Anadolu İktisat ve İşletme Dergisi, 4 (2) 2020, 70-89
Anatolian Journal of Economics and Business, 4 (2) 2020, 70-89

A Comparative Analysis of Consumers for Determining the Perception and Attitudes of Domestic Production Applications in Terms of Following Innovations

Abdulvahap BAYDAS[1]
Serhat ATA[2]

Abstract

This study aims to determine the perceptions and attitudes of consumers towards domestic production practices in terms of following innovations and to explain how and in what direction consumer perceptions and attitudes are shaped in line with these practices. Accordingly, the data collected in March 2019- June 2019 were analyzed using the structural equation model. The results show that consumers who take into account the technological developments, quality, competitiveness and cost advantage in the long term take more risks and rush when a new domestic product is launched and adapt to the product early, which show more conservatism and care for the protection of local products. It has revealed that although it tends to focus on more domestic products due to labor, it constitutes a late majority, and moreover, consumers who have a very strict attitude towards domestic products constitute the traditional consumer group. These findings provide some suggestions for both manufacturers and consumers.

***Keywords**: Diffusion of innovation, Domestic product applications, Following innovations*

***JEL Classification**: M31, M39*

Yenilikleri Takip Açısından Tüketicilerin Yerli Üretim Uygulamaları ile İlgili Algı ve Tutumların Belirlenmesine Yönelik Karşılaştırmalı Bir Analiz

Özet

Bu çalışma yenilikleri takip açısından tüketicilerin yerli üretim uygulamalarına yönelik algı ve tutumlarını belirlemeyi ve bu uygulamalar doğrultusunda tüketici algı ve tutumların nasıl ve ne yönde şekillendiğini açıklamayı amaçlamıştır. Mart ve Haziran 2019arasında toplanan veriler yapısal eşitlik modeli ile analiz edilmiştir. Sonuçlar uzun vadede teknolojik gelişmeleri, kaliteyi, rekabetçiliği ve maliyet avantajını dikkate alan tüketicilerin, daha fazla risk aldığını, yeni bir yerli ürün piyasaya sürüldüğünde acele ettiğini ve ürüne erken adapte olduğunu göstermektedir. Daha fazla muhafazakârlık gösteren ve yerli ürünlerin korunmasına önem veren tüketicilerin ise yerel ekonomi ve emek nedeniyle daha fazla yerli ürüne odaklanma eğiliminde olmasına rağmen geç çoğunluğu oluşturduğu bulgusuna ulaşılmıştır. Dahası yerli ürün konusunda çok katı tutum gösteren tüketicilerin ise geleneksel sona kalan tüketici grubunu oluşturduğunu ortaya koymuştur. Bu bulgular hem üreticiler hem de tüketiciler için birtakım öneriler sunmaktadır.

***Anahtar Kelimeler**: Yeniliklerin yayılımı, Yerli üretim uygulamaları, Yenilikleri takip etme*

***JEL Sınıflandırması**: M31, M39*

[1] Associate Professor, Department of Business, Duzce University, abdulvahapbaydas@duzce.edu.tr, orcid.org/0000-0001-2345-6789
[2] Research Assistant, Department of International Trade, Duzce University, serhatata@duzce.edu.tr, orcid.org/000-0002-5423-5118

Geliş Tarihi / Received: 16.06.2020
Kabul Tarihi / Accepted: 11.09.2020

1. Introduction

Businesses, in order to maintain their activities, either introduce a product, a new version of the product to the market, where consumers are aware of what is already available in the market, or introduce to the market a new product or a new version of the product that consumers are not familiar with before. When considering today's global markets as a pool where each individual has desired local habit, the local life style and the product yearned, the domestic markets are not lost but are constantly in contact with each other, it will be inevitable to develop new, different products for the businesses. From this way, it is very difficult to describe new product both domestic and foreign markets. Because defining products entering the current country's market from domestic and foreign market, depends upon innovations of current product, creating value in terms of time, generating innovations in market share and being perceived as innovation by customers (Robertson, 1971). In addition, another factor that may affect the identification of new products in the current market is the country-origin effect, expressed as the abstract barriers that cause consumers to create negative judgment against foreign products (Wang and Lamb, 1980).

Consumers' perceptions of product quality are directly affected by the country in which the product is produced. Therefore, the knowledge of country of origin and ethnocentrism tendency of consumers may be an advantage that can be used by marketers, but can also turn into a disadvantage if it cannot be managed properly. Before evaluating the tendency of consumers towards ethnocentric or in other words domestic products, it is necessary to first mention what innovation is and what it means in marketing.

The main purpose of this study is to determine how and in what direction consumers' perception of domestic products is shaped in terms of following innovations. It is thought that this study will benefit literature in terms of determining how domestic production and applications perceived by consumers, which are prominent recently, and whether they shape the purchasing behavior of consumers. In this study, innovation in terms of marketing and customer was mentioned first and eventually diffusion of innovation and then customer perceptions of domestic products and findings, discussions and recommendations.

2. Innovation and Marketing

When the concept of innovation is mentioned, the first thing that comes to mind is technology and product development; however, marketing where both concepts are integrated is an important component of innovation. Marketing innovation is the development of new designs and methods, giving a new and different direction to marketing.

Marketing innovation, according to Penning and Kim (2009); includes changing the product design, packaging, product positioning, product promotion activities and pricing in order to increase the acceptability of the products. These innovations can be expressed with examples such as original visual designs that will give the product a different image, virtual advertising application in films, new showroom

concepts, discounted prices on membership card, etc. (Elçi, 2006:32). Accordingly, marketing innovation includes innovations to be realized in all marketing mix elements called 4P. Therefore, marketing innovation; product design or packaging, product positioning, product promotion or pricing as a new marketing method that includes significant changes (Shergill and Nargundkar, 2005:32-33).

Innovations in marketing may increase consumer demand. The use of new marketing themes and channels in advertising can provide access to new customers, consumers' price sensitivity can be reduced by differentiation of products (Porter, 2000:221-222).

