurs if a product has been moved from one foreign market to another foreign market (Assmus & Wiess, 1995).

The first seminal papers about gray marketing emerged in the 1988-1989, and that was not a coincidence (Çavuşgil & Sikora, 1988; Cespedes et al., 1988; Duhan & Sheffet, 1988; Weigand, 1989). In 1988, The United States Supreme Court decided that, in the K-Mart case, the unauthorized importation of products cannot be prevented by the American trademark owners (Weigand, 1991). In the same year, approximately ten billion dollars in goods were imported through gray market channels in the U.S. (Lansing & Gabriella, 1993). The trade volume of gray marketing has developed gradually. However, it is very hard to get explicit data on gray marketing activities (Antia et al., 2004)

A wide range of sectors has been affected by gray marketing throughout the world. These sectors can be compiled from the literature as follows: Electronic components such as cameras, TV's, mobile phones, camcorders, alcoholic beverages, watches, fashion goods, automobiles, computers, batteries, cosmetics, glassware, heavy construction equipments, home appliances, soft drinks, perfumes, and so on (Antia et al., 2004; Antia et. al., 2006; Çavuşgil & Sikora, 1988; Chang, 1993; Mathur, 1995). However, one of the most important sectors affected by gray marketing is the IT sector. For instance, estimated volume of IT sector only held by gray marketing increased from $40 billion in 2002 to $58 billion in 2008 (Gudigantala & Biçen, 2011; KPMG, 2008).

The increase of gray marketing activities provides several advantages and disadvantages to the authorized distributors and manufacturers. Several authors claimed that gray marketing may help authorized dealers or/and manufacturers to increase the market share and sales volume (Ahmadi & Yang, 2000; Bardakçı, 2010; Champion, 1998; Duhan & Sheffet, 1988; Gudigantala & Biçen, 2011; Myers, 1999; Prince & Davies, 2000). In addition, Antia et al. (2004) stated that gray marketing leads several advantages pertaining to incremental sales, supply constraints, competitive necessity, and market segmentation. Furthermore, gray marketing may be beneficial for authorized distributors to overcome international regulations and barriers, to remain competitive in highly intensive markets, to overcome supply-chain constraints (Gudigantala & Biçen, 2011).

2 GRAY MARKET ACTIVITIES FROM THE COMPANIES' PERSPECTIVE

2.1 Literature Review

In order to determine the most affective strategies managers should carefully analyze the antecedents and consequences of gray market activities. In addition, the managers also should consider the strategies suggested by the managers and the researchers.

2.1.1 Antecedents of Gray Marketing

Gray marketing does severe harms to both manufacturers and authorized distributors from various aspects as it is discussed in the preceding section. Therefore, both authorized distributors and manufacturers should develop protective and proactive strategies to minimize or deter gray market activities in a market. However, in order to develop successful strategies they should first reveal the underlying reasons what causes the gray market activities (Huang et al., 2008).

In the literature, the authors stated several reasons about the emergence of gray market activities. They mostly agreed that price differential between the countries was far the most effective factor which caused gray market activities (Antia et al., 2006; Assmus & Wiese, 1995; Cespedes et al., 1988; Chang, 1993; Chaudhry & Walsh, 1995; Chen, 2007; Duhan & Sheffet, 1988; Mathur, 1995; Weigand, 1991). There are also some opposite viewpoints such as Lee et al. (2000) claimed that even if the manufacturer or authorized distributor does not discriminate the price across markets, gray marketing may still exist. Other prospective causes of gray market activities are provided in the Table-2.

Table 2: Prospective Antecedents of Gray Market Activities

Authors	Prospective Antecedents of Gray Market Activities
Antia et al. (2006)	Price differential Product scarcity in the local market Free riding potential Customer heterogeneity of services
Assmus & Wiese (1995)	Having a unique brand name Price differences between markets Lowering of the trade barriers Increasing number of global products Decreasing the cost of price information in different countries Local Price elasticity
Cespedes, Corey, & Rangan (1988)	Supplier pricing policies International exchange rate fluctuations Uniform goods and multilingual packaging Supplier franchise practices
Chaudhry & Walsh (1995)	Source of supply Low trade barriers between countries Easy access from one market to another Large price differentials
Duhan & Sheffet (1988)	Product must be available in other markets Trade barriers must be low enough Price differentials among various markets must be great enough
Weigand (1991)	Exchange rate differences Price discrimination among markets Opportunistic behaviors of the distributors

Although several authors stated their views on the potential causes of gray market activities, only Antia et al. (2006) empirically proved that price differential among markets, product scarcity in a local market, free riding potential in a market, and customer heterogeneity of services in a market positively affect gray market activities. The most important antecedents of gray market activities were price differences across countries, low trade barriers, product scarcity in the market, opportunistic behaviors of the distributors, and exchange rate differences.

2.1.2 Consequences of Gray Marketing

Although gray marketing may provide some advantages to the authorized distributors and manufacturers, harms of gray market activities are numerous.. In the extant literature, several authors stated their thoughts on the possible consequences of gray market activities that are indicated in Table-3. For instance, Myers (1999) conducted an empirical analysis to measure the effect of gray marketing activities on economic performance (sales volume, profit margin, ROI, and overall profitability goals) and strategic performance. The results, surprisingly, indicated that there was no significant relationship between gray market activities and economic performance. In addition, there was a negative relationship between gray market activities and strategic performance of the manufacturing firms.

Table 3: Possible Consequences of Gray Market Activities

Antia, Bergen, & Dutta (2004)	Damage profit of the authorized distributors' profit, brand equity, market position, channel relationship, reputation of the manufacturer
Assmus & Wiese (1995)	Cannibalize product sales

	Threaten the prestige image of the product Damage long term profitability
Çavuşgil & Sikora (1988)	Erosion of trademark image Strained manufacturer-dealer customer relations Legal liabilities such as safety Disruption of marketing strategy and profits
Cespedes, Corey, & Rangan (1988)	Upset pricing strategy Lead customer dissatisfaction
Champion (1998)	Undercut margins
Chen (2007)	Erode the brand image of the authorized goods strain channel relationships
Duhan & Sheffet (1988)	Damage the goodwill of the manufacturer
Huang, Lee, & Hsiao (2008)	Losing control of marketing channel Customer dissatisfaction
Mathur (1995)	Reduce effectiveness of marketing strategy Damage images and values of goods and brand names Lessen the effectiveness of pricing strategy
Myers (1999)	Damage the relationship between manufacturer and authorized distributor Damage relationship between distributor and customer Decrease sales volume and margins

Other important consequences of gray marketing activities were damage of brand image, decrease in profit margin, sales, manufacturer-dealer-customer relations, the dissatisfaction of the consumers, losing control of the market, and so on.

2.1.3 Strategies to Combat Gray Marketing

The managers of the authorized distributors and manufacturers should apply several marketing strategies to prevent gray market activities which may damage their performance and image. In the literature, some authors suggested several strategies for authorized distributors and/or manufacturers which are indicated in the Table-4. Probably the most comprehensive strategies to combat gray marketing were proposed by Çavuşgil and Sikora (1988). Cavuşgil and Sikora first divided the strategies into two as Protective and Proactive strategies. Then, they evaluated every strategy in terms of cost, difficulty, implementer, source, risk, long term effectiveness and so on.

However, most of the strategies indicated in the Table-4 were just the authors' thoughts and only the limited numbers of strategies were evaluated by the qualitative research. On the other hand, most of the seminal papers were published years ago.

Table 4: Strategies to Prevent Gray Market Activities

Ahmadi & Yang (2000)	Monitoring dealers' sales through product registration Differentiating products such as packaging, language, design Differentiating services such as warranty, technical support
Antia, Bergen, & Dutta (2004)	Asking manufacturers to prevent gray marketing Enforcement Charging the same price to all markets Use of incentives to prevent diversion of products Introducing new products constantly and steadily discounting the previous generation products
Assmus & Wiese (1995)	Work on legal protection Fewer warranties for products bought on the gray market Acquisition of the gray marketer Modification of the products Coordinating international prices of the global product
Çavuşgil & Sikora (1988)	**Reactive Strategies** Strategic Confrontation Educate the dealers, Analysis of strengths and weaknesses, Promotion of dealer strengths and competitive weaknesses, Creative

	merchandising Participate Do gray marketing in short term and so eliminate the other gray marketers from the market Cut the price temporarily and beat the gray market price (manufacturer should help the dealer) Supply Interference Cancel the dealership if they do gray marketing Buy back the gray marketing products Promote the gray market products' limitations Collaborate with the gray marketers (If you cannot beat them) Acquire the gray marketer company Consider the financial ability, dealer's image and cost of acquisition **Proactive Strategies** Product/Service Differentiation and Availability Design product for certain market Apply strategic pricing Develop strategic pricing strategies Dealer Development Use Marketing Information Systems A "must" in tracking gray market movements in the global arena Warranty registration cards can be used Long Term Image Reinforcement Promotion of the dealer's image and intangible services may discourage gray market buyers. Establish Legal Precedence Lobby Seek protectionism against parallel imports; and increase of non-tariff barriers through regulatory agencies
Cespedes, Corey, &	Promotion the weak sides of gray marketing Disenfranchisement of offenders

Rangan (1988)	Application of a one-price-for-all policy Adding distributors to the network Getting accurate and timely information Using product serial numbers, warranty cards Price adjustment
Chen (2007)	Emphasize Perceived Quality (Distributor) Focus on High Involvement products Packaging and adjusting product features in each different country (Manufacturer)
Gudigantala & Biçen, (2011)	Enforcement Buy back gray market products Monitoring such as Incentive management, internal control Using IT to get timely and accurate information
Huang, Lee, & Hsiao (2008)	Application of a one-price-for-all policy Comparative advertising Sales promotion Increasing service fees for gray goods
Lansing & Gabriella (1993)	Price Cutting Pricing on the same currency Participation Termination of authorized distributor Product Differentiating Warranty registration Unit pricing instead of volume discount Lobbying for Legislative and judicial changes
Myers (1999)	Coordinate the distribution channel horizontally. Stay apprised of changing regulations. Pay attention to differentiated products across markets. Restrict the autonomy to set prices. Stay in touch with your distributor.
Prince & Davies (2000)	Refusing to service gray goods Differentiate products

Tan, Lim, & Lee (1997)	Price war with gray marketers (Price Cut) Scale down or cut-off the advertising and promotional activities Engage in the occasional price promotion
Weigand (1989)	Ignoring the gray market activities Public warnings about gray market activities Pointing product differences Buying gray market products back
Weigand (1991)	Frequent Price Changes Charging the same price to all markets Work on legal issues Modification of the products based on local consumers' preferences Buy back gray market products

The most important and suggested strategies to combat gray market activities were the price decrease of authorized distributors goods, modifications and definitions of the products, refusing the service to gray market goods, lobbying, application of a one-price-for-all policy, warranty registrations,

2.2 Methodology for In-Depth Interview

Since, there is no study in the literature regarding gray marketing activities in Turkey, a qualitative research was preferred to retrieve comprehensive information about the gray market activities in Turkey. Qualitative research is defined as "multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them" (Denzin and Lincoln 1994: p.2). There are several qualitative research techniques such as in-depth interviews, focus groups, ethnography, and case studies (Berg, 2001) and each technique has its own specification methods and procedures (Mays and Pope, 1995). In-depth interview technique is very effective when interviewing experts, top-level managers and thought leaders. Therefore, in this study, semi-standardized in-depth interview technique was preferred since it provides much more comprehensive information than what is available through other data collection methods (Boyce and Neale, 2006).

2.2.1 In-Depth Interview Sampling

In order to reveal the most comprehensive and exact information, the middle and top marketing managers of the well-known consumer electronics companies in Turkey were aimed as interviewees. However, to get more diverse information, the managers were chosen from authorized distributors, dealers, online marketplace companies, manufacturer subsidiaries and gray marketers. E-mails, which indicated the aim of the study, were sent to the managers and they were requested to participate in the study. Table-5 indicates the demographics of the managers who volunteered for participation in the study.

Table 5 Demographics of the Managers and Company Information

Manager	Position	Gender	Age	Company Type	Company Sector	Product Type
Manager 1	Deputy General Manager	Male	40-50	Online retails	Various	Genuine /Gray
Manager 2	Consumer electronics Category Manager	Male	30-40	Online marketplaces	Various	Genuine /Gray
Manager 3	Consumer electronics Marketing Manager	Male	30-40	Online marketplaces	Various	Genuine /Gray
Manager 4	Deputy General Manager	Male	50-60	Country headquarter	Consumer Electronics	Genuine
Manager 5	Country Sales Manager	Male	40-50	Country headquarter	Mobile Phones	Genuine
Manager 6	CEO	Male	40-50	Authorized Distributor	Mobile Phones	Genuine

Manager 7	CEO	Male	40-50	Authorized Distributor	Mobile Phones	Genuine
Manager 8	Product Group Manager	Male	30-40	Gray Marketer	Consumer Electronics	Genuine /Gray

2.2.2 Data Collection

For the interviews, an interview guide (see Appendix A) was formed based on the literature. This interview guide provides a structured map for the interviewer to assure the flow of discussion. Appointments were set and confirmed by the managers based on their time and location preferences. Before starting the interview, the managers were asked permission to audio record the interview. Six of the interviews were conducted at the managers' offices at company headquarters and two of the managers preferred cafes for the conversation. Based on the managers' available time, the durations of the interviews varied between 32 minutes and 1 hour 3 minutes. In order to be certain about whether the managers have adequate information about gray marketing, in the beginning of the interview they were asked to define gray marketing from their perspectives. The answers indicated that they have very extensive knowledge about gray marketing.

2.2.3 Data Analysis

Salkind (2012) claimed that interviews should be conducted until the saturation is reached. Saturation is reached when the answers of the interviewees do not differ much. In this study, the saturation is reached at the 8th interviews. Total eight interviews' audio recordings were transcribed elaborately.

The obtained data were analyzed through thematic analysis. “Thematic analyses seek to unearth the themes salient in a text at different levels, and thematic networks aim to facilitate the structuring and depiction of these themes” (Attride-Stirling, 2001; p. 387). This technique is generally used to “identify, report and analyze the data” (Floersch, 2010, p. 2) and provides high flexibility for the researchers (Braun and Clarke, 2006). Atlas.ti, which is a qualitative data analysis tool, was used to analyze the data.

Coding was made considering the steps mentioned in the Attride-Stirling’s (2001) study. First a coding framework was devised based on the literature. All the text was read and coded carefully and themes and networks were extracted from the codes. In order to assess the reliability of the coding a test-retest method was used. In this method, the author coded the data twice and compared the results of first and second coding (Gorden, 1992). The results of the codings were very similar.

2.2.4 The Findings of Data Analysis

2.2.4.1 Gray Marketing from the Companies’ Perspective

Definition of Gray Marketing from the Managers’ perspectives

At the start of the in-depth interviews, the managers were asked to define gray marketing from their perspectives. The manager of the online marketplace company defined gray marketing as follows;

> “Gray marketing is the importation of genuine goods by an importer company without the permission of authorized distributor by meeting the requirements such as warranty and technical service”.

On the other hand, the manager of an authorized distributor company made a more subjective definition as “Importation and sale of the products by other companies without our control”. Although the managers’ definitions more or less the same, there were some differences between them. On the authorized distributor side, they mostly focus on the perspective of the process to be out of control of the main company. On the other hand, the manager of gray marketer highlights the legality of gray marketing. The representative of the global manufacturer called gray marketing as an alternative sales channel.

Gray Marketing Companies

The specifications of the gray marketers vary. Therefore, it is very hard to assess their characteristics. On the one hand, some gray marketing companies are corporate companies and they have imported and sold gray market goods for a long time. These companies really care about customer satisfaction and company image. On the other hand, there are some small companies who make gray marketing under the counter. Customer satisfaction and company image are not that important for these companies. They do business on guerilla basis.

Gray Market goods in the Market

All the interviewees agreed that mobile phones are by far the most dominant gray market goods in the market. Gray Marketers prefer to import and sell mobile phones since they are the top demanded product group in the consumer electronic sector both in value and quantity. For instance, the manager of the online marketplace claimed that;

> "Almost all the mobile phones that are sold on the online marketplaces are gray market goods". The other consumer electronics product groups that are imported as gray marketing are game consoles, tablets, cameras, sound systems, smart watches, televisions, and vacuum cleaners".

Gray Marketing Volume

Gray market activities have existed in the consumer electronics market for decades. However, there is no information about the market share of gray market goods. Furthermore, none of the interviewee managers have formal reports about gray marketing. Therefore, they were asked about their forecast about the market share of gray market goods.

The manager of an authorized distributor company claimed that before 2000 market share of the gray market goods in the consumer electronic sector was approximately 50 %. He mentioned about an incident as following;

> "We were looking for a warehouse to store our products. One day a real estate agent took us to a warehouse that was located in a free-custom zone. At the main gate we were warned that the warehouse is not empty. We said that we would just look over the general conditions of the warehouse. When we got in we realized that the warehouse were full of our products which were imported as gray marketing. Interestingly, the total quantity of the gray market goods in the warehouse was more than our total inventory".

The managers claimed that gray market goods' market share was approximately 20% in 2005. At the present time, the managers' forecast about the market share of gray market goods in the consumer electronics sector varies between five to ten percent. Although, the forecasted numbers indicate that there is a descending rate on the gray market goods' market share, in the near future the slope will probably go upwards. The manager of the online marketplace claimed that many of the electronics products sold in the online marketplaces are the gray market goods. The market share of the gray market goods is expected to increase in parallel with the proliferation of the online marketplaces.

Moreover, the Interviewees provided very comprehensive information about the antecedents and consequences of gray market activities in a country, and possible strategies against gray marketing.

2.2.4.2 Antecedents of Gray Marketing

Free-Riding Potential

Gray marketers generally free ride the marketing efforts of the authorized distributors. Hence, the costs of gray market goods are less than the authorized distributors goods. If the free riding potential is huge for a product or brand in a market, the likelihood of the gray market activities will be higher for this product or brand. An Interviewee explained this situation "Gray marketers generally do not allocate their resources for marketing activities such as advertising and public relations. They free ride the authorized distributors. Therefore, they can sell the same product cheaper than the authorized distributors"

Existence of Manufacturer Subsidiary

Existence of manufacturer subsidiary in a country also plays an important role of the gray marketing potential for a product and brand. When a manufacturer has a subsidiary in a country, they would have comprehensive knowledge about the market and they can control the market activities more easily. The gray marketers mostly prefer to import the products and brands, which have no subsidiary in a country. A country headquarter manager of a well-known consumer electronics company stated that "Before we open a subsidiary in Turkey, the market share of gray market goods for our brand was about fifty percent. Fortunately, today this ratio decreased to approximately five percent.

Big Retailers' integration of gray marketing

Some big retail chains refuse to collaborate with the authorized distributors. Their strategy is to negotiate with the manufacturer companies instead of authorized distributors. They prefer to import products from the manufacturers directly, which can be called as gray marketing, in order to keep retail chains' trade volume enormous. An interviewee claimed as follows;

> "When the global consumer electronics retail chains enter the Turkish market, the dynamics of the market have changed. When they faced with an intense price competition, they said we only work with the manufacturers. They imported the products directly from the manufacturers by ruling out the authorized distributors".

Illegal Issues

All the interviewees, without any exception, mentioned about some illegal issues related to gray market activities. They all accept that gray marketing activities are legal fundamentally, however, they claimed gray marketers gain advantages through some illegal actions. For instance, the top-level manager of an authorized distributor company claimed that gray marketers could not compete with the authorized distributors if they do gray marketing completely lawfully. Another interviewee has agreed with the top-level manager and stated as follows: "Today, there is only one condition that lead gray market activities exist in the market. It is declaring the products' custom entry prices far lower than their actual prices. Thus, they pay lower value added tax, special consumption tax and other taxes lower than it should be".

For instance, an Interviewee calculated the unfair gain of a gray marketer though declaring the custom price lower than the actual price.

Let's consider the price of a product is about $500. If the gray marketer declared the price of this product as $300 at the custom, they would pay all the taxes on this amount. For a mobile phone, the government applies approximately 25% special consumption tax, 18% value added tax, 6% communication tax. The total tax is about 50%. This gray marketer pays $150 as a tax instead of $250. Hereby, they gain $100 unfairly and can sell the product far cheaper than the authorized distributors.

Government Policies

Government policies are also one of the key antecedents of gray market activities in a country. Government policies can affect the gray market activities both directly through legislations and indirectly through tax rates. In this context, the governments' standpoint about gray marketing is crucial. The managers of the authorized distributors stated that they demanded and requested from the government to prevent gray market activities in Turkey. However, government officials replied that there is nothing to do for them to prevent gray marketing. In addition, government officials claimed that the protection of the customers are their priority and though gray marketing authorized distributors can not overcharge for the products and thus customers can buy the products with reasonable price.

On the other hand, eighty percent of the interviewees agreed on the fact that governments' tax regulations indirectly affect the gray market activities because of the tax related issues provided in the preceding section. They claimed tax rates for consumer electronics goods are among the highest in the world. Consequently, these tax regulations attract the companies who are eager to do gray marketing.

Sales of Gray Market goods earlier than official launch date

Some big electronic companies launch their most recent products in some specific countries such as the United States first, and then they release these products in other countries later on. Authorized distributors have to obey the official launch dates. However, in the market, there are some early adopters who want to buy the latest products first. So, some gray marketers take the advantage of this situation, and they import and sell these latest products earlier than the authorized distributors. Being first users of the products is very important for innovative consumers and they do not care whether the products are gray or genuine. This mostly happens for the game consoles and games. For instance, an interviewee claimed as follows:

> "Nowadays, some gray marketers can import gray goods swiftly. We have witnessed that some gray marketers launched Sony Play Station 4 earlier than the authorized distributors. There are some game addicts who don't mind the price and other issues. They only focus on having these products first. Therefore, release date is very important for them."

Proliferation of Online Marketplaces

The interviewees agreed on the fact that the proliferation of the online marketplaces is a milestone for gray marketing. In fact, there is a mutually beneficial relationship between the online marketplaces and gray marketers. The manager of an online marketplace company stated that gray marketers make us stronger and we make them stronger. If they want to sell their gray market products through dealers and wholesalers, they have to offer them margins, which decrease their profits, and have to accept the heavy conditions of the well-known dealers and wholesalers. Therefore, online marketplaces, where they can open a virtual store and sell the products directly to the end-users, provide them peerless opportunities.

In the context of mobile phones, the managers stated that 25% of the online sales are gray market goods. Furthermore, more than 90% of the mobile phones sold on the online marketplaces are gray market. These numbers look very impressive. However, the ratio of online sales equals only the one-tenth of offline sales in the electronics sector. The first reason for that is the fact that Turkish consumers still prefer to see, evaluate and test the electronics goods before they buy it. The second reason is that Turkish consumers are not eager to use their credit cards online.

However, the use of online shopping is increasing day by day. The manager of an online marketplace claimed that the growth rate of the online marketplace is about 35-40%. There are several reasons that lead to the growth of online marketplaces as follows. Online shopping companies provide new payment methods other than credit cards. Moreover, the consumers are protected by distance selling contract for their online transactions. Some of the interviewees forecasted that both the market share of the online marketplaces and volume of the gray market goods would increase mutually.

Authorized Distributors' Lack of Service Quality

Under normal conditions, services and warranty issues are the weakest side of the gray marketing. However, some managers claimed that consumers' perceived service quality is almost the same both for gray market and authorized distributor goods. Even, some gray marketers provide better after-sale service and warranty conditions than the authorized distributors do. For instance, an interviewee claimed that for a malfunctioned mobile phone, a customer might wait 30 days to be repaired by the authorized distributors. However, some gray marketers replace the malfunctioned phone with the new one that makes them more satisfied than the authorized distributors' service. Moreover, the manager of a well-known gray marketer stated that they really care about the after sales service for the gray market goods and provide quick and trustworthy after sale service to the customers.

Price Related Issues

The interviewees mentioned about two main price related issues, which are price differences across countries and high profit margin of the authorized distributors. If the price of a product is far cheaper than the home country, the gray marketing potential in the home country will increase. The second issue is the high profit margin of the authorized distributors. The interviewees claimed that some authorized distributors overcharge for their goods. For instance, one of the managers claimed that some authorized distributors price 1600 TL for a product that he can sell 1000 TL instead. This high profit margin attracts the gray marketers in a market.

Information Access

Before the Internet's widespread use, the consumers could not make detailed product and price search. However, today they can easily search for authorized distributor prices, gray market prices, even the prices of the products in other countries. On the other hand, they can have ideas about who are the gray marketer, what about their after sales service, other users' experience about the purchasing from these gray marketers though forums, online store ratings, and customer reviews. Therefore, they can feel safer about purchasing gray market goods in the light of this information.

International Warranty

As it is stated in the previous section, after sales service and warranty issues are very problematic in terms of gray marketing. In this context, there is a trade-off for the manufacturers whether to provide international warranty for the products or not. On the one hand, if the manufacturer does not provide international warranties for their products, the gray marketers' poor after sale service quality will probably affect the manufacturer's brand image. Thus, some manufacturers are apt to provide international warranty to protect their brands and images. On the other hand, if the consumers are provided international warranty for a product, the authorized distributors have to provide after sale services free of charge even for the gray market goods. Therefore, providing an international warranty increases the probability of gray market activities. Because gray marketers free ride the after sales service costs in addition to advertising efforts of the authorized distributors.

2.2.4.3 Consequences of Gray Marketing

There are both positive and negative consequences of gray marketing activities as summarized in the following part.

Negative Consequences of Gray Marketing

Relationship with the dealers

The existence of gray market activities in a market affects the relationship between the dealers and authorized distributors from several aspects. The interviewees claimed that some dealers accuse authorized distributors of supporting gray market activities or selling products to other dealers cheaper which affects the trustworthiness of the authorized distributors. On the other hand, some authorized distributors blame the dealers for selling gray market goods. In addition, gray market goods eliminate the dependency of the dealers to the authorized distributors. The managers stated several examples that that indicated that authorized distributors force dealers about not to sell gray market goods or vice versa. For instance, the manager of a dealer claimed as follows:

> "I try to negotiate with the authorized distributors on the price of products and make my offer. If they do not accept my offer, I go and ask gray marketers for the same product and publish these products in my catalogue. When the authorized distributors see my catalogue they got upset and we argue about it."

Customer Dissatisfaction

Although some gray marketers provide quality services to the customers, the rest of the gray marketers provide poor quality services, which harms the product brand and lead to customer dissatisfaction. In addition, some customers buy gray market goods unknowingly. When their products break down and they go to the authorized distributors' technical service, the consumers are told that their products are gray market goods and they are not providing service. This situation, on the one hand, is very disappointing for the consumers; on the other hand detrimental for the manufacturers brand.

Decline in the Sales of Authorized Distributor Goods

The interviewees stated that since the consumers prefer to buy gray market goods instead of authorized distributors' goods, the authorized distributors' sales decrease.

This situation also affects to measurement of the marketing performance of the company.

Decrease of Profitability

According to the managers, the most important negative consequence of the gray market activities for the authorized distributors is the decrease of profit. In order to fight with the gray marketers, authorized distributors are obligated to renounce the planned profitability and reduce their prices. For instance, one of the managers illustrated the following:

> "For instance, Samsung electronic's authorized distributor changed their pricing policy for the televisions 2 years ago. They reduced their end user price and profitability. Therefore, selling gray market Samsung TV's was no longer appealing for the gray marketers."

Government's Tax loss

Gray Market activities affect the governments as well. As it is indicated in the illegal issues section, some of the gray marketers declare custom entry prices lower than their actual prices. Therefore, government gets lower tax income in total. Interviewees stated that they have warned the government many times about the government's tax loss.

Brand Image

The interviewees agreed on the fact that gray market activities harm the manufacturer's brand image. However, some of the gray marketers who perform every operation, as it should be, do not damage the manufacturers' brand image; even may contribute to it. One of the interviewees stated the following example:

> "There were some confusions regarding the technical services. For example, a consumer buys LG television from a gray marketer's store. Then for the set-up he calls the LG's authorized distributors technical service. The service says it a gray market good and they cannot provide technical service for this television. This negative response makes the consumers angry and harms the brand image of the manufacturer".

Product Related Risks

Gray market products may be very risky for the consumers and the environment. Some of the gray market goods are produced country specific and all the product tests are applied within the country. Some gray marketers import some electronic products without testing for Turkey. One of the managers explained some of these hazards as following:

> "Yes, there are a lot of risks. From the fire risks to some extreme risks that I cannot mention here…electricity, cabling, non-compatibility, not to match the standards of the Turkish Standards Institutions, and so many other risks…"

Positive Consequences of Gray Marketing

For Manufacturers

The managers of the gray marketer, authorized distributor, and dealers all agreed that gray market activities increase the manufacturers' market shares. The manager of a gray marketing company claimed as follows.

> “We were importing gray products of a well-known consumer electronic company. In those years, the market share of this brand increased dramatically and the manufacturer of this brand took the advantage of our gray market sales.”

For Customers

The most important advantage of the gray market activities for the consumers is providing more competitive and lower priced goods. The gray marketers make the market more competitive and in order to fight with gray market goods, authorized distributors also lower their price. Therefore, both the customers who buy gray market products and authorized distributor products pay lower price for the products.

For Dealers

The managers of the online marketplaces claimed that most of the electronics goods, especially mobile phones, sold on the online marketplaces are gray market goods and gray market activities increased online marketplaces’ revenues. In addition, the dealers stated that gray market goods provide them bargaining power against authorized distributors and they can get more money through gray market goods.

For Authorized Distributors

None of the interviewees stated any positive effects of gray market activities for the authorized distributors.

2.2.4.4 Possible Strategies Regarding to Gray Marketing

Strategies for Authorized Distributors to combat Gray Marketing

Bilateral Fairness Agreement

A manager of a well-known authorized distributor company stated that they signed a bilateral fairness agreement with the other countries' authorized distributors. According to this agreement, if the distributor of home country cannot sell the products and have excess stock they can contact to other countries' authorized distributors to get permission to sell these products there. Thus, they can control and track the flow of their products.

Buy-Back

An interviewee stated that in order to fight against gray market activities they bought some of the gray market goods back. Furthermore, they sent the items back to the countries where they were imported. The manufacturer paid the amount that authorized distributors paid to gray marketers. This action slowed down the gray market activities regarding their products.

Lobbying

Some of the managers mentioned that they went to relevant ministries about the gray marketing individually. They indicated how the government loses tax because of the gray market activities. On the other hand, some authorized distributors preferred to lobby via associations such as Mobile Service Provider Businessman's Associations. They got partial success. For instance, a couple of years ago, the government started to use minimum custom base price regulations for the products, which decreased the gray market activities.

Declaring actual or higher custom base price

As it is stated in the antecedents of the gray marketing section, gray marketers declare very low custom base price for the product to pay less tax. However, recently, the government takes the base price, which is declared by the authorized distributors into consideration. In this context, the gray marketers have to pay all the taxes based on the authorized distributors' declared base price. Therefore, for authorized distributors, to declare the actual price for the products will decrease the potential gray market activities. For instance, the manager of an authorized distributor company claimed that they were not affected by the gray market activities since they declared their price simultaneously.

Setting the same price across countries

Price differences across countries are one of the main reasons for gray market activities. Therefore, to eliminate the gray market activities, manufacturers may set the same price across the countries. A Manager stated that X brand changed its pricing strategy; now the prices of this brand in different countries were almost the same and to import gray market goods of this brand is not profitable anymore.

Price Decrease

All the interviewees agreed on the fact that price decrease is the most effective strategy to prevent gray market activities in a market. Furthermore, one of the interviewees claimed that price decrease is the only strategy that can work to restrain gray market activities. The managers provided several examples, which indicate the price decrease strategy works as following:

> “In the market, there were X branded gray market irons and they were selling much. The authorized distributor set the lower price from the gray marketer. Thus, gray marketers could not sell these irons and in the market, there were no longer X branded gray market irons”
>
> “We witnessed a successful strategy in the camera market. They set almost the same price with the gray marketers and so customers prefer to buy authorized distributors goods. I don’t think that there is another strategy for the gray market goods.”

Promotion of Authorized Distributorship

One of the managers stated that promotion of the authorized distribution strategy might draw the attention of the customers against gray market goods. Because some of the customers have no idea about what is the difference between authorized distributors’ goods and gray market goods. Promotion of trustworthiness of the authorized distributors and risks of gray market goods would probably decrease the likelihood to buy gray market goods for consumers.

Strategies for Gray Marketers to compete with Authorized Distributors

There are also several strategies for gray marketers to increase the market share of gray market goods.

