# BANU KÜLTER DEMIRGÜNEŞ 

Ahi Evran University, Turkey

## BÜLENT ÖZSAÇMACI

Çankaya University, Turkey

## EXPLORING THE EFFECT OF CONSUMERS' FOOD-RELATED DECISION MAKING STYLES ON NATIONAL BRAND VS. STORE BRAND CHOICE


#### Abstract

: It is important for marketers to understand the individuals' buying decisions in a competitive environment. The concept of decision making style is one of the key determinants of consumers' behavioral patterns. This study aims to explore the effects of consumers' decision making styles on buying national and store branded food products. To examine consumer decision making styles, Sproles and Kendall's (1986) The Consumer Style Inventory (CSI) is adopted in the study. The framework of this study is based on eight consumer decision making style, expected to shape consumers' national and store brand choice on food products. The empirical analysis is based on data obtained from consumers living in Kırşehir, a city in Turkey. Questionnaires was handed over to 500 customer of retail stores both selling national and their own brands. Firstly, exploratory factor analysis is used to confirm the model, then multiple regression analysis is used to test the hypothesis and to compare consumer's national and store brand choice, in the context of their decision making styles. The study is expected to help retailers develop suitable strategies for national and store branded food products. In fact it is important to develop a certain and an accurate understanding of consumers' decision making styles for successful marketing and advertising strategies. Besides, different marketing strategies for both national and store branded food products can be tailored to the characteristics of consumers.


## Keywords:

Consumer Decision Making Styles, The Consumer Style Inventory, Store Brand, National Brand
JEL Classification: M31

## 1. Introduction

The main purpose of marketing function is to satisfy and compensate the needs of the consumers. To accomplish this objective, may be the first thing to do is analyzing consumers behavior to figure out; how, where and why the product or brand is possessed or purchased by the consumer. Therefore, marketing practitioners should track and analyze consumers' needs, preferences and wants constantly in order to build up successful strategic marketing decisions.

For skilled marketers, customers are viewed as the core of the business and organizational culture rooted in the marketing concepts, which referred to production, product, and selling concepts by using major strategic tools of segmentation, targeting, and positioning to build successful relationships emphasizing customer value and retention. In order to fully understand different consumer needs reflecting on their decision-making, the research areas about consumer behavior have expanded not only from economic theory but also to other disciplines, including psychology, sociology, social psychology, and anthology (Schiffman and Kanuk, 2006).

Although consumption is a global activity, we should specifically understand consumers' cultures and patterns in order to fully understand this activity. In consumer cultures the routine act of consumption is a central value that infuses every aspect of life (Allen and Anderson, 1994). Furthermore, with the economic, social and technological developments, rapidly evolving new products and services shape consumer trends and lifestyles. The development of global markets not only resulted in an additional product choices and diverse marketing activities, but also made consumers' decision-making even more complicated. Understanding consumer decision-making styles is becoming more significant due to its complicated relationship with shopping behavior.

On one hand, existing consumers were facing more challenges and alternatives to choose products. On the other hand, managers also dealing with the difficulty of reaching out to their target markets and the complications of endorsing sales using the marketing strategies (Lihra and Graf, 2007; Wind, 2008, Henrie and Taylor, 2009). One way to confront with this issue is to explore and understand consumer behavior and consumer decision making styles and concepts. One of the important factors influencing consumer purchase behavior is the decision-making styles, which are crucial for understanding consumer shopping behavior and for developing successful marketing strategies.

Schiffman and Kanuk (2006) define consumer behavior as "the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs". Theoretically, these behaviors were reflections of both the cognitive and emotional aspects of consumer decision-making and could be influenced through cross-disciplines of psychology,
sociology, social psychology, anthropology, and economics (Sproles and Kendall, 1986; Schiffman and Kanuk, 2006; Gordon, 2008). Consumer decision making process involves several steps (Nahavandi, 2006; Robbins and Judge, 2007). At first consumers process information and interact with their desired environment and then make a decision based on their available alternatives (Bettman, 1979).