3. Innovation and Consumers

Consumers' tendency to adopt new ideas, goods and services; can play an important role in brand loyalty, decision making, choice and communication theories. If consumers did not have innovation, consumer behavior would become a routine purchase of similar products on the market. Innovation, a natural desire of a consuming society, leads to a dynamic structure of the market (Hirschman, 1980:283). From this perspective; consumer innovation may be considered as the tendency of individuals to purchase new products and brands rather than their previous product selection and consumption habits (Steenkamp, Hofstede, and Wedel, 1999:56).

So a question is needed to reveal "why is the consumer's level of innovation sought?" There are several reasons for this. These are the need for companies to better understand the differences and similarities of consumers between markets as a result of the globalization of the markets, and more and more often, companies need to learn the tendencies of consumers in different markets towards new products (Telis, Yin and Bell, 2009:1).

When the studies in the consumer behavior literature are examined, it is seen that the concept of consumer innovation is explained in two dimensions. These are global/innate innovativeness and domain specific innovativeness (Midgley and Dowling, 1978:235; Goldsmith and Flyn, 1993:378). Midgley and Dowling (1978) defines the global/innate innovation as the tendency to adopt innovations independently, regardless of the experience conveyed by other members of the social system in which the individual is involved. Global/innate innovation leads to consumers' decision to buy new products. Consumers rely on others' own experience rather than the knowledge of new products or services. The high level of personal innovation makes it more relevant to new experiences and new stimuli.

In global/innate innovation, innovative people are less affected by the subjective norms of the society in which they are located, and therefore consumers of this type are more likely to adopt new products because they are not more affected by social pressures and tend to be seen differently from society. There are twelve hidden personal feature sizes of global/innate innovation. These; seeking innovation, seeking risk, seeking change, stimulus variation, habit, longing for the past, suspicion, social dependence, inactivity (laziness), frugality, enthusiasm for buying (Tellis, Yen and Bell, 2009:4).

The second dimension of consumer innovation is that domain specific innovation is narrower than personal innovation, and the adoption of new products in the area of interest reflects the tendency to learn about these products. The scale developed for domain specific innovation is widely used in two areas. These are fashion and technology. Fashion innovation is a concept that marketers take care of. Fashion innovators have been described as the first to age the existing styles by adopting different styles. When new styles are introduced to the market, fashion innovators are the first to buy them. Technological innovation can be expressed as a tendency to adopt technological innovations. Technological innovation affects the individual's tendency to obtain information about the product class and new products in the technological field (Goldsmith and Hofacker, 1991:209). Consumer perceptions, attitudes and characteristics of the product category have a significant effect on innovation. The idea leadership, expertise and meaning of the product for the consumer affect the innovation. Idea leaders are those who convince consumers to buy products and services. They are also the first to try new products or services. Therefore, they are likely to affect other consumers related to new products (Goldsmith and Flynn, 1993:380).

4. Diffusion, Adaption and Acceptance of Innovation

Diffusion is the process of transmitting innovation over time through certain channels between members of a social system, and at the same time, diffusion is a special type of transmitting messages about new ideas (Rogers, 2003). In other words, innovation can be either an alternative solution to problems to meet the needs of individuals or organizations, or new ways of perceiving the problem or needs.

In 1962, E.M. The Theory of Innovation Distribution (DOI) developed by Rogers who is one of the oldest social science theories. It stemmed from communication to explain how an idea or product accelerated and spread over time through a particular population or social system. The result of this expansion is that people adopt a new idea, behavior or product as part of a social system. Adoption means that a person does something different from what he or she has before (ie, he buys or uses a new product, acquires and performs new behavior, etc.) (Rogers, 1995). The key to adoption is that one should perceive the idea, behavior or product as new or innovative. This allows diffusion to be possible. Adopting a new idea, behavior or product (ie, “innovation”) does not happen simultaneously in a social system; instead, it is a process in which some people tend to adopt innovation more than others. Researchers have found that individuals who adopt an early innovation have different characteristics than those who later adopt an innovation. However recent literature suggests two substantial constituents for diffusion of innovations: signals and network externalities. Signals are described as any market information rather than personal comments which could be used by potential adopters to make an adoption decision. Network externality is defined as the observation in which benefit of some products or services may increase as more consumers adopt the new product such as mobile phones or internet (Peres et al.2009).

However, according to Rogers (1995), innovations consist of four stages: invention (innovation), extension to social system (or communication), time and results. The invention or innovation is the thought or practice perceived by an individual. This innovation spreads through the social system or communication channels. Then the adaptation process begins. The process of adapting or accepting new ideas and innovations varies from person to person depending on time.

When promoting an innovation to an audience, it is important to understand the characteristics of the target population that will help or hinder the adoption of innovation. There are five accepted categories identified and it is still necessary to understand the characteristics of the target population, while the majority of the general population tends to fall into the middle categories. While promoting an innovation, there are different strategies used to address different adoptive categories (Rogers, 2003:277). Individuals within the social system are classified as low, medium and high in terms of innovation. When the graph showing the adopters of innovation over time is drawn, a normal "S" shaped bell curve emerges. (Rogers, 2003:280). It means the attitudes of consumers towards innovation vary. In other words, even if consumers are in the same social system, their response to innovation is not at the same speed. In line with all these explanations, Rogers (1995) discussed innovation in 5 different stages. The first one is *innovation* that is first consumer group to adopt products (Blacwell et al., 2006:556). This group accounts for 2.5% of consumers and wants to buy and test every product they see. They are too hasty to try new ideas. They do not hesitate to take risks and endure risks. Innovators come from young, well-educated, well-established families, who engage with many. They are self-confident, giving more importance to their values and judgments than group norms. Sources of information extend beyond local communities; establish close relationships with other innovators, personal resources, scientific resources and experts. They closely monitor mass media and professional resources (Rogers, 1995). According to Rogers (2003), innovators are hard-working, aggressive, challenging and risk-taking; they have the financial resources to meet the losses of innovations, have the ability to understand and apply complex technical information, and are capable of dealing with the high uncertainty of innovation (Kotler and Keller, 2006:660). In the promotion efforts for innovators, product features and benefits to consumers should be emphasized. Innovators are less brand-dependent and are more inclined to products or environments that create different opportunities.