Importing the products with different codes

The importance of custom base price was mentioned several times previously. To overcome this disadvantage, gray marketers may prefer to import the models that are currently not sold in the market. The manager of a gray market company stated as follows.

> "We generally preferred to import products, which are sold in Turkey. For example, if there was a 640 model numbered product, we imported model 642, which was slightly different from model 640. Although this was confusing for the consumers when they compare the products they preferred to buy out gray market goods."

Promotion of Gray Market Good

Since the consumers have little information about the gray marketing, they hesitate to buy the gray market products. Even, some of the consumers think that gray market goods are fake or smuggled goods. Therefore, gray marketers should promote that gray marketing is legal and gray market goods are original goods. This strategy will probably disambiguate about the gray market goods and consumers will trustfully buy these goods.

Founding an Association

Gray marketers are relatively small companies and they are not powerful by themselves. Therefore, in order to be stronger and popularize the gray market activities they must establish a gray market association and take joint actions. Thus, they can compete with the authorized distributors better and reinforce the legality of gray market activities.

Strategies for Manufacturer

In addition to the Authorized distributors' strategies, manufacturers may also apply some strategies to prevent gray market activities globally.

Tracking the products through IMEI's and Digital codes

Nowadays, most of the consumer electronics such as mobile phones, tablets, computers, smart watches, cameras, and televisions are getting smarter. Most of them have operation systems and communication systems such as Wi-Fi. For example, when the electronics products, especially mobile phones, are activated the manufacturer can track these devices and get information about them. Therefore, manufacturers may monitor and notice the difference between the sold and activated locations of consumer electronic goods. The managers stated as follows:

> "When the authorized distributor of the X brand realized that there are gray market X branded goods in the market, they asked to the manufacturer about the sources of these products. The manufacturer can track the route of these products and may find out which of these products are sold to Germany and from Germany they are shipped to Dubai and finally are imported to Turkey. In this case, the manufacturer should ask to the authorized distributor in Germany about why they sell these products to Dubai and apply sanctions to this distributor to prevent gray market activities."

Opening Country Subsidiary

The occurrences stated by the managers indicated that if a manufacturer has a subsidiary in a country; the ratio of gray market activities for this brand will decrease dramatically.

For instance, one of the managers claimed that two years ago Apple was the biggest gray market in Turkey. However, after opening a subsidiary in Turkey, the rate of the gray market activities of Apple products decreased substantially.

Not Supporting Dealers who sell gray market goods

One of the interviewees who works in a country headquarter of a well-known electronics company stated that they do not support the dealers who sell gray market goods. He claimed that if a dealer sold his products, he would no longer support this dealer. These supports are product launching, marketing, price decrease, and stock protection. In order not lose these supports the dealers stop selling gray market goods.

2.2.4.5 Gray Marketing from the ethical and legal perspectives

Ethical Considerations

The managers of the dealers and gray marketer company agreed that gray marketing activities are totally ethical. They even claimed that authorized distributors are not ethical. Dealers stated that authorized distributors created the gray marketing by themselves through overcharging for the products to get more profit. In addition, the gray marketer stated that authorized distributors defame gray marketers by telling customers gray market goods are contraband.

On the other hand, the managers of authorized distributors claimed that gray marketing is not ethical. The following statement explains this claim best:

> "I totally disagree that the gray marketing is ethical. Because I make a distributorship agreement with the manufacturer and I spend millions of

dollars and plenty of time for the agreements, international meetings, sales simulations, and educations. Therefore, I have to get enough profit margins to sustain this business. Then a free rider imports 500 products from Germany and sells them under the authorized distributor's price with a little profit margin. Thus, the customers are stumped by the price of the product. This affects the authorized distributors very negatively"

Legal Considerations

The interviewees agreed that there is a free market economy in Turkey and gray marketing is legal in Turkey and exclusive distributorship agreements cannot prevent gray market activities. In some cases, some authorized distributors sue the gray marketers. For example, the manager of a gray marketer company stated that the authorized distributor sued them for selling counterfeit products. Seven different experts investigated their products and decided that the products are original and thus, they were acquitted.

2.2.5 Discussion

The findings of the in-depth interviews indicated that the market share of the gray market goods is U-shaped throughout the year. In the past, it was about fifty percent. Nowadays, the market shares of the gray market goods are forecasted between five to ten percent. However, with the proliferation of the online stores and marketplaces, it is expected to increase. In addition, mobile phones are the most demanded gray-marketed goods. Other gray marketed products are tablets, game consoles, TV's, and cameras. However, these product types are not constant. Because, gray marketers are opportunists and they try to import fast moving goods. For example, if smart watches become popular, gray marketers probably focus on these products.

The comparisons of the literature review and the results of this study in terms of antecedents of gray market activities are indicated in the Table-6.

Table 6 Comparison the Findings and Literature: Antecedents of Gray Market Activities

Antecedents of Gray Market Activities	Literature	Current Study
Price Difference /Supplier pricing policies/Opportunistic behaviors	✓	✓
Free Riding Potential	✓	✓
Product Scarcity in the local Market /Launching earlier	✓	✓
Services Issues	✓	✓
Having a unique brand name	✓	
Trade Barriers /Government Policies	✓	✓
Increasing number of global products	✓	
Decreasing the cost of price information in different countries	✓	✓
Local Price elasticity	✓	
International exchange rate fluctuations	✓	
Uniform goods and multilingual packaging	✓	
Existence of Manufacturer subsidiary		✓
Big Retailers' integration of gray marketing		✓
Illegal issues		✓
Proliferation of Online Marketplaces		✓
International Warranty		✓

The comparison of the literature review and findings of this study indicated that most of the antecedents of gray marketing are universal and time independent such as price differences, easiness of getting information, government policies, free riding potential, product scarcity, and service related factors. Interestingly, none of the interviewees mentioned about the exchange rate fluctuating as an antecedent. Since exchange rates fluctuate very often in Turkey, these fluctuations may create opportunities for the gray marketers. This is also very interesting that illegal issues were not stated in the literature, although all the managers claimed that there are illegal issues in gray marketing in Turkey. On the to other hand, in the literature proliferation of online stores and marketplaces have not been stated. Because most probably the studies in the literature are outdated. Nowadays, the existence of the online stores and marketplaces are probably the most effective antecedent of gray market activities.

The comparisons of the literature review and the results of this study in terms of consequences of gray market activities are indicated in the Table-7. The results indicated that the effects of gray market activities are almost identical and universal. The only missing consequence of gray marketing activities in the literature is the government tax loss, which probably stem from the illegalities in gray market activities. The consequences of gray marketing activities indicate that how these activities are hazardous for the authorized distributors and preventing these activities is very crucial for them. Otherwise, the authorized distributors may be closed-down.

Table 7 Comparison the Findings and Literature: Consequences of Gray Market Activities

Consequences of Gray Marketing	Literature	Current Study
Cannibalize product sales	✓	✓
Threaten the brand image of the product	✓	✓
Damage long term profitability	✓	✓
Manufacturer-dealer-customer relations	✓	✓
Legal liabilities such as safety	✓	✓
Upset pricing strategy	✓	✓
Lead customer dissatisfaction	✓	✓
Losing control of marketing channel	✓	✓
Reduce effectiveness of marketing strategy	✓	✓
Government's tax loss		✓

The aforementioned antecedents and consequences of gray marketing activities lay emphasis on the effectiveness of strategies towards gray market activities. The possible strategies were analyzed from the authorized distributors', manufacturers' and gray marketers' perspectives.

From the authorized distributors' point of view, the most effective strategy is the price cut by lowering the profit margin. Thus, when the price of the authorized distributors goods and gray market goods' price are similar, consumers most likely prefer authorized distributor goods. Most of the possible strategies revealed through this study were the same strategies mentioned in the literature. The managers claimed that opening a country subsidiary for the manufacturers is the second most effective strategy to prevent gray market activities. On the other hand, this has been the first study, which suggests strategies for the gray marketers to increase the market share of the gray market activities. In the near future, the proliferation of online stores and marketplaces, easiness of global transportation, dissemination of information are estimated to be a threat for the authorized distributors and provide opportunities for the gray marketers. Therefore, authorized distributors should carefully analyze the antecedents of gray market activities and develop protective and proactive strategies to fight against gray market activities.

3 GRAY MARKET ACTIVITIES FROM THE CONSUMERS' PERSPECTIVE

3.1 Qualitative Research: Focus Group Study

Hitherto, there has been only a limited number of studies were conducted on the consumers' attitude towards gray market goods. Therefore, prior to quantitative research, a qualitative research is applied to probe more comprehensive information about the perspectives of the consumers about the gray market goods to form the infrastructure for the questionnaire.

3.1.1 Focus Group Participation

In this context, two focus groups were conducted. Focus Group participants were selected to represent the groups to be compared for the purpose of the study based on the some criteria such as past purchase experience related to gray market goods, participants' education level and occupation variety. Both groups were comprised of eight participants.

3.1.2 Focus Group Composition and Location

The first focus group was conducted in the focus group studio of the Binom Research Center in İstanbul. The second focus group study was conducted in a Boardroom at Yalova University. Each of the groups was composed as follows:

> **1st Group:** Conducted August 26, 2015. Binom Research Center, İstanbul. Fifty percent of the participants had bought at least one gray market good so far. The education level of the participants is Undergraduate or lower. The demographic distribution of the participants is shown in Table-8.

Table 8: Demographic Characteristics of the First Focus Group Participants

Name	Gender	Age	Education	Occupation
Participant-1	Male	19	High School	Shuttle Driver
Participant-2	Female	24	High School	Civil Servant
Participant-3	Female	30	Secondary School	Housewife
Participant-4	Male	29	Undergraduate	Teacher
Participant-5	Female	31	High School	Antique Dealer
Participant-6	Male	36	Undergraduate	Teacher
Participant-7	Female	38	High School	Car Dealer
Participant-8	Male	36	Undergraduate	Basketball Coach

2nd Group: Conducted June 17, 2015. Yalova University, Yalova. Approximately fifty percent of the participants had bought at least one gray market good so far. The education level of the participants is Master of Higher degree. The demographic distribution of the participants is shown in Table-9.

Table 9: Demographic Characteristics of the Second Focus Group Participants

Name	Gender	Age	Education	Occupation
Participant-9	Male	24	Master	Master Student
Participant-10	Male	32	Master	Research Assistant
Participant-11	Male	25	PhD	PhD Student
Participant-12	Male	28	Master	Research Assistant
Participant-13	Male	27	PhD	PhD Student

Participant-14	Male	30	PhD	Research Assistant
Participant-15	Male	21	Master	Master Student
Participant-16	Male	35	PhD	Assistant Professor

3.1.3 Group Facilitation

A Semi Structured questionnaire form (see Appendix-B) was constructed to probe detailed information about consumers' opinions about gray market goods from different perspectives.

When the participants arrived, the moderator provided a short orientation as to how the focus group discussion would be conducted. Participants were asked to sit facing each other around the tables and wear a nametag that indicated their first names for identification purposes. The participants were informed that the sessions would be recorded by tape. After they introduced themselves, the moderator started to ask the questions about gray market goods.

3.1.4 Focus Group Results

Before starting focus group session, the participants were given a paper that included two questions that are "have you heard about gray marketing" and "what is the definition of gray marketing". Thus, it was found out what they really know about gray marketing. Some of the gray marketing definitions made by the participants were as follows;

"Sale of the imported products cheaper by the importer."

> "The distributors other than the authorized distributor, import and sell the product below the market price and also provide after sales service and spare parts for the products."
>
> "Sales of the products by the firms other than the authorized distributors"

After the collection of the answers, the moderator provided them comprehensive information about what is gray marketing with actual visual examples. Then focus group session started with the first question "have you ever bought a gray market good?" Approximately half of the respondents bought at least one gray market good. Interestingly, three of the participants realized that they had bought gray market goods during the focus group as follows;

> "After your explanation about gray marketing, I have just realized that I had bought gray market goods. In the store, they told me that they provided the warranty and if something wrong happened with the product, I could bring it to them".

> "I have just remembered that I had bought two Samsung televisions. After the payment, I found out that they had imported it from another country"

Some of the participants claimed that they heard about gray market via friends and forums. Surprisingly, three of the participants stated that they realized about gray market goods when they are searching for product price. They said they decided to buy a product and look for the cheapest price on the price comparison web pages such as cimri.com, akakce.com

They realized some of the sellers sell the product far cheaper than others. They wondered how it can be possible and have searched on the Internet about the sellers. Finally, they realized that the sellers were selling gray market goods.

A thematic analysis approach was used to probe information gathered via focus groups. Thematic analysis is a qualitative research method, which is used to reveal the themes and their networks from textual data. There are three types of themes, which are basic themes, organizing themes and global theme (Attride-Stirling, 2001). The results indicated that Factors Affecting to Buy Gray Market Goods, which have been mentioned in the literature, is the global theme. The organizing themes have been grouped under the following headlines: The product related factors, price related factors, personality factors, gray marketer related factors, authorized distributor factors and past purchase experience. In addition, there are total 19 basic themes, which are shown in the Figure-2.

3.1.4.1 Price Related Factors

3.1.4.1.1 Price Difference

Almost all the participants who preferred to buy gray market goods agreed that they buy them because of the cheaper price. However, the pricing of the gray market goods is a very crucial decision for the gray marketers. Because, the consumers' approach towards gray market goods' price varies. As it is stated by one of the respondents below, the price of gray market goods should be neither too close nor far below the genuine goods' price. The common view it that 20-30% price difference might convince them to buy gray market goods.

> "When the prices of the genuine and gray market goods are very similar, I prefer to buy genuine products. However, when the price difference between the genuine and gray market goods is very different, I think that something is wrong with gray market goods and again prefer to buy genuine goods. If the price difference is about 20-30 % I can prefer to buy gray market goods".

3.1.4.1.2 Price Level

On the other hand, participants did not agree on whether they prefer to buy gray market goods when they are shopping for low priced or high priced goods as indicated below. Some participants claimed that they do not consider gray market goods when they are buying high priced goods such as TV's because of the risk factor. Some other participants expressed that they do not prefer to buy gray market goods while they are shopping low-priced goods. Because, despite the percentage of the price difference between the gray market goods and genuine goods is very high, the difference amount is very low. Therefore, they don't want to take the risk of buying gray market goods. However, most of the participants agreed that they could prefer to buy mid-priced goods from the gray market.

> "The price of a product is very important for me. For example, if I am planning to buy a product that costs about 5.000 TL I prefer genuine goods.

However, if the price was about 1.000 I would buy gray market good instead".

"If I would buy a flash drive and genuine one is about 80 TL and gray market is about 65 TL I would prefer the genuine one, because the price difference is not that high".

3.1.4.2 Product Related Factors

3.1.4.2.1 Product Type

The participants were asked several questions about "which types of electronics products did they buy before?" and "which types of electronics products they will consider to buy in the future?" The result indicated that most of the participants who bought gray market goods preferred to buy mobile phones. In addition, some of the other participants bought gray market television and notebook. The participants also consider buying gray market mobile phones, televisions, game console, and software in the future. For instance, one of the participants stated as follows;

"My preference of gray market good depends on the type of the product. If I bought a mobile phone or smart watch I would prefer gray market ones. However, for other electronics I would prefer genuine goods".

3.1.4.2.2 Product Quality

Participants claimed that they prefer gray market goods for quality products. Since warranty is one of the most problematic issues of gray market goods, they think if they buy quality products as a gray market, the likelihood of a breakdown is very low and they do not face with warranty issues. For instance, one of the participants stated

> "If I am planning to buy a quality product I would prefer gray market goods. However, for a low quality product I would prefer authorized distributors' products".

3.1.4.2.3 Brand of the Product

Product brand also plays an important role for the preference of gray market goods. Participants agree that they prefer gray market goods for well-known, high quality branded products. Furthermore, one of the participants stated that the user of the product is also important for brand choice. If he bought a gray market product for himself, he would prefer quality brands, while for his child he would prefer low quality brands.

3.1.4.2.4 International Warranty

Participants stated that if a manufacturer of a product provide international warranty, consumers tend to buy this product as gray market good. Because the riskier issue pertaining to gray market goods is warranty. If a product is sold with international warranty, the authorized distributors' services will have to accept and fix defective gray market goods for free.

3.1.4.2.5 Call Back

Product call back is also another important determinant for consumers to prefer or not to prefer gray market goods. Because the consumers are conscious that they cannot make use of callbacks if they buy gray market goods. One of the participants stated;

> "There were some hardware problems related to Play Station 4. The authorized distributor of Sony in Turkey announced that they would change

the product with brand new ones. However, they only changed the authorized distributor's goods not the gray market goods. Thus, consumers who bought gray market goods are aggrieved".

3.1.4.3 Personality Factors

The participants of the study stated that several personality factors might affect the consumers' attitude towards gray market goods. These factors are risk averseness, price consciousness, price-quality inferences, innovativeness, informative susceptibility.

3.1.4.3.1 Risk Averseness

Some of the participants stated that they are very risk averse and they never plan to take risks of buying gray market goods as following;

> "I have enough information about gray marketing. However, I have never bought a gray market good because I am a very risk-averse person. I want to buy the product under the full warranty of authorized distributors and I am eager to pay more for it".

Some risk-averse participants found a solution for gray market goods. Instead of giving much money for genuine goods, they buy extra product insurance packages from third parties. Thus, they do not feel they are under the risk of gray market goods.

> "I always buy insurance for the gray market goods. Therefore, I do not take risks and feel comfortable".

On the other hand, the majority of the participants claimed that they are not risk averse and if the gray market goods are sold in accordance with their expectations, they can buy gray market goods.

"In any case I would take the risks of buying gray market goods. But I would minimize the risks of buying the goods from a store".

3.1.4.3.2 Price Consciousness

Price consciousness is also an important factor that affects consumers' attitude towards gray market goods. The participants claimed that the price is the first and the most important factor for them while they are evaluating the gray market goods. Several participants stated that if they found the same product with a cheaper price, they would buy it regardless of being gray market or a genuine good.

3.1.4.3.3 Product Quality Inferences

In the product quality section of the study, it has been stated that some of the participants prefer to buy quality products and well-known brands. They think that expensive products have more quality and most of them do not consider gray market goods when they buy expensive products. For instance, a participant stated this situation as follows;

"I never consider gray market goods when I purchase expensive products. If I paid that amount of money, I would prefer authorized distributors' goods that provide better after-sale service".

3.1.4.3.4 Innovativeness

One of the most interesting and important findings of the study is that some of the participants claimed that innovative people might prefer to buy gray market goods more than non-innovative ones. They indicated two premises. The first one is as it is stated below the participants consider that innovative people change their consumer electronics goods very often and therefore they do not care about the durability, warranty and after-sale service issues.

> "I prefer gray market goods especially for mobile phones. I never used a mobile phone for more than a year. Since, I frequently change my mobile with the latest technology ones, I do not care much about whether it is a gray market or a genuine good".

The second premise is that since gray marketers are more dynamic and small companies they can import the latest electronic goods before the authorized distributors. Therefore, innovative people who want to buy the latest technologies first, they have to buy gray market goods that are available in the market earlier. This situation occurs especially for game consoles and some mobile phones.

3.1.4.3.5 Informative Susceptibility

The participants stated that their considerations about whether to buy or not to buy gray market goods are also affected by others' viewpoints. For instance,

> "I always read the forums before I decide to buy a product. The posts in the forums affect my decision much.
>
> F: The people in my close environment may affect my ideas about gray market goods. If they encourage me to buy a gray market good, I would buy it. However, before I decide to buy a product I consult at least 3-4 people".

3.1.4.3.6 Product Category Involvement

In this study, some of the participants stated that consumer electronics goods are high involvement goods for them. These participants also stated that they make very comprehensive research before buying consumer electronics goods. For instance, one of them said that in his product research, he found different prices for the same products and he wondered why? And he searched online and read the forums and blogs. Finally, he realized that these different prices stem from the gray market goods and he preferred the gray market good.

3.1.4.4 Gray Marketer Related Factors

3.1.4.4.1 Promotion of Gray Marketing

Some of the respondents had no idea about gray market goods, whereas some others had misinformation about them. For instance, one participant stated that gray marketers do not provide any warranty for the goods. Therefore, gray marketers should provide comprehensive and accurate information about gray market goods. Hereby, consumers may buy the gray market goods confidently. One of the participants mentioned about the lack of promotion for gray market goods;

> "Most of the gray marketers are not small companies. They stand behind their products. In my opinion, the problem regarding the gray market goods is that they are not explained to the consumers properly. The people should be provided accurate and sufficient information about gray market goods. Therefore, they will feel confident on buying gray market goods. For example, there is a myth that Gold (one of the most important gray marketer company) sells electronics goods cheaper because it sells refurbished goods. Gray marketers should promote their goods and increase the awareness. Almost all the people hear gray market goods happenstance".

3.1.4.4.2 Trustworthiness

Participants agreed on the fact that trustworthiness of the gray market companies is very crucial. As it is indicated below if they trust the seller, they are apt to buy gray market goods.

> "There are some trustworthy gray marketers and I can buy gray market goods from them regardless of the product type".
>
> "Whatever is the product; if I trust a gray marketer, I can purchase gray market goods from them".

3.1.4.4.3 Warranty Issues

Some of the participants complained about the warranty and after-sale service issues of the gray market goods. There is a common belief that gray marketers do not provide adequate service and do not obey the promised warranty conditions. For instance, faced with most of the defects, gray marketer claims it is the consumer's fault. And they request extra money to repair the product. In addition, participants also complained about the fact that they couldn't reach the gray marketer after the sales.

3.1.4.4.4 Store Type

Participants claimed that they search gray market products and price online. However, they preferred to buy them via offline stores, which is very surprising. They think that physical stores are more trustworthy than the online stores. However, the vast majority of the gray marketers sell their products online, while only a couple of gray marketer has physical stores. For this reason, in order to increase their sales gray marketers should open offline stores.

3.1.4.4.5 Online Store Ratings

Participants who bought gray market goods online stated that they prefer popular online marketplaces. Just before buying a gray market good, they carefully read the ratings, comments and reviews related to gray marketers and thus they minimize the potential risks.

> "Online store ratings are very important for me. I would minimize the risk if I buy gray market products from the online stores who have high ratings and good reviews".

3.1.4.5 Authorized Distributor Related Factors

3.1.4.5.1 Warranty Issues

Participants of the study, criticize the authorized distributors due to the fact that they do not provide after sale service, as it should be. Although after sale service and warranty issues are the weaknesses of gray marketers, the authorized distributors cannot take advantage of this opportunity. Almost all the participants were dissatisfied with authorized distributors' after sale service and warranty conditions. Some of the examples are provided below.

> "I never consider buying gray market goods if the authorized distributors provide adequate after-sale service. If the authorized distributors solve my service problems fast and effectively, I would buy electronics products from them".

3.1.4.5.2 Trustworthiness

The participants stated that they do not trust after sale services of authorized distributors. The participants think authorized distributors lie to customers to get extra money from them and they don't fix the products under the warranty coverage by claiming user error

3.1.4.6 Past-Purchase Experience

Participants of the study stated that past purchase experiences also affects consumers' attitude towards gray market goods. If they buy a gray market good and do not face any problem they will intend to buy gray market goods again. If they face some problems regarding the gray market products or gray marketers they will probably buy authorized distributors' goods at their next shopping.

As it is revealed through thematic analysis, there were several factors, which may affect consumers' attitude towards gray market goods.

On the one hand, the authorized distributors should carefully analyze these factors to prevent consumers from buying gray market goods. It is very obvious that consumers complain about the service quality and warranty conditions of the authorized distributors, and they also complain about the overpriced authorized distributor goods. Moreover, personality factors affect the decision of buying gray market goods. Therefore, managers should improve their service quality and warranty conditions and decrease their prices to a reasonable level. The managers also should take the personalities of the consumers into the considerations and form their strategies based on the personal factors. For example, they may launch the latest goods immediately and before the gray marketers to appeal the innovators and early adopters. In addition, they can make promotion campaigns that highlight the risks of buying gray marketing. Therefore, risk averse people may hesitate to buy gray market goods.

On the other hand, the findings of this study provide valuable information for the gray marketers to increase their sales. First of all, they should carefully promote what the gray marketing is and legal status of gray market goods, because consumers are not clear about the gray marketing. Moreover, they should open physical stores to improve their trustworthiness. In addition, they should also form their strategies by considering the personalities of the consumers. For example, they can promote that gray market goods do not bear any risks, their quality is the same as authorized distributor' goods. By using the advantage of being a dynamic structure they should import the latest products earlier than the authorized distributors.

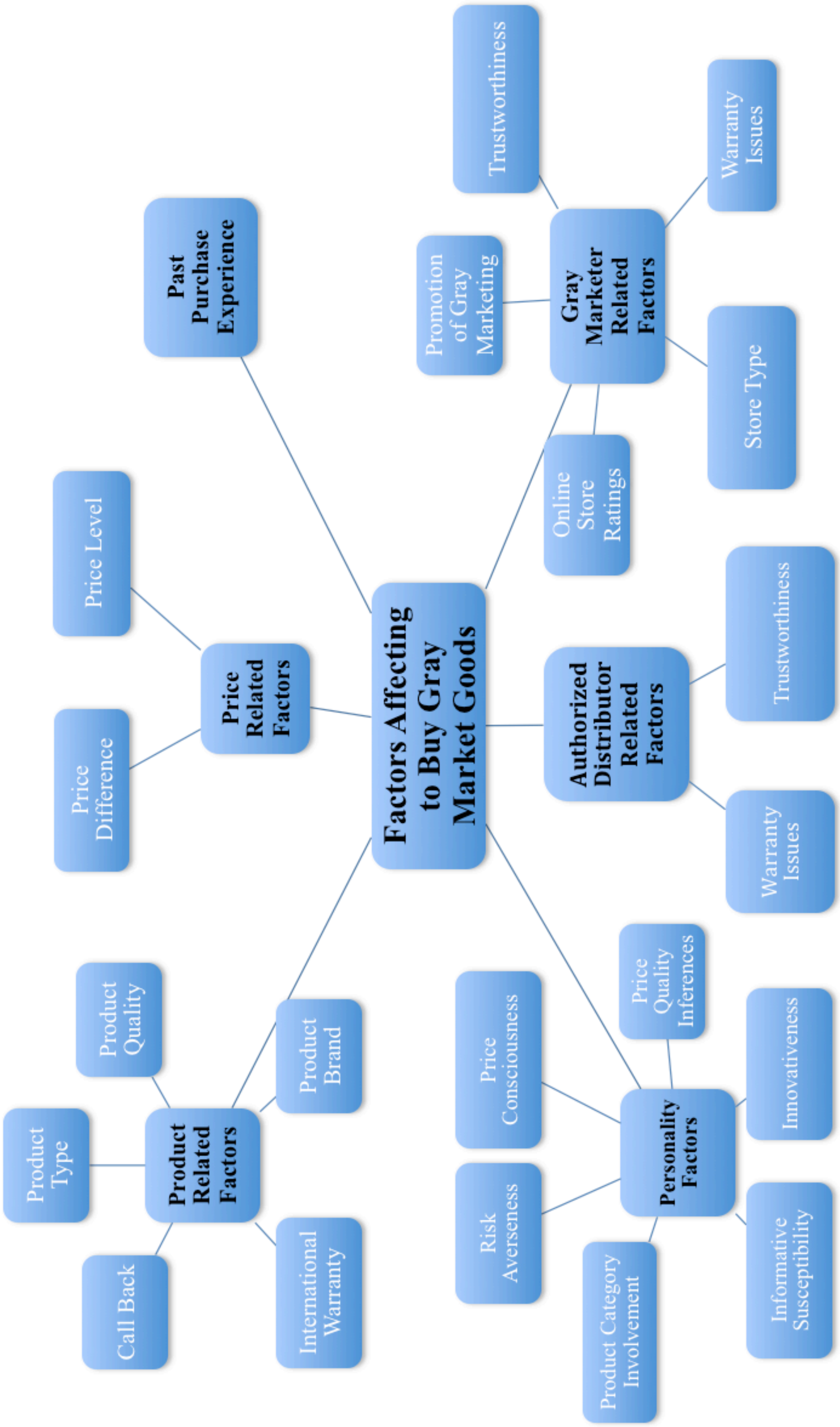

Figure 2 Themes Revealed through Focus Group Study

3.2 Literature Review

3.2.1 Theory of Reasoned Action

In order to form effective strategies for gray market activities, authorized distributors and manufacturers should also take the factors affecting the consumers' attitude towards gray market goods into considerations. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1973) behavior is determined by the intention to engage in such behavior, which in turn, is determined by the attitude toward the behavior and the subjective norm. TRA provides a framework for understanding, predicting, and changing human social behavior (Ajzen, 2011). In addition, according to the theory, consumers' behavior can be determined by their intention (Chang, 1998). Thus, in several studies, intentions can be used to predict a behavior.

On the other hand, the attitude which can be defined as the "disposition to respond favorably or unfavorably to an object, person, institution, or event" (Ajzen, 2005, p.3), is one of the most important predictor of behavioral intention (Pavlou & Fygenson, 2006). In most of the behavioral models there is a causal link from attitude to actual behavior via intention which implies that behavioral intentions have to be considered to predict behavior from attitudes (Huang et al., 2004). In the literature, there are several studies which empirically tested and significantly proved the relationship between attitude and behavioral intention from different aspects. However, there are only limited numbers of studies which tested the relationship between attitude and intention related to the gray market goods (Huang et al., 2004; Mollahosseini et al., 2012; Yasin et al., 2009; Ismail, 2008). In this regard, it is hypothesized as follows;

H1a: Consumers' attitude towards gray market goods is positively related to the intention to purchase gray market goods.

However, the effects consumers' attitude towards gray market goods on purchase intention may not be the same for all countries because of the cultural differences. Lee and Green (1991) claimed that individualism (or collectivism) which is a subdimension of the culture may affect the strength of the relationship between attitude and intention. Lee and Green (1991) also stated that for individualistic cultures, attitude is more effective determinant for purchase intention and social norms are more important for the collectivists cultures. Since the U.S. consumers are more individualistic than the Turkish consumers according to the Hofstede's (1980) index, it it hypothesized as following;

H1b: The effect of attitude towards gray market goods on purchase intention is stronger for the U.S. consumers than the Turkish consumers.

In the literature, there are a limited number of studies which investigate the effects of personality factors on attitude in the context of gray marketing (Huang et al., 2004; Mollahosseini et al., 2012; Yasin et al., 2009; Ismail, 2008). Huang, Lee and Ho (2004) have published the first study regarding this relationship between personality traits and attitude for Taiwanese customers. Subsequently, other scholars added and/or removed some personality traits to the Huang's base model (Mollahosseini et al., 2012; Yasin et al., 2009; Ismail, 2008). The most common personality traits that affect the attitude towards gray market goods are Price Consciousness, Risk Averseness, Price-Quality Inference, and Ethical Judgments. Table-10 indicates the results of the studies which test the relationship between personality factors and attitude towards gray market goods.

Table 10 The relationship between Personality Factors and Attitude towards Gray Market Goods

Independent Variables	Dependent Variables	Huang et al.(2004)	Mollahosseini et al.(2012)	Yasin et al. (2009)	Ismail (2008)
Price Consciousness	Attitude Towards GM	No Relationship	Positive	No Relationship	Positive
Price Quality Inference	Attitude Towards GM	Negative	Positive		Negative
Risk Averseness	Attitude Towards GM	Negative	Negative	Negative	Negative
Ethical Judgement	Attitude Towards GM			No Relationship	

Since there are only a limited number of studies about the factors affecting consumers' attitude towards gray market activities, counterfeit goods literature were also analyzed to borrow the appropriate personality and social factors from the counterfeit literature.

3.2.2 Personality Factors

3.2.2.1 Price Consciousness

According to Economic Theory, price is one of the most important factors that affect buyers' choice and customers look for lower prices to maximize their satisfaction for a given limited budget (Monroe, 1973). There are a vast number of studies which indicates the important role of price on consumer behavior (Huang et al., 2004). Customers have a range of price experiences and they set lower and higher price bounds (Janiszewski and Lichtenstein, 1999) and make their purchase decisions based on the reference price in their mind (Huang et al., 2004). One of the most important factors which is directly related to reference pricing is Price Consciousness (Alford and Biswas, 2002). Lichtenstein et al. (1993, p. 235) defined price consciousness as ‘‘the degree to which the consumer focuses exclusively on paying a low price”. Similarly, Monroe and Petroshius (1981, p. 44) defined price consciousness as “to the degree he/she is unwilling to pay a higher price for a product, and if the price is greater than what is acceptable to pay, the buyer may refrain from buying”. Price consciousness can vary from one consumer to another (Lichtenstein et al. 1988). The consumers who are highly price conscious not only always look for a cheaper price, but also unwilling to pay more for extra features if the price difference is too much (Monroe and Petroshius, 1981).