The decision making process is a multivariate subject in terms of consumer purchasing behavior context. There has a number of factors that affect each individual decision separately. The study of individual consumer behavior while choosing between alternative products or brands has been a major research area in the field of consumer interactions to identify the basic characteristics of decision-making styles. This research is based on consumer decision making styles and its effect on foodrelated national and store brand choice. Based on the empirical research of Sproles and Kendall (1986), eight decision-making styles are categorized to influence consumer purchase decisions while purchasing in the marketplace. Sproles and Kendall (1986) declared that "this identification helps to profile an individual's consumer style, educate consumers about their specific decision-making characteristics, and consult families on financial management".

This current study is conducted to determine whether consumer-decision making styles significantly affect purchasing national and store brand food products. Moreover, this study also profiles consumer decision-making styles by using the Consumer Styles Inventory (CSI) instrument to understand and predict consumer behaviors.

Store brands or private label products are basically designed to imitate the leading national brand, which deals with the relative quality measure and the relative consumer's "quality" preference (Toommongkol, 2011, p.102). The Private Label Manufacturers Association (PLMA) reports that store brands, or private labels, account for one of every five items sold every day in U.S. supermarkets, drug chains, and mass merchandisers these days (www.plma.com). With this growing importance of store brands in retailing, practitioners are in search of innovative strategic guidelines to take the full advantage of store brands. This trend has prompted marketing academicians to address various issues related to store brands, such as the factors for store brand success (Dhar and Hoch 1997), the positioning of store brands (Sayman et al., 2002; Du et al., 2005), the effect of store brand introduction (Raju et al., 1995; Chintagunta et al., 2003) and the impact of store brand introduction on channel price leadership and optimum price differentials between store vs. national brands (Sethuraman and Cole, 1999) and the optimal product line design for store brands (Chung, 2008).

Some of the global researches explore that the importance and the market share of store brands increases rapidly. Store brands are most developed in Europe, particularly in the Western markets. Switzerland has the highest private-label share (in
the region and around the world) at $45 \%$, Turkey has the moderate share at $14 \%$ (The Nielsen Company, 2014). Store brands considered as an alternative to manufacturer brands, is a period of more than 30 years in particular have shown a significant level of development across the US and Europe (Uçar and Duff, 2008). Average sales volume is about $\$ 400$ billion on store brands worldwide, and is around one billion dollars in Turkey. Sapmaz and Yercan (2015) conducted a study in Turkey to explore the purchasing behavior of store brand food products against national brand food products in respect to prevailing product features such as price, quality, food safety and brand awareness. The researchers expressed that the consumers have rather preferred manufacturer brand food products than store brand food products and they also determined that the most efficient product quality in the preference of the consumers is the food safety.

Food retailing constitutes almost half of the total retail industry in Turkey. It was 152 billion dollars in 2010 and it is reached to $\$ 165$ billion in 2013, an increase of $9 \%$ of the food retail. Between the years of 2013-2017, it is expected to grow by $8 \%$ in food retailing (ATIG Report, 2015).

This study will contribute to the consumer behavior and consumer decision making styles literature by comparing consumers' store brand and national brand food product choices in terms of different decision making styles. While several earlier researches focus on general shopping styles mostly in product-neutral, catalogue or apparel settings (McDonald, 1993; Mitchell and Bates, 1998; Hiu et al., 2001; Akturan and Tezcan, 2007; Firat, 2011), many previous studies (Hafstrom et al., 1992; Lysonski et al., 1996; Walsh et al., 2001; Kavas and Yeşilada, 2007; Anic et al., 2010) examine the role of demographic characteristics on consumer decision making styles. That means decision making styles are mostly examined as dependent variable and the factors (e.g. different cultures, demographic characteristics) affecting them have been researched. Different from these studies, the current study aims to define the effect of consumers' food-related decision making styles on national and store brand choices and to see which styles have more influence on national brand over store brand choice or vice versa. This article will also help us to observe the choices on national and store brand food products based on demographic factors. To our best knowledge, In Turkey, there has no single study that has adapted Consumer Styles Inventory (CSI) to compare the interaction with national and store brand choice. Besides, this study adopts one of the most comprehensive consumer decision making instrument developed by Sproles and Kendall (1986) and empirically test it on brand choices.

Besides its theoretical contributions, another contribution of this study is to present strategies for marketers to position national and store brand food products, in the context of certain decision making styles. Due to rapid increase and important market share of store brands, it is necessary to examine store brands and national brands separately and make comparison between them in terms of consumer decision making styles. Thus, this study is expected to help retailers develop suitable strategies
for national and store brand food products. Different marketing strategies for both national and store brand food products can be tailored to the characteristics of consumer.