Early adopters are the second stage of product buyers after innovators. According to Rogers (1995), it accounts for 13,5% of adaptors of innovations. They tend to be the most influential people in any market area, and will often take some "thought leadership'' to other potential adopters. Early adopters integrate more with the local social system than innovators. Possible adopters in the whole community follow early adopters to get ideas and advice on innovation (Odabaşı, 1995:125). Early adopters will normally have a reasonably high social status (which in turn enables thought leadership), reasonable access to finances (beyond those of later adopters), high levels of education and a reasonable approach to risk. However, they do not

take as many risks as innovators and tend to make more reasoned decisions as to whether or not to become involved in a particular product. They will try to obtain more information than an innovator in this decision making process. They can be very active on social media and often create reviews and other materials about new products they like or dislike.

Early majority is the stage that people queries for a while before fully accepting a new idea and accounts for 34% of adaptors of innovations. Their period of decision-making for innovation is relatively longer than the innovators and early adapters. Individuals in the early majority are often eager to adopt innovations that interact with the other innovative stages, but rarely lead to others. These members tend to observe the choices and decisions of the early members and shape their own decisions when the time comes (Rogers, 1995:249).

Another stage is the *late majority* that accounts for 34%. People in the late majority adopt innovations with a doubt and cautious approach. The category of skepticism does not accept innovation until others adopt, because the potential economic and communication difficulties that innovation may arise are important for the late majority. If the late majority is given extensive information about the benefits of new ideas by those who have previously been innovative, they may exhibit a positive attitude towards innovation (Rogers, 1995:249-250).

Laggards are traditionalists and the last innovation to be adopted by accounting of 16 % of adopters. Possessing almost no opinion leadership, laggards are being compared to the other adopter categories. They are fixated on the past, and all decisions have been made in terms of previous generations. While traditionalists generally need a lot of help with technology, their social communication and interaction is very limited. Therefore, they acquire information about innovations through face-to-face communication from individuals they trust more (Rogers, 1995:251).

5. Consumer Perception and Attitudes towards Domestic Production

In this study, attitudes and behaviors of consumers about domestic product consumption were examined. There is a point to be mentioned before this review. According to the regulation published in the Official Gazette dated 08.09.2018 and numbered 30539 and entered into force on 3/10/2018, the Article 5th of the Price Tag Regulation was amended and the information required to be included in the labels and lists; "Place of production of goods to be implemented by the date of commencement of the sale price and the unit price for goods Turkey, the Ministry determined and declared by the way, logo or mark" points have been added. In this direction, the "*Domestic Production*" logo has been prepared to attract the attention of consumers at first glance in order to show that the product is produced in our country in the sales of goods for consumers and shared with the public by the Ministry of Commerce (Ticaret Bakanlığı, 2018).

However, since the main object of consumer buying attitudes is the product, it is inevitable that the product category has an effect on the consumers' choice of domestic products. In some cases, product characteristics may affect product

preferences more strongly than domestic product perception (Hong and Wyer, 1990). Researches on the reasons why consumers prefer domestic and foreign products and the criteria they use when evaluating these products contain very different results. The reason for this is the differences between cultures and countries in terms of macro factors and the reason for each difference is that each individual has different information processing, evaluation and decision making processes and the criteria they use in these processes are different in terms of micro factors. It has been observed in some cases that consumers prefer domestic products first and in some cases tend to prefer foreign products instead of domestic products (Özçelik and Torlak, 2011). For example, Varma (1998) found that Indian consumers were in high demand for foreign goods and listed the reasons for the search as the status symbol, the inferiority complex, the increase in relations with the west, the increase in consumer income, the change in expectations and the openness of consumers to brands. Another example from Turkey to support domestic products is as follows. It has taken its place in the literature as consumer ethnocentrism and the best example of the behavior of buying domestic products, popular in the 1980s, "*Domestic goods of the country, every Turk should use it*" slogan can be said to have a perspective that manifests itself (Armağan and Gürsoy, 2011: 69). From a different viewpoint,

Consumers prefer products produced in their own countries first. If domestic products cannot be found or are not sufficient in terms of various features, then consumers prefer to buy products from countries with good commercial relations with their home countries. The consumer who buys a product of foreign origin tries to reduce the risk of the unknown by choosing the products of the countries with the same level of development or having strong commercial relations with the country (Okechuku, 1994).

In fact, consumers who take the concept of *domestic* economically generally have beliefs about their products' superiority. This belief does not mean that the products of the country are superior only in economic and functional areas; In addition, it assumes that it has more noble foundations based on ethics. In other words, it suggests that the purchase of foreign products harms the local economy, causes unemployment and is perceived as a non-patriotic behavior. This perception, which summarizes consumer behavior, causes some consumers to think that it is wrong to buy foreign origin products and thus, by supporting the purchase of domestic products; question the accuracy of receiving foreign-origin products (Shimp, 1984: 285). In another study, consumers were divided into two groups as nationalist and universalist in relation to the cultures of their countries. According to the model developed in the study, if individuals who form a culture have a sense of nationalism, they will probably be "nationalist". If their culture is at peace with the world, then individuals are defined as "universalist". Commitment to the nation lies at the basis of nationalism, which leads to a commitment to the nation in consumer attitudes and purchasing behaviors. The consumer group, defined as nationalist, buys local products and brands with the idea that buying foreign goods will harm the national economy. Consumers in the universalist group, on the other hand, have