In the literature, price consciousness concept has been analyzed from different perspectives. For instance, Sinha and Batra (1999) and Kara et al. (2009) tested the impact of price consciousness on private label products. On the other hand, Alford and Biswas (2002) researched the price consciousness in the context of advertising and promotion. Moreover, Michaelidou and Christodoulides (2011) investigated the effect of price consciousness on attitude towards counterfeit goods and intention to buy counterfeit goods.

In addition to the contexts mentioned above, price consciousness can also be considered as one of the most important antecedents of attitude towards gray market goods. Rajendran and Tellis (1994) claimed that that the low price of a product is a very important cue for a reference price. Furthermore, Huang et al. (2004) stated that consumers use the price of authorized distributors’ products as a reference price, and so lower price of gray market goods may easily get the consumers’ interest.

When the core of gray market activities is analyzed, it is obvious that price consciousness directly related to the consumers' evaluation of gray market goods. Because the price difference between authorized distributors' goods and gray market goods is one of the key features of gray market activities (Assmus and Weise, 1995; Cavusgil and Sikora, 1988; Cespedes et al., 1988; Duhan and Sheffet, 1988; Lansing and Gabriella, 1993; Weigand, 1991). In addition, gray market goods are genuine and almost all the features are the same. In this context, the price conscious customers are expected more likely to buy gray market goods.

In the literature, there is only a limited number of studies that researched the effects of price consciousness on the attitude towards gray market goods. Ismail (2008) and Mollahosseini et al. (2012) statistically proved that there is a positive relationship between the price consciousness of the customer and their attitude towards gray market goods and behavioral intention to buy the goods as expected. However, surprisingly, Huang et al (2004)'s and Yasin et al. (2009) indicated that there is no relationship between the price consciousness of the customer and their attitude towards gray market goods. These differences between studies can be caused by country of origin or product type. In order to eliminate this dichotomy, it is very important to test this relationship in the context of the Turkish gray market. Therefore, it is hypothesized that;

H2a: Consumers' price consciousness positively affects consumers' attitude towards gray market goods.

Purchasing power and economic development levels of the countries may affect consumer decision making styles (Fan and Xiao, 1998). Turkish and American consumers' purchasing power is not the same. GDP per capita of the U.S. (55.000 usd) is approximately five times more than the GDP per capita of Turkey (10.500 usd)

(WORLDBANK.ORG, 2016). In addition, Jin and Sternquist (2003) claimed that if traditional negotiating and bargaining exist in a market, the consumers in this market may be more price conscious. In addition, Jin and Sternquist (2003) indicated that Korean consumers, who are used to bargaining and negotiating, are more price conscious than the U.S. consumers. In Turkey, bargaining and negotiating still exists in several stores and bazaars. In this context, it is hypothesized as follows;

H2b: Positive effect of Price consciousness on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.

3.2.2.2 Risk Averseness

One of the most important factors that affect consumers' behavior is the risk (Bauer, 1960; Chiu et al, 2014; Tan, 1999; Mollahosseini, 2012). According to Classical Decision Theory, risk is defined as "reflecting variation in the distribution of possible outcomes, their likelihoods, and their subjective values" (March and Shapira, 1987, p. 1404). In addition, Peter and Ryan (1976, p. 185) defined risk in the context of consumer behavior as "the expectation of losses associated with purchase and, as such, acts as an inhibitor to purchase". Risk is related to a various consumer behavior fields such as service, product innovation (Lee, 2012), online channel (Lee, 2007), store selection, advertising effectiveness, innovation and diffusion of innovation, information acquisition, brand loyalty, mode of shopping (Paul and Ryan, 1976).

Risk may be considered as an objective characteristic of a given situation, but the evaluation of risk comprises an individual bringing his or her own characteristics to the situation (Conchar et al., 2004). The perception of risk varies across individuals that some people can be more risk averse from the others (March and Shapira, 1987) and they are positioned between risk seekers and risk averse. Risk averse people tend to take low risk and are ready to sacrifice some expected returns to reduce the possible undesirable outcomes, while risk seekers are eager to take high risks (March and Shapira, 1987). In this context, risk perception can be considered as a personality construct (Peter and Ryan, 1976). Perceived risk also has a multidimensional structure which includes performance risk, financial risk, safety risk, social risk, psychological risk, and time/opportunity risk (Havlena and DeSarbo, 1991). Consumers take all these types of risks into consideration while they are evaluating products and services. In this respect, perceived risk affects the five stages of the consumer decision process, which are problem recognition, pre-purchase information search, evaluation of alternatives, purchase decision and post-purchase behavior (Mitchell, 1992, Albarq, 2013). Therefore, it can be deduced that risk averseness is one of the most important personal characteristics that affects consumers' behavior especially in ambiguous situations.

Buying a gray market good can be considered as a risky behavior from several aspects such as product related risks and parallel importer related risks. Although gray market goods are original, there may be some changes in products from one country to another. For example, in America national voltage standard is between110 -120V, while it is 220V in European Union countries. Hence, an electronic product manufactured for the U.S. may be hazardous for E.U countries. In addition, since the gray market goods are sold via unauthorized channels, they can sell counterfeit products as original goods. Another risk related to the gray market goods is the refurbished products. Refurbished products are repaired and restored to a like-new condition by the manufacturer or a third-party refurbishment company. Since the refurbished products are sold cheaper than the brand new products, gray marketers may import and sell the refurbished products in another market. On the other hand, gray market goods can be considered as risky because of gray marketer related issues. Some gray marketers may provide inadequate and poor quality after sales service. Even they can blame the customers for a defective product. Another risk is the close down case. If a gray market company faces several problems, they can close the company down and establish a new company with a new name. In this context, buying gray market goods is riskier than buying a product via authorized channels and risk averse consumers are expected to avoid buying gray market goods (Yasin et. al., 2009).

In the literature, Huang et al. (2004), Mollahosseini et al. (2012), Yasin et al. (2009), and Ismail (2008) tested the relationship between risk averseness and attitude towards gray market goods. All four studies indicated that there is a negative effect of risk averseness on attitude towards gray market goods. Based on the literature, it is hypothesized that;

H3a: Consumer's risk averseness negatively affects consumers' attitude toward gray market goods.

Culture may also play an important role about the perception of risk of the people. Hofstede (2007, p. 13) claimed that the degree of uncertainty avoidance, which is defined as the extent to which the members of a culture feel threatened by uncertain or unknown situations, changes from one country to another. Uncertainty avoidance influences differences among cultures in risk taking (Money and Crotts, 2003). According to Hofstede's Uncertainty Avoidance Index the level of Turkey's uncertainty avoidance is high (UAI=85), while the level of the United States of America's uncertainty avoidance index is low (UAI=41) (Hofstede, 1980). Thus, Turkish consumers are expected to be more risk averse than the U.S. consumers. In this regard;

H3b: The negative effect of risk averseness on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.

3.2.2.3 Price-Quality Inferences

Erickson and Johansson (1985) claimed that the price has a dual effect on attitude and purchase intention. The first effect of price is negative that if the price of a product increases, the purchase intention of the product decreases as stated in the price consciousness section of the study. The second effect of the price of a product on the purchase intention is positive based on product quality perception (Lichtenstein et al., 1993).

In the literature, the relationship between price and quality is one of the most interested topics regarding to pricing research (Lichtenstein and Burton, 1989). According to the Price-Quality Inference, price can be used as an indicator of product quality. Namely, high priced products are high quality" and "low priced products are low quality" (Huang et al., 2004). Therefore, if a product's price is higher, the consumers may evaluate the product is more quality (Shapiro, 1973). However, there is no an agreement between the researchers about this proposition. Many empirical studies indicated a positive, powerful relation between price and quality, in some studies, there is a relationship, but the magnitude of the relationship is low. Other studies indicated that there is a nonlinear relationship between price and quality (Zeithaml, 1988). Peterson and Wilson (1985, cited in Zeithaml, 1988) claimed that the relationship between quality and price is not universal and the direction of the relationship between them is not always positive. In addition, Shapiro (1973) claimed that price-quality relationship varies across individuals. One of the factors that cause these contradictory results may arise from the vague definition and subjective perception of the quality.

The perception of price-quality relationship is very subjective (Cronley et al., 2005) and several personal characteristics may affect the use of price as a quality signal (Zeithaml, 1988). Zeithaml (1988, p. 12) also claimed that use of price as a cue to quality depends on several factors as follows: “Availability of other cues to quality, price variation within a class of products, product quality variation within a category of products, the level of price awareness of consumers, and Consumers’ ability to detect quality variation in a group of products”. Several authors agreed the first factor that level of information is very crucial for the price-quality relationship (Cronley et al, 2005; Kardes et al, 2004; Tellis & Gaeth, 1990). When there is little information about a product, customers tend to use price as a quality indicator (Tellis & Gaeth, 1990). However, if there is a load of information, price may be considered as one of the least important factors that individuals associate with quality.

In this respect, there is no definite linear relationship between price and quality and the direction and magnitude of the relation may vary. As it is mentioned previously, the price of the gray market goods is lower than the products sold via authorized channels. According to the price-inference logic, consumers perceive the quality of gray market goods less than the authorized dealers’ products and will have a negative attitude and purchase intention towards gray market goods (Huang et al., 2004). In the literature, Huang et al. (2004) and Ismail (2008) demonstrated that there is a negative relationship between the price-quality inference and the attitude towards gray market goods et al., while Mollahosseini et al. (2012) indicated a positive relationship. In addition, if the consumers have enough information about the gray market goods and know that the qualities of gray market goods are the same as authorized distributor goods, they may have a positive attitude towards gray market goods. In this context, it is hypothesized that

H4a: There is a relationship between the consumers' price quality inferences and attitude towards gray market goods.

According to Hofstede (1980), Turks ranked high in uncertainty avoidance, while the U.S. is low. As it is discussed previously Turkish consumers are more risk averse than the American consumers. Monroe and Krishnan (1985) claimed that consumers rely on price-quality inferences to decrease the risk when they encounter risks in shopping (cited in Jin and Sternquist, 2003). On the other hand, since the American consumers' economic level is higher than the Turkish consumers, American consumers may tend to rely on price-quality inferences. In this context, it is hypothesized as follows;

H4b: The relationship between the consumers' price-quality inferences and attitude towards gray market goods is affected by the culture.

3.2.2.4 ***Ethical Judgment***

Ethical judgment is the process on which consumers' internal ethical rules are based on their personal beliefs about what is right or wrong (Shaw et al., 2000). There is a relationship between the ethical judgment and behavioral intention that if a consumer perceive an action is ethical, the consumer is more likely to perform such an action, and vice versa (Fernandes, 2012). However, there are opposing views to this discourse. For example, in their study Carrigan and Attala (2001) revealed that, even though the consumers state that they support ethical companies and punish unethical ones, such a change in their actual purchase behavior was not observed.

Gray marketing is a very interesting topic in the context of ethical judgment. The name of "Gray" comes from its ambiguous nature. Gray marketing is structurally a legal activity, but it is ethically uncertain (Yasin et al., 2009). Free riding is probably the most important factor that the consumers may think that gray marketing is an unethical activity (Chang, 1993, Mathur, 1995, Prince and Davies, 2000). Mathur (1995, p. 45) claimed "Although "free-riding" is not illegal, it is basically unethical since gray marketers are "squatters" on the channel, using authorized goods, the strategy, and firms' identities to achieve their own objectives". Gray marketers mostly free-ride the promotional and advertising activities which are financed by the authorized distributors (Chen, 2002), retail channels which are managed by the authorized distributors (Mathur, 1995) and take advantage of the market demand and brand image created and maintained by authorized distributors without sharing in marketing efforts and costs (Tan et al., 1997; Çavuşgil and Sikora, 1988). In addition, if the manufacturer of a product provides international warranties for the product, the services of the authorized distributors in other countries may have to provide after sales service for gray-marketed products free of charge. All these factors indicate that gray marketing includes some unethical activities which can be perceived by the customers. In the literature, there is only one study, which has tested the relationship between ethical judgment and attitude towards gray market goods (Yasin et al., 2009). However, the results indicated that there is no significant relationship between them. In this context, additional works need to be done to test the relationship between ethical judgment and attitude towards gray market goods. For this reason, it is hypothesized that;

H5a: Consumer's ethical judgment of gray market activities positively affects consumer's attitude toward gray market goods.

Culture may play an important role for the consumers' ethical judgments and their attitudes and intentions (Vitell, 2003). Vitel (2003) conducted a meta-analysis and indicated consumers from different countries may have a different level of ethical evaluations. Burnaz et al. (2010) claimed that in the developed countries, ethical awareness and ethical standards are expected to be higher than the developed or less-developed countries where the consumers have low income. As it is stated previously, the U.S. is a developed country and the U.S. consumers have more income than the consumers in Turkey which is a developing country. Therefore, it can be deduced that ethical issues are more important for the U.S. consumers than the Turkish consumers. In this context, it is hypothesized as follows;

H5b: The effect of ethical judgment of gray market activities on attitude towards gray market goods is stronger for the U.S. consumers than the Turkish consumers.

3.2.2.5 Consumer Innovativeness

Consumer Innovativeness plays a very important role in consumer behavior (Hirshman, 1980). However, there are several conceptualizations related to innovativeness. On the one hand, Rogers and Shoemaker (1961, p. 27) defined innovativeness as "degree to which an individual is relatively earlier in adopting an innovation than other members of his system". Rogers and Shoemaker (1961) mostly focused on categorization of people based on time of adoption. On the other hand, Midgley and Dowling (1978, p. 236) defined innovativeness as "the degree to which an individual is receptive to new ideas and makes innovation decisions independently of the communicated experience of others". Midgley and Dowling (1978) viewed innovativeness as a personality trait

(Goldsmith and Hofacker, 1991), and innovativeness possessed to a greater or lesser degree by all individuals (Hirshman, 1980).

In addition, Goldmisth and Faxall (2003) claimed that there are three levels of innovativeness. They are global innovativeness, defined as willingness to try new things, consumer innovativeness, defined as consumers who want to be the first to buy new products, and domain specific innovativeness, defined as consumers in specific product categories who want to be the owners of the newest products in this category. In this study, innovativeness will be taken as a personality trait and a domain specific manner that is consumer electronics.

In the literature, there is no empirical study about the effects of innovativeness on attitude towards gray market goods. However, the results of in-depth interviews with the managers and focus group studies with the consumers indicated that innovative consumers may have a positive attitude towards gray market goods because of two reasons. First, since gray market firms are more flexible, they can import the latest products quicker than the authorized distributors and that appeals the innovators and early adopters. In this context, customers who look for new products may have a positive attitude towards gray market goods. The second reason is that innovative people change their electronic goods very often and they do not consider about the weaknesses of gray market goods which are service and warranty issues. Therefore, it is hypothesized that;

H6a: Innovativeness positively affects consumer's attitude toward gray market goods.

Culture and its dimensions affect the innovativeness of the consumers and countries (Shane, 1993). Shane (1993) indicated that there is a relationship between the uncertainty avoidance, individualism, and masculinity and innovativeness level of the consumers. Moreover, Steenkamp, Hofstede and Wedel (1999), in their cross-cultural study, claimed that the cultural dimensions play an important role for the level innovativeness. Steenkamp et al. (1999)'s research indicated consumers who live in a more individualistic and masculine country are tented to be more innovative. In addition, consumers who live in high uncertainty avoidance countries are less innovative. When the cultural indexes of the U.S. and Turkish consumers are compared, The U.S. consumers are more individualistic and masculine and less uncertainty avoidance than the Turkish consumers. Therefore, American consumers are expected to be more innovative than the Turkish consumers. In this context, it is hypothesized as follows;

H6b: *The effect of consumer innovativeness on attitude towards gray market goods is stronger for the U.S. consumers than the Turkish consumers.*

3.2.2.6 Product Category Involvement

Product involvement refers to the personal relevance of the product, based on inherent needs, values, and interests of the consumer (Zaichkowsky, 1985). Level of involvement is determined with respect to how much active engagement is needed for product-focused judgment and decision-making processes (Petty, Cacioppo, and Schumann 1983; Zaichkowsky 1985). Consumers develop diversified involvement levels through the product categories (Manzur et al., 2012). Low-involvement products are consumable items that require minimal effort and consideration before purchasing whereas high-involvement products entail more effort and consideration prior to their purchase. Consumers pay more attention to advertisements of products that they have high involvement with (Holbrook and Lehmann 1980) since they have more important personal consequences (Apsler and Sears 1968). Moreover, according to the Elobation Likelihood Model (ELM) when the consumers' involvement is high for a product/product category they actively engage in information search (Petty and Cacioppo, 1986). In addition, Suh and Yi (2006) claimed that if product involvement increases, consumers are more intensively search information about the products.

As it is stated previously gray marketing is not a well-known issue. If consumers are highly involved in a product / product category, they will make more search about the products and most likely they find product and price information about the gray market goods. The results of focus group studies, which was mentioned previously, indicated that participants who are low involved about the electronic goods has little and/or misinformation about the gray market goods and they do not have a positive attitude towards gray market goods. On the contrary, participants who are highly involved in the electronic goods, have already enough and accurate information about the gray market goods. In this context, it is hypothesized as follows;

H7a: The more consumers involved in a product category, the more they have positive attitudes toward gray market goods.

As it is stated previously consumers in Turkey are more risk averse and avoid uncertainties than the U.S. consumers. Consumers in Turkey may tend to reduce risks during decision making make more comprehensive product search more than the American consumers. In this context, it is hypothesized as follows;

H7b: *The effect of product category involvement on attitude towards gray market goods is stronger for the Turkish consumers than the U.S. consumers.*

3.2.3 Social Factors

In addition to personal factors, others' influence is another determinant of a consumer's behavior (Ang et al., 2001). Bearden et al. (1989) proposed a concept, consumer susceptibility, which is based on influenceability (McGuire, 1968). He defined the consumer susceptibility as "the need to identify with or enhance one's image in the opinion of significant others through the acquisition and use of products and brands, the willingness to conform to the expectations of others regarding purchase decisions, and the tendency to learn about products by observing others or seeking information from others" (Bearden et al., 1989, p. 474). Stafford and Cocanougher (1977) stated that the effects of interpersonal influence should be taken into consideration while analyzing attitudes, norms and purchase behavior of the consumers. However, the effects of consumer susceptibility on attitude purchase intention have not been researched in the literature in the context of gray market goods yet. Therefore, to reveal the relationship between consumer susceptibility and attitude and intention in the context of gray market goods will provide valuable information both for the researchers and practitioners.

Bearden et al. (1989) claimed that there are two types of consumer susceptibility that are normative susceptibility and informative susceptibility.

3.2.3.1 *Informative Susceptibility*

Informative susceptibility is used to define a situation when products are bought based on the expert opinion of others. When the consumers do not know much about a product category, informative susceptibility occurs. (Ang et al., 2001). Effects of informative susceptibility on attitude and purchase intention are mostly studies in the context of counterfeit goods. For instance Ang et al. (2001) claimed that informative susceptibility may affect the attitude towards counterfeit goods. In addition, Matos et al. (2007)

claimed that the views of the friends and relatives affect the consumers' attitude towards gray market goods. Moreover, Börekçi et al. (2015) indicated that there is a negative relationship between the informative susceptibility and attitude towards counterfeit goods.

Gray market goods are not well-known by the consumers. Therefore, consumers ask experts and look for the social media tools such as forums, blogs, and online communities to get comprehensive information about the gray market goods. Consequently the consumers' attitudes are developed based on the expert opinions. When the expert of a product group is aware of the negative consequences of gray market goods, this will affect the consumer's attitude towards gray market goods and intention to buy gray market goods negatively. On the other hand, if the expert suggests that you will have the same product by paying less, this will affect the attitude and intention for gray market goods in a positive way. In this context, It is hypothesized that;

H8a: There is a relationship between informative susceptibility and attitude towards gray market goods.

3.2.3.2 ***Normative Susceptibility***

Normative susceptibility is related to attitude and purchase decisions that are based on the expectations that would impress others (Ang et al., 2001). Therefore, if consumers think that usage of gray market goods may not be liked or may not impress others, they will be likely develop negative attitudes towards gray market goods and intention to buy gray market goods. Therefore, it is hypothesized that;

H9a: There is a relationship between normative susceptibility and attitude towards gray market goods.

Culture may affect the consumers' levels of informative and normative susceptibility who live in different countries. Hofstede (1980) claimed that in the collectivist cultures, people care about the group members' ideas and expectations and group decisions and norms also play an important role. However, in the individualistic cultures, people act more individualistic and they are only supposed to take care of themselves. From this point of view, since Turkey is more collectivist (Individualism Index: 37) than the U.S. (Individualism Index: 91) the effects of informative and normative susceptibility on attitude is expected to be higher for the Turkish consumers than the U.S. consumers. Therefore, it is hypothesized as follows;

H8b: *The effect of informative susceptibility on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.*

H9b: *The effect of normative susceptibility on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.*

According to the Theory of Reasoned Action purchase intention is also affected by the subjective norms. Subjective Norm is defined as "a person's perception that most people who are important to him think he should or should not perform the behavior in question" (Ajzen and Fishbein, 1980, p.57). The meaning, context and, the measures of the consumer susceptibility and subjective norms is very similar that some of authors such as Matos et al. (2007) used these constructs in the same meaning. In the literature, there are several studies which tested the effects of informative susceptibility and normative susceptibility on purchase intention. For instance, Teah and Phau (2007) indicated that informative susceptibility has a negative effect on purchase intention, while normative susceptibility has a positive effect. In this context based on the TRA, the following hypotheses were proposed;

H10a: There is a relationship between informative susceptibility and intention to buy gray market goods.

H11a: There is a relationship between normative susceptibility and intention to buy gray market goods.

H10b: *The effect of informative susceptibility on intention to buy gray market goods is stronger for Turkish consumers than the U.S. consumers.*
H11b: *The effect of normative susceptibility on intention to gray market goods is stronger for Turkish consumers than the U.S. consumers.*

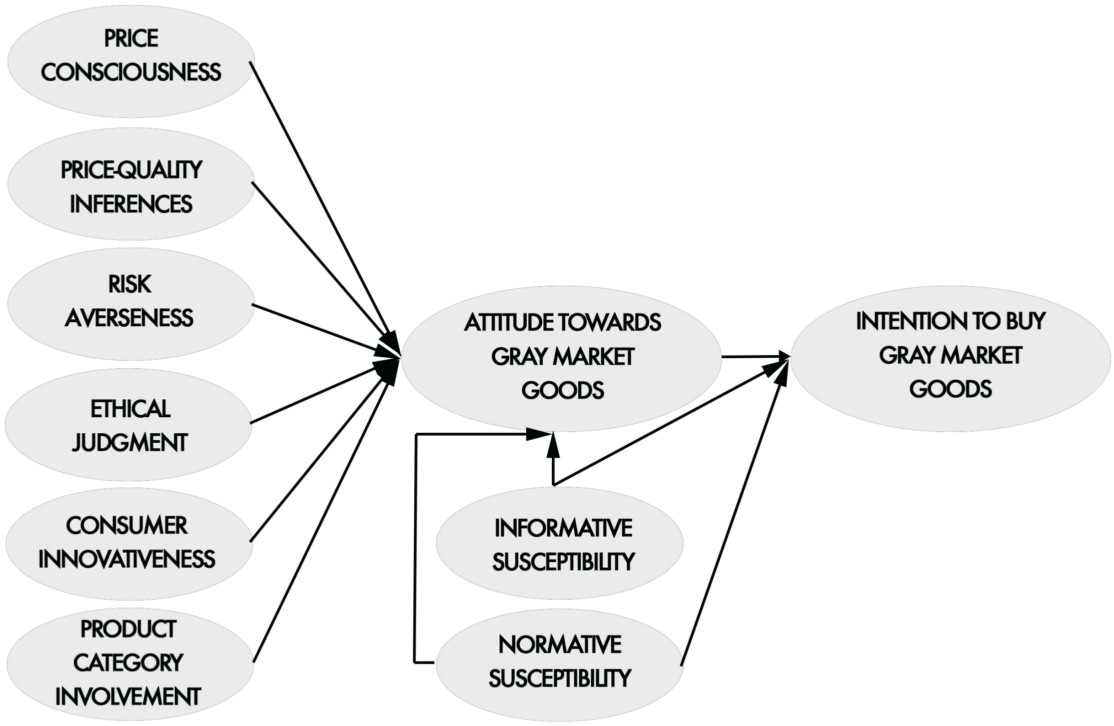

Figure 3 The Proposed Model

The model was not proposed from the gray marketing literature which is very limited so inputs from the qualitative research were also taken into consideration in the construction of the model The Table-11 indicates sources of the constructs included in the model.

Table 11: Sources of the Constructs in the Model

Constructs	Literature Review (Gray Marketing)	Literature Review (Counterfeit)	Focus Group	In-Depth Interview
Attitude towards Gray Market Goods	✓			
Intention to buy Gray Market Goods	✓			
Innovativeness			✓	✓
Risk Averseness	✓	✓	✓	

Price Consciousness	✓	✓	✓	
Price-Quality Inferences	✓	✓		
Product Category Involvement			✓	✓
Ethical Judgment	✓	✓		
Normative Susceptibility		✓		
Informative Susceptibility		✓	✓	

4 Quantitative Research: Factors Affecting Consumers' Attitude and Intention towards Gray Market Goods

4.1 Methodology

Following the qualitative research, aforementioned focus group study, a quantitative research was applied to test the proposed hypotheses. Quantitative research is defined as "the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect" (Babbie, 1992, p. 405),

Selecting the most appropriate research method is very critical to get the valid and reliable results. In this study, survey method was considered to fit best. The survey is a method of "questioning the individuals on a topic or topics, and describing their responses" (Jackson, 2008, p: 17). The motivation of using survey technique is that they are "popular as they allow the collection of a large amount of data from a sizeable population in a highly economical way" (Saunders, 2009, p. 144). It is also a commonly used strategy in business and management research and it is generally used to answer questions such as what, where, who, how many, and how much (Saunders, 2009).

4.1.1 Population and Sampling

After the selection of the appropriate research type, the following step is to design targeted sample. "A sample is a subset of the population; and population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2003, p. 266). In most cases, collecting data from the entire population is almost impossible. Therefore, using samples is a good alternative for the following conditions;

- It would be impracticable for the researcher to survey the entire population;
- Your budget constraints prevent you from surveying the entire population;
- Your time constraints prevent you from surveying the entire population;
- You have collected all the data, but need the results quickly (Saunders, 2009, p. 212).

Since buying a product does not require any specifications and demographic characteristics, unit of analysis of this study was the Turkish and American consumers whose ages are over 18. As of 2016, the population of the U.S. is about 323 millions and approximately 250 million people are over the age of 18 (United States Sample Bureau, 2016). In addition, the population of Turkey is 78.5 million as of 2015 and 57 million people are over 18 years (TUIK, 2015).

Due to the difficulty of getting the list of targeted population and reaching them and also time and budget constraints, convenience sampling, which is a non-probability method, was used for the study. Convenience sampling refers to "the collection of information from members of the population who are conveniently available to provide it" (Sekaran, 2003, p. 276).

In order to get more reliable and valid results, sample size is one of the most critical decisions to be made. However, to decide the sample size is very tricky and complex. There is no general accepted sample size formula and required sample size varies based on the data analysis technique.

In this study, multi-group structural equation modeling, which will be discussed in the next chapter, will be used to test the hypotheses. Hair et al. (2010) claimed that decision on sample size was very complex and they stated five considerations might affect the required sample size for SEM analysis. These considerations are multivariate normality, estimation techniques, model complexity, missing data, and average error variance of indicators. By taking account of these considerations, Hair et al. (2010) claimed that, if there are more than seven constructs in the model, the required sample size is determined as 500. In addition, in multi group analysis the minimum sample size must be met for each group Hair et al. (2010). Since the proposed model in this study consists of ten constructs and two groups, the required sample size was determined as total 1000 (500 Turkish consumers and 500 American consumers).

4.1.2 Instrument Development

After designing the sample and decision of the sample size, the next step is the designing the adequate questionnaire to gather data. A questionnaire is a formalized set of questions to get information from respondents (Malhorta, 2010). Questionnaires are very effective mechanism when the researchers know what is necessary and how the variables should be measured (Sekaran, 2003). Malhotra and Birks (2008) stated nine steps regarding designing a good questionnaire as indicated in Figure-4 and discussed below.

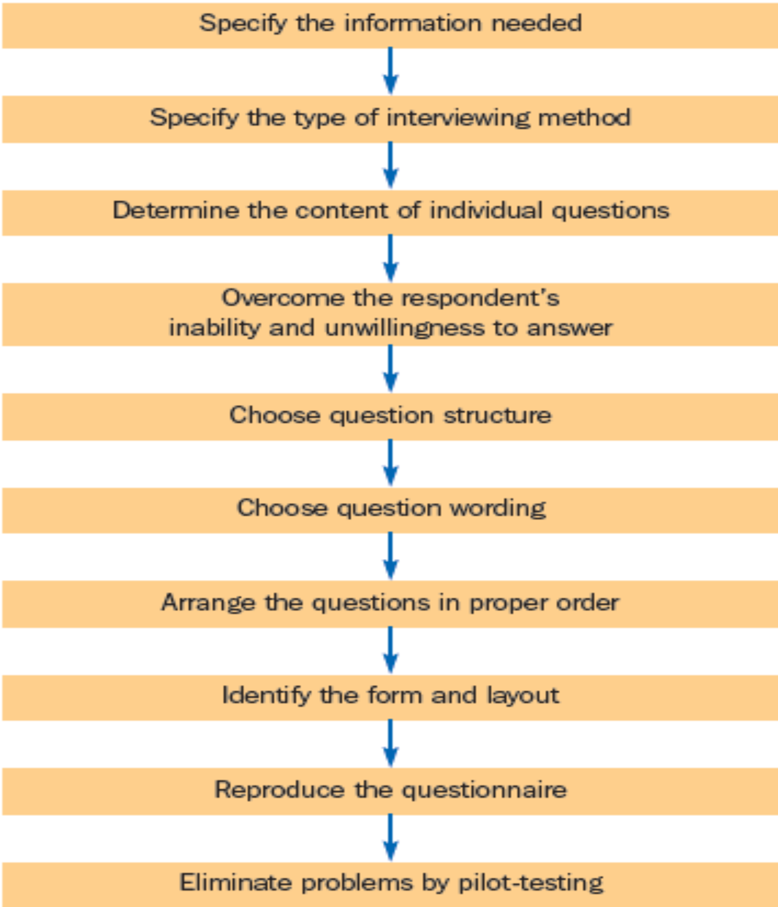

Figure 4 Questionnaire Design Process

1-Specify the Information Needed.

Unlike the focus groups studies and in-depth interviews the questions used in the questionnaires must be determined prior to data collection (Saunders, 2009). The objective of this study is to indicate the effects of personal and social factors on attitude towards gray market goods and intention to buy gray market goods. In addition, consumers' prior knowledge about gray market goods and their gray market goods preferences are aimed to be revealed.

2- Specify the Type of Interviewing Method

The researchers should take type of interviewing method into consideration while designing the questionnaire. In personal interviews, respondents see the questionnaire and interact face to face with the interviewer. Thus, lengthy, complex and varied questions can be asked (Malhotra, 2003, p. 375). Since the questionnaire is expected to consist of varied question and lengthy, in this study personal interview technique was used.

3- Determine the Content of Individual Questions

In this study, the questionnaire has consisted of four main sections. First of all, the questionnaire started with a filtering question which is “What is your country of birth?”. Only the Turkish and American people were allowed to participate in the study.

In the first section, there was an introductory paragraph and detailed information about the gray market goods. Also, in the introductory paragraph, the respondents were provided information about the objective of the study and confidentiality of the responses. Gray marketing is a lesser-known concept by the consumers. Therefore, a very comprehensive information and examples about the gray marketing were also provided in the first section.

In the second section, there are questions about the consumers’ knowledge and preferences related to gray market goods. Since, there is little information in the literature about these topics, the questions and answer choices were determined through focus group studies mentioned previously. The following questions were included in the study: Have you ever heard about gray market goods?, From which source/sources have you gained the information?, Have you ever bought any gray market electronics goods?, Which type of gray market electronics goods have you bought?, From where have you bought these goods?, Why did you prefer to buy gray market goods?, How much price difference convinces you to buy gray market goods rather than authorized distributor goods for each product groups?.

Third section is the most important part of the study. This section consisted of the questions, which measure the dependent and independent variables integrated in the model. The variables and sources of the measures were indicated in the Table-12.