This study composes of several parts. The next part includes theoretical background with the crucial topics for this study. Consumer decision making process, consumer's decision making styles, consumer styles inventory and national and store brand literature are presented and research hypotheses are defined based on related literature. Then, research methodology is defined and research hypotheses are tested in the third part of the study. The results are discussed in the last section and finally, study concludes with implications for future researches.

## 2. Theoretical Background

### 2.1. Consumer Behavior and Consumer Decision Making Styles

Consumer decision-making is defined as the behavior patterns of consumers that precede, determine and follow the decision making process for the acquisition of need satisfying products, ideas or services (Du Plessis and Rousseau, 1999). Consumers make decisions in order to reach their goals, which include making the best choice among alternative possibilities, reducing the effort in making the decision, minimizing negative emotions and maximizing the ability to justify the decision. In summary, consumer decision-making is a constructive process (Mowen and Minor, 2000).

Decision-making models explore how consumers gather and process information, evaluate alternatives and reach conclusions (Arroba, 1977). There have been a number of general decision-making models proposed over the years (for instance; Deacon and Firebaugh, 1975; Rice and Tucker, 1986; Goldsmith, 1996; Garman, 2002). Bettman (1979) argues that consumer decision-making is a complex process and consumers must constantly gather and process information and evaluate alternatives in this process. Consumers take many things (e.g. price, quality) into consideration when making their decisions. For example, price has been accepted as an important indicator of quality when no other information is available (Jacoby, 1976); and several researchers have stated the influence of store and brand loyalty on consumer decision-making (Jacoby and Chestnut 1978; Miller and Stafford, 2001; Garman, 2002). However, it was not until Sproles (1985) and Sproles and Kendall (1986) conceptualized the Consumer Styles Inventory (CSI) that there was an instrument to systematically measure consumer decision-making. Past studies of consumer decision making styles have helped researchers to understand shopping behaviors, and advertisers and marketers to develop marketing tools based on decision styles of various consumer groups.

Since Sproles and Kendall (1986) created the Consumer Styles Inventory (CSI), a number of research projects followed this study and profiled consumer decision-
making styles in different cultures (Hafstrom et al., 1992; Lysonski et al., 1996; Fan and Xiao, 1998; Mitchell and Bates, 1998; Walsh et al., 2001; Wang et al., 2004; Gönen and Özmete, 2006; Schiffman and Kanuk, 2006; Mokhlis and Salleh, 2009).

Lynsonski et al. (1996) highlighted consumer decision styles in three categories: (1) the consumer typology approach (e.g., Darden and Ashton 1974; Moschis 1976); (2) the psychographics/lifestyle approach (e.g., Lastovicka, 1982); and (3) the consumer characteristics approach (e.g., Sproles and Kendall, 1986; Sproles and Sproles, 1990). Although all of these approaches basically share the same fundamental idea that consumer behavior concerning brands, prices, quality, and etc., deals decisionmaking styles, the consumer characteristics approach, which focuses on the mental orientation of consumers in making decision is used and appears to be the most effective one (Lynsonski, et al., 1996, p. 11). This type of approach assumes that consumers follow certain decision-making traits to handle their shopping tasks. Traits that have been identified are, for instance, quality consciousness (Darden and Ashton, 1974) or brand and store loyalty (Moschis, 1976). Sproles and Kendall (1986) combined these and additional traits to develop a consumer decision-making styles list, and called consumer styles inventory (CSI).

Consumer decision-making refers to each individual consumer behavior toward choosing between alternative products (Sproles and Kendall, 1986). The Consumer Styles Inventory (CSI) is based upon the assumption that individual decision-making dimensions (e.g., psychographic, cognitive and personality characteristics) influence an individual's decision in consumer situations (Arroba, 1977; Sproles and Kendall, 1986). Through empirical research, Sproles and Kendall (1986) defined a consumer decision-making style as "a mental orientation characterizing a consumer's approach to making choices" (p. 268). The 40-item CSI was developed based upon basic mental characteristics of consumers making marketplace decisions and researchers conceptualized to eight characteristics of consumer decision-making styles as follows (Sproles and Sproles, 1990, p. 137):

Perfectionistic and high-quality conscious consumer: This trait is characterized by a consumer who searches the very best quality in products. Consumers with this style are expected to shop more carefully and more rationally. Often, they are not satisfied with the good enough products.