a more universal view of the world as they have knowledge of international phenomena and try to create an international partnership (Rawwas et al, 1996). Studies addressing innovation in terms of differences between cultures and countries have also been conducted. Steenkamp, Hofstede, and Wedel (1999), in their study in 11 different countries, tried to identify the individual and national cultural variables of consumer innovation. The authors found that consumer innovativeness is negatively related to conservatism and that innovativeness declines with high ethnocentrism. Balabanis et al (2002) in their study, compare Czech Republic and Turkey and found that in both two countries increasing in openness to innovativeness bring about high consumer ethnocentrism. However, adaptation of innovation does not only depend on nationalism and culture, but also it depends on economy politics of a country. Hsu, Tian, & Xu (2014) investigated how the development of financial markets affects innovation using a data set of 32 developed and developing countries. As a result, it was stated that industries that are more dependent on external resources exhibit a higher level of innovation performance. In today's high technology, the spread of innovation and the consumers' tendency to innovation is happening easier and faster. Especially the speed and ease of use in accessing the data brought by the mobile technology that emerged in recent years affects the consumers' perception of innovation and these effect consumer's ethnocentric attitudes. In the study conducted by Leong, Hew, Tan, and Ooi (2013: 5613), the effect of the innovativeness variable on the perceived ease of use variable is examined and it is revealed that this effect is positive. Goldsmith and Foxall (2003), in their study, stated three different approaches in adopting innovation. These approaches; intrinsic innovativeness, interest-based innovativeness and consumer innovativeness. Intrinsic innovativeness is the willingness of a person to try something new, depending on personal characteristics. Internal innovativeness is a personality trait. Interest-specific innovativeness is the pioneering behavior that a person exhibits to stand out in a particular product category and the sector of interest. Consumer innovativeness is the first tendency to buy a new product. For adapting innovations these all approaches determine the consumer buying decision.

6. Methods and Methodology

In this study, it is aimed to determine consumers' perception and attitudes of domestic production applications in terms of following innovations. The study was conducted between 15 March and 30 June 2019 in sloppy and/or significant missing data are cancelled out. The available survey rate of 95% is considered sufficient to represent the population. Questionnaires are drawn up from the related literature. In this context, in the first part, Önal (2009) study was taken as the 'Adoption of Innovations Scale' and the scale was adapted and included in the questionnaire. In the second part, the CETSCALE scale developed by Shimp and Sharma (1987) in order to reveal consumer ethnocentric tendencies and which has been used in many international studies, has gone through the process of adapting the scale into Turkish. In order not to cause any errors and confusion about the expressions of the scale, the Turkish translation was checked by another researcher who had a good command of English and was put into the survey after the necessary corrections

were made. Both scales are prepared on 5-point Likert scale (1 - strongly disagree, 2 - disagree, 3 - undecided, 4 - agree, 5 - strongly agree). In the last section, questions are asked to determine the demographic characteristics of the respondents.

6.1. Sampling Process

The main population of the research is all consumers in Düzce. Since it is not possible to collect data from the whole population in terms of time and cost, a sample selection was made from the main population described above. Since the confidence interval generally accepted by the researchers in the social sciences is 95%, the sample size is obtained as 384 based on the Z value of 2.58. Accordingly, the sample size was determined and data were obtained from 389 consumers after missing and inaccurate surveys.

6.2. Analysis of information and data

Since it is known that factor analysis is a suitable tool for determining the variable structures in determining the validity of the adoption of innovation and CETSCALE scale used in the research (Hair et al., 1998: 94); in the determination of reliability, alpha coefficient method, which is widely studied, was used. In order to determine the consumer's attitude towards domestic product, a scale that was used in Ellialtı (2009)'s research was developed and advanced with the help of academicians acknowledged expert in the field.

7. Findings and Discussions

Demographic and socio-economic characteristics of the participants included in the study are shown in Table 1.

Table 1: Demographic Characteristics

Gender	**N (389)**	**%**	**Income Status**	**N (389)**	**%**
Male	168	43,2	Article I. ≤2020 ₺	147	37,8
Female	221	56,8	2021 ₺- 2999 ₺	60	15,4
Marital Status	**N (389)**	**%**	3000 ₺- 4499 ₺	87	22,4
Married	227	58,4	4500 ₺- 5999₺	64	16,5
Single	162	41,6	6000 -7999₺	18	4,6
			≥8000 ₺	13	3,3
Education Status	**N (389)**	**%**	**Occupation**	**N (389)**	**%**
Primary School	9	2,3	Housewife	43	11,1
High School	104	26,7	Artisan	13	3,3
Two-year Degree	44	11,3	Worker	15	3,9
Bachelor's Degree	184	47,3	Officer	102	26,2
Post Graduate	48	12,3	Self-employment	30	7,7
			Other	186	47,8

According to the table, 57% of the participants were women and 43% were males. The fact that 62.2% of the sample has a monthly net income over ₺ 2021 could make the research more interesting. In addition, it can be claimed that the sample is composed of high education and relatively young individuals.

When the scales used in the research are subjected to factor analysis, the results in Table 3 and Table 5 are obtained.

Table 2: Kaiser-Meyer-Olkin Measure of Sampling Adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,827
Bartlett's Test of Sphericity	Approx. Chi-Square	2231,875
	df	136
	Sig.	0,000

The data obtained from 389 questionnaire forms were analyzed using confirmatory factor analysis. KMO value was found to be 0.643 and Bartlett test result was significant (Sig = 0.000). In the first analysis, a 6-factor structure explaining 51,381% of the total variance was obtained. Three items with cross-factor loading (1, 2, 6, 9, 10, 14, 18, 21) were excluded from the scale and re-factor analysis was performed. In the confirmatory factor analysis with the remaining 16 items, a four-factor structure was found, and the KMO value was significant as 0.827 Bartlett test (Sig. = 0.000). The obtained four-factor structure explains 59,609% of the total variance and differs from the original scale.