Table 12: Measures of the Variables

Variable Name	Number of Items	Author	Year	Journal
Attitude towards Gray Market Goods	6	Huang et al.	2004	International Marketing Review
Intention to buy Gray Market Goods	3	Grewal	1998	Journal of Retailing
Innovativeness	6	Goldsmith and Hofacker	1991	Journal of the Academy of Marketing Science
Risk Averseness	4	Burton et al.	1998	Academy of Marketing Science
Price Consciousness	4	Lichtenstein et al.	1993	Journal of Marketing Research
Price-Quality Inferences	3	Lichtenstein et al.	1993	Journal of Marketing Research
Product Category Involvement	3	Seiders et al.	2007	Journal of the Academy of Marketing Science
Ethical Judgment	4	Barnett et al.	1994	Journal of Business Ethics
Normative Susceptibility	4	Wang et al.	2005	Journal of Consumer Marketing
Informative Susceptibility	4	Bearden et al.	1989	Journal of Consumer Research

In order to assess the quality of the questionnaire, the measures of the variables were drawn from the top journals. All the authors, who developed measures for the variables, conducted validity and reliability analysis of the measures. As it is indicated in the Table-11, attitude towards gray market good measures were taken from Huang et al. (2004), while intention to buy gray market good measures were taken from Grewal (1998). Other variables and sources were as follows: Innovativeness (Goldsmith and Hofacker, 199), Risk Averseness (Burton et al., 1998), Price Consciousness and Price-Quality Inferences (Lichtenstein et al., 1993), Product Category Involvement (Seiders et al., 2007), Ethical Judgment (Barnett et al., 1994), Normative Susceptibility (Wang et al., 2005), and Informative Susceptibility (Bearden et al., 1989).

The fourth section of the questionnaire consisted of the demographic questions as the following, what is your age, gender, marital status, income level, and occupation.

Control Question

As it is stated previously gray marketing is not a well-known concept by the consumers. However, in order to get accurate responses from the consumers they should know about what gray marketing is precisely. In the first section of the questionnaire, comprehensive information about the gray marketing was provided. However, in case the respondents skip this part or do not understand clearly, a control question, which asked the definition of gray marketing, was placed at the end of the questionnaire.

4- Overcoming the respondent's inability and unwillingness to answer

This study just focused on Turkish and American consumers. Therefore, the questionnaire first started with a filter question as "What is your country of birth?" to filter out the respondents who were not eligible for the study. In addition, the respondents were provided with very comprehensive information about the gray marketing.

Moreover, in order to decrease the unwillingness of the consumers to answer the questions, demographic questions were placed at the end of the questionnaire. The only sensitive question of the study is to income of the respondents. Therefore, instead of asking the exact income of the respondents, they were asked to mark an appropriate income category as suggested by Malhotra and Birks (2008).

5- Choice of the Question Structure

In this study, mostly structured questions were preferred to use. In the second section and fourth section dichotomous and multiple-choice structured questions were used. For the variables in the third sections except Ethical Judgment, seven-point Likert scale were used. Likert scale is defined as the "Scale that allows the respondent to indicate how strongly she or he agrees or disagrees with a statement" (Saunders, 2009, p. 594). Likert scales provides several advantages to the researchers as following; "It is simple to construct Likert Scale, Likert scale can be used in many cases, it is more reliable than other scales, the range of agreement-disagreement responses permitted with Likert items may make subjects more comfortable in indicating their positions" (Kumar, 2008, p. 108), "This method is based entirely on empirical data, and this method produces more homogeneous scales and increases the probability that a unitary attitude is being measured, increasing the validity and reliability (Burns and Burns, 2008, p. 475). In addition, for the Ethical Judgment variable a semantic differential scale was used. The bipolar adjectives used in the questionnaire were Unethical-Ethical, Unfair-Fair, Unjust-Just, and Morally Wrong and Morally Right.

6-Choice of Question Wording

Question wording "is the translation of the desired question content and structure into words that respondents can clearly and easily understand" (Malhotra and Birks, 2008 p. 384). For the questionnaire, the wording is designed through using ordinary and unambiguous words and avoiding leading and biasing questions.

The remained steps in the questionnaire design are to arrange the questions in proper order to identify the form and layout and reproduce the questionnaire. The questionnaire was designed by taking these steps into the consideration.

Special Issues in Instrumentations for Cross-Cultural Research

This study is a cross-cultural research, which compares the Turkish and the American consumers' behaviors. Both groups speak different language and therefore two different questionnaires were formed. Since the original scales used in the study were in English, the original questionnaire for this study was formed in English. In order to translate the questionnaire in Turkish properly, the back translation method was used. In back translation "The questionnaire is translated from the base language by a bilingual speaker whose native language is the language into which the questionnaire is being translated. This version is then retranslated back into the original language by a bilingual whose native language is the initial or the base language (Malhotra and Birks, 2008). Three marketing scholars translated the English version of the questionnaire into Turkish, and then three other marketing scholars translated the translated Turkish version of the questionnaire into English. The original and re-translated English version of the questionnaire was compared and final Turkish version of the questionnaire was reached. The only weakness in this study is that all the all six scholars' native language was Turkish. However, all of them were fluent in English.

The last step is to eliminate problems by pilot testing. In this context, a pilot study was conducted to test the questionnaire.

4.1.3 Pilot Study

In order to test the questionnaire and identify and eliminate the potential problems a pilot study was conducted both in Turkey and in the U.S.

101 samples were collected from American consumers through Amazon's Mechanical Turk (MTurk) data collection website. MTurk "is a relatively new website that contains the major elements required to conduct research: an integrated participant compensation system; a large participant pool; and a streamlined process of study design, participant recruitment, and data collection" (Buhrmester et al., 2011, p. 3). Buhrmester et al., (2011) tested and claimed that MTurk data can be used to gather high-quality data cheaply and rapidly. In addition, 100 samples were collected from Turkish consumers in Istanbul by the pollsters who were trained for this study.

The descriptive statistics of the samples were indicated in the Table-13. 65% of the respondents are male in Turkey, while 54% in the U.S. In addition, 56% of the sample is single in Turkey, while 66% in the U.S.. %76 of the respondents are between 18- 44 years old in Turkey, while 72% in the U.S..

Table 13: Demographics of the Respondents Participated in the Pilot Study

Demographics		Turkey	U.S.A.
Gender	**Male**	65	54
	Female	35	47
Marital Status	**Single**	56	66
	Married	44	35

Age	**18-24**	18	14
	25-34	31	37
	35-44	27	21
	45-54	18	11
	55 +	6	18
Education	**Less than High School**	23	10
	High School	41	20
	Undergraduate	34	53
	Graduate	2	18

In order to test the measures of the variables, an exploratory factor analysis was conducted both for the Turkish and the American data.

For the American data, Kaiser-Meyer-Olkin sampling appropriateness value is .748 and the Bartlett test has significant results (Chi-Square = 2993,731, p=.000<.05) which indicates that the data is appropriate for factor analysis. Moreover, communality values are ranged between .574 and .934. The total explained variance was 80.5%. The factor loadings of the variables were indicated in the Table-14.

Table 14: Factor Loadings of the Turkish Pilot Study

Rotated Component Matrix[a]

	Component							
	1	2	3	4	5	6	7	8
INV3	.928							
INV1	.905							
INV2	.902							
CI3	.750							
CI4	.703	.319						
CI6	.560	.408						
NS1		.840						
NS2		.830						
NS4		.820						
NS3		.813						
EJ3			.957					

EJ2			.951					
EJ1			.950					
EJ4			.912					
PC4_REV				.894				
PC3_REV				.853				
PC2_REV				.827				
PC1_REV				.703				
IS3					.899			
IS4					.895			
IS2					.867			
IS1		.491			.584			
RA1						.861		
RA3						.824		
RA4_R						.656		.363
RA2_R		-.338				.650		.449
PCI1							.909	
PCI2							.901	
PCI3							.815	
CI2_REV	.325							.826
CI1_REV	.464							.724
CI5_REV	.533							.669

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

There were two problematic issues regarding the results of the factor analysis. The first one is Product Category Involvement and Consumer Innovativeness variables were loaded to the same factor. However, since the reliability and validity of these scales have been tested before by several authors, no changes were applied in the questionnaire regarding the variables. This problem may be caused by the small sample size. The second problematic issue is that three reverse questions were not loaded adequately to the factors. Therefore, wordings of these five items were revised.

For Turkish data, Kaiser-Meyer-Olkin sampling appropriateness value is .741 and Bartlett test has significant results (Chi-Square = 2284, p=.000<.05) which indicates that the data is appropriate for factor analysis. Moreover, communality values ranged between .474 and .929. The total explained variance was 76.2%. The factor loadings of the variables were indicated in the Table-15. The items were almost loaded perfectly to the factors.

Table 15: Factor Loadings of the U.S. Pilot Study

Rotated Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
EJ2	.910								
EJ1	.901								
EJ4	.895								
EJ3	.892								
PC4_R		.861							
PC2_R		.852							
PC1_R		.837							
PC3_R		.815							
RA1			.844						
RA4_R			.844						
RA3			.841						
RA2_R			.815						
IN5_R				.730					
IN6				.725					
IN2_R				.704					
IN4				.666					
IN1_R				.654					
IN3				.623					
PQI3					.908				
PQI2					.850				
PQI1					.839				
NS1						.751			
NS3						.707			
NS2						.696			
NS4	-.432					.674			
PCI2							.889		

PCI1							.847		
IS3								.840	
IS4								.622	
IS1						.439		.517	
PCI3									-.758
IS2								.446	.621

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

Reliabilities of the variables were measured by the Cronbach's Alpha, which assesses the consistency of the scale (Hair at al., 2010). The Cronbach's Alpha values of the variables for both Turkish and American scales were shown in the Table-16. The results indicated that all the variables' but informative susceptibility in Turkish data alpha values are above 0.7 cut-off point and this indicates that measures used in the study are reliable. Since the alpha value of informative susceptibility are not far lower than the 0.7, no adjustment was made for the informative susceptibility measure.

Table 16: Cronbach's Alpha Values of the Factors in the Pilot Study

Variable Name	Cronbach's Alpha Turkish	Cronbach's Alpha American
Attitude towards Gray Market Goods	0.978	0.881
Intention to buy Gray Market Goods	0.921	0.951
Innovativeness	0.807	0.867
Risk Averseness	0.911	0.824
Price Consciousness	0.922	0.879
Price-Quality Inferences	0.698	0.892
Product Category Involvement	0.924	0.965
Ethical Judgment	0.977	0.963
Normative Susceptibility	0.716	0.940
Informative Susceptibility	0.660	0.870

Based on the findings of the pilot study, only small amendments were applied such as changing the some reversed questions to the straight statements. The final versions of both Turkish and English questionnaires were indicated in the Appendix-C and Appendix-D.

4.1.4 Data Collection Procedures

After the finalization of the questionnaires, a convenience sampling method was used to collect the data. The first reason to use convenience-sampling technique was the impossibility of reaching the list of the whole population (Approximately 400 millions). The second reason was the time and budget constraints.

In Turkey, the data were collected through a research company. The research company had pollsters who are experts in data collections for surveys. These pollsters were trained about this study and the gray marketing before the data collection. In addition, to get more accurate data, the research company changed the questionnaire form from self-administrated questionnaire to an interviewer-administrated questionnaire. The data were collected face to face from respondents between December 2015 and February 2016 in Istanbul. In the U.S., data were obtained by the researcher through a self-administrated questionnaire between the date of October 2015 and February 2016.

4.2 Data Screening and Demographics

In this study, Confirmatory Factor Analysis (CFA), Structural Equation Modeling (SEM), and Multi-Group Structural Equation Modeling were applied in order to test the hypothesized model.

Before the data analysis, the data were screened for several characteristics such as missing data, univariate and multivariate outliers, and normality via SPSS 23 software. Then, descriptive statistics were provided in order to describe the respondents' demographics, frequencies, percentages, and means. After the data screening process and presentation of the descriptive statistics; the CFA, SEM and multi-group SEM analyses were conducted to test the model.

4.2.1 Data Screening

For this study, 557 questionnaires were gathered from the Turkish consumers, while 452 questionnaires were gathered from the American consumers.

4.2.1.1 Missing Value Analysis

"Missing responses represent values of a variable that are unknown either because respondents provided ambiguous answers or because their answers were not properly recorded"(Malhotra and Birks, 2008, p. 487). In the data gathered from Turkey, there were no missing values. However, the data gathered from the U.S. had some missing values. 11 of the respondents left the various questions unanswered. Since the number of the cases that included missing values was low, these cases were casewise deleted from the analysis. Responses with few missing values were substituted with imputed values.

4.2.1.2 Control Question Check

As has been mentioned previously, a control question was added at the beginning of the questionnaire about the definition of gray marketing. If the consumers who did not understand what the gray marketing is, they could not reply the questions in the questionnaire accurately. Therefore, the cases which included the wrong answer for the definition of gray marketing were eliminated from the study. In this context, 1 case from Turkish data and 69 cases from the American data were eliminated from the study.

4.2.1.3 Outlier Analysis

Outliers are observations with a unique combination of characteristics identifiable as distinctly different from the other observations (Hair et al., 2010, p. 64). There are two main outlier detections which are univariate and multivariate detections. The univariate "identification of outliers examines the distribution of the observations for each variable in the analysis" (Hair et al., 2010, p. 64). In this study Z-Score approach was used to identify the univariate outliers. In this approach, data values were converted to standard scores and then a threshold value was established. Hair et al. (2010) suggested that for large samples threshold value might be increased up to 4. Therefore, four was determined as the threshold value. For the American data, 9 cases which had univariate outliers were eliminated, while 14 cases were eliminated from the Turkish data.

In order to identify the multivariate outliers Mahalanobis distance measure was used. Mahalanobis distance method "measures each observation's distance in multidimensional space from the mean center of all observations, providing a single value for each observation no matter how many variables are considered" (Hair et al., 2010, p. 66). In this study, linear regression method was conducted to calculate the Mahalanobis D^2 value. 1-CDF.CHISQ(quant, df) formula was used to obtain t-value of significance, where quant = Mahalanobis distance value and df=45. Although Hair et al., (2010) claimed that threshold value can be 0.001 for the large samples, cases whose values below 0.0001 were eliminated from the study in order to retain more cases. In this context, 15 cases in the Turkish data and 12 cases in the American data were excluded from the study.

4.2.1.4 Normality Analysis

In order to test the normality of the data, Kolmogorov-Smirnov and Shapiro-Wilk's normality tests were applied. The significance of the results (see Appendix-E for values) indicated deviations from the normality both for the Turkish and American data. However, Field (2009, p. 148) claimed that for larger samples, Kolmogorov-Smirnov and Shapiro-Wilk tests could be "significant even when the scores are only slightly different from a normal distribution". Therefore, Field (2009) suggested using skewness and kurtosis values while determining the normality of the data. Z values for the skewness and kurtosis are calculated when the values are divided by the standard deviations. For large samples cut-off value can be taken as 3.29 ($p < .001$) or 2.58 ($p < .01$). The results indicated that approximately 89% of the variables are skewed and almost half of the variables are peaked or flat (See Appendix-F for the complete list of the values). Nevertheless, Hair et al. (2010) claimed that if there are 15 respondents for each parameter estimates, the problems caused by the deviations from the normality are minimized. Since the sample size is enough to minimize non-normality effects in the SEM analysis, non-normality was not be taken into considerations.

4.2.2 Descriptive Statistics of the Respondents

After the data screening process, total 878 cases (527 from Turkey and 351 from the U.S.) were eligible for the study. The following tables indicated the descriptive statistics for data which were gathered from the Turkey and the U.S..

Figure-5 indicates the gender of the total sample. 47% of the Turkish sample were male, while 50% of the U.S. sample were male.

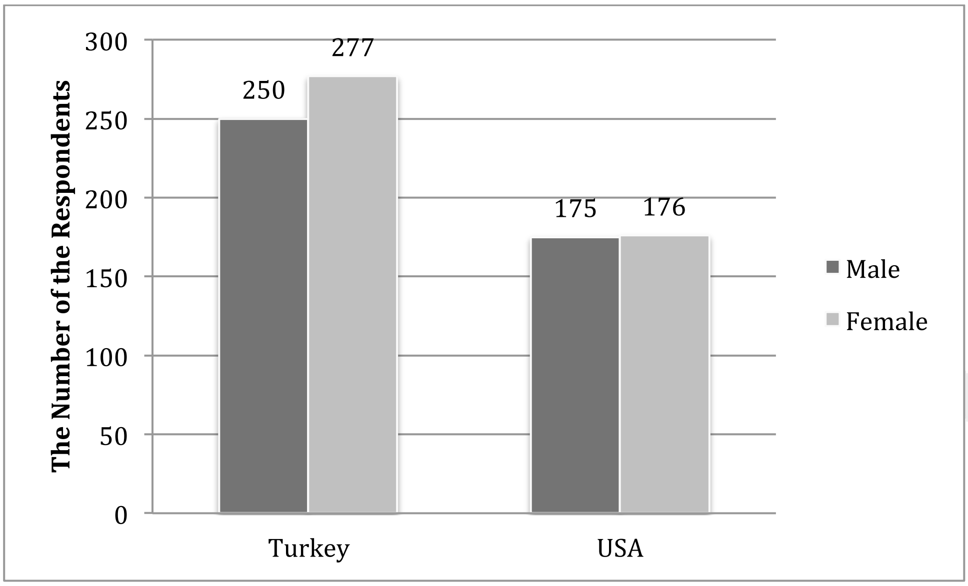

Figure 5: The Gender Distribution of the Sample

Figure-6 indicates the age distribution of the sample. The average age of the American respondents was lower than the Turkish respondents. Approximately 81% of the American respondents were between the 18-34 years old. The ages of the Turkish respondents were distributed more horizontally.

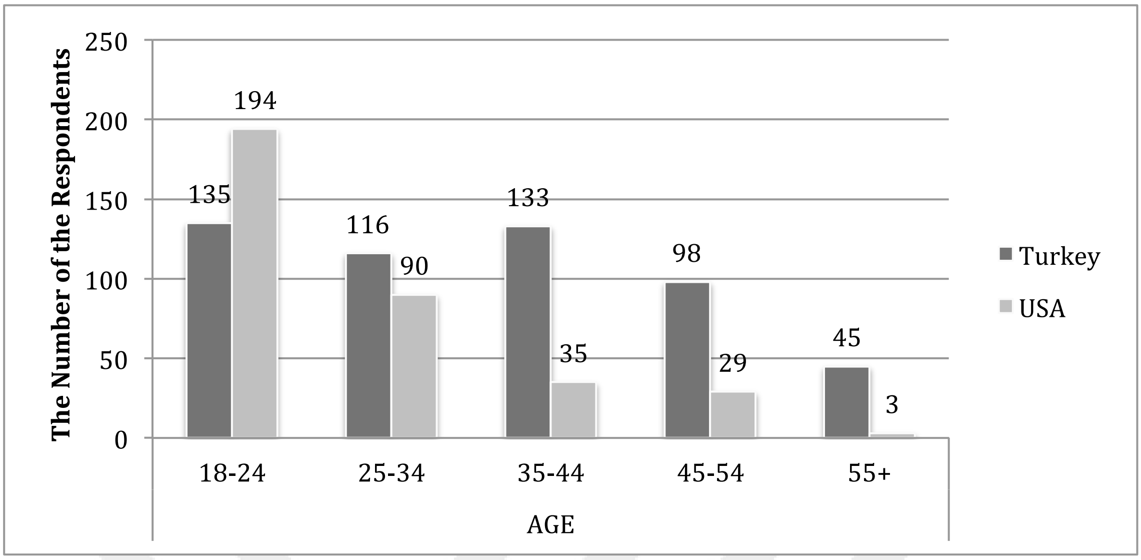

Figure 6 The Age Distribution of the Sample

Figure-7 indicates the marital status distribution of the sample. For the both countries the number of the singles was more than the married respondents. 56% of the Turkish respondents were single, while 69% of the American respondents were singles.

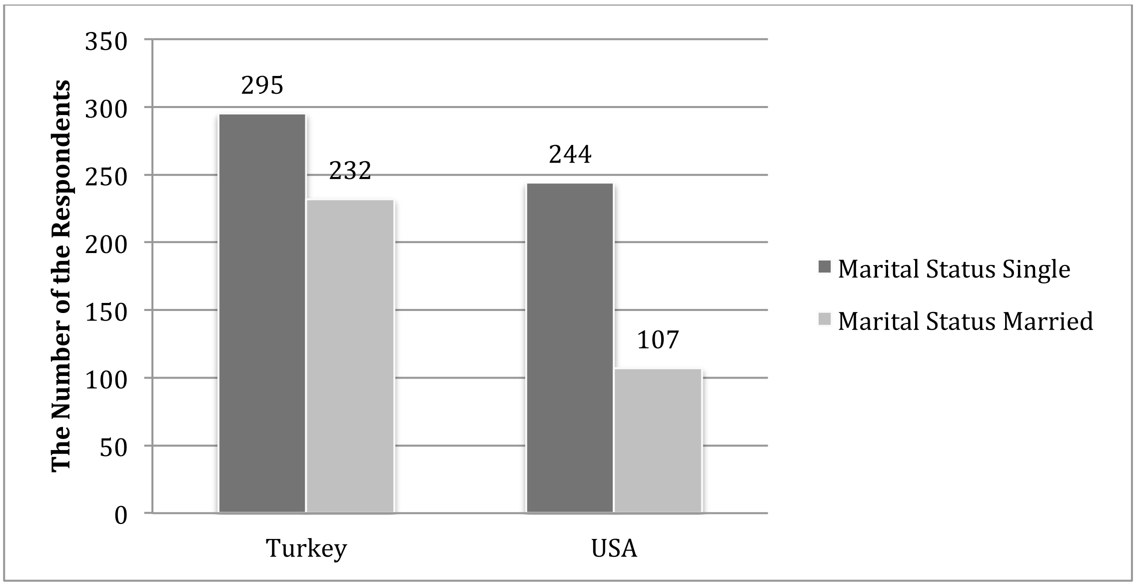

Figure 7 Marital Statuses of the Sample

Figure-8 indicates the income distribution of the sample. The comparison of the income in an amount between Turkish and American respondents was very hard to apply. The income levels and currencies of the Turkey and America are very different. ın order to compare the income levels of the respondent, the income values recoded as low, low-moderate, moderate, moderate-high, and high instead of actual values. The results indicated that the income levels of the respondents were almost normally distributed.

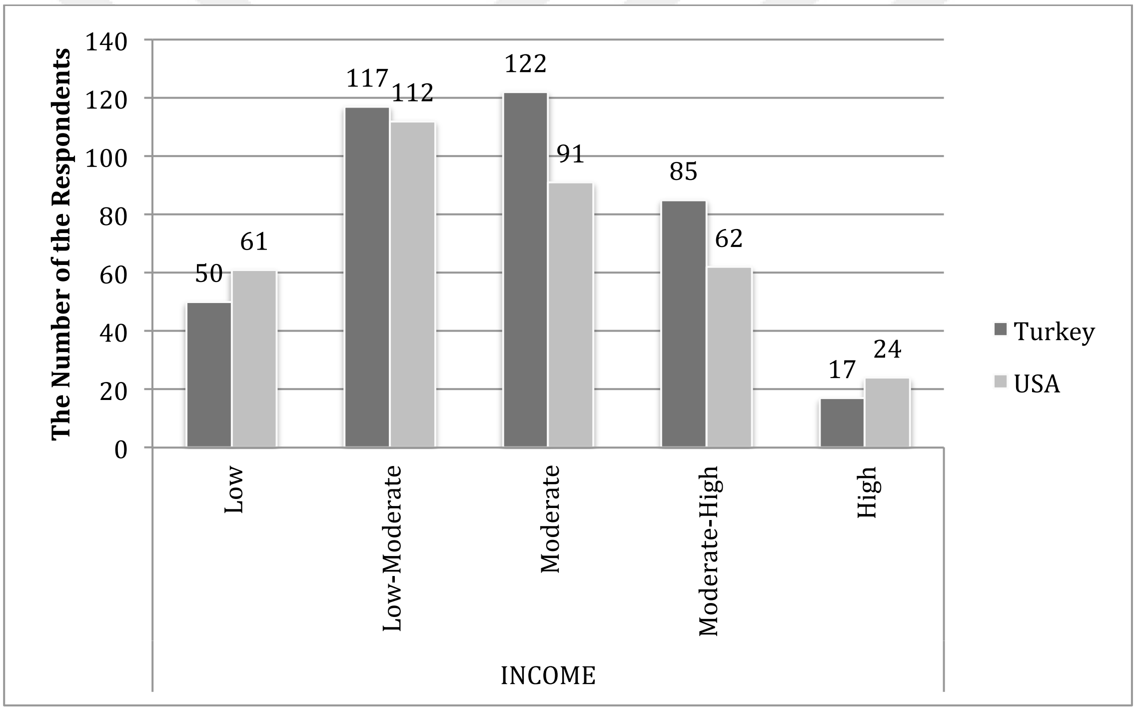

Figure 8 The Income Distribution of the Sample

The education levels of the respondents are indicated in the Figure-9. The average education level of the American respondents was higher than Turkish respondent. Only one of American respondents was graduated less than high school. Most of the Turkish respondents were graduated from High School, whereas most of the American respondents had an undergraduate level.

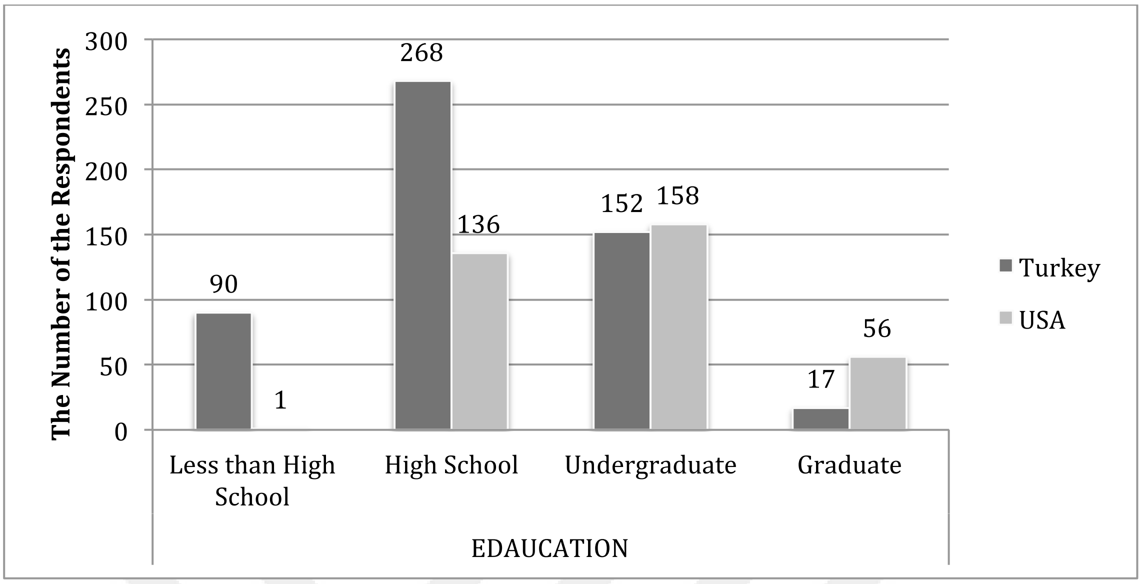

Figure 9 Education Levels of the Sample

The occupations of the respondents are indicated in the Figure-10. Most of the Turkish respondents were private sector employees, while most of the American respondents were students. In addition, approximately 19% of the Turkish respondents and 5% of the American respondents were not working.

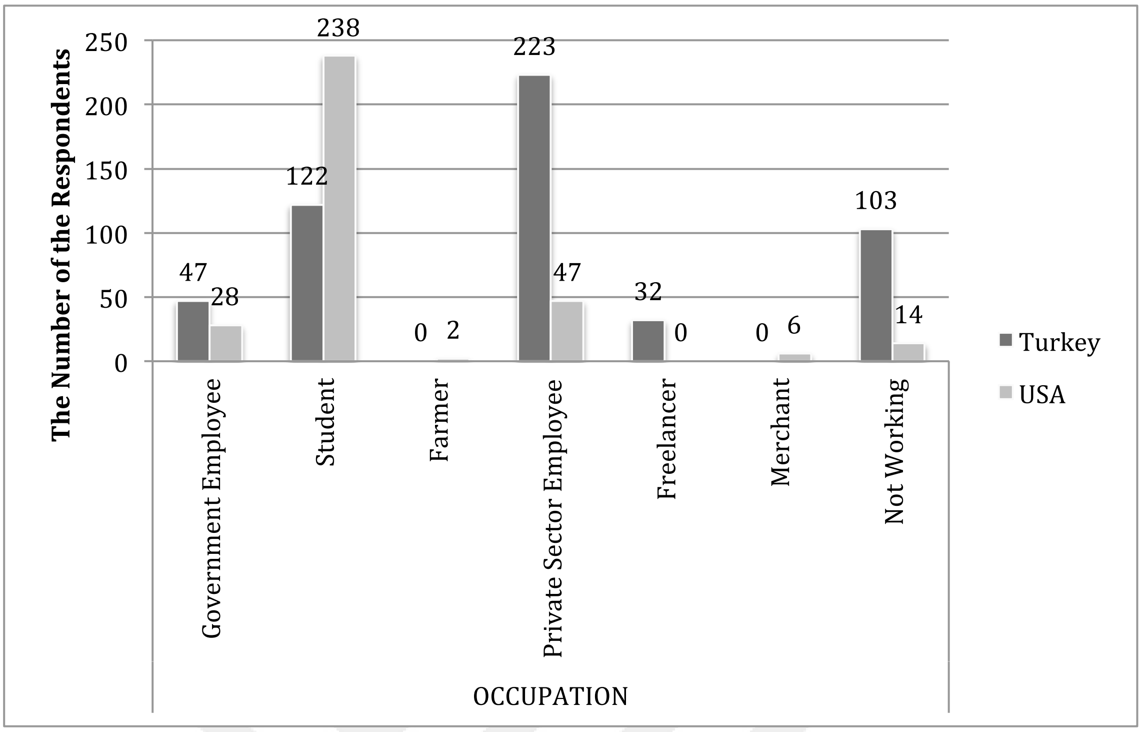

Figure 10 Occupation Distribution of the Sample

4.2.3 The Knowledge of the Respondents Related to Gray Marketing

The respondents were asked whether they have ever heard about gray marketing and the results are indicated in the Figure-11. The results indicated that American consumers know about gray marketing more than the Turkish consumers. Only 12% of the Turkish consumers have heard of gray marketing, while 29 % of the American consumers heard about gray marketing.

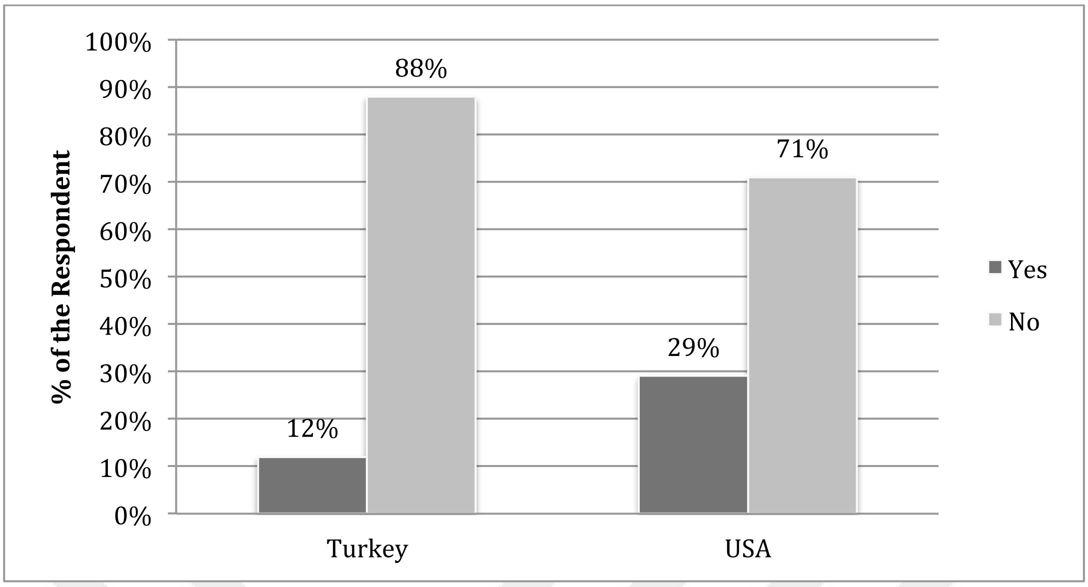

Figure 11 Awareness of Gray Marketing

Figure-12 indicates that from which source / sources have they gained information about the gray marketing. American consumers had heard of gray marketing from the friends/Family, News Websites and Forums. Turkish consumers had heard of gray marketing mostly from Friends/Family and Gray marketer itself. The least effective source for the dissemination of gray marketing is the newspapers and magazines. On the other hand, 3 of the American respondents stated that they learned gray marketing from business classes.