Brand-conscious and price equal quality consumer: Brand consciousness is defined as consumer orientation towards buying the expensive, well known national brands, believing that the higher the price of a product, the better the quality. They also prefer best-selling and advertised brands.

Novelty-fashion conscious consumer: This factor characterizes novelty seekers, who find seeking out new things pleasurable. Consumers with this style like up-to date
styles, with the intent of gaining excitement and pleasure from buying a large variety of new things.

Price-conscious, value-for-money consumer: This factor measures price and value for money consciousness. People scoring high on this trait would be particularly conscious of sale prices and lower prices in general and, more importantly, are concerned with getting the best value for their money. These consumers are likely to be comparison shoppers.

Recreational and hedonistic conscious consumer: Consumers scoring high on this factor view shopping as recreation and entertainment. Consumers with high level of this trait find the shopping as a pleasant activity and shop just for the fun of it.

Impulsive, careless consumer: In contrast with the perfectionism, impulsiveness or carelessness dimension measures an orientation that is characterized by careless and impulsive shopping. These consumers pay less attention to the price they spend or value for money. That is, these consumers do not plan their shopping.

Confused by over-choice consumer: Confused by over-choice style of decisionmaking characterizes consumers experiencing an overload of information. Overload of information can be caused because there are too many brands and stores. High scores on this characteristic perceive many brands and stores from which to and have difficulty in making choices.

Habitual, brand-loyal consumer: People who have high scores on this factor, unlike the variety seeking behavior of novelty conscious consumers, have favorite brands and stores and have formed habits in choosing these in a repetitive manner. They exhibit a strong tendency to stick with certain brands and stores while shopping.

Some of the researchers have used the CSI to study a number of diverse populations and environments including New Zealand (Durvasula et al., 1993; Lysonski et al., 1996), China (Fan and Xiao, 1998), Korea (Hafstrom et al., 1992), Malaysia (Kamaruddin and Mokhlis, 2003), United Kingdom (Mitchell and Bates, 1998; Bakewell and Mitchell, 2004), Germany (Walsh et al., 2001), Macedonia (Anić et al., 2010) and Turkey (Ünal and Erciş, 2006; Akturan and Tezcan, 2007; Fırat, 2011). Many of these studies have revealed resemblances and differences among the main consumer decision making styles, which could be explained by cultural, demographical or economical differences.

Through examining past studies, it was observed that some modifications are made in the application of CSI instrument. For instance, some consumer decision-making styles were removed (Hafstrom et al., 1992; Lysonski et al., 1996; Hung, 2004; Gönen and Özmete, 2006; Wesley et al., 2006; Kavas and Yeşilada, 2007; Mokhlis and Salleh, 2009; Mishra, 2010;) or new ones were created, such as time-energy
conserving (Hafstrom et al., 1992; Fan and Xiao, 1998; Kavas and Yeşilada, 2007; Hanzaee, 2009; Mokhlis and Salleh, 2009), time consciousness (Fan and Xiao, 1998; Gönen and Özmete, 2006), information-utilization (Fan and Xiao, 1998), variety seeking (Walsh et al., 2001; Bauer et al., 2006; Hanzaee, 2009; Mokhlis and Salleh 2009; value seeking (Hanzaee, 2009; Mokhlis and Salleh, 2009), personal style consciousness (Siu et al., 2001), spontaneity (Bauer et al., 2006), satisfying (Mokhlis and Salleh, 2009), dissatisfied shopping conscious (Mishra, 2010), and so on. In summary, different styles are included in or removed from CSI instrument. Different from testing the instrument on different cultures and values, this study test the effect of CSI instrument -adopted by Sproles and Kendall (1986)- on choices of national and store brand.