Table 3: Confirmative Factor Analysis for Following and Diffusion of Innovations

Variables		**Factor Loads**	**Variables Explained**	**Alpha**
Factor I: Innovators			14,04	,76
Y3	I would like to use it immediately when a new product is released.	0,723		
Y4	I want to have the innovation right before other people discover it.	0,828		
Y5	When a new product is released, I would like to buy it immediately, regardless of price.	0,819		
Y7	I think innovations increase my standard of living.	0,675		
Factor II: Early Adapters			20,81	,82
Y8	The appearance of a product I buy is important to me.	0,571		
Y11	The type or size of innovation affects my purchase decision	0,633		
Y12	Feature of innovation affects my purchase decision	0,822		
Y13	The level of meeting the need for innovation affects my purchase decision	0,811		

Y15	I feel the need for additional information in innovations with high technical features.	0,566		
Y16	It affects my decision to purchase a product in a simpler structure and in use, which provides an advantage over the old product.	0,627		
Y17	Offering a free trial of a new product affects my decision-making level	0,628		
Factor III: Late Majority			9,73	0,69
Y19	I expect new products to become widespread	0,748		
Y20	I expect new products to become cheaper	0,745		
Factor IV: Laggards			15,01	0,78
Y22	I generally react to innovations. Because if I buy a product which I don't know, my money can squander away	0,813		
Y23	I am often skeptical of new products.	0,764		
Y24	I do not approve so many new products.	0,858		
Y25	I think innovations have increased the consumption frenzy.	0,629		

Factor analysis was also conducted to determine the sub-dimensions of attitudes and perceptions of consumers towards domestic production. According to the confirmatory factor analysis results, KMO value was found to be 0.643. In the analysis, a 5-factor structure explaining the total variance was obtained and then three items with cross-factor loads (7,10,13) were removed from the scale. In exploratory factor analysis with 19 items, KMO value was 0.917 and Bartlett test result was significant (Sig. = 0.000). The obtained four-factor structure explains 64,232% of the total variance.

Table 4: Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,917
Bartlett's Test of Sphericity	Approx. Chi-Square	3787,403
	df	171
	Sig.	0,000

Table 5: Confirmative Factor Analysis for Attitudes of Consumers towards Domestic Product

Variables		**Factor Loads**	**Variables Explained**	**Alpha**
Factor V			9,482	0,739
TM1	Purchasing domestic products increases employment.	0,806		

TM2	Buying domestic products reduces unemployment.	0,867		
Factor VI:			21,836	0,883
TM3	Domestic production reduces dependence on foreign countries.	0,620		
TM4	Turkish people should always buy Turkish products instead of imported ones.	0,697		
TM5	Only products that cannot be found in Turkey must be imported	0,633		
TM6	Turkish-made products must be purchased and Turkey to continue to operate.	0,748		
TM8	Instead of allowing other countries to become rich by selling goods to us, we buy products made in Turkey.	0,738		
TM9	Domestic production contributes to the enrichment of the country.	0,665		
TM11	Domestic production increases the market value of TL (₺).	0,598		
Factor VII:			19,225	0,849
TM14	Domestic production positively reflects on technological developments.	0,741		
TM16	I prefer to support Turkish products, although it costs me more in the long run.	0,583		
TM17	Domestic production increases the quality standards.	0,715		
TM18	More domestic production gives companies more competitive advantage.	0,751		
TM21	Domestic production reduces costs.	0,582		
TM22	Domestic production enables the emergence of domestic brands worldwide.	0,646		
Factor VIII:			13,719	0 ,757
TM12	It is always best to buy Turkish products.	0,604		
TM15	Barriers must be placed on all imported products.	0,827		
TM19	For the reduction of inflows to Turkey, foreign products should be taxed at higher rates.	0,761		
TM20	We should only buy products that we cannot produce in our own country from foreign countries.	0,540		

In this research, Structural Equation Modeling (SEM) and Path analysis were conducted in this research in order to follow the innovations of consumers and show the relationship between their perceptions and attitudes towards domestic production practices. Path analysis provides a systematic and comprehensive examination of a complex research problem in a single process by modeling the relationships between one or more dependent and independent variables, compared to commonly use statistical techniques such as regression (Anderson and Gerbing, 1988). In more general terms, multiple regression analyzes are performed at the same time, and path coefficients, variance values and regression weights between the variables in the structural model are given in Figure 1.

Coefficients show how much a variable changes depending on the other variables affecting it. First the compatibility of the model was tested by considering the values that the researchers concentrated more and the goodness of fit values obtained were as follows:

Table 6: Goodness of Fit Values of the Model

Goodness of Fit	Value	Acceptability
X^2/ df	2,775	✓
RMSEA	0,070	✓
GFI	0,812	✓
CFI	0,834	✓
NFI	0,764	✓
TLI	0,818	✓

In the model, the coefficients of error (e1-e2; e10-e11; e26-e27; e28-e29; e33-e34; e34-e35) of some variables were correlated and meaningless paths were removed from the model and the analysis was repeated. The revised model obtained as a result of the modifications has reached acceptable a values in the goodness of fit indices values (RMSA = 0.70 GFI = 0.80, NFI = 0.75, CFI = 0.82, TLI = 0.80). For RMSEA, values below 0.05 indicate a perfect fit, and values below 0.08 indicate an acceptable value fit (Browne & Cudeck, 1993). (GFI) expresses the ratio of the explained variance to the total variance, and the initial value is accepted as 0.8, and it is compatible with values close to 1. For the Comparative Fit Index (CFI), the value between 0 and 1 and being close to 1 is sufficient for the fit criterion. For (NFI) values of 0.95 and above show a good fit, while values of 0.70 and above are acceptable and the same is valid for (TLI) (Byrne, 2010).

As a result, goodness of fit values obtained from the analysis show that the model is acceptable. In other words, the data obtained from the research corresponds to the predicted theoretical structure of the model. Figure 1 that shows paths to conform a model detected the model of relationship between variables is given as follows and the estimation parameters in the structural model are given in Table 7.