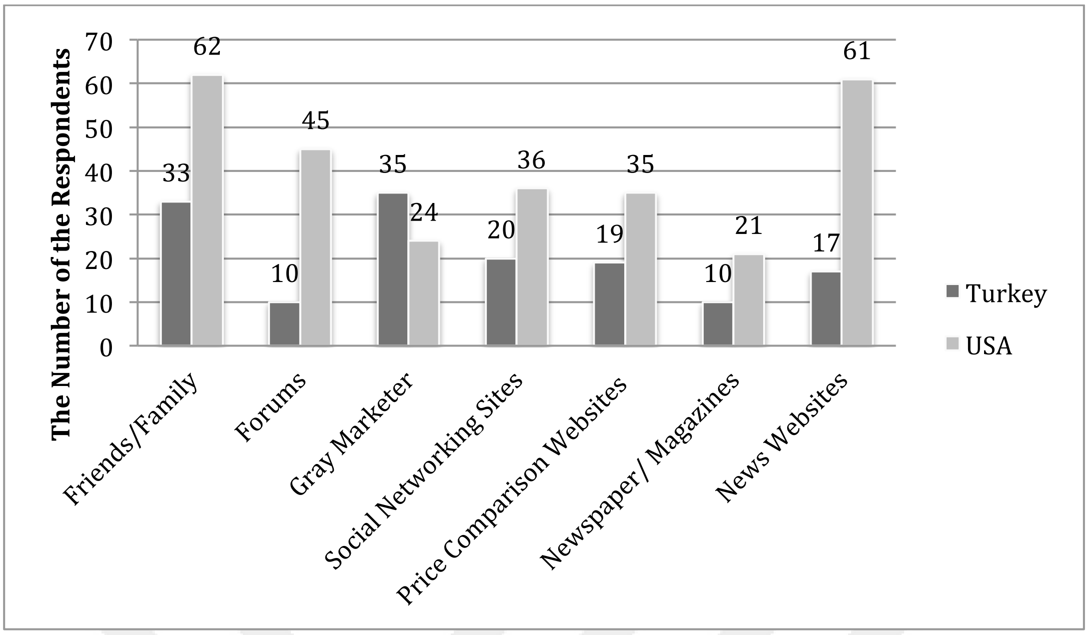

Figure 12 Sources that Consumers Have Heard about Gray Marketing from

The numbers of the consumers who had bought gray market goods are indicated in the Figure-13. The results were very surprising. 69% of the Turkish respondents stated that they had bought gray market good/goods unknowingly, but during this study, they realized that they had bought gray market good after they read the informative text about the gray marketing. Moreover, 20% of the Turkish respondents bought gray market good/goods. On the other hand, only 7% of the American consumers bought gray market good/goods and 9% of the American consumers just realized that they had bought gray market goods unknowingly.

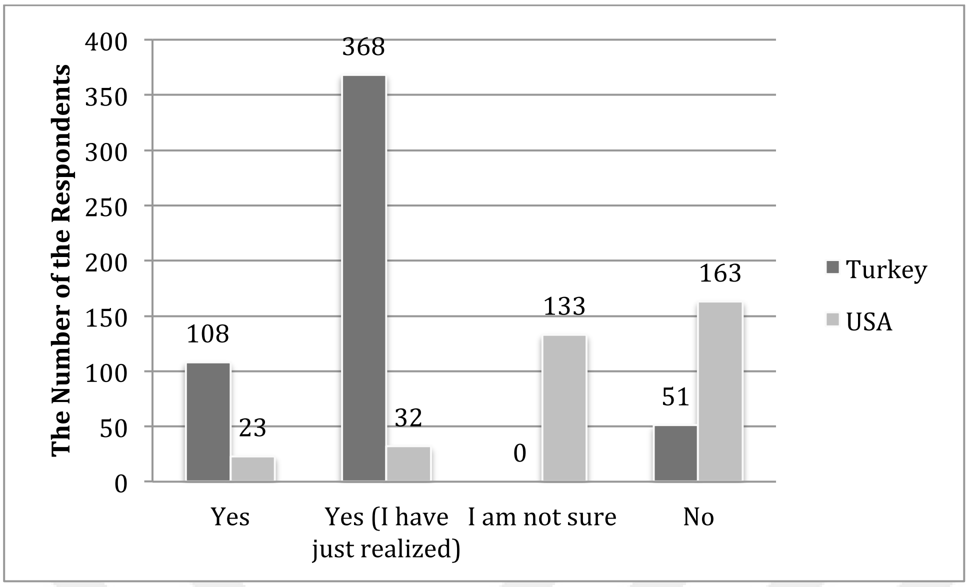

Figure 13 Past Purchase Distribution of the Sample

Figure-14 indicates which types of the product the consumers bought as gray market good. Mobile phones were by far the most bought gray market goods by the Turkish consumers. Approximately 69% of the Turkish respondents bought gray market mobile phones. The other popular gray market goods were TV, computer, and camera/camcorder. As it is seen in the figure, in America gray market goods were not that popular and only 4% of them bought gray market mobile phone and software.

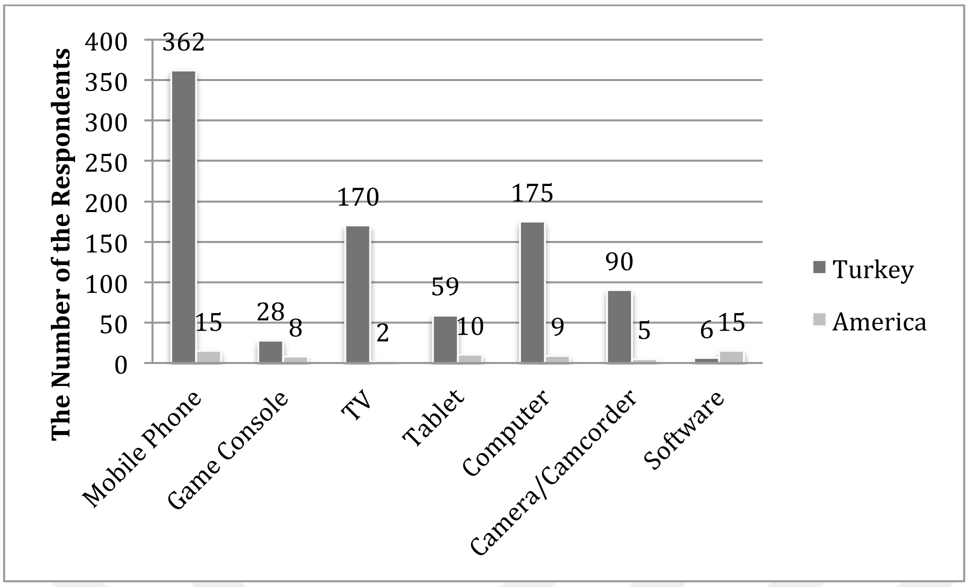

Figure 14 Types of Gray Market Goods Bought by the Sample

The respondents were also asked from where they bought gray market good(s). The results were indicated in the Figure-15. The results were very remarkable. Turkish consumers preferred to buy gray market goods from technology retail stores. They also preferred group buying web sites and virtual marketplaces, and online shopping websites to buy gray market goods. On the other hand, American consumers preferred virtual marketplaces and online shopping sites to buy gray market goods.

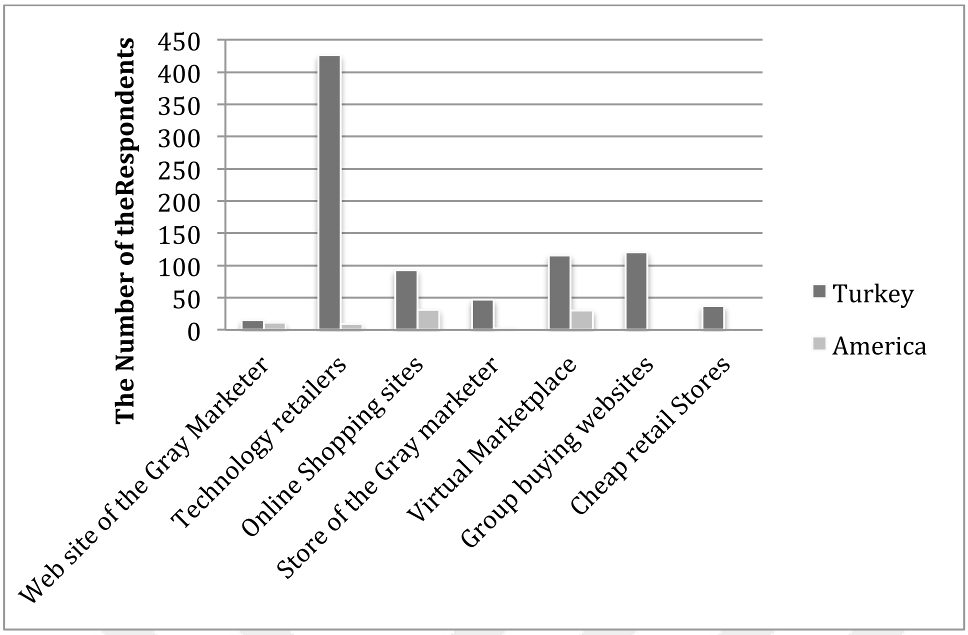

Figure 15 Store Types that The Sample Preferred to Buy Gray Market Goods from

Respondents were also asked how much price difference convinces them to buy gray market goods rather than authorized distributor goods for each product group.

In the Figure-16 the results are indicated for the Turkish consumers. The most preferred price difference was between 21-40% for all product types. Only one of the 527 Turkish respondents stated that they never considered buying a gray market mobile phone. This means almost all the consumers were potential customers for gray market mobile phones if they are offered a price that would have created enough price difference. Moreover, 1-10% price difference was not sufficient to attract Turkish customers to buy gray market goods. For this price difference they would probably prefer to buy authorized distributors' goods. On the other hand, if gray marketers sell their product 40 % or lower than the authorized distributors' price, the customers may also prefer authorized distributors' goods.

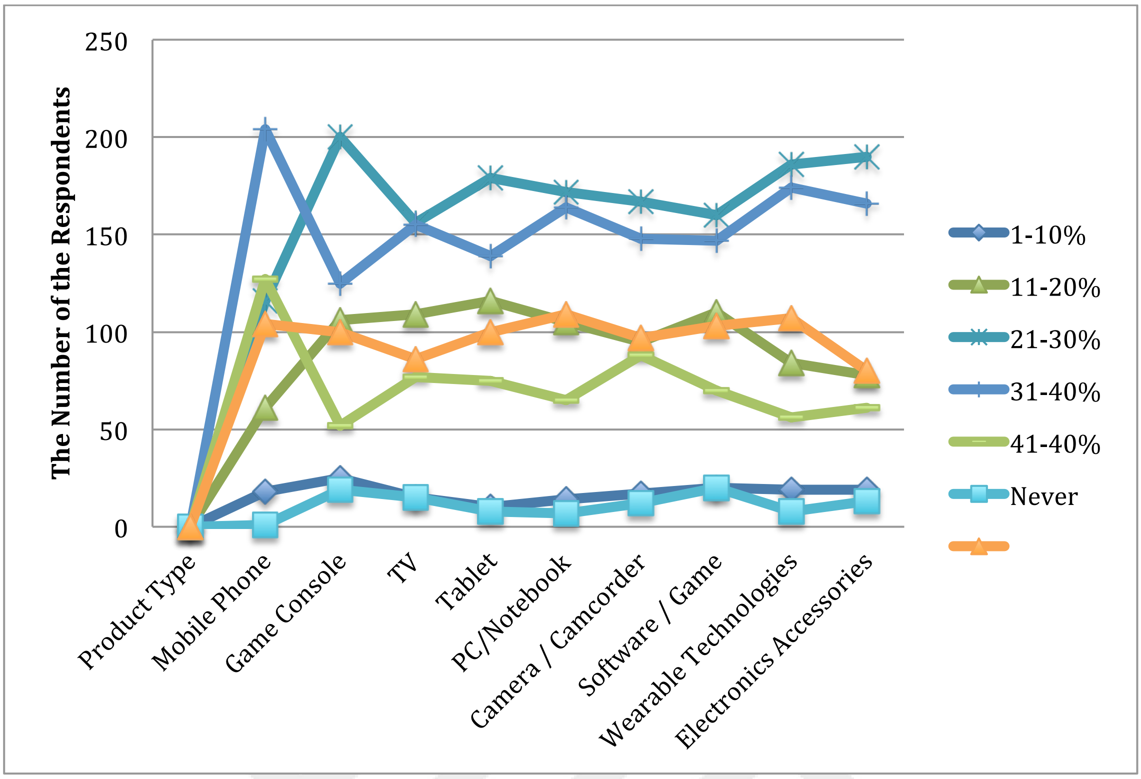

Figure 16 Price Differences that Affect Turkish customers to Prefer Gray Market Goods

The following Figure-17 indicates that the amount of price difference that convinces them to buy gray market goods rather than authorized distributor goods. The results were different from the Turkish consumers' preferences. Approximately 30% of the American Consumers never consider buying gray market goods. Consumers who have intention to buy gray market goods mostly prefer 21-30% price difference in all product types. For software and goods their price difference expectations were higher.

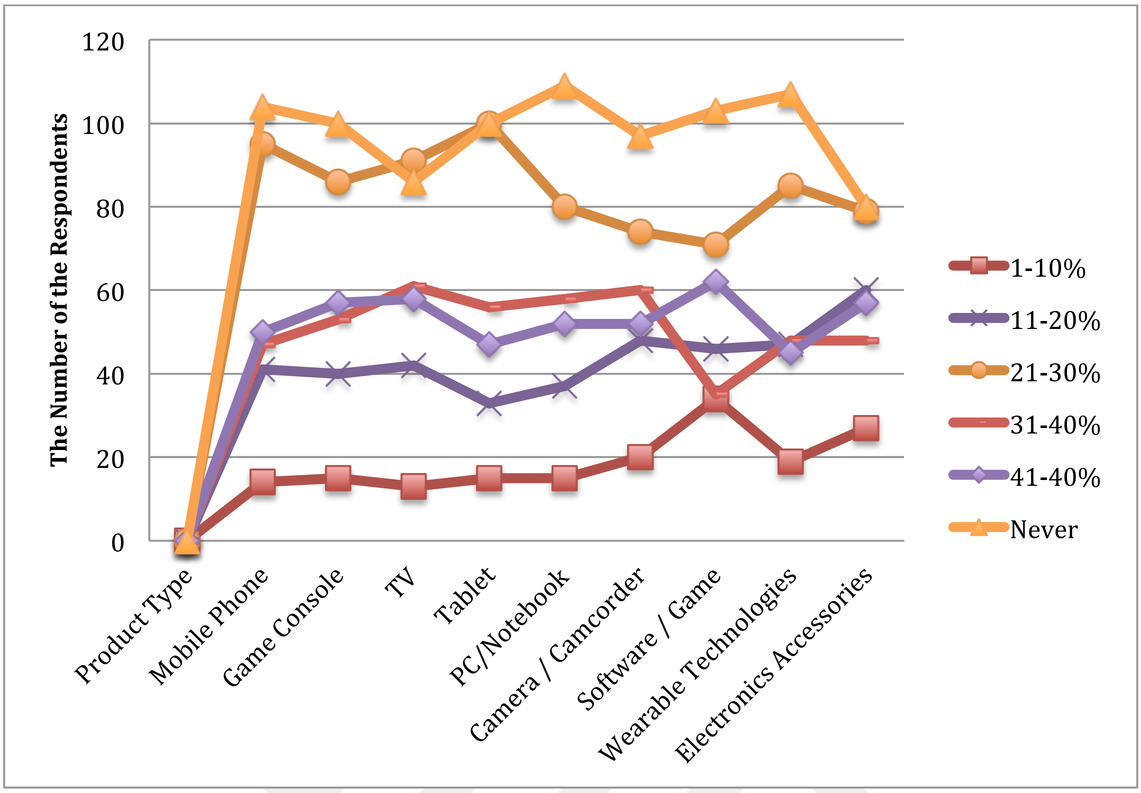

Figure 17 The Price Differences that Affect American Consumers to Prefer Gray Market Goods

4.3 Data Analysis

In order to test the personal and social factors that affect consumers' attitude towards gray market goods and purchase intention, two-step structural equation modeling process was used because a valid structural model cannot be tested with bad measures. Structural Equation Modeling "enables the researcher to simultaneously examine a series of interrelated dependence relationships among the measured variables and latent constructs" (Hair et al., 2010, p. 634). In this approach, there are two models, which are measurement and structural model. In the first step, which is measurement test, fit and construct validity of the proposed model is tested via confirmatory factor analysis (CFA). If the results indicate that measurement model is satisfactory and fit well, then the researcher may proceed to the second step, which is structural test (Hair et al., 2010).

There are six main steps to perform analyses with structural equation modeling: Firstly, defining the individual constructs; secondly, develop and specify the measurement model; thirdly, designing a study to produce empirical results; fourthly, assessing the measurement model validity; fifthly, specify the Structural model; sixthly, assessing structural model validity (Hair et al., 2010).

4.3.1 Test of Measurement Model

4.3.1.1 CFA Analysis of the Initial Model

Testing the measurement model covers the first four stages of the SEM Analysis. Constructs and their measures and adequate sample size were discussed in the previous sections. The proposed measurement model was indicated in the Figure-18. In the figure, RA refers to risk averseness, PCI refers to product category involvement, IN refers to innovativeness, PC refers to price consciousness, EJ refers to ethical judgment, AT refers to attitude, IS refers to informative susceptibility, PQ refers to product quality inferences, INT refers to intention, and NS refers to normative susceptibility. The results will be tested using Maximum Likelihood Estimation.

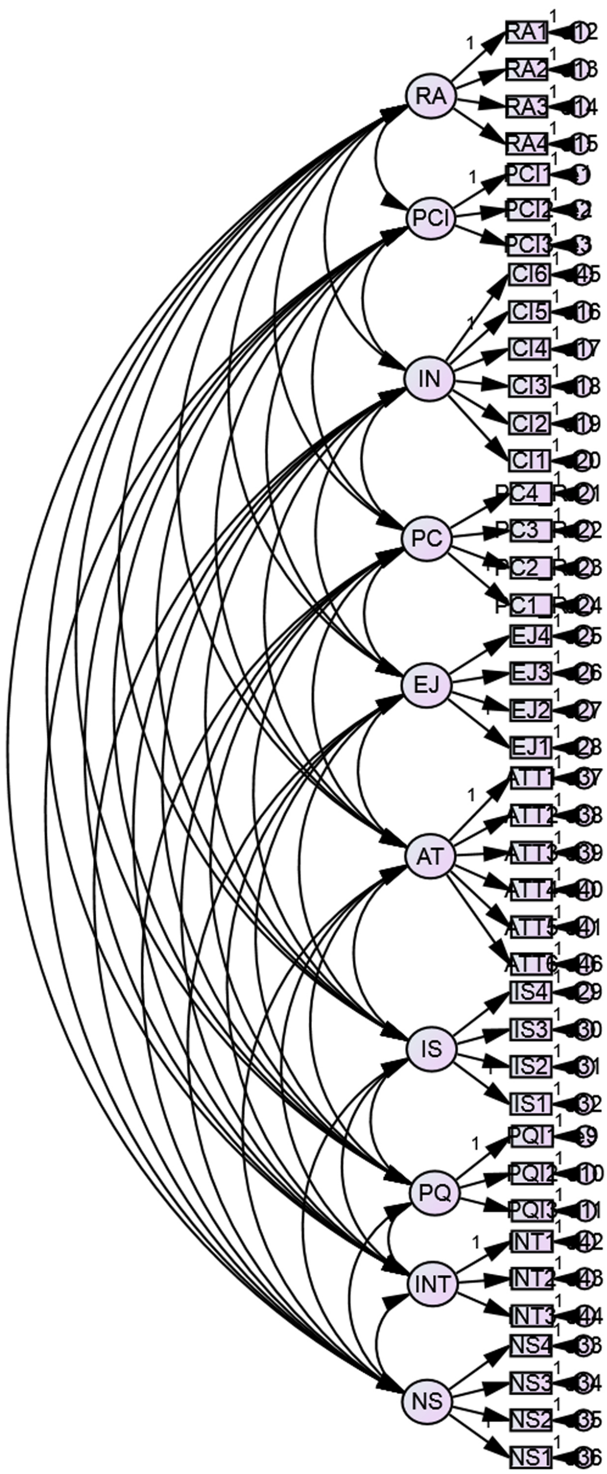

Figure 18 Visual Representation of the Initial Measurement Model

The forth stage is the assessing of the measurement model validity. The parameter estimates and standard regression weights of both Turkish and U.S. data were indicated in Table-17 and Table-18. All the parameters were significant which means each of them significantly contribute to the model. In addition, all standardized loading estimates were over 0.5.

Table 17: Standardized Regression Weights of the Initial Model

Standardized Regression Weights: (TR)				**Standardized Regression Weights: (USA)**			
			Estimate				Estimate
PCI1	<---	INVOL	0,866	PCI1	<---	INVOL	0,947
PCI2	<---	INVOL	0,897	PCI2	<---	INVOL	0,914
PCI3	<---	INVOL	0,917	PCI3	<---	INVOL	0,976
PQI1	<---	QUAL	0,92	PQI1	<---	QUAL	0,839
PQI2	<---	QUAL	0,917	PQI2	<---	QUAL	0,906
PQI3	<---	QUAL	0,949	PQI3	<---	QUAL	0,67
RA1	<---	RISK	0,816	RA1	<---	RISK	0,817
RA2	<---	RISK	0,83	RA2	<---	RISK	0,746
RA3	<---	RISK	0,838	RA3	<---	RISK	0,873
RA4	<---	RISK	0,665	RA4	<---	RISK	0,84
CI5	<---	INNOV	0,897	CI5	<---	INNOV	0,912
CI4	<---	INNOV	0,893	CI4	<---	INNOV	0,816
CI3	<---	INNOV	0,9	CI3	<---	INNOV	0,913
CI2	<---	INNOV	0,88	CI2	<---	INNOV	0,926
CI1	<---	INNOV	0,886	CI1	<---	INNOV	0,845
PC4_R	<---	PRICE	0,926	PC4_R	<---	PRICE	0,919
PC3_R	<---	PRICE	0,912	PC3_R	<---	PRICE	0,848
PC2_R	<---	PRICE	0,918	PC2_R	<---	PRICE	0,884
PC1_R	<---	PRICE	0,917	PC1_R	<---	PRICE	0,732
EJ4	<---	ETHIC	0,657	EJ4	<---	ETHIC	0,901
EJ3	<---	ETHIC	0,715	EJ3	<---	ETHIC	0,959
EJ2	<---	ETHIC	0,658	EJ2	<---	ETHIC	0,934
EJ1	<---	ETHIC	0,772	EJ1	<---	ETHIC	0,928
IS4	<---	INSUS	0,734	IS4	<---	INSUS	0,9
IS3	<---	INSUS	0,571	IS3	<---	INSUS	0,913
IS2	<---	INSUS	0,563	IS2	<---	INSUS	0,872
IS1	<---	INSUS	0,656	IS1	<---	INSUS	0,637
NS4	<---	NORSUS	0,826	NS4	<---	NORSUS	0,82
NS3	<---	NORSUS	0,794	NS3	<---	NORSUS	0,768

NS2	<---	NORSUS	0,821	NS2	<---	NORSUS	0,92
NS1	<---	NORSUS	0,773	NS1	<---	NORSUS	0,84
ATT1	<---	ATTITU	0,69	ATT1	<---	ATTITU	0,818
ATT2	<---	ATTITU	0,591	ATT2	<---	ATTITU	0,817
ATT3	<---	ATTITU	0,628	ATT3	<---	ATTITU	0,812
ATT4	<---	ATTITU	0,699	ATT4	<---	ATTITU	0,8
ATT5	<---	ATTITU	0,705	ATT5	<---	ATTITU	0,807
INT1	<---	INTEN	0,708	INT1	<---	INTEN	0,968
INT2	<---	INTEN	0,679	INT2	<---	INTEN	0,949
INT3	<---	INTEN	0,79	INT3	<---	INTEN	0,911
CI6	<---	INNOV	0,895	CI6	<---	INNOV	0,785
ATT6	<---	ATTITU	0,7	ATT6	<---	ATTITU	0,899

Table 18:Parameter Estimates of the Initial Model

Regression Weights			TR					USA			
			Est.	S.E.	C.R.	P	Label	Est.	S.E.	C.R.	P
PCI1	<---	INVOL	1					1			
PCI2	<---	INVOL	1,237	0,043	28,597	***	par_1	0,951	0,029	32,691	***
PCI3	<---	INVOL	1,2	0,04	29,82	***	par_2	1,026	0,024	42,645	***
PQI1	<---	QUAL	1					1			
PQI2	<---	QUAL	1,182	0,032	36,385	***	par_3	1,048	0,063	16,543	***
PQI3	<---	QUAL	1,103	0,027	40,539	***	par_4	0,742	0,056	13,274	***
RA1	<---	RISK	1					1			
RA2	<---	RISK	1,05	0,049	21,572	***	par_5	0,895	0,059	15,187	***
RA3	<---	RISK	0,984	0,045	21,844	***	par_6	0,964	0,052	18,502	***
RA4	<---	RISK	0,837	0,052	16,174	***	par_7	0,972	0,055	17,713	***
CI5	<---	INNOV	1					1			
CI4	<---	INNOV	0,97	0,031	31,789	***	par_8	0,81	0,037	21,651	***
CI3	<---	INNOV	0,958	0,03	32,354	***	par_9	1,025	0,036	28,394	***
CI2	<---	INNOV	1,08	0,035	30,677	***	par_10	1,049	0,035	29,574	***
CI1	<---	INNOV	0,896	0,029	31,116	***	par_11	0,878	0,038	23,385	***
PC4_R	<---	PRICE	1,045	0,028	37,318	***	par_12	1,181	0,069	17,142	***
PC3_R	<---	PRICE	1,083	0,03	35,625	***	par_13	1,056	0,067	15,875	***
PC2_R	<---	PRICE	1,196	0,033	36,312	***	par_14	1,135	0,069	16,557	***
PC1_R	<---	PRICE	1					1			
EJ4	<---	ETHIC	0,83	0,06	13,79	***	par_15	0,921	0,032	29,092	***
EJ3	<---	ETHIC	0,953	0,064	14,912	***	par_16	1,027	0,028	36,17	***
EJ2	<---	ETHIC	0,842	0,061	13,812	***	par_17	1,027	0,031	32,823	***
EJ1	<---	ETHIC	1					1			
IS4	<---	INSUS	1,143	0,094	12,142	***	par_18	1,43	0,104	13,698	***
IS3	<---	INSUS	0,941	0,091	10,375	***	par_19	1,406	0,102	13,811	***
IS2	<---	INSUS	1,043	0,102	10,263	***	par_20	1,295	0,097	13,407	***
IS1	<---	INSUS	1					1			
NS4	<---	NORSUS	1,24	0,064	19,523	***	par_21	0,954	0,052	18,467	***

NS3	<---	NORSUS	1,089	0,058	18,701	***	par_22	0,977	0,058	16,751	***
NS2	<---	NORSUS	1,365	0,07	19,411	***	par_23	1,022	0,047	21,777	***
NS1	<---	NORSUS	1					1			
ATT1	<---	ATTITU	1					1			
ATT2	<---	ATTITU	0,897	0,074	12,127	***	par_24	1,189	0,066	18,135	***
ATT3	<---	ATTITU	0,997	0,078	12,834	***	par_25	1,115	0,062	17,961	***
ATT4	<---	ATTITU	1,11	0,079	14,118	***	par_26	1,096	0,062	17,571	***
ATT5	<---	ATTITU	1,064	0,075	14,22	***	par_27	1,218	0,068	17,785	***
INT1	<---	INTEN	1					1			
INT2	<---	INTEN	1,065	0,076	14,046	***	par_28	1,006	0,024	41,612	***
INT3	<---	INTEN	1,15	0,072	16,016	***	par_29	1,034	0,03	34,43	***
CI6	<---	INNOV	0,962	0,03	31,958	***	par_30	0,813	0,041	20,018	***
ATT6	<---	ATTITU	1,029	0,073	14,137	***	par_31	1,408	0,067	20,991	***

Goodness of fit statistics (GOF) is one of the most important indicators of the model fit. GOF measures “how well a specified model reproduces the observed covariance matrix among the indicator items” (Hair et al, 2010, p.632). In order to assess the goodness of fit multiple fit indices should be used (Kline, 2016). There are five fit index categories, which are Chi-Square, absolute fit indexes, incremental fit indexes, goodness of fit indexes, and badness of fit indexes (Hair et al, 2010). In this study, normed Chi-Square test was used as a chi square test; Standardized Root Mean Square Residual (SRMR) was used as an absolute fit index, Tucker-Lewis Index was used as a goodness of fit index, Comparative Fit Index (CFI) was used as an incremental fit index and the Root Mean Square Error of Approximation (RMSEA) was used as a badness of fit index.

Normed Chi Square is calculated by dividing Chi-Square value to the degrees of freedom. The sensitivity of the model chi-square to sample size was reduced in normed Chi-Square. The values lower than three for the normed Chi Square indicate a good fit. The CFI makes a comparison in the amount of departure from close fit for the proposed model against that of the independence model (Kline, 2016). The values over 0.90 for

CFI indicate a good fit for the model (Hair et al, 2010). Standardized Root Mean Square Residual is the standardized version of RMR and it measures the mean absolute covariance residual. Values of SRMR < 10 indicated a good fit (Kline, 2016). Root Mean Square Error of Approximation (RMSEA) is a badness of fit index. Although there is no exact cut-off value for the RMSEA, the values lower than 0.05 indicates a perfect fit and values between 0.05 and 0.08 indicates moderate fit.

The Chi-Square, normed Chi-Square, CFI, SRMR, TLI, and RMSEA values of the initial model were indicated in the Table-19. The results indicated that all three models have a good fit (SRMR<10, RMSEA<0.08, CFI>0.90, TLI>0,90, and normed Chi-Square<3).

Table 19: Goodness of Fit Statistics of the Initial Model

Data	χ^2	χ^2 (P)	χ^2/DF	CFI	TLI	RMSEA	SRMR
Turkey	2098,348	0,000	2,859	0,921	0,911	0,590	0,0608
U.S.A	1364,905	0,000	1,860	0,953	0,947	0,500	0,0432
Grouped Model	3463,235	0,000	2,359	0,935	0,927	0,390	0,0608

In order to increase the measurement model fit and to get more reliable and valid results some minor modifications were applied to the model based on the modification indices, which were provided by the AMOS software. Hair et al. (2010) claimed that until 20% modifications and deletions of the measured variables are considered as minor and in the current study, 20% of the items were eliminated from the study. The final CFA model is indicated in the Figure-19.