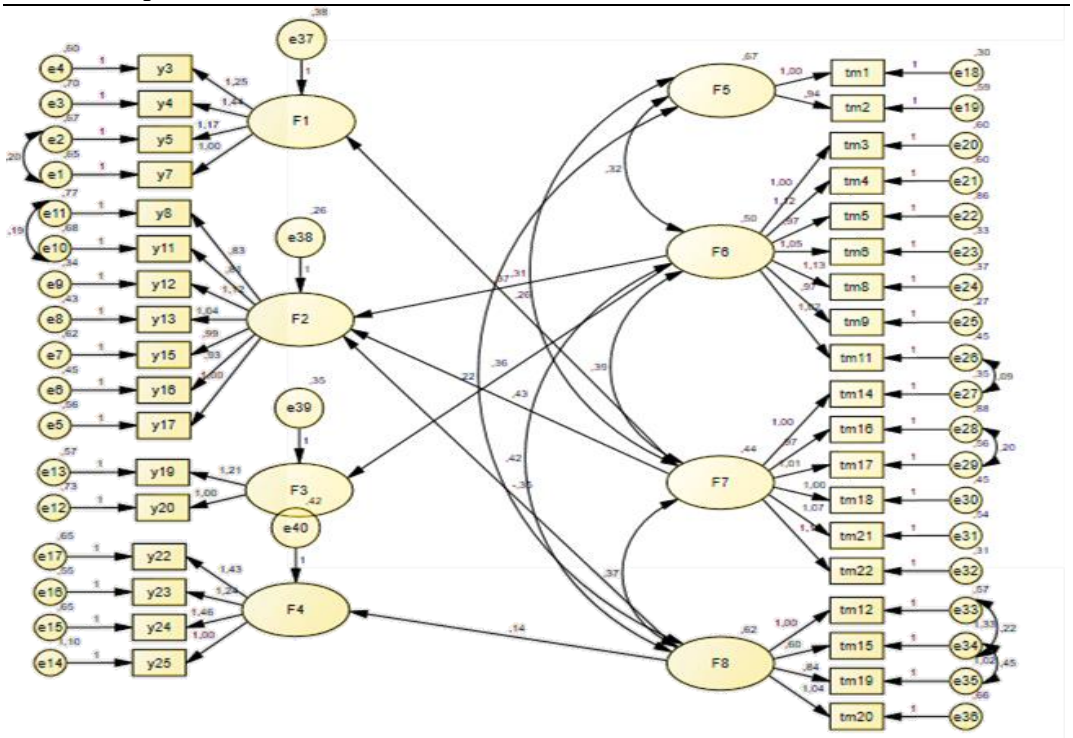

Figure 1: Path Coefficients of Model

Table 5: Estimation Parameters of the Model

Estimation Parameters	Standardized Weights	Unstandardized Weights	P
Scaling Model			
F6 → F2	0,372	0,314	**0,016**
F8 → F4	0,225	0,138	**0,010**
F6 → F3	0,406	0,364	**0,000**
F7 → F1	0,506	0,429	**0,000**
F6 → F1	-0,321	-0,260	**0,046**
F7 → F2	0,396	0,365	**0,000**
F8 → F2	-0,327	-0,249	**0,000**

When the regression weights are evaluated in terms of coefficients having values less than 0.10, the effect is small; It is medium to be around 0.30; 0.50 and above means that it is at a high level (Simsek, 2007: 126). When Table 5 is analyzed, the most significant effect is seen (rw= 0,429 and p=0,000) among the innovators that is factor 7 with factor 1, which indicates increasing in domestic production, technological developments, quality standards, competition and the emergence of domestic brands, while reducing the costs of consumers. In other words, consumers taking technological developments, quality, competitiveness and cost advantage in the long term into account, take more risks, and are in a hurry when a new domestic product is released. Balabanis, and Melewe Mueller (2002: 29), in their research,

on the citizens of Turkey and Czech Republic, examined the relationship between internationalization, to be open to innovation, conservatism, and consumer ethnocentrism. In line with this study, there is a positive relationship between being open to innovations and consumer ethnocentrism in support of this study. In other words, consumer ethnocentrism was measured to be higher in societies consisting of individuals open to innovation.

The second highest value has a positive effect on factor 7 and factor 2. (rw = 0,365 and p= 0,00). Factor 2 represents early adopters. Early adopters are crucial to the success of a new product. Because they affect their friends and their environment through word of mouth communication; group members are interested and influenced by their views. Early adopters observe the first innovators who use the product and then turn to the same product after seeing that they are successful. They are more advanced than average consumers in adapting to innovations; therefore they form a model in the market. The risk they bear is lower than that of innovators. They have to act more rationally and thoughtful (Rogers, 1995). Therefore, it is the priority of this group to focus more on domestic goods as a cost-reducing factor and to be a reference to the consumer groups that adopt it. Because they feel that they have to make their plans in the longer term. Kavak, Sunaoğlu and Taner (2016) stated that one feature of innovators and early adopters are that they have holistic thinking structure and on the other hand, followers have analytical thinking style. In other words, it can be said that consumers with holistic thinking show more innovative behavior (innovators and early adopters) than consumers with analytical thinking. The common finding is that; early adopters are trying to set an example for consumers with a sense of representation and aiming at more domestic goods and thus have the idea to benefit both in terms of their own costs and in terms of national income.

Another is that factor 6 has a significant positive effect on factor 3 (rw =0,364 and p =0,000). Consumers representing factor 6, which means more conservatism and protection of domestic products, tend to focus more on domestic products because of the local economy and labor. This consumer group affects the late majority. This group accepts innovation immediately after average consumers adopt innovation. Adoption of innovation occurs for economic reasons or under pressure from the environment (Rogers, 1995). In the findings of Asil and Kaya's (2013) study, related to consumer ethnocentrisms of respondents, such variables as "domestic products should always be used instead of foreign products", "only products not available in our country should be imported", "Buy Turkish made products, Turks should not be unemployed", "I think Turkish products come first, then and always", we should buy Turkish products instead of allowing other countries to become rich by selling goods to us", products should not be imported from other countries unless compelled to do so", "Turks should not buy foreign products because this will harm the Turkish economy and cause unemployment", "only we have to buy the products we cannot produce in our own country from foreign countries" averages of the responses are above the general average of the scale. In other words, the Turkish consumer is very sensitive about these issues and the advertising effect is very low

for this group and national feelings are the priority. Factor 6 significantly effects factor 1 negatively (rw = -0,260 and p =0,046). In fact, this is a possible outcome that can be expected. Innovators are hard-working, dashing, challenging and risk-taking; they have the financial resources to meet the losses caused by innovations, have the ability to understand and apply complex technical information, and are able to cope with the high uncertainty created by innovation. However, consumers who act by taking into account the benefits to their country rather than adopting new products indifferently will make product choices by considering more reference groups. One effect is the negative and significant relationship between factor 8 and factor 2 (rw = -0,249 and p =0,000). Factor 8 refers to the group of consumers representing high taxation on imported products and solid conservatism involving various barriers. When the consumer's point of view of domestic products is based on extremely strict rules, it is almost hostile towards imported products. Together with boycotting imported products and encouraging domestic products in all areas, this group of consumers can afford to take more risks, and when brand dependency is considered to be less, they will tend to make decisions suddenly and follow innovations only because of the perception of Turkish goods and go to buying behavior. In a study conducted on this subject, it was concluded that nationalist consumers tend to be more dependent on their own country products and because of this tendency they find Turkish brands better than foreign brands (Armağan and Gürsoy, 2011: 76). In this study, it has been revealed that ethnocentric-prone consumers prefer the domestic one of the two brands with the same characteristics, they contribute to the national economy by choosing domestic products and believe that the welfare level will increase with this behavior (Armağan and Gürsoy, 2011: 76).