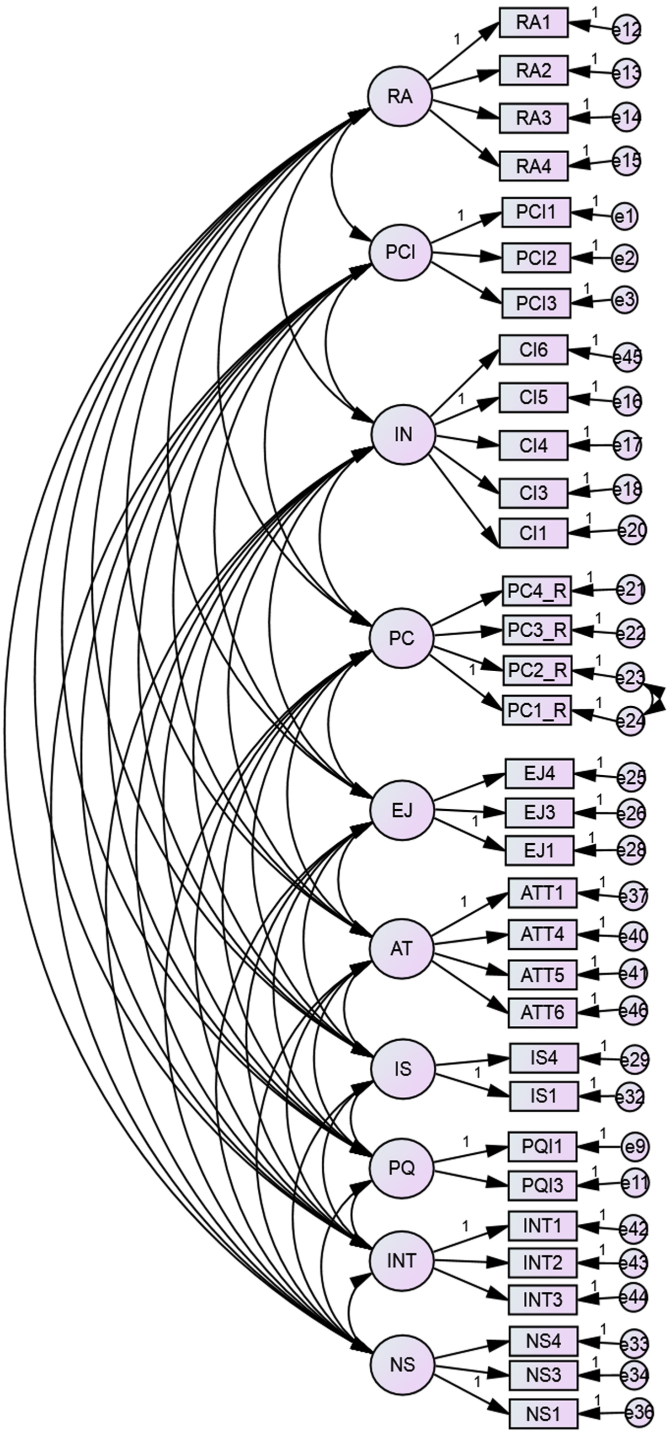

Figure 19 Visual Representation of the Final Model

4.3.1.2 CFA analysis of the Modified Model for Turkish Data

The standardized regression weights of the Modified Model for Turkish data are shown in the Table-20. The standardized loading estimates were over 0.5 which indicated that items are strongly related to their associated factors.

Table 20: Standardized Regression Weight of the Turkish Data

Standardized Regression Weights: (TR - Default model)			
			Estimate
PCI1	<---	INVOL	0,868
PCI2	<---	INVOL	0,892
PCI3	<---	INVOL	0,921
PQI1	<---	QUAL	0,933
PQI3	<---	QUAL	0,945
RA1	<---	RISK	0,816
RA2	<---	RISK	0,833
RA3	<---	RISK	0,837
RA4	<---	RISK	0,663
CI6	<---	INNOV	0,886
CI5	<---	INNOV	0,893
CI4	<---	INNOV	0,893
CI3	<---	INNOV	0,903
CI1	<---	INNOV	0,897
PC4_R	<---	PRICE	0,923
PC3_R	<---	PRICE	0,906
PC2_R	<---	PRICE	0,931
PC1_R	<---	PRICE	0,935
EJ4	<---	ETHIC	0,611
EJ3	<---	ETHIC	0,694
EJ1	<---	ETHIC	0,812
IS4	<---	INSUS	0,758
IS1	<---	INSUS	0,673
NS4	<---	NORSUS	0,794
NS3	<---	NORSUS	0,803
NS1	<---	NORSUS	0,822
ATT1	<---	ATTITU	0,696
ATT4	<---	ATTITU	0,728
ATT5	<---	ATTITU	0,694

ATT6	<---	ATTITU	0,686
INT1	<---	INTEN	0,712
INT2	<---	INTEN	0,672
INT3	<---	INTEN	0,793

Moreover, the parameter estimates of the Turkish data are shown in the Table-21. All the parameters were significant which means each of them significantly contribute to the model.

Table 21: Parameter Estimates of the Turkish Data

Regression Weights: (TR - Default model)						
			Estimate	S.E.	C.R.	P
PCI1	<---	INVOL	1			
PCI2	<---	INVOL	1,227	0,043	28,39	***
PCI3	<---	INVOL	1,203	0,04	30,208	***
PQI1	<---	QUAL	1			
PQI3	<---	QUAL	1,083	0,027	39,483	***
RA1	<---	RISK	1			
RA2	<---	RISK	1,052	0,049	21,676	***
RA3	<---	RISK	0,982	0,045	21,823	***
RA4	<---	RISK	0,834	0,052	16,115	***
CI5	<---	INNOV	1			
CI4	<---	INNOV	0,974	0,031	31,162	***
CI3	<---	INNOV	0,967	0,03	32,028	***
CI1	<---	INNOV	0,912	0,029	31,541	***
CI6	<---	INNOV	0,957	0,031	30,629	***
PC4_R	<---	PRICE	1,022	0,026	38,812	***
PC3_R	<---	PRICE	1,056	0,029	36,581	***
PC2_R	<---	PRICE	1,19	0,035	33,966	***
PC1_R	<---	PRICE	1			
EJ4	<---	ETHIC	0,735	0,059	12,527	***
EJ3	<---	ETHIC	0,879	0,063	13,933	***
EJ1	<---	ETHIC	1			
IS4	<---	INSUS	1,15	0,121	9,514	***
IS1	<---	INSUS	1			
NS4	<---	NORSUS	1,122	0,06	18,771	***
NS3	<---	NORSUS	1,036	0,055	18,965	***
NS1	<---	NORSUS	1			
ATT1	<---	ATTITU	1			
ATT4	<---	ATTITU	1,146	0,081	14,149	***
ATT5	<---	ATTITU	1,039	0,076	13,622	***
ATT6	<---	ATTITU	1	0,074	13,493	***

INT1	<---	INTEN	1			
INT2	<---	INTEN	1,047	0,076	13,859	***
INT3	<---	INTEN	1,149	0,072	15,987	***

In addition, Goodness of Fit statistics of the Modified Model for Turkish data was indicated in the Table-22. The chi square value was significant χ^2 (449) = 1259,017 p=.000, indicated that the model predicted relations that were significantly different from the relations observed in the sample. The normed chi-square, which is the division of Chi-Square to degrees of freedom, was used to correct sensitivity of the sample size. The normed chi-square, which was 2.804, showed a reasonable fit which is lower than 3 (Hair et al, 2010). In addition, Comparative Fit index (CFI= .941) and Tucker-Lewis index (TLI= .931) indicated a good fit for the model. Moreover, RMSEA and SRMR values indicated the model fit well.

Table 22: Goodness of Fit Statistics of the Turkish Measurement Model

Fit Index	Fit Statistics	Cut-Off Point	Model Fit
Chi-square	1259017,000	P>0.05	Poor Fit
Chi-square (P)	0,000		
Chi-square/DF	2804,000	<3	Good Fit
CFI	0.941	>0.90	Good Fit
TLI	0.931	>0.90	Good Fit
RMSEA	0.059	<0.05	Good Fit
SRMR	0.062	<0.10	Good Fit

4.3.1.3 CFA analysis of the Modified Model for the U.S. Data

The standardized regression weights of the Modified Model for the U.S. data are indicated in the Table-23. The results showed that all standardized loading estimates were over 0.5 which means the items are strongly related to their associated factors.

Table 23: Standardized Regression Weights of the U.S. Data

Standardized Regression Weights			
			Estimate
PCI1	<---	INVOL	0,947
PCI2	<---	INVOL	0,913
PCI3	<---	INVOL	0,976
PQI1	<---	QUAL	0,916
PQI3	<---	QUAL	0,602
RA1	<---	RISK	0,817
RA2	<---	RISK	0,747
RA3	<---	RISK	0,873
RA4	<---	RISK	0,84
CI6	<---	INNOV	0,814
CI5	<---	INNOV	0,924
CI4	<---	INNOV	0,832
CI3	<---	INNOV	0,883
CI1	<---	INNOV	0,838
PC4_R	<---	PRICE	0,927
PC3_R	<---	PRICE	0,849
PC2_R	<---	PRICE	0,875
PC1_R	<---	PRICE	0,718
EJ4	<---	ETHIC	0,916
EJ3	<---	ETHIC	0,953
EJ1	<---	ETHIC	0,925
IS4	<---	INSUS	0,776
IS1	<---	INSUS	0,762
NS4	<---	NORSUS	0,844
NS3	<---	NORSUS	0,799
NS1	<---	NORSUS	0,78
ATT1	<---	ATTITU	0,759
ATT4	<---	ATTITU	0,763
ATT5	<---	ATTITU	0,837
ATT6	<---	ATTITU	0,93
INT1	<---	INTEN	0,966
INT2	<---	INTEN	0,952
INT3	<---	INTEN	0,91

In addition, Table-24 indicates the parameter estimates. All the parameters were significant which means each of them significantly contribute to the model.

Table 24 Parameter Estimates of the U.S. Data

Regression Weights: (USA - Default model)						
			Estimate	S.E.	C.R.	P
PCI1	<---	INVOL	1			
PCI2	<---	INVOL	0,951	0,029	32,648	***
PCI3	<---	INVOL	1,027	0,024	42,612	***
PQI1	<---	QUAL	1			
PQI3	<---	QUAL	0,61	0,111	5,472	***
RA1	<---	RISK	1			
RA2	<---	RISK	0,895	0,059	15,208	***
RA3	<---	RISK	0,963	0,052	18,506	***
RA4	<---	RISK	0,971	0,055	17,714	***
CI6	<---	INNOV	0,832	0,038	21,681	***
CI5	<---	INNOV	1			
CI4	<---	INNOV	0,814	0,036	22,7	***
CI3	<---	INNOV	0,977	0,037	26,178	***
CI1	<---	INNOV	0,858	0,037	23,07	***
PC4_R	<---	PRICE	1,214	0,075	16,227	***
PC3_R	<---	PRICE	1,077	0,071	15,259	***
PC2_R	<---	PRICE	1,144	0,069	16,641	***
PC1_R	<---	PRICE	1			
EJ4	<---	ETHIC	0,94	0,032	29,838	***
EJ3	<---	ETHIC	1,024	0,031	33,445	***
EJ1	<---	ETHIC	1			
IS4	<---	INSUS	1,03	0,129	7,986	***
IS1	<---	INSUS	1			
NS4	<---	NORSUS	1,057	0,068	15,452	***
NS3	<---	NORSUS	1,093	0,074	14,841	***
NS1	<---	NORSUS	1			
ATT1	<---	ATTITU	1			
ATT4	<---	ATTITU	1,128	0,075	14,958	***
ATT5	<---	ATTITU	1,364	0,082	16,685	***
ATT6	<---	ATTITU	1,571	0,083	18,854	***
INT1	<---	INTEN	1			
INT2	<---	INTEN	1,011	0,024	41,898	***
INT3	<---	INTEN	1,034	0,03	34	***

Goodness of Fit statistics of the Modified Model for the U.S. data was indicated in the Table-25. The chi square value was significant χ^2 (449) = 703,068 p=.000, indicated that the model predicted relations that were significantly different from the relations observed in the sample. The normed chi-square was used to correct sensitivity of the sample size. The normed chi-square, which was 2.804, showed a good model fit. In addition, Comparative Fit index (CFI= .973) and Tucker-Lewis index (TLI= .969) indicated a good fit for the model. Moreover, RMSEA was lower than 0.05 and SRMR was lower than 0.10 and these values indicated a perfect model fit.

Table 25 Goodness of Fit Statistics of the U.S. Measurement Model

Fit Index	**Fit Statistics**	**Cut-Off Point**	**Model Fit**
Chi-square	703,068		
Chi-square (P)	0,000	P>0.05	Poor Fit
Chi-square/DF	1,566	<3	Good Fit
CFI	0,973	>0.90	Good Fit
TLI	0,969	>0.90	Good Fit
RMSEA	0,040	<0.05	Good Fit
SRMR	0,037	<0.10	Good Fit

4.3.1.4 Multi-Group CFA Analysis of the Data

The standardized regression weights of the Multi-Group model are indicated in the Table-26. The results showed that all standardized loading estimates were over 0.5 which means the items are strongly related to their associated factors.

Table 26: Standardized Regression Weights of the Multi-Group Model

Standardized Regression Weights: (Multi-Group)			
			Estimate
PCI1	<---	INVOL	0,868
PCI2	<---	INVOL	0,892
PCI3	<---	INVOL	0,921
PQI1	<---	QUAL	0,933
PQI3	<---	QUAL	0,945
RA1	<---	RISK	0,816
RA2	<---	RISK	0,833
RA3	<---	RISK	0,837

RA4	<---	RISK	0,663
CI6	<---	INNOV	0,886
CI5	<---	INNOV	0,893
CI4	<---	INNOV	0,893
CI3	<---	INNOV	0,903
CI1	<---	INNOV	0,897
PC4_R	<---	PRICE	0,923
PC3_R	<---	PRICE	0,906
PC2_R	<---	PRICE	0,931
PC1_R	<---	PRICE	0,935
EJ4	<---	ETHIC	0,611
EJ3	<---	ETHIC	0,694
EJ1	<---	ETHIC	0,812
IS4	<---	INSUS	0,758
IS1	<---	INSUS	0,673
NS4	<---	NORSUS	0,794
NS3	<---	NORSUS	0,803
NS1	<---	NORSUS	0,822
ATT1	<---	ATTITU	0,696
ATT4	<---	ATTITU	0,728
ATT5	<---	ATTITU	0,694
ATT6	<---	ATTITU	0,686
INT1	<---	INTEN	0,712
INT2	<---	INTEN	0,672
INT3	<---	INTEN	0,793

Furthermore, Table-27 indicates the parameter estimates of the Multi-Group Model. All the parameters were significant which means each of them significantly contribute to the model.

Table 27: Parameter Estimates of the Multi-Group Model

Regression Weights: (Multi-Group Model)						
			Est.	S.E.	C.R.	P
PCI1	<---	INVOL	1			
PCI2	<---	INVOL	1,227	0,043	28,385	***
PCI3	<---	INVOL	1,203	0,04	30,203	***
PQI1	<---	QUAL	1			
PQI3	<---	QUAL	1,083	0,027	39,476	***
RA1	<---	RISK	1			
RA2	<---	RISK	1,052	0,049	21,672	***

RA3	<---	RISK	0,982	0,045	21,819	***
RA4	<---	RISK	0,834	0,052	16,112	***
CI5	<---	INNOV	1			
CI6	<---	INNOV	0,957	0,031	30,623	***
CI4	<---	INNOV	0,974	0,031	31,156	***
CI3	<---	INNOV	0,967	0,03	32,022	***
CI1	<---	INNOV	0,912	0,029	31,535	***
PC4_R	<---	PRICE	1,022	0,026	38,805	***
PC3_R	<---	PRICE	1,056	0,029	36,574	***
PC2_R	<---	PRICE	1,19	0,035	33,96	***
PC1_R	<---	PRICE	1			
EJ4	<---	ETHIC	0,735	0,059	12,525	***
EJ3	<---	ETHIC	0,879	0,063	13,931	***
EJ1	<---	ETHIC	1			
IS4	<---	INSUS	1,15	0,121	9,512	***
IS1	<---	INSUS	1			
NS4	<---	NORSUS	1,122	0,06	18,767	***
NS3	<---	NORSUS	1,036	0,055	18,961	***
NS1	<---	NORSUS	1			
ATT1	<---	ATTITU	1			
ATT4	<---	ATTITU	1,146	0,081	14,146	***
ATT5	<---	ATTITU	1,039	0,076	13,62	***
ATT6	<---	ATTITU	1	0,074	13,491	***
INT1	<---	INTEN	1			
INT2	<---	INTEN	1,047	0,076	13,856	***
INT3	<---	INTEN	1,149	0,072	15,984	***

Goodness of Fit statistics of the Multi-Group Model were indicated in the Table-28. The chi square value was significant χ^2 (898) = 1962.007 p=.000, indicated that the model predicted relations that were significantly different from the relations observed in the sample. The normed chi-square was used to correct sensitivity of the sample size. The normed chi-square, which was 2.185, showed a good model fit. In addition, Comparative Fit index (CFI= .954) and Tucker-Lewis index (TLI= .946) indicated a good fit for the model. Moreover, RMSEA was lower than 0.05 and SRMR was lower than 0.10 and these values indicated a perfect model fit.

Table 28: Goodness of Fit Statistics of the Multi-Group Model

Fit Index	Fit Statistics	Cut-Off Point	Model Fit
Chi-square	1962,007		
Chi-square (P)	0,000	P>0.05	Poor Fit
Chi-square/DF	2,185	<3	Good Fit
CFI	0,954	>0.90	Good Fit
TLI	0,946	>0.90	Good Fit
RMSEA	0,037	<0.05	Good Fit
SRMR	0,062	<0.10	Good Fit

4.3.1.5 Reliability and Validity Analysis of the Constructs

Validity is defined as “the extent to which research is accurate” (Hair et al, 2009, p. 679). One of the main aims of the confirmatory factor analysis is the assessment of the construct validity of the proposed measurement model (Hair et al, 2010). Construct validity indicates whether the hypothetical constructs, which are latent and measured indirectly through their indicators, are measured accurately (Kline, 2016). Construct validity is composed of several components such as face validity, convergent validity, and discriminant validity.

4.3.1.5.1 Face Validity

Face validity, sometimes called content validity, is the evaluation of whether the items used to measure the constructs are representative or not (Kline, 2016). It is the most important construct validity type (Hair et al., 2009). However, since it is a subjective evaluation there is a formal way to measure face validity (Malhotra, 2008). In this study, the items (both Turkish and English), used to measure the constructs, were carefully examined by four marketing scholars to assess whether the items were representative or not.

4.3.1.5.2 Convergent Validity

Convergent validity is a measure of construct validity that "measures the extent to which the scale correlates positively with other measures of the same construct" (Malhotra, 2008, p. 359). There are several ways to assess convergent validity.

4.3.1.5.2.1 Factor Loadings

One of the most important considerations is the size of the factor loadings. All factor loadings should be significant and standardized loading estimates must be over 0.5 to assess the convergent validity. In this case, since all the loadings were significant and standardized loading estimates were over 0.5 in all three CFA analyses which is an indication of convergent validity.

4.3.1.5.2.2 Average Variance Extracted

AVE is also another indication of convergent validity. AVE is calculated by the following formula.

$$\mathbf{AVE} = \frac{\sum_{i=1}^{n} L_i^2}{n}$$

L_i is the standardized factor loadings, i is the number of items, and n is the total number of items. AVE values over 0.5 are an indication of convergent validity (Hair et al., 2009). Table-28 indicates the AVE values for Turkish and the U.S. data. In the U.S. data all AVE values were over 0.5 which indicated the convergent validity for all constructs. In the Turkish data, all the values except Attitude constructs were over 0.5. However, the AVE value of the Attitude construct was very close to 0.5. Overall, the constructs had convergent validity.

4.3.1.5.2.3 Composite (Construct) Reliability

Composite reliability is the ratio of explained variance over total variance (Kline, 2016). The higher composite reliability values show the higher internal consistency that means the measures consistently represent the same construct. The values over 0.7 indicate the existence of high internal consistency (Hair et al., 2009). As it is indicated in the Table-29, all the values except one both for Turkish and U.S. data were over 0.7. Only the informative susceptibility in Turkish model was lower than the cut-off point. However, the CR value of informative susceptibility was very close to the cut-off value. In this context, the results indicated the existence of convergent validity.

Table 29 AVE and Composite Reliability Values of the Turkish and U.S. Measurement Model

	TURKEY		U.S.	
CONSTRUCT	**CR**	**AVE**	**CR**	**AVE**
ATTITUDE	0,795	0,492	0,894	0,681
INVOLVEMENT	0,923	0,799	0,962	0,894
QUALITY	0,937	0,882	0,743	0,601
RISK AVERSENESS	0,869	0,625	0,892	0,673
INNOVATIVENESS	0,952	0,800	0,934	0,738
PRICE CONSCIOUSNESS	0,959	0,853	0,909	0,715
ETHICAL JUDGMENT	0,751	0,505	0,952	0,868
INFORMATIVE SUSCEPTIBILITY	0,678	0,514	0,743	0,591
NORMATIVE SUSCEPTIBILITY	0,848	0,650	0,849	0,653
INTENTION	0,770	0,529	0,960	0,889

4.3.1.5.3 Discriminant Validity

Discriminant validity is “the extent to which a measure does not correlate with other constructs from which it is supposed to differ” (Malhotra, 2008, p. 359). High discriminant validity indicates that the construct is unique (Hair et al., 2009). If the square root of AVE of the constructs is greater than the correlations of the other constructs, it can be concluded that there is discriminant validity of the measurement model (Fornell and Larcker, 1981). Table-30 indicates the square root of the AVE values and the correlations of other constructs for Turkish model, while Table-31 indicates the values for U.S. model.

Table 30: Discriminant Validity Values of the Turkish Measurement Model

	ATT	INV	QUAL	RISK	INNOV	PRICE	ETHIC	INSUS	NORSUS	INTEN
ATTITU	0,701									
INVOL	0,216	0,894								
QUAL	0,204	0,775	0,939							
RISK	0,387	0,553	0,520	0,791						
INNOV	0,246	0,857	0,765	0,650	0,894					
PRICE	-0,155	-0,696	-0,848	-0,692	-0,748	0,924				
ETHIC	0,356	0,458	0,483	0,621	0,460	-0,497	0,710			
INSUS	0,319	0,093	0,093	0,173	0,202	-0,039	-0,001	0,717		
NORSUS	0,031	0,474	0,474	0,157	0,504	-0,410	0,026	0,379	0,806	
INTEN	0,793	0,425	0,300	0,574	0,418	-0,263	0,427	0,460	0,129	0,727

Table 31:Discriminant Validity Values of the U.S. Measurement Model

	ATTITU	INVOL	QUAL	RISK	INNOV	PRICE	ETHIC	INSUS	NORSUS	INTEN
ATTITU	0,825									
INVOL	0,045	0,946								
QUAL	-0,148	0,111	0,775							
RISK	-0,124	-0,133	0,155	0,821						
INNOV	-0,003	0,645	0,263	-0,165	0,859					
PRICE	0,093	0,075	-0,173	-0,007	-0,148	0,846				
ETHIC	0,703	0,045	-0,091	-0,071	-0,009	0,108	0,931			
INSUS	0,025	0,094	0,163	-0,092	0,177	-0,005	-0,080	0,769		
NORSUS	-0,023	0,128	0,232	-0,086	0,439	-0,310	-0,103	0,499	0,808	
INTEN	0,875	0,111	-0,177	-0,149	0,086	0,078	0,563	0,092	0,064	0,943

On the other hand, another approach is to assess discriminant validity is that both The Maximum Shared Squared Variance (MSV) and the Average Squared Variance (ASV) values of the constructs must be lower than the Average Variance Extracted (AVE) values. Table-32 indicates the AVE, MSV, and ASV values for the both Turkish and American data. The results indicated that only for attitude and intention constructs MSV is bigger than AVE.

Table 32: AVE, MSV, and ASV Values of the Turkish and the U.S. Data

	Turkey			U.S.		
Constructs	**AVE**	**MSV**	**ASV**	**AVE**	**MSV**	**ASV**
ATTITUDE	0,492	0,629	0,131	0,681	0,766	0,145
INVOLVOMENT	0,799	0,734	0,311	0,894	0,416	0,055
QUALITY	0,882	0,719	0,308	0,601	0,069	0,031
RISK AVERSENESS	0,625	0,479	0,266	0,673	0,027	0,014
INNOVATIVENESS	0,800	0,734	0,338	0,738	0,416	0,085
PRICE CONSCIOUSNESS	0,853	0,719	0,306	0,715	0,096	0,020
ETHICAL JUDGMENT	0,505	0,386	0,177	0,868	0,494	0,095
INFORMATIVE SUSCEPTIBILITY	0,514	0,212	0,061	0,591	0,249	0,038
NORMATIVE SUSCEPTIBILITY	0,650	0,254	0,118	0,653	0,249	0,070
INTENTION	0,529	0,629	0,209	0,889	0,766	0,130

The results indicated that all the exogenous constructs showed the existence of the discriminant validity. However, the relationship between Attitude and Intention seemed problematic. These two constructs did not discriminate from each other. According to the Theory of Reasoned Action and Theory of Planned Behavior, attitude is an antecedent of the intention and these two constructs are different. However, according to the Tripartite Attitude Model, attitude is consisted of three components which are

Affect, Behavior, and Cognition, and intention is included in the behavior component. From the Tripartite Attitude Model's point of view the discrimination problem of attitude and intention constructs can be considered as rational.

4.3.2 Structural Equation Modelling Analysis

The first four stages indicated that the proposed measurement model was reliable, valid, and fit well. The fifth and sixth stages are related to the structural model. The fifth stage is the converting measurement model to the structural model (Hair et al., 2010). The structural model is indicated in the Figure-20.

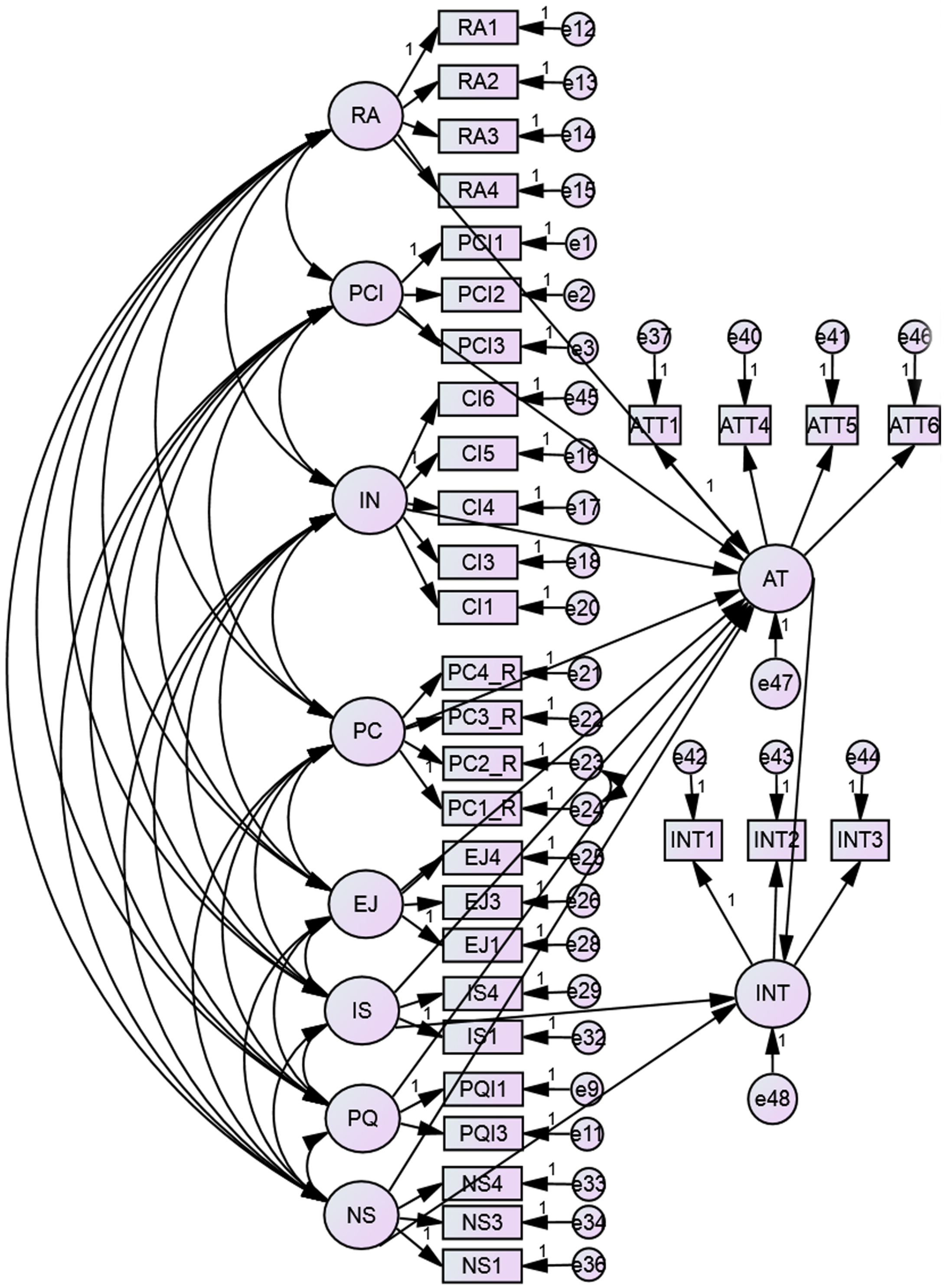

Figure 20 Visual Representation of the Structural Model

4.3.2.1 Goodness of Fit Statistics

The sixth stage is the assessing the goodness of fit statistics and also significance, size and direction of the structural model (Hair et al., 2010). Table-33 indicates the GOF statistics of the structural equation modeling analysis. Although the significance of chi-square value indicated a poor fit, all other GOF statistics (normed chi-square, CFI, TLI, RMSEA, and SRMR) indicated that the structural model fits well.

Table 33: Goodness of Fit Statistics of the Structural Model

Fit Index	Fit Statistics	Cut-Off Point	Model Fit
Chi-square	2041,834		
Chi-square (P)	0,000	P>0.05	Poor Fit
Chi-square/DF	2,249	<3	Good Fit
CFI	0,951	>0.90	Good Fit
TLI	0,943	>0.90	Good Fit
RMSEA	0,038	<0.05	Good Fit

4.3.2.2 Structural Equation Modelling in Turkey

Table-34 indicates the results of structural equation modeling for Turkish data.

Table 34: Results of Structural Equation Modelling in Turkey

En. V.		Ex. V.	Estimate	Std. Estimate	S.E.	C.R.	P
ATTITU	<---	INNOV	0,01	0,021	0,061	0,158	0,875
ATTITU	<---	INVOL	0,024	0,047	0,074	0,327	0,743
ATTITU	<---	QUAL	0,138	0,33	0,056	2,445	0,014
ATTITU	<---	RISK	0,32	0,584	0,07	4,536	***
ATTITU	<---	PRICE	0,257	0,621	0,069	3,714	***

ATTITU	<---	ETHIC	0,116	0,157	0,057	2,025	0,043
ATTITU	<---	INSUS	0,017	0,061	0,201	0,084	0,933
ATTITU	<---	NORSUS	-0,007	-0,011	0,077	-0,096	0,924
INTEN	<---	INSUS	0,013	0,044	0,16	0,084	0,933
INTEN	<---	NORSUS	0,081	0,108	0,047	1,729	0,084
INTEN	<---	ATTITU	0,929	0,832	0,087	10,625	***

The results showed that risk averseness (β=.230, p=.000), price-quality inferences (β=.138, p=.014), price consciousness (β=.257, p=.000), and ethical judgment (β=.116, p=.043) positively affect consumers' attitude towards gray market goods. On the other hand, consumers' attitude towards gray market goods has a positive effect (β=.929, p=.000) on their intention to buy gray market goods. In addition, normative susceptibility positively affects consumers' intention to buy gray market goods at the 10% significance level.

Table-35 indicates the evaluation of the hypotheses based on the results of SEM analysis in Turkey.

Table 35: Evaluation of the Hypothesis for Turkish Consumers

Hypotheses	Results
H2a: Consumers' price consciousness positively affects consumers' attitude towards gray market goods	Accepted
H3a: Consumer's risk averseness negatively affects consumer attitude toward gray market goods.	Rejected
H4a: There is a relationship between price-quality inferences and attitude towards gray market goods	Accepted
H5a: Consumer's ethical judgment of gray market activities positively affects consumer's attitude toward gray market goods.	Accepted
H6a: Innovativeness positively affects consumer's attitude toward gray market goods	Rejected
H7a: The more consumers involved for a product category, the more they have positive attitude toward gray market goods.	Rejected
H8a: There is a relationship between informative susceptibility and attitude towards gray market goods	Rejected

H9a: There is a relationship between normative susceptibility and attitude towards gray market goods	Rejected
H1a: Consumers' attitude towards gray market goods is positively related to the intention to purchase gray market goods	Accepted
H10a: There is a relationship between informative susceptibility and intention to buy gray market goods.	Rejected
H11a: There is a relationship between normative susceptibility and intention to buy gray market goods.	Accepted

On the other hand, squared multiple correlations indicated that 32% of the attitude was explained by its exogenous variables. In addition, 72% of the intention was explained by its exogenous variables. The Final Model was indicated in the Figure-21

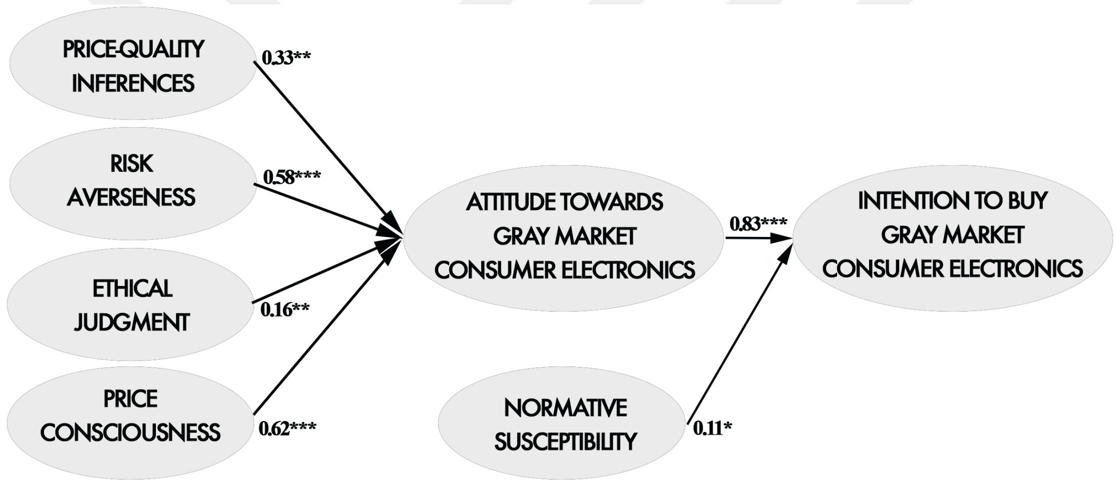

Figure 21 Final Model for Turkey

Structural Equation Modeling in the U.S.