Factor 6 also effects factor 2 positively and significant. (rw = 0,232 and p =0,048). Even if they share many things in common with innovators, especially in the case of symbolic products such as clothing, cosmetics, etc., it is more important to engage in socially acceptable behavior for early adopters (Rogers, 1995). Because adopting common values and leading other groups is the main feature of this consumer group. In order for domestic product and import product reduction discourse to be reflected more intensely on consumption behavior, in addition to the balance of price and quality of domestic product, brand strength must be able to surpass foreign competitors and at least equalize itself with others. As it can be seen, many reasons cause risk factors on domestic production and consumers expect these products to be used by a certain group and they aim to start operations thereafter.

One of the results in the table is that factor 8 positively effects factor 4. (rw =0,180 and p =0,010) It takes a very long time for the laggards to adopt innovations. When they adopt innovations, those products are already replaced by a new product. The last ones are people with low education, low social status and low income. They communicate with those who end up like themselves, they are sources of information. This group has no opinion leaders (Rogers, 1995). As a result of the strict domestic product nationalism contained in Factor 8, or in other words, the hostility fed to imported products, consumers may adopt a more skeptical approach

towards products, even if the products have the domestic production logo or label. In Turkey, when it was first introduced in the market related to domestic production logo, it was in the following discussion to the forefront in the display: Consumers will decide how of what is native, was the subject of debate will be considered on domestic products. Consumer opinion prevailing in the society were as follows: For example, a packaging of the pulses has been imported by a local company in Turkey when done, is put on 869 barcode. Or will we use the same label for tomatoes whose seeds were taken from Israel but grown in our country? There are quite a few of these examples. If the only criterion would be the 869 barcode number, it would seem a bit dubious that the desired target would be captured. With this approach, it is possible that new domestic products will reach the end consumer groups after passing through the filter of the market. Here the study was concluded and presented recommendations for customer, producer and future research.

6. Conclusion and Recommendations

In this study, it is seen that consumers react to domestic production practices in terms of diffusion and follow-up of innovations. It has been observed that some consumers are able to change their traditional purchasing behavior according to the perception of domestic production, while others continue their past purchasing styles and behavior with the effect of traditionalism and conservatism, or remain unresponsive to changes. It is seen that technological development, quality standard, and cost of product are effective on innovators and early adapters, however when conservatism and protection perceptions of consumer against domestic product increase perception of innovativeness detain and it comprises late majority. Social status, low income and education effects laggards which is related to people who have lack of communication and social intractability.

The process of adopting an innovation for the individual is related to the evaluation of this innovation according to current practices. The person does not immediately reveal his positive or negative response to innovation; he can decide to apply it after a certain examination and observation. This will be the same in domestic production applications. Although the individual takes into consideration the concepts of " return to domestic " and " national capital " required by the economic and social conditions in the country, it can be expected that the product adopts innovation and shows sustainable purchasing behavior, and the product will be dependent on the degree of customer expectation and satisfaction. The important point here is the applications that will ensure the adoption of innovation. Innovation should be better than the idea or application it will replace (Crouch, and Chamala, 1981). Otherwise, its sustainability will not be ensured. Innovations fulfil very important functions such as changing the production style and understanding of production in developing societies. In addition, with the emergence of beneficial results of innovations at the domestic production point, producers are assisted to take a positive attitude towards new thoughts and practices and to take action towards change.

In order for a domestic product to be launched as a new product to be long-lasting, it must be able to take its place in the market and have a quality value between the

buyer and user in the past years, when it was said that Turkish products, poor quality products appeared in mind. Of course, the people who aim to make poor quality products and defraud the people have great contribution, as well as the size of the competing companies and their market shares could affect the firms. But this perception has been changing in recent years, which will affect the degree to which consumers adopt innovations.

There are some limitations in the study. Preferring the sampling technique from random methods constitutes a constraint. Researches that will be carried out by using random techniques and by increasing the sample size will allow to reach more generalizable findings. The limitation of the study to Düzce province only constituted the other constraint. In future studies, attitudes and perceptions of consumers in different cities towards innovations for domestic products can be measured. The findings to be obtained with the sample to be selected in different countries will provide the opportunity to compare with the research results in question. Thus, the source of the differences in domestic product preferences of individuals living in different cultures and the factors affecting the preferences can be examined. Including different variables into the research model by analyzing the literature may mediate to reach different findings. It is thought that the perception of domestic goods may have an impact on product preference.

References

Anderson, J.C., Gerbing, D.W. (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-step Approach", *Psychological Bulletin*, 103(3): 411.

Armağan, E.A., Gürsoy, Ö. (2011), "Satın Alma Kararlarında Tüketici Etnosentrizmi ve Menşe Ülke Etkisinin Cetscale Ölçeği ile Değerlendirilmesi", *Organizasyon ve Yönetim Bilimleri Dergisi,* 3(2): 67-77.

Asil, H., Kaya, İ. (2013), "Türk Tüketicilerin Etnosentrik Eğilimlerinin Belirlenmesi Üzerine Bir Araştırma", *Istanbul University Journal of the School of Business Administration*, 42(1): 113–132.

Balabanis, G., Mueller, R., Melewar, T.C. (2002), "The Human Values' Lenses of Country of Origin Images", *International Marketing Review*, 19(6): 582–610.