The results of structural equation modeling for the U.S. data in the Table-36.

Table 36 The Results of Structural Equation Modelling in the U.S.

En. V.		EX. V.	Estimate	Std. Estimate	S.E.	C.R.	P
ATTITU	<---	INNOV	-0,037	-0,061	0,066	-0,554	0,579
ATTITU	<---	INVOL	-0,028	-0,039	0,095	-0,301	0,764
ATTITU	<---	QUAL	-0,004	-0,005	0,114	-0,032	0,974
ATTITU	<---	RISK	-0,015	-0,021	0,062	-0,248	0,804

ATTITU	<---	PRICE	-0,043	-0,04	0,118	-0,367	0,714
ATTITU	<---	ETHIC	0,483	0,739	0,071	6,821	***
ATTITU	<---	INSUS	1,646	0,997	2,591	0,635	0,525
ATTITU	<---	NORSUS	-0,676	-0,881	1,171	-0,577	0,564
INTEN	<---	INSUS	1,937	0,737	1,502	1,29	0,197
INTEN	<---	NORSUS	-0,759	-0,621	0,677	-1,121	0,262
INTEN	<---	ATTITU	1,325	0,832	0,163	8,136	***

The results indicated that only ethical judgment of gray market activities had a significant positive effect (β=.483, p=.000) on attitude towards gray market goods in the U.S. All other independent variables' effects were insignificant. In addition, attitude towards gray market goods positively affects intention to buy gray market goods (β=1.325, p=.000).

Table-37 indicates the evaluation of the hypotheses based on the results of SEM analysis in the U.S.

Table 37 Evaluation of the Hypotheses for the U.S. Consumers

Hypotheses	Results
H2a: Consumers' price consciousness positively affects consumers' attitude towards gray market goods	Rejected
H3a: Consumer's risk averseness negatively affects consumer attitude toward gray market goods.	Rejected
H4a: There is a relationship between price-quality inferences and attitude towards gray market goods	Rejected
H5a: Consumer's ethical judgment of gray market activities positively affects consumer's attitude toward gray market goods.	Accepted
H6a: Innovativeness positively affects consumer's attitude toward gray market goods	Rejected
H7a: The more consumers involved in a product category, the more they have positive attitudes toward gray market goods.	Rejected
H8a: There is a relationship between informative susceptibility and attitude towards gray market goods	Rejected
H9a: There is a relationship between normative susceptibility and attitude towards gray market goods	Rejected

H1a: Consumers' attitude towards gray market goods is positively related to the intention to purchase gray market goods	Accepted
H10a: There is a relationship between informative susceptibility and intention to buy gray market goods.	Rejected
H11a: There is a relationship between normative susceptibility and intention to buy gray market goods.	Rejected

On the other hand, squared multiple correlations indicated that 58% of the attitude was explained by its exogenous variables. In addition, 82 % of the intention was explained by its exogenous variables. The final model for the U.S. is indicated in the Figure-22.

Figure 22 Final Model for the U.S.

4.3.2.3 Multi-Group Structural Equation Modelling

To test the model differences between the Turkish and American respondents, multi-group structural equation modeling was used. A Multi-group SEM is used to indicate the differences between similar models estimated for different groups (Hair et al, 2010). The statistical differences between the groups are assessed through Chi-Square difference test. However, prior to the chi-square difference test, several invariance assumptions must be met. There are six invariance tests, which are configural invariance, metric invariance, scalar invariance, factor covariance invariance, factor variance invariance, and error variance invariance (Hair et al., 2010). Nevertheless, Hair et al. (2010) claimed that full configure invariance and partial metric invariance are acceptable.

4.3.2.3.1 Configural Invariance

In configural invariance, the authors must indicate that CFA models for each group must have the same number of items and constructs. In addition, each group and multi-group CFA results must indicate a good model fit and construct validity. Table-38 indicates the goodness of fit statistics for each group and multi-group CFA analysis. Adequate GOF statistics indicated the existence of full configure invariance.

Table 38 GoF Statistics indicate Configural Invariance

Group	**Chi-square**	**Chi-square (P)**	**Chi-square /DF**	**CFI**	**TLI**	**RMSEA**	**SRMR**
Multi-Group	1.259.017	0.000	2.804	0.941	0.931	0.59	0.062
U.S.	703,068	0,000	1,566	0,973	0,969	0,040	0,037
Turkey	1962,007	0,000	2,185	0,954	0,946	0,037	0,062

4.3.2.3.2 Metric Invariance

Metric invariance indicates the equality of the factor loadings across groups (Hair et al, 2010). In order to assess the full-metric invariance a chi-square difference test is applied between unconstrained and constrained models. Table-39 shows the chi-square test for metric invariance. The results indicated that the factor loadings across groups were not invariant ($\Delta\chi^2$=144, Δdf=23, p=0.000).

Table 39 Chi-Square Difference Test for Full Metric Invariance

	Chi-square	**df**	**p-val**	**Invariant**
Overall Model				
Unconstrained	1962	898		
Fully constrained	2106	921		
Number of groups		2		
Difference	144	23	0.000	NO

Hair et al. (2010) claimed that assessing full metric invariance is very difficult to achieve for complex models. Therefore, they suggest freeing the some of the constraints that have largest differences. For the current model, 10 out of 23 constraints freed and the constrained model with 13 constraints indicated the partial metric invariance ($\Delta\chi^2$=16, Δdf=13, p=0.249) as it is indicated in the Table-40. In addition, the goodness of fit statistics for the partially constrained model indicated a good model fit.

On the other hand, Hair et al., (2010) suggested each construct should have at least two constraints in the constrained model. In the current model, 6 out of 10 constructs, which were risk averseness, innovativeness, price consciousness, ethical judgment, normative susceptibility, and intention, included at least two constraints in the constrained model.

Table 40: Chi-Square Difference Test for Partial Metric Invariance

	Chi-square	**df**	**Chi square (P)**	**Chi-square/ DF**	**CFI**	**TLI**	**RMSEA**	**SRMR**
Unconstrained Model	1962,007	898	0,000	2,185	0,954	0,946	0,037	0,062
Partially Constrained Model	1978,362	911	0,000	2,172	0,954	0,947	0,037	0,061
Model Difference	16	13	0,249					

4.3.2.3.3 Model Comparison

After assessing the full configural invariance and partial metric invariance, Z-Test was applied to reveal which relationships between the constructs significantly differ across the Turkish and the U.S. groups. The results are indicated in the Table-41.

Table 41: Results of Multi-Group SEM Analysis

			TR		USA		
			Estimate	**P**	**Estimate**	**P**	**Z-Values**
ATTITU	<---	INNOV	0,01	0,875	-0,037	0,579	-0,514
ATTITU	<---	INVOL	0,024	0,743	-0,028	0,764	-0,439
ATTITU	<---	QUAL	0,138	0,014	-0,004	0,974	-1,11
ATTITU	<---	RISK	0,32	***	-0,015	0,804	-3.567***
ATTITU	<---	PRICE	0,257	***	-0,043	0,714	-2.197**
ATTITU	<---	ETHIC	0,116	0,043	0,483	***	4.036***
ATTITU	<---	INSUS	0,017	0,933	1,646	0,525	0,627
ATTITU	<---	NORSUS	-0,007	0,924	-0,676	0,564	-0,57
INTEN	<---	INSUS	0,013	0,933	1,937	0,197	1,274
INTEN	<---	NORSUS	0,081	0,084	-0,759	0,262	-1,238
INTEN	<---	ATTITU	0,929	***	1,325	***	2.139**

There were only two relationships which were significant both Turkish and the U.S. model. Ethical judgment of gray market activities significantly affects attitude towards gray market goods both in Turkish and the U.S. model. However, chi-square difference test indicated that the effect of ethical judgment on attitude was greater for the U.S. consumers (β=.483, p=.000) than Turkish consumers (β=.116, p=.04). In addition, the relationship between intention and attitude was significant both in Turkish and the U.S. model. This effect is stronger for the U.S. consumers (β=1.325, p=.000) than the Turkish consumers (β=1.325, p=.929).

On the other hand, the effects of risk averseness and price consciousness were significantly different across countries. However, these relationships were significant for the Turkish consumers, while insignificant for the U.S. consumers.

Table 42: Results of the Multi-Group Hypotheses

Hypotheses	Results
H1b: The effect of attitude towards gray market goods on purchase intention is stronger for the U.S. consumers than the Turkish consumers.	Accepted
H2b: Positive effect of Price consciousness on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.	Accepted
H3b: The negative effect of risk averseness on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.	Rejected
H4: The relationship between the consumers' price-quality inferences and attitude towards gray market goods is affected by the culture.	Rejected
H5b: The effect of ethical judgment of gray market activities on attitude towards gray market goods is stronger for the U.S. consumers than the Turkish consumers.	Accepted
H6b: The effect of consumer innovativeness on attitude towards gray market goods is stronger for the U.S. consumers than the Turkish consumers.	Rejected
H7b: The effect of product category involvement on attitude towards gray market goods is stronger for the Turkish consumers than the U.S. consumers.	Rejected
H8b: The effect of informative susceptibility on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.	Rejected
H9b: The effect of normative susceptibility on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers.	Rejected
H10b: The effect of informative susceptibility on intention to buy gray market goods is stronger for Turkish consumers than the U.S. consumers.	Rejected
H11b: The effect of normative susceptibility on intention to gray market goods is stronger for Turkish consumers than the U.S. consumers.	Rejected

The results of the Multi-Group SEM analysis indicated that; positive effect of Price consciousness on attitude towards gray market goods is stronger for Turkish consumers than the U.S. consumers; the effect of ethical judgment of gray market activities on attitude towards gray market goods is stronger for the U.S. consumers than the Turkish consumers; and positive effect of attitude towards gray market goods on consumers' purchase intention is stronger for the U.S. conusmers than the Turkish consumers.

4.4 Discussion of the Findings

The findings of the study somewhat varied from the extant literature.
In the literature, there was only one study which tested the relationship between ethical judgment and attitude towards gray market goods, and the result showed that there was no relationship between them. However, the results of this study indicated that if both Turkish and American consumers think that gray market activities are ethical, they have positive attitude towards gray market goods.

In the literature, there were different results for the price consciousness. There were in total four studies which analyzed the relationship between the price consciousness and attitude towards gray market goods. Two of the studies indicated a positive relationship (Mollahosseini et al., 2012 and İsmail, 2008), while the other two studies (Huang et al, 2008 and Yasin, 2009) stated there was no relationship between them. Huang et al. (2008) claimed that a moderating variable such as cultural difference might affect the relationship between price consciousness and attitude. This study analyzed the relationship between the variables from a cross-cultural perspective and the results indicated that for Turkish consumers price consciousness has a positive effect on attitude, while for American consumers there was no relationship between them.

In addition, Figure-16 and Figure-17 indicate the consumers' preferences based on the price difference between gray and authorized distributor goods. The results indicated that there are differences between countries. The majority of the Turkish consumers claimed that if the price difference is between 20-40 percent they prefer gray market goods. However, the first choice of the American consumers was that they never consider buying gray market goods. This preference differences may stem from the economic status and purchasing power of the consumers from different countries. Therefore, it can be concluded that the effects of price consciousness on attitude towards gray market goods cannot be generalized as it does change from one country to another.

The relationship between the price-quality inferences and attitude towards gray market goods was also not agreed in the literature. Yasin (2009) and Huang et al. (2008) indicated a negative relationship between the variables. However, Mollahosseini et al. (2012) stated that there was a positive relationship. The current study also indicated a positive relationship between price-quality inference and attitude. This result may arise from the fact that the participants of the study were told that gray market goods and authorized distributor goods are the same and genuine goods. Therefore, the participants may think that they have the same quality with a lower price and so may form a positive attitude towards gray market goods.

Probably the most unexpected result of this study is the positive effect of risk averseness on the attitude towards gray market goods. Because contrary to this research, all four studies in the literature (Huang et al, 2008; Yasin, 2009; Mollahosseini et al., 2012; and İsmail, 2008) indicated a negative effect of risk averseness on attitude. This may be caused by the participants' unawareness of the risks of the buying and using gray market goods, and in the informative section of the questionnaire the participants were not provided any information about the possible risks of buying gray market goods. Another reason for this positive relationship may be that some of the participants in the focus group study stated that they read comments and compare the rating scores of the gray marketers and they feel risk-free when they buy gray market goods.

On the other hand, this was the only cross-cultural study in the literature about gray marketing and the results of the study indicated that the effects of personality factors on attitude towards gray market goods might be different from one country to another. Moreover, the effects of social factors on attitude towards gray market goods were tested for the first time in the literature. However, the results did not indicate any significant difference. Since there is a collectivist culture in Turkey (Hofstede, 1980), a relationship was expected especially for the Turkish consumers. This probably stems from lack of information about the gray market goods in the market. Furthermore, there is not any common tendency about whether buying gray market goods is an appreciated or not appreciated action in the society.

5 Conclusion

The results of the analysis provide valuable insights for the authorized distributors and manufacturers of the international brands who wish to create effective strategies to reduce and prevent gray market activities, and for gray marketers who wish to increase their sales and market share.

The results of the in-depth interviews with the top-level managers indicated that gray marketing activities do still exist in the market and the majority of the managers agreed on the increase of these activities due to the proliferation of the online channels and market places. The possible antecedents of the gray market activities are the proliferation of the online channels and market places, price differences across the markets, free-riding potential and product scarcity in the market, government policies and regulations, illegal issues and providence of international warranty.

Gray market activities also lead several negative and positive consequences in the market. The negative consequences of gray market activities are decrease of product sales and profitability, damage to the brand image of the product, damage to manufacturer-dealer-customer relations, upsetting the pricing strategy, leading to customer dissatisfaction, lose of control of marketing channel, reducing the effectiveness of marketing strategy, and government's tax loss. All these consequences indicate the importance of the effective strategies to combat gray market activities. On the other hand, gray market activities lead several possible consequences for managers for increasing their global sales; for customers decreasing the market price of the products; for dealers increasing their bargaining power.

The focus group study revealed several factors, which affects the consumers' attitude towards gray market goods. These factors are personality factors such as price consciousness, risk averseness, price-quality inferences, innovativeness and informative susceptibility; product related factors such as product type, product quality, brand of the product, international warranty, call-back; price related factors such as price difference and level; gray marketer related factors such as store type, online store ratings, warranty issues, promotion of gray marketing, and trustworthiness; authorized distributors related factors such as warranty issues and trustworthiness and past purchase experience.

Furthermore, the survey research indicated that price consciousness, price-quality inferences, ethical judgment and risk averseness positively affect the Turkish consumers' attitude towards gray market activities. For American consumers only ethical judgment of gray market activities positively affects the attitude towards gray market goods. In addition, multi-group comparison between the Turkish and American consumers revealed that the effect of ethical judgment on attitude towards gray market activities is stronger for American consumers than the Turkish consumers.

5.1 Implications of the Study

This study provides several practical implications for the authorized distributors, manufacturers and gray marketers and theoretical implications for the academics.

5.1.1 For Authorized Distributors

In this study, the majority of the implications were provided for the authorized distributors. This study indicated that gray market activities substantially affect authorized distributors sales, profitability and strategies. Therefore, they should analyze the market and consumer related factors very carefully to prevent or vitiate the gray market activities.

The results of the studies suggest several strategies for the authorized distributors. The authorized distributors should adjust the prices considering gray market goods, lobby, declare actual or higher custom base price, set the same price across countries, promote the importance of buying authorized distributor goods and risks of gray market goods, buy-back the products from the gray marketers. In addition, they should launch the latest goods before the gray marketers.

On the other hand, the results of the quantitative research generated several implications. The results indicated that both the Turkish and the American consumers think that gray market activities are ethical, they would have a positive attitude towards gray market goods, which also lead to a purchase intention. In this context, the authorized distributors should highlight the unethical issues regarding the gray market activities such as free riding. Furthermore, for Turkish customers price consciousness is also another effective personal factor. Therefore, the authorized distributor should not overcharge for their goods; and keep their price close to the gray market goods' price. Most of the Turkish participants claimed that if the gray market goods' price is 20-40% lower than the authorized distributor goods they would prefer buying gray market goods. Another strategy may be highlighting the quality differences between authorized distributor and gray market goods. In addition, the unexpected positive relationship between risk averseness and attitude indicated that consumers are not aware of the risks of buying gray market goods. As it is mentioned previously gray market goods bear some risks and the authorized distributors should promote the risks of buying gray market goods.

The results of focus group study also provided implications for the authorized distributors. The participants, mostly complained about the after sales service warranty problems regarding the authorized distributors. Therefore, the authorized distributors should improve after sale services and provide better warranty to the consumers. Thus, the trustworthiness of the authorized distributors will increase and the consumer will prefer buying authorized distributors' goods.

5.1.2 For Manufacturers

The manufacturers should open a country headquarter-country subsidiary which can enable them better control of the market and decrease gray market activities. In addition, they should track their products through IMEI's and digital codes. Thus, they can monitor the flow of the goods and may intervene if needed. They can also determine the dealer and wholesalers who sell gray market goods and should cut the supports such as stock protection and advertising supports to these dealers. Furthermore, the manufacturers should not provide international warranty for the products. If they do authorized distributors have to provide service to the gray market goods for free. So consumers would prefer buying gray market goods. Call-backs of the manufacturers also are another reason for consumers not to prefer gray market goods. The consumers are concerned about missing the advantage of call-backs. In addition, manufacturers may also use one price for all countries which decrease the likelihood of gray market activities.

5.1.3 For Gray Marketers

The results of the study suggest several implications for the gray marketers as well. In order to enhance the gray market activities they should import the product with different codes because for some product codes authorized distributors declare a high customer base price. Thus, they do not need to pay higher customs taxes. Another implication is the foundation of a gray market association. Thus, the gray marketers stand together to enhance gray market activities. Moreover, promotion of gray marketing is very important because most of the consumers do not have any information about having misinformation about the gray market goods which leads to a drawback for the consumers. Gray marketers should increase the knowledge about gray market goods by highlighting that their goods are genuine and all the gray market activities are legal. Thus, the consumers feel comfortable about buying gray market goods. Furthermore, despite the increase of using online channels, approximately 90 % of the sales are still made via offline channels. Therefore, gray marketers should consider opening physical stores to increase their sales and trustworthiness.

The results indicated that the price consciousness positively affects attitude towards gray market goods in Turkey, while there is no effect for the U.S. In this context, the gray marketers should focus on the countries in which price consciousness affects attitude towards gray marketing. Because price conscious customers make a detailed search to find the lowest price for the product and in the end they will probably prefer gray market goods. In addition, if the consumers think that buying gray market goods is ethical they prefer buying them. Therefore, gray marketers should highlight that there is nothing wrong with buying gray market goods and gray market activities are ethical.

5.1.4 For Policy Makers

The results of the in-depth interviews indicated that almost all the gray market activities contain some illegal issues in themselves. These illegal activities lead to tax loss for the governments and so government's income decreases. Therefore, policy makers should carefully analyze and control these activities. They should assess the custom base prices accurately and check the gray market goods more carefully at customs.

On the other hand, some customers are aggrieved because of the gray market goods. After they sell the products, some gray marketers shut down the companies or disappear and do not provide any after-sale service and warranty for their products. Therefore, the policy makers should take some precautions such as applying some criteria for gray marketing to prevent the suffering of the customers.

5.1.5 Theoretical implications

First of all, the results indicated that gray market activities still exist and effective in the market. Therefore, there need to be an additional research in this field. This study was the first in the literature which indicated the significant positive effects of ethical judgment on attitude towards gray market goods. Furthermore, one of the most important implications of this study is testing the model in different countries as moderation. In the literature, there were contradictory results regarding the factors affecting attitude towards gray market goods. In this study, country moderation indicated that the factors affecting consumers' attitude towards gray market goods vary from one country to another. For instance, while price consciousness, risk averseness, and price-quality inferences positively affect consumers' attitude towards gray market goods in Turkey, there is no effects of them in the U.S. Thus, authors may test the model in different countries.

Moreover, although the results indicated non-significant results, this was the first study, which the effects of innovativeness, product, category involvement, informative and normative susceptibility concepts were analyzed first time in the context of gray marketing. Especially, innovativeness, product, category involvement, informative susceptibility factors were revealed through a qualitative study. The authors should test the effects of these constructs in different countries and for different types of products.

On the other hand, the results of the in-depth interviews revealed several factors regarding the antecedents and consequences of the gray market activities and suggested several strategies for the managers. The authors may quantitatively analyze which antecedents are more important, which consequences are more detrimental, and which strategies are more effective in order to increase the companies' sales, profitability and market share through actual data and surveys.

In this study, Theory of Reasoned Action was tested in the context of gray market goods. The results indicated that attitude towards gray market goods is a more effective predictor of the purchase intention than the social factors. In addition, the relationship between attitude and intention regarding the gray market goods was tested through multi group analysis for the first time in the literature. The results indicated that the strength of the relationships may vary from one country to another.

5.2 Limitations and Further Research

Although this study has revealed substantial findings, these findings have some limitations which are relevant for future research, as detailed below.

One of the main limitations of the study is the consumers' knowledge regarding gray marketing. The majority of the respondents (88% of the Turkish consumers and 71 % of the American consumers) were not aware of gray market activities. Therefore, an informative text was located in the first section of the questionnaire and some information about the gray marketing was provided. However, this information was limited because of the time and budget constraints. For example, in the text there was no information about the risks of buying gray market goods not to lead the consumers. The positive relations between the risk averseness and attitude probably stem from the consumers' lack of information. Therefore, additional research that the consumers are provided with more information about gray marketing is required to get more accurate results.

Another limitation is that this study was only conducted in two countries (Turkey and the U.S.) to test the differences regarding gray marketing between countries. However, there are additional countries and unions, which have different cultural characteristics such as European Union countries, BRIC countries, Middle East countries and Far East countries. In order to see the cultural differences more accurately, additional research should be conducted in the different countries which have different cultural characteristics. In addition, in this study, we used the Hofstede's (1980) cultural dimension indexes. However, every person is unique and may have different characteristics. Therefore, individual cultural characteristics may be measured in the further research.

Another limitation is the sampling methods used in this study. Due to the budget and time limitations random sampling methods could not be used and this affects the generalizability of the results. So, in the future research the proposed model may be tested using the data gathered through one of the random sampling methods. In addition, Hair et al (2010) suggested obtaining at least 500 samples for each group using multi group SEM for complex models. Although Turkish sample was over the cut-off value, there were only 351 cases for the U.S. data because of time limitation. Moreover, another limitation of the study regarding the sampling is the demographic differences between the Turkish and the U.S. data. The U.S. data mostly composed of the students and younger respondents, while Turkish data composed of the older and working respondents. In addition, education level of the American respondents was higher than the Turkish respondents. In order to get more accurate results, additional research may be applied to the respondents from different countries who has similar demographic characteristics.

Non-normality of the data used in this study is also another limitation, because normality is an assumption of maximum likelihood method in SEM analysis. Non-normal data may affect the robustness of the analysis and results. Under normal conditions, Asymptotically Distribution-Free Method, which requires a large sample size, was more appropriate for this study. However, the sample size used in the study did not allow the researcher to conduct this method to enhance the robustness of the study. Further research may be applied to the normal data or large sample size in order to get more accurate results.

This study only tested the effects of some personality and social factors on attitude towards gray market goods. However, several other factors may also affect attitudes towards gray market goods. For instance, the focus group study revealed that authorized distributor related factors, gray marketer related factors, product and price related factors, and past purchase experience may have impact on consumers' attitude towards gray market goods. In this context, additional research is needed to test the effects of these factors on attitude.

Another limitation of the study is the discriminant validity issues between the attitude and purchase intention. The validity analyses indicated that these two constructs were discriminated from each other which may affect the robustness of the model. Further research may propose a second order structural equation model in which attitude may compose of three subdimensions as cognitive, affective and conative as it is indicated in the Tricomponent Attitude Model.

Finally, this research is only tested in the context of consumer electronics. However, consumers' approaches towards other products may be different. So further research may test or compare the model in the context of other product types such as durable consumer goods, watches, fashion goods, beauty goods, health products and so on.

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7 APPENDICES

7.1 Appendix-A: In-Depth Interview Questions

1. **Gri Pazarlama / Paralel İthalat nedir? Açıklar mısınız?**
2. **Sizce Türkiye'de gri pazar aktiviteleri ne ölçüde yaygındır? Geçmiş, bugün, gelecek?**
3. **(Eğer yaygın ise) Türkiye'de gri pazar aktivitelerinin yaygın olma nedenleri nelerdir?**
4. **Gri pazar aktiviteleri Türkiye'de en çok hangi ürün gruplarında gerçekleşiyor?**
5. **Gri pazar aktivitelerinin şirketinize herhangi bir etkisi oldu mu?**
   Fiyatlandırma, Satış, Pazar Payı, Karlılık, Dağıtım, Promosyon, Marka imajı, Şirket imajı, müşteri tatminsizliği, Müşteri ilişkileri, pazar kontrolünü kaybetme, güvenlik problemleri,
6. **Gri pazar aktivitelerine karşı herhangi bir strateji uyguladınız mı / uyguluyor musunuz?**

   Fiyatlandırma, Dağıtım, Promosyon, Marka Stratejileri, Ürün, Bayi takibi, garanti, ürünleri satın alma, gray marketingin olumsuz yönleriyle ilgili promosyon faaliyetleri, lobicilik faaliyetleri, ürün takip sistemleri, tüm ülkelerde aynı fiyat uygulanması, paralel ithalat ürünler için yüksek servis ücreti, Ürün farklılaştırılması (yerel pazara uygun), Halka paralel ithalat ile ilgili uyarılar yapmak, Sık fiyat değişiklikleri, Üreticiden destek isteme, Rekabet için geçici fiyat indirimi, Paralel ithalatçıyı şirket bünyesine katmak.
7. **Uyguladığınız stratejilerde başarılı olduğunuzu düşünüyor musunuz?**
8. **Sizce gri pazar aktivitelerinin etkilerini azaltmak için başka hangi stratejiler uygulanabilir?**
9. **Gri pazar aktiviteleri ile mücadele ederken (eğer ediyorsanız) üretici firmalardan destek alabiliyor musunuz?**
10. **Sizce gri pazar aktivitelerinin faydalı yönleri var mıdır? Niçin?**
    Üretici firmaya, Yetkili distribütöre , Müşteriye faydası, Pazara
11. **Gri pazar aktivitelerini etik ve yasal buluyor musunuz?**

7.2 Appendix-B: Focus Group Study Questions

Cinsiyet:

Yaş:

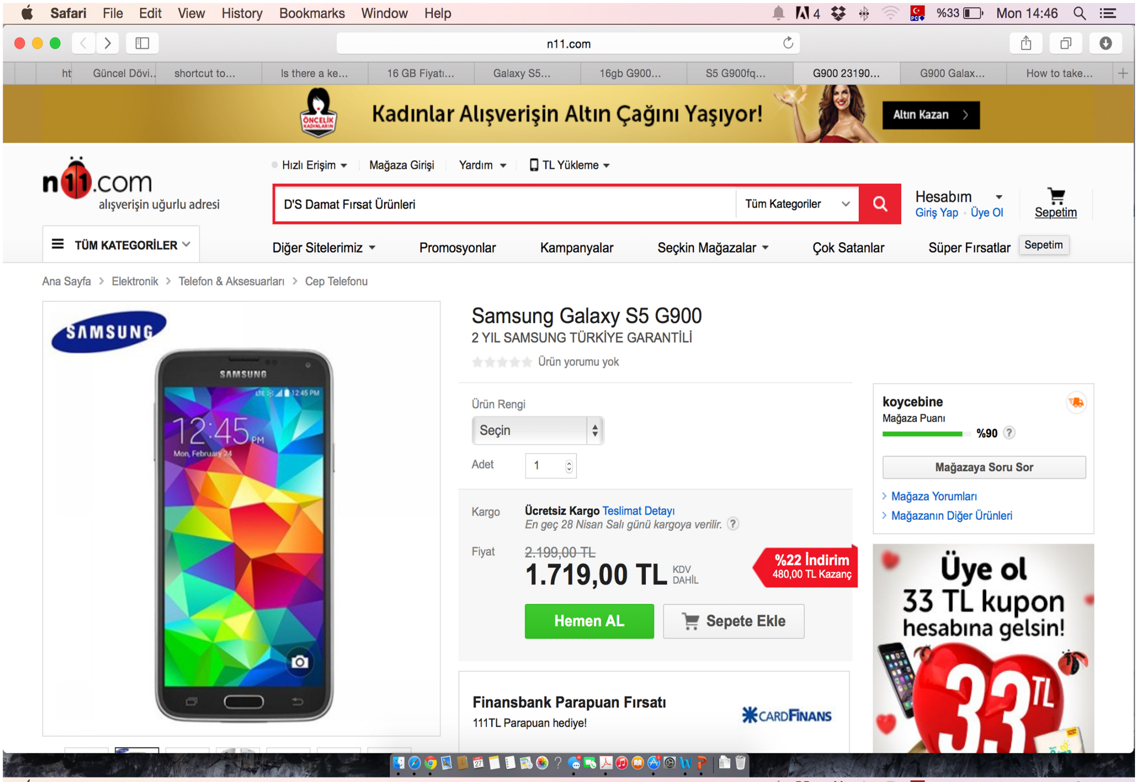
Eğitim:

Meslek:

Medeni Durum:

1-Parallel ithalat /Gri pazar kavramlarını duydunuz mu ?

2-Paralel ithalat /Gri pazar kavramlarının ne olduğunu açıklar mısınız ?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TÜM KATEGORİLER
Diğer Sitelerimiz Promosyonlar Kampanyalar Seçkin Mağazalar Çok Satanlar Süper Fırsatlar
Ana Sayfa > Elektronik > Telefon & Aksesuarları > Cep Telefonu
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2 YIL SAMSUNG TÜRKİYE GARANTİLİ
Ürün yorumu yok
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Seçin
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Ücretsiz Kargo Teslimat Detayı
En geç 28 Nisan Salı günü kargoya verilir.
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Üye ol 33 TL kupon hesabına gelsin!
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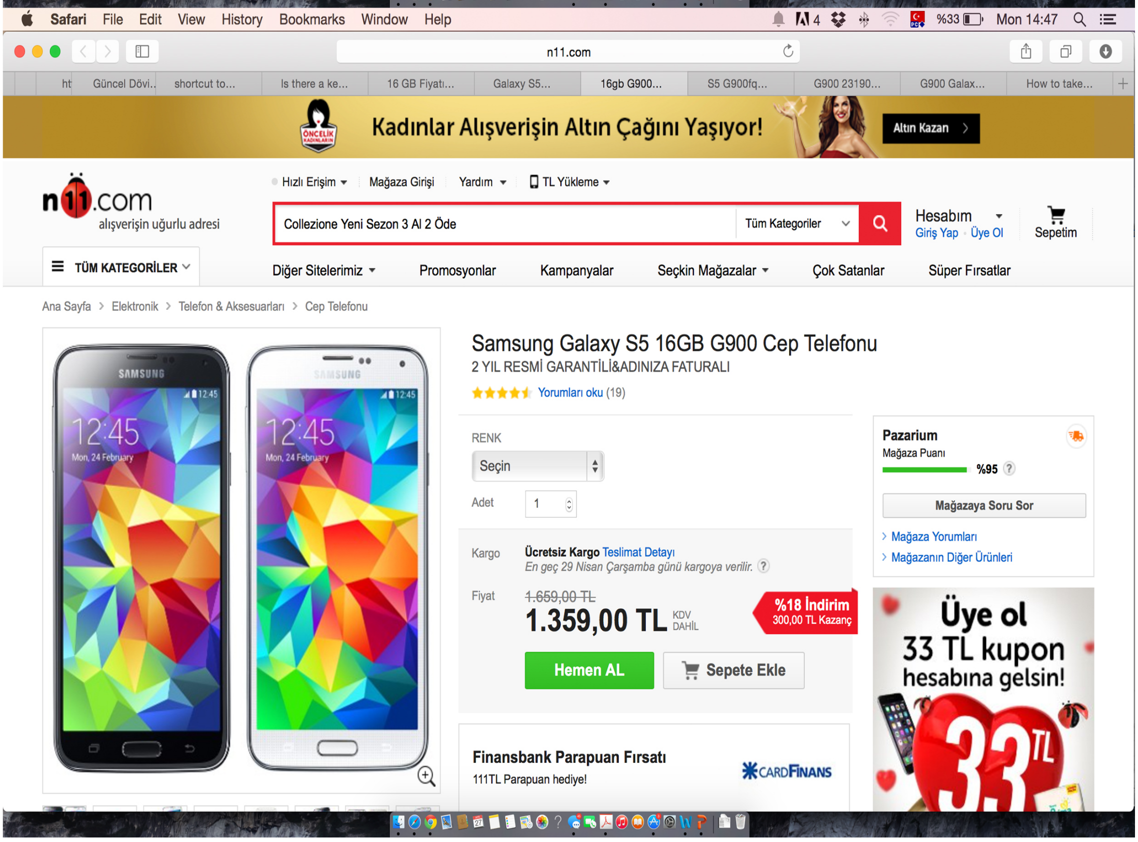
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TÜM KATEGORİLER
Diğer Sitelerimiz Promosyonlar Kampanyalar Seçkin Mağazalar Çok Satanlar Süper Fırsatlar
Ana Sayfa > Elektronik > Telefon & Aksesuarları > Cep Telefonu
Samsung Galaxy S5 16GB G900 Cep Telefonu
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En geç 29 Nisan Çarşamba günü kargoya verilir.
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Mağazaya Soru Sor
Mağaza Yorumları
Mağazanın Diğer Ürünleri
Üye ol 33 TL kupon hesabına gelsin!
Finansbank Parapuan Fırsatı
111TL Parapuan hediye!
CARDFINANS

(Paralel İthalat hakkında kısa bilgi verilecek)

1. Bu kavramlar hakkında nereden bilgi sahibi oldunuz?

2. Hiç paralel ithalat ürünlere rastladınız mı? Rastladıysanız hangi ürünlere?

3. Siz hiç paralel ithalat ürün/ürünler satın aldınız mı ?

Hayır ;

3.1. Niçin ?

Evet ;

3.2. Niçin paralel ithalat ürünleri satın almayı tercih ettiniz.?

3.3. Hangi ürünü/ürünleri satın aldınız?

3.4. Ürünü nereden satın aldınız?

3.5. Aldığınız paralel ithalat ürününden memnun musunuz?

Evet;

3.5.1. Niçin?

Hayır;

3.5.2. Niçin?

4. Genel olarak, hangi paralel ithalat ürünleri almayı tercih edersiniz?

5. Hangi şartlarda normal ürün yerine paralel ithalat ürün almayı tercih edersiniz?

5.1. Fiyat farkı?(ne kadar fiyat farklı olursa)
5.2. Fiyat Düzeyi?(Pahalı ürünlerde mi Ucuz ürünlerde mi?)
5.2. Marka?
5.3. Ürün grubu?
5.4. Özellik?

5. Sizce paralel ithalat ürünlerini almak riskli bir tercih midir? Neden?

6. Paralel ithalat /gri pazar ürünlerini etik buluyor musunuz?

7. Paralel ithalatın firmaların marka imajını zedelediğini düşünüyor musunuz?

8. Firmalar paralel ithalatı durdurmak için sizce ne yapmalılar?

9. Sizce hangi kişilik özellikleri paralel ithalat ürünleri satın alıp almamayı etkiler?

7.3 Appendix-C: The Questionnaire for Turkey

binom Research and Consulting Services	PROJE ADI: 2016_EDU. Pi_2701	VERİ GİRİŞ ANKET NO: ……………………

SAHA ÇALIŞMASI DETAYLARI (BİNOM KULLANIMI İÇİNDİR)

Merhabalar, İsmim ……….Sizleri Binom Araştırma şirketinde çalışıyorum. Paralel ithalat ile ilgili bir araştırma yürütmekteyiz. Görüşmemiz yaklaşık 20 dakika sürecek olup, Sizden aldığımız görüşler, diğer katılımcılardan aldığımız görüşler ile birlikte anonim olarak değerlendirilecektir. **Binom Araştırma Şirketi ile ilgili tüm bilgilere www.binomarastirma.com.tr adresinden ulaşabilirsiniz.**

BÖLÜM 1

HERKESE SOR
S1. Piyasada bulunan paralel ithalat ürünleri hakkında daha önceden bilgi sahibi miydiniz?

Evet	**1**
Hayır	**2**

S1 SORUSUNDA 1 KODU İŞARETLEMİŞ GÖRÜŞMECİLERE SORUNUZ.

S2. Paralel ithalat ürünleri ile ilgili bilgiye neren sahip olduğunuzu öğrenebilir miyim**?(Çok cevap olabilir)**

Arkadaş/Aile	**1**
Paralel ithalatçı firmalar	**2**
Fiyat Karşılaştırma siteleri	**3**
Haber siteleri	**4**
Forum siteleri	**5**
Sosyal paylaşım siteleri	**6**
Gazete /Dergi	**7**
Diğer (Belirtiniz)……	**8**

HERKESE SOR
S3. Şimdiye kadar herhangi bir paralel ithalat elektronik ürün satın aldınız mı? **(Tek cevap)**

Evet	**1**	**S4 sorusu ile devam et**
Fark etmeden almışım, şimdi farkına vardım	**2**	**S4 sorusu ile devam et**
Hayır	**3**	

S4. Satın aldığınız paralel ithalat elektronik ürün/ürünler nelerdir?**(Çok cevap olabilir)**

Cep Telefonu	**1**
TV	**2**
Bilgisayar	**3**
Fotoğraf Makinesi/Kamera	**4**
Oyun Konsolu	**5**
Tablet	**6**
Yazılım/oyun	**7**
Diğer (Belirtiniz)……	**8**

S5. Bu paralel ithalat ürününü/ürünlerini nereden satın aldınız? **(Çok cevap olabilir)**

Paralel İthalatçı web sitesinden	**1**
Sanal pazar sitelerinden (N11, Sahibinden vs.)	**2**
Teknoloji perakende mağazalarından (Teknosa, Gold, Bimeks, Mediamarkt vs.)	**3**

Fırsat/özel alışveriş sitelerinden (Trendyol, Markafoni vs.)	4
Online alışveriş sitelerinden (Hepsiburada, hızlıal)	5
Ucuz gıda zincir marketlerinden (Bim, A101, Şok vs.)	6
Paralel İthalatçı mağazasından	7
Diğer (Belirtiniz)……	8

HERKESE SOR

S6. Okuyacağım ürün gruplarında, paralel ithalat ürünlerinin fiyatı yetkili distribütör ürünlerinin fiyatından yüzde kaç daha düşük olursa bu ürünleri paralel ithalat olarak satın almayı tercih edersiniz?

Kod	Ürün	%1-10	%11-20	%21-30	%31-40	%41-50	Hiçbir Zaman
1	Cep Telefonu	1	2	3	4	5	6
2	Oyun Konsolu	1	2	3	4	5	6
2	TV	1	2	3	4	5	6
3	Tablet	1	2	3	4	5	6
4	Bilgisayar	1	2	3	4	5	6
4	Fotoğraf Makinası /Kamera	1	2	3	4	5	6
5	Oyun/Yazılım	1	2	3	4	5	6
6	Giyilebilir Teknolojiler (Akıllı saat, gözlük vs.)	1	2	3	4	5	6
7	Elektronik Aksesuarlar	1	2	3	4	5	6

HERKESE SOR

S7. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile 7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S7_1	Genellikle, elektronik ürünleri paralel ithalat olarak satın almak daha iyi bir seçenektir.	1	2	3	4	5	6	7
S7_2	Fiyat farkı dikkate alındığında, paralel ithalat elektronik ürünleri tercih ederim.	1	2	3	4	5	6	7
S7_3	Paralel ithalat elektronik ürünlerini satın almaktan hoşlanırım	1	2	3	4	5	6	7
S7_4	Elektronik ürünleri paralel ithalat olarak satın almak tüketiciye genellikle fayda sağlar.	1	2	3	4	5	6	7
S7_5	Elektronik ürünlerini paralel ithalat olarak almakta herhangi bir sakınca yoktur.	1	2	3	4	5	6	7
S7_6	Ürün tercihinde paralel ithalat elektronik ürünlerini dikkate alırım	1	2	3	4	5	6	7

HERKESE SOR

S8. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S8_1	Daha düşük fiyatlı ürün bulabilmek için ekstra çaba sarf etmek istemem	1	2	3	4	5	6	7
S8_2	Daha düşük fiyatlar araştırılarak tasarruf edilen para, genellikle harcanan zamana ve çabaya değmez	1	2	3	4	5	6	7
S8_3	Daha düşük fiyatları bulabilmek için asla mağaza mağaza dolaşmam	1	2	3	4	5	6	7
S8_4	Daha düşük fiyatları bulabilmek için harcanan zaman genellikle harcanan emeğe değmez	1	2	3	4	5	6	7

HERKESE SOR

S9. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S9_1	Genel olarak, bir ürünün fiyatı ne kadar yüksekse kalitesi de o kadar yüksektir.	1	2	3	4	5	6	7
S9_2	Bir ürünün fiyatı, onun kalitesi hakkında iyi bir göstergedir	1	2	3	4	5	6	7
S9_3	En iyiyi satın almak için her zaman biraz daha fazla ödemeniz gerekir	1	2	3	4	5	6	7

HERKESE SOR

S10. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S10_1	Risk almaktan hoşlanmam	1	2	3	4	5	6	7
S10_2	Tanıdığım çoğu insanla kıyaslandığımda hayatı uçlarda yaşamayı sevmem	1	2	3	4	5	6	7
S10_3	Gereksiz şeyler için kendimi riske atmak istemem	1	2	3	4	5	6	7
S10_4	Tanıdığım çoğu insanla kıyaslandığımda bir şeyler için risk almayı sevmem.	1	2	3	4	5	6	7

HERKESE SOR

S11. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S11_1	Arkadaşlarımla kıyaslandığımda, onlardan daha çok elektronik ürün satın alırım	1	2	3	4	5	6	7
S11_2	Genel olarak, arkadaş çevremde elektronik ürünlerdeki yeni trendlerden ilk benim haberim olur	1	2	3	4	5	6	7
S11_3	Elektronik ürünlerin yeni modellerini diğer insanlardan daha iyi bilirim.	1	2	3	4	5	6	7
S11_4	Eğer elektronik ürünlerin yeni modellerinin çıktığını duyarsam, bu ürünleri satın almak için yeterince ilgili olurum.	1	2	3	4	5	6	7
S11_5	Genelde, arkadaş çevremde yeni ürünleri ilk alanlardan biriyimdir.	1	2	3	4	5	6	7
S11_6	Elektronik bir ürünün yeni bir modelinin çıktığını henüz duymuş olsam bile o ürünü satın almayı düşünürüm.	1	2	3	4	5	6	7

HERKESE SOR

S12. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S12_1	Paralel ithalat elektronik ürünleri satın alırım.	1	2	3	4	5	6	7
S12_2	Paralel ithalat elektronik ürünleri satın almayı düşünebilirim	1	2	3	4	5	6	7
S12_3	Paralel ithalat elektronik ürünleri satın alma ihtimalim yüksektir	1	2	3	4	5	6	7

HERKESE SOR

S13. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S13_1	Doğru ürünü veya markayı aldığımdan emin olmak için genellikle başkalarının ne aldıklarını ve kullandıklarını gözlemlerim	1	2	3	4	5	6	7
S13_2	Şayet ürüne ilişkin çok az tecrübem varsa çoğu kez arkadaşlarıma ürün hakkında sorular sorarım	1	2	3	4	5	6	7
S13_3	Bir ürün grubunda var olan en iyi alternatifi seçebilmek için çoğu kez başkalarına danışırım.	1	2	3	4	5	6	7
S13_4	Bir ürünü almadan önce çoğunlukla arkadaşlarımdan ve ailemden o ürün hakkında bilgi toplarım	1	2	3	4	5	6	7

HERKESE SOR

S14. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S14_1	Aldığım ürünlerin ve markaların başkaları tarafından beğenilmesi benim için önemlidir.	1	2	3	4	5	6	7
S14_2	Eğer başkaları benim kullandığım ürünü görebiliyorlarsa, çoğunlukla onların satın almamı bekledikleri markayı satın alırım.	1	2	3	4	5	6	7
S14_3	Hangi ürün ve markaların başkaları üzerinde iyi etki bıraktığını bilmek isterim.	1	2	3	4	5	6	7
S14_4	Şayet herhangi birisine benzemek istersem, çoğunlukla onun satın aldığı markaları almaya çalışırım.	1	2	3	4	5	6	7

HERKESE SOR

S15. Okuyacağım ifadelere ne ölçüde katıldığınızı 1 ile7 arasındaki bir rakam ile belirtir misiniz? 1; kesinlikle katılmıyorum, 7 ise kesinlikle katılıyorum anlamına gelmektedir. Arada kalan rakamları da kullanabilirsiniz
.

Kod	İfadeleri tek tek oku!	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Ne Katılıyorum Ne Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
S15_1	Elektronik ürünlere karşı çok ilgiliyim	1	2	3	4	5	6	7
S15_2	Elektronik ürünler benim için çok önemlidir	1	2	3	4	5	6	7
S15_3	Benim için, elektronik ürünler büyük önem arz eder	1	2	3	4	5	6	7

HERKESE SOR

S16. Size göre paralel ithalat ürünlerini almanın okuyacağım ifadeler ile ilişkisini yakın bulduğunuz tarafa uygun şekilde belirtir misiniz? Örneğin, paralel ithalat ürünleri almanın etik olmadığını düşünüyorsanız tabloda sol tarafa yakın 1-5 arası puanlandırmalısınız.

1	2	3	4	5	6	7
Etik Değil	2	3	4	5	6	**Etik**
Adil Değil	2	3	4	5	6	**Adil**
Adaletsiz	2	3	4	5	6	**Adaletli**
Ahlaken Yanlış	2	3	4	5	6	**Ahlaken Doğru**

HERKESE SOR,

S17. Aşağıdakilerden hangisi paralel ithalatın tanımıdır**?(Tek Cevap)**

Orijinal bir ürünün kopyasının imal edilip piyasaya sürülmesine denir	**1**
Orijinal bir ürünü yasa dışı yollarla ithal edilip piyasaya sürülmesine denir.	**2**

Orijinal bir ürünü yetkili distribütör firma dışında başka bir ithalatçı tarafından yasal olarak ithal edilip piyasaya sürülmesine denir.	3
Diğer (Belirtiniz)...	4

BÖLÜM 2-GÖRÜŞMECİ İNFO

HERKESE SOR

D1.Görüşmecinin cinsiyetini ''sormadan'' seçiniz.**(Tek Cevap)**

Kadın	1
Erkek	2

D2. Yaşınızı öğrenebilir miyim? ……………………………..(Açık şekilde yazınız)

D2A. Yaş aralığını seçiniz.**(Tek cevap)**

18-24	1
25-34	2
35-44	3
45-54	4
55 yaşından büyük	5

D3. Ailenizin aylık toplam gelir aralığını öğrenmem mümkün müdür**?(Tek Cevap)**

1000 TL den az	1
1000-1999 TL	2
2000-2999TL	3
3000-3999TL	4
4000-4999 TL	5
5000-5999 TL	6
6000-6999 TL	7
7000 TL den fazla	8
Cevap vermek istemiyor	9

D4. En son mezun olduğunuz eğitim seviyesini söyler misiniz ? **(Tek Cevap)**

İlkokul	1
Ortaokul	2
Lise	3
Üniversite	4
Yüksek Lisans	5
Doktora veya daha üzeri	6

D5. Mesleğinizi öğrenebilir miyim? **(Tek Cevap)**

Çalışmıyor/İşsiz	1
Esnaf	2
Ev Hanımı	3
İşçi	4
Memur(Devlet /Kamu)	5
Öğrenci	6
Özel sektör çalışanı	7
Serbest Meslek	8

D6.Medeni durumunuzu öğrenebilir miyim? **Tek Cevap)**

Evli	1
Bekar	2

BİZİMLE GÖRÜŞTÜĞÜNÜZ İÇİN TEŞEKKÜR EDERİZ.

ANK. Anketör adını yazınız.

7.4 Appendix-D: The Questionnaire for the U.S.

Dear Respondent,
I am conducting an international study about gray marketing. The objective of my research project is to understand consumer's attitude towards gray market goods. The information about "what gray market goods are" is provided below.
In the survey, we use some attention track questions to see whether you understand the definition of gray market. Therefore, we kindly suggest you to read the information provided below about gray market goods carefully.
Gray Marketing is the distribution of genuine products outside the manufacturer's authorized channels (Lansing & Gabriella 1993). We can imagine that, in Turkey, a specific model of iPhone costs around $1100, and in the USA, it's around $700. Technically, a company can buy this iPhone from USA and sell them in Turkey for $900, making $200 per iPhone. We call these iPhones "Gray Market Goods" since they are not offered by Apple Turkey. This type of transaction is completely legal.

Gray Marketers mostly does not advertise the products and they free-ride the authorized distributors' ads. They also sell the gray market goods directly to the customers via online channels. Therefore they can sell the same products cheaper than the authorized distributors.

Please answer the questions based on the information about gray marketing provided above.
This questionnaire only takes about 10 to 15 minutes to complete. Your answers will be strictly confidential.

1. **What is your country of birth?**

2. **Have you ever heard about gray market goods?**

	Yes		No

3. **If your answer is yes, from which source/sources have you gained the information?**

	Friends/Family		Gray Marketer		Price Comparison Websites		News Websites
	Forums		Social Networking Sites		Newspaper/ Magazines		Other ……..…

4. **Have you ever bought any gray market electronics goods?**

	Yes		Yes (I have just realized)		I am not sure		No

*If your answer is No, please skip to the 8th question.

5. **Which type of gray market electronics goods have you bought?**

	Mobile Phone		TV		Computer		Software/Game
	Game Console		Tablet		Camera/Camcorder		Other…….....

6. **From where have you bought these goods?**

	Web site of the Gray Marketer		Virtual Marketplace (ex:Ebay)
	Technology retailers (ex: Bestbuy)		Group buying websites (ex: Groupon)
	Online Shopping sites (ex: Amazon)		Other.......
	Store of the parallel importer		

7. **How much price difference convinces you to buy gray market goods rather than authorized distributor goods for each product groups?**

	1-10 %	11-20 %	21-30 %	31-40 %	41-50 %	Never
Mobile Phone	❍	❍	❍	❍	❍	❍
Game Console	❍	❍	❍	❍	❍	❍
TV	❍	❍	❍	❍	❍	❍
Tablet	❍	❍	❍	❍	❍	❍
PC/Notebook	❍	❍	❍	❍	❍	❍
Camera / Camcorder	❍	❍	❍	❍	❍	❍
Software / Game	❍	❍	❍	❍	❍	❍
Wearable Technologies	❍	❍	❍	❍	❍	❍
Electronics Accessories	❍	❍	❍	❍	❍	❍

8. **Please indicate your agreement with each of the following statements**

	Strongly Disagree	**Disagree**	**Somewhat Disagree**	**Neither Agree Nor Disagree**	**Somewhat Agree**	**Agree**	**Strongly Agree**
Generally speaking, buying gray market consumer electronics is a better choice.	○	○	○	○	○	○	○
Considering price, I prefer gray market consumer electronics.	○	○	○	○	○	○	○
I like shopping for gray market consumer electronics.	○	○	○	○	○	○	○
Buying gray market consumer electronics generally benefits the consumer.	○	○	○	○	○	○	○
There's nothing wrong with purchasing gray market electronics.	○	○	○	○	○	○	○
I consider gray market consumer electronics when choosing merchandise	○	○	○	○	○	○	○

I am not willing to go to the extra effort to find lower prices (R).	○	○	○	○	○	○	○
The money saved by searching for lower prices is usually not worth the time and effort (R).	○	○	○	○	○	○	○
I would never shop at more than one store to find lower prices (R).	○	○	○	○	○	○	○
The time it takes to find lower prices is usually not worth the effort (R).	○	○	○	○	○	○	○
Generally speaking, the higher the price of a product, the higher the quality.	○	○	○	○	○	○	○
The price of a product is a good indicator of its quality.	○	○	○	○	○	○	○
You always have to pay a bit more for the best.	○	○	○	○	○	○	○
I don't like to take risks.	○	○	○	○	○	○	○
Compared to most people I know, I don't like to "live life on the edge"	○	○	○	○	○	○	○
I have no desire to take unnecessary chances on things.	○	○	○	○	○	○	○
Compared to most people I know, I don't like to gamble on things	○	○	○	○	○	○	○
Compared to my friends, I do more purchasing for consumer electronics	○	○	○	○	○	○	○
In general, I am the first in my circle of friends to know the latest trends for consumer electronics	○	○	○	○	○	○	○
I know more about new versions of consumer electronics than other people	○	○	○	○	○	○	○
If I heard that a new versions of consumer electronics were available, I would be interested enough to buy them	○	○	○	○	○	○	○
In general, I am among the first in my circle of friends to purchase new products like these	○	○	○	○	○	○	○
I will consider buying a new version of consumer electronics, even if I have just heard about it	○	○	○	○	○	○	○
I would purchase gray market consumer electronics	○	○	○	○	○	○	○
I would consider buying gray market consumer electronics	○	○	○	○	○	○	○
The probability that I would consider buying gray market consumer electronics is high	○	○	○	○	○	○	○
To make sure I buy the right product or brand, I often observe what others are buying and using.	○	○	○	○	○	○	○
If I have little experience with a product, I often ask my friends about the product.	○	○	○	○	○	○	○
I often consult other people to help choose the best alternative available from a product class.	○	○	○	○	○	○	○
I frequently gather information from friends or family	○	○	○	○	○	○	○

about a product before I buy							
It is important that others like the products and brands I buy.	O	O	O	O	O	O	O
If other people can see me using a product, I often purchase the brand they expect me to buy.	O	O	O	O	O	O	O
I like to know what brands and products make good impressions on others.	O	O	O	O	O	O	O
If I want to be like someone, I often try to buy the same brands that they buy.	O	O	O	O	O	O	O
I have a strong personal interest in consumer electronics goods	O	O	O	O	O	O	O
Consumer electronics goods are very important to me.	O	O	O	O	O	O	O
Consumer electronics goods are so important to me	O	O	O	O	O	O	O

9. To me, buying gray market consumer electronics is;								
Unethical								Ethical
Unfair								Fair
Unjust								Just
Morally Wrong								Morally Right

10. Which of the following is the definition of gray marketing

	Importation and distribution of the imitation of an original product in a market
	Importing original products illegally and selling them in a market.
	Legally importation and distribution of an original product by a gray marketer without the permission of authorized distributor.

Gender	O	**Female**	**Age:**	
	O	**Male**		
Marital Status	O	**Single**		
	O	**Married**		
Monthly Family Income	O	Less than $1000	O	$ 2501-3500
	O	$1000-1500	O	$ 3500-4000
	O	$1501-2500	O	Over $ 4000
Education	O	Primary School	O	University
	O	Secondary School	O	Master / MBA
	O	High School	O	PhD
Job	O	Government Employee	O	Private sector employee
	O	Student	O	Merchant
	O	Farmer	O	Freelancer
	O	Blue Collar	O	Not Working

7.5 Appendix-E: Tests of Normality

Tests of Normality

	Country of Birth	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PCI1	Turkey	.240	527	.000	.890	527	.000
	USA	.206	351	.000	.895	351	.000
PCI2	Turkey	.222	527	.000	.881	527	.000
	USA	.201	351	.000	.907	351	.000
PCI3	Turkey	.248	527	.000	.857	527	.000
	USA	.195	351	.000	.901	351	.000
VC1	Turkey	.244	527	.000	.849	527	.000
	USA	.268	351	.000	.820	351	.000
VC2	Turkey	.218	527	.000	.870	527	.000
	USA	.257	351	.000	.822	351	.000
VC3	Turkey	.236	527	.000	.860	527	.000
	USA	.247	351	.000	.798	351	.000
VC4	Turkey	.258	527	.000	.839	527	.000
	USA	.249	351	.000	.779	351	.000
VC5	Turkey	.264	527	.000	.842	527	.000
	USA	.261	351	.000	.806	351	.000
IS1	Turkey	.240	527	.000	.847	527	.000
	USA	.256	351	.000	.900	351	.000
IS2	Turkey	.219	527	.000	.884	527	.000
	USA	.241	351	.000	.864	351	.000
IS3	Turkey	.218	527	.000	.864	527	.000
	USA	.246	351	.000	.884	351	.000
IS4	Turkey	.237	527	.000	.846	527	.000
	USA	.250	351	.000	.888	351	.000
INT1	Turkey	.241	527	.000	.808	527	.000
	USA	.174	351	.000	.919	351	.000
INT2	Turkey	.205	527	.000	.852	527	.000
	USA	.218	351	.000	.894	351	.000
INT3	Turkey	.249	527	.000	.820	527	.000
	USA	.153	351	.000	.939	351	.000
NS1	Turkey	.255	527	.000	.873	527	.000
	USA	.209	351	.000	.907	351	.000
NS2	Turkey	.234	527	.000	.871	527	.000

	USA	.229	351	.000	.878	351	.000
NS3	Turkey	.233	527	.000	.862	527	.000
	USA	.191	351	.000	.901	351	.000
NS4	Turkey	.257	527	.000	.864	527	.000
	USA	.233	351	.000	.871	351	.000
PQI1	Turkey	.248	527	.000	.891	527	.000
	USA	.206	351	.000	.930	351	.000
PQI2	Turkey	.221	527	.000	.885	527	.000
	USA	.230	351	.000	.921	351	.000
PQI3	Turkey	.257	527	.000	.874	527	.000
	USA	.261	351	.000	.904	351	.000
RA1	Turkey	.237	527	.000	.891	527	.000
	USA	.195	351	.000	.927	351	.000
RA2	Turkey	.228	527	.000	.885	527	.000
	USA	.172	351	.000	.937	351	.000
RA3	Turkey	.254	527	.000	.866	527	.000
	USA	.204	351	.000	.924	351	.000
RA4	Turkey	.226	527	.000	.918	527	.000
	USA	.197	351	.000	.914	351	.000
CI1	Turkey	.247	527	.000	.896	527	.000
	USA	.139	351	.000	.942	351	.000
CI2	Turkey	.212	527	.000	.905	527	.000
	USA	.160	351	.000	.931	351	.000
CI3	Turkey	.242	527	.000	.889	527	.000
	USA	.162	351	.000	.932	351	.000
CI4	Turkey	.273	527	.000	.881	527	.000
	USA	.183	351	.000	.932	351	.000
CI5	Turkey	.241	527	.000	.896	527	.000
	USA	.153	351	.000	.934	351	.000
CI6	Turkey	.260	527	.000	.883	527	.000
	USA	.139	351	.000	.937	351	.000
ATT1	Turkey	.217	527	.000	.865	527	.000
	USA	.242	351	.000	.916	351	.000
ATT2	Turkey	.236	527	.000	.877	527	.000
	USA	.179	351	.000	.944	351	.000
ATT3	Turkey	.211	527	.000	.868	527	.000
	USA	.226	351	.000	.925	351	.000
ATT4	Turkey	.232	527	.000	.853	527	.000
	USA	.197	351	.000	.927	351	.000
ATT5	Turkey	.234	527	.000	.853	527	.000
	USA	.156	351	.000	.936	351	.000

ATT6	Turkey	.242	527	.000	.819	527	.000
	USA	.198	351	.000	.924	351	.000
PC1	Turkey	.258	527	.000	.895	527	.000
	USA	.258	351	.000	.850	351	.000
PC2	Turkey	.201	527	.000	.903	527	.000
	USA	.245	351	.000	.867	351	.000
PC3	Turkey	.228	527	.000	.906	527	.000
	USA	.267	351	.000	.837	351	.000
PC4	Turkey	.249	527	.000	.887	527	.000
	USA	.257	351	.000	.858	351	.000
EJ1	Turkey	.227	527	.000	.817	527	.000
	USA	.160	351	.000	.941	351	.000
EJ2	Turkey	.247	527	.000	.847	527	.000
	USA	.139	351	.000	.935	351	.000
EJ3	Turkey	.244	527	.000	.837	527	.000
	USA	.156	351	.000	.936	351	.000
EJ4	Turkey	.268	527	.000	.847	527	.000
	USA	.209	351	.000	.923	351	.000

a. Lilliefors Significance Correction

7.6 Appendix-F: Skewness and Kurtosis Values

Skewness	Std, Error of Skewness	Kurtosis	Std, Error of Kurtosis	Z Value (Skewness)	Z Value (Kurtosis)
-0,787	0,083	0,193	0,165	-9,48	1,17
-0,849	0,083	0,135	0,165	-10,23	0,82
-0,946	0,083	0,370	0,165	-11,40	2,24
-0,389	0,083	0,192	0,165	-4,69	1,16
-0,432	0,083	-0,020	0,165	-5,20	-0,12
-0,317	0,083	-0,404	0,165	-3,82	-2,45
-0,404	0,083	0,057	0,165	-4,87	0,35
-0,416	0,083	0,016	0,165	-5,01	0,10
-1,126	0,083	1,820	0,165	-13,57	11,03
-1,103	0,083	1,791	0,165	-13,29	10,85
-1,176	0,083	2,079	0,165	-14,17	12,60
-1,245	0,083	2,100	0,165	-15,00	12,73
-1,190	0,083	1,453	0,165	-14,34	8,81
-1,188	0,083	1,719	0,165	-14,31	10,42
-1,047	0,083	0,706	0,165	-12,61	4,28
-0,465	0,083	-0,870	0,165	-5,60	-5,27
-0,234	0,083	-1,245	0,165	-2,82	-7,55
-0,530	0,083	-0,910	0,165	-6,39	-5,52
-0,342	0,083	-1,176	0,165	-4,12	-7,13
-0,387	0,083	-0,827	0,165	-4,66	-5,01
-0,445	0,083	-0,772	0,165	-5,36	-4,68
-0,716	0,083	-0,356	0,165	-8,63	-2,16
-0,655	0,083	-0,222	0,165	-7,89	-1,35
-0,711	0,083	-0,001	0,165	-8,57	-0,01
-0,783	0,083	0,155	0,165	-9,43	0,94
-0,537	0,083	-0,415	0,165	-6,47	-2,52
-0,342	0,083	-0,845	0,165	-4,12	-5,12
-0,301	0,083	-1,026	0,165	-3,63	-6,22
-0,399	0,083	-0,899	0,165	-4,81	-5,45
-0,568	0,083	-0,527	0,165	-6,84	-3,19
-0,308	0,083	-0,998	0,165	-3,71	-6,05
-0,370	0,083	-0,923	0,165	-4,46	-5,59
-0,595	0,083	-0,001	0,165	-7,17	-0,01
-0,792	0,083	0,394	0,165	-9,54	2,39
-0,649	0,083	-0,011	0,165	-7,82	-0,07
-0,894	0,083	0,875	0,165	-10,77	5,30
-0,954	0,083	0,940	0,165	-11,49	5,70
-1,143	0,083	1,407	0,165	-13,77	8,53

-0,841	0,083	0,162	0,165	-10,13	0,98
-0,935	0,083	0,741	0,165	-11,27	4,49
-0,857	0,083	0,403	0,165	-10,33	2,44
-0,764	0,083	0,271	0,165	-9,20	1,64
0,117	0,083	-1,287	0,165	1,41	-7,80
0,282	0,083	-1,232	0,165	3,40	-7,47
0,218	0,083	-1,290	0,165	2,63	-7,82
0,121	0,083	-1,325	0,165	1,46	-8,03