Blackwell, R.D., Miniard, P.W., Engel, J.F. (2006), *Consumer Behavior*, 10th Edition, Natorp Boulevard Mason: Thomson Higher Education.

Byrne B.M. (2010), *Testing for the Factorial Validity of a Theoretical Construct. Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming*, New York: Routledge, 74-82.

Crouch, B.R., Chamala, S., (1981), *Extension Education and Rural Development*, 2, John Wiley and Sons.

Elçi, S. (2006). *İnovasyon: Kalkınmanın ve Rekabetin Anahtarı.* Nova Yayıncılık, Ankara.

Goldsmith R.E., Hofacker, C.F. (1991), "Measuring Consumer Innovativeness", *Journal of the Academy of Marketing Science*, 19(3): 209-221.

Goldsmith, R.E., Flynn, L.R. (1993), "Models of Enduring Product Involvement and Opinion Leadership in Swift", *Association of Marketing Theory and Practice Proceedings*, 2: 378-386.

Goldsmith, R. E., Foxall, G. R. (2003), *The Measurement of Innovativeness*, The International Handbook On Innovation, 321-330.

Hair, Joseph F., Anderson, Rolph E., Tatham, R. E., William, C.B. (1998), *Multivariate Data Analysis with Readings*, Fifth Edition, New York: Prentice-Hall International Inc.

Hirschman, E.C. (1980), "Innovativeness, Novelty Seeking, And Consumer Creativity", *Journal of Consumer Research*, 7(3): 283-295.

Hong, S, Wyer, R.S. (1990), "Determinants of Product Evaluation: Effects of the Time Interval between Knowledge of a Product's Country of Origin and Information About Its Specific Attributes", *Journal of Consumer Research*, 17(3): 277-288.

Hsu, P.H., Tian, X., Xu, Y. (2014), "Financial Development and Innovation: Cross-Country Evidence", *Journal of Financial Economics*, 112(1): 116–135.

Kavak, B., Sunaoğlu, Ş.K., Taner, N. (2016), "Yeniliği Benimseyen Kategorilerinin Bütüncül ve Analitik Düşünme Açısından Farklılıkları: Akıllı Telefonlar Için Bir İnceleme", *Pazarlama ve Pazarlama Araştırmaları Dergisi*, 20(1): 179-200.

Leong, L. Y., Hew, T. S., Tan, G. W. H., Ooi, K. B. (2013), "Predicting the Determinants of the NFC-Enabled Mobile Credit Card Acceptance*:* A Neural Networks Approach", *Expert Systems with Applications*, 40 (14): 5604-5620.

Midgley, D.F., Dowling, G.R. (1978), "Innovativeness: The Concept and Its Measurement", *Journal of Consumer Research*, 4 (4): 229–242.

Odabaşı, Y. (1995), *Pazarlama İletişimi*, Anadolu Üniversitesi Yayınları 851, Eskişehir.

Okechuku, C. (1994), "The Importance of Product COO", *European Journal of Marketing*, 28(4): 5-19

Önal, G. (2009), *Yeniliğe Karşı Tüketici Tepkisi ve Tüketicilerin Yenilikleri Benimseme Düzeyleri ile İlgili Isparta İline Yönelik Bir Uygulama* (Doctoral Dissertation, Yüksek Lisans Tezi, Afyonkarahisar: Afyon Kocatepe Üniversitesi, Sosyal Bilimler Enstitüsü).

Özçelik, D.G., Torlak, Ö. (2011), ''Marka Kişiliği Algısı ile Etnosentrik Eğilimler Arasındaki İlişki: Levis ve Mavi Jeans Üzerine Bir Uygulama'', *Ege Akademik Bakış*, 11 (3): 361-377.

Pennıng, J., Kım, H. (2009), "Innovation and Strategic Renewal in Mature Markets: A Study of the Tennis Racket Industry", *Organization Science*, 20(2): 368-383.

Peres, R., Muller, E., Mahajan, V. (2010), "Innovation Diffusion and New Product Growth Models: A Critical Review and Research Directions", *International Journal of Research in Marketing*, 27(2): 91-106.

Rawwas, M. Y., Rajendran., K. N., Wuehrer, G. A. (1996), "The Influence of Worldmindedness and Nationalism on Consumer Evaluation of Domestic and Foreign Products", *International Marketing Review*, 13(2): 20-38.

Robertson, T.S. (1971), *Innovative Behavior and Communication*, Holt, Rinehart and Winston, New York.

Rogers, E.M. (2003). *Diffusion of Innovations*, A Division of Simon and Schuster, Inc. New York.

Shergill S. G., Nargundkar, R. (2005), "Market Orientation, Marketing Innovation as Performance Drivers: Extending the Paradigm", *Journal of Global Marketing*, 19(1): 27-44.

Shimp, T.A. (1984), "Consumer Ethnocentrism: The Concept and A Preliminary Empirical Test", *NA-Advance in Consumer Research*, 11: 285-291

Steenkamp, B. E. M., Hofstede, F. T., Wedel, M. (1999), "A Cross-National Investigation into the Individual and National Cultural Antecedents of Consumer Innovativeness", American *Marketing Association*, 63(2): 55-69.

Şimşek, Ö. F. (2007). *Yapısal Eşitlik Modellemesine Giriş: Temel İlkeler ve LISREL Uygulamaları*. Ekinoks Yayınları, Ankara.

Tellis, G. J., Yin, E., Bell, S. (2009), "Global Consumer Innovativeness: Cross Country Differences and Demographic Commonalities", *Journal of International Marketing*, 17(2): 1 – 22.

Wang, C. K., Lamb, C. W. (1980), "Foreign Environmental Factors Influencing American Consumers' Predispositions Toward European Products", *Academy of Marketing Science Journal*, *8*(4): 345.

Varma, P. (1998), "The Middle Comes First It Happens Hota Hai, the Great Indian Middle Class", Outlook India, https://magazine.outlookindia.com/story/the-middle-comes-first-it-happens-hota-hai/235972 (25.02.2020).