### 2.2. National Brand vs. Store Brand

The concept of 'store brand' and 'national brand' have been described as different forms of brand sponsorship (Kotler and Armstrong, 2006). 'Store brand' refers to the merchandise that carries wholesalers or retailer's own brand name or a brand name created exclusively for that particular wholesaler or retailer (Kotler and Armstrong, 2006; Levy and Weitz, 2008). Thus, the store brand carries either the retailer's own name or a name that is exclusively created by the retailer. The terms 'store brand', 'private brand', 'private label' and 'distributor's brand' are used interchangeably in the marketing literature (Richardson, et al., 1994; Gilbert, 2001; Levy and Weitz, 2008). Store brands are the only brands for which retailers take on all the responsibility for marketing activities including development, sourcing and warehousing to merchandising and marketing (Raju et al., 1995; Gilbert, 2001).

In contrast to store brands, national brands are the products designed, produced, controlled and marketed by a manufacturer (Kotler and Armstrong, 2006; Levy and Weitz, 2008). Thus, a manufacturer's brand refers to the brand owned by manufacturers. The terms 'national brand' and 'manufacturer's brand' have been used in marketing literature interchangeably (Bellizzi et.al., 1981; Cunningham, et.al., 1982; Kotler and Armstrong, 2006). Retailers have very little or no influence over product quality, advertising and brand image, packaging and wholesale cost with regard to manufacturer's brands (Dick et al., 1995).

Discounted store brands were introduced into the American supermarkets in the late 1970s. It has long been regarded as a cheap generic substitute for the real thing, provided by retailers during recessions and discarded once the economy picked up again. However, consumers changed their view when high quality store brand products were introduced into the market in the late 1980s and early 1990s (Janofsky, 1993). The substantial quality improvement of store brands was a result of technological advances and production by national brand manufacturers. Technological advances allowed competitors to come close to replicating successful national brands (Kennedy, 1992). Then, some national brands started producing store
brand versions of their name brand products, with the aim to employ the excess capacity in their plants (Beckett 1992; Janofsky, 1993).

Today, the strategic importance of store brand continues to grow, driven by significant trends affecting the Retail industry. Globally, store brand is estimated to account for $16.5 \%$ of all purchases (Deloitte, 2015-2016, p. 2). To understand current consumer perceptions about private-label quality, value, assortment and packaging, The Nielsen Company (2014) polled more than 30,000 online consumers in 60 countries. A few shared sentiments emerged around the world. Price is important to most consumers and is the primary driver of consumers' purchase intent for store brand. 69\% of respondents globally feel it's important to get the best price on a product. Moreover, $70 \%$ state that they purchase store brand to save money. Store brand's appeal goes beyond price. Consumers are seeking quality and value, and private label delivers on both of these attributes. Two-thirds (67\%) believe private label offers extremely good value for money, and $62 \%$ say buying private label makes them feel like a smart shopper (The Nielsen Company, 2014).

The store brand is a product designed to reduce the influence of the national brand product and its manufacturer. The store brand weakens the market power of the existing brand and at the same time offers an additional source of income to the retailer. The literature in the area mostly shows how the store brand product affects the national brand standing and its profit share in the market. Most literature in the area focus on the two aspects, which are closely intertwine; that is, the brand positioning and the pricing strategy (Toommongkoli, 2011, p .18).

The competition faced by a national brand from the store brand is very different from that of the other national brands. The introduction of a store brand places the retailer in a dual role as both the national brand manufacturers' immediate customer and their competitor for end consumers' purchases. So, while a national brand can treat the other national brands as pure competitors, it has to treat the retailer who carries the store brand as both a competitor, for end consumer consumption, and a cooperator, because it is also sold through the retailer. The national brand has to account for this mixed relationship with the retailer when forming strategies to counteract the store brand invasion (Hoch, 1996; Quelch and Harding, 1996). Based on experiences of competition with other national brands, national brand manufacturers generally respond to the attack of store brands in three ways: they lower prices, engage in more promotional activities, and further differentiate their products by advertising and new product introductions (Beckett 1992; Kennedy, 1992; MacDonald 1998; Nijssen and Trijp 1998; Martin and Kubomura, 1999).

Myers (1968) for the first time attempted to identify the determinants of store brand attitude among the Unites States consumers of organized retailers. The emphasis of his study was on testing the extent to which characteristics related to personality, perceptions and socio-economic demographics of consumer explained differences in
store brand attitude. The researchers (Burton et al., 1998) conceptualized store brand attitude to be related with three broad constructs of consumer price perceptions, marketing constructs and deal-proneness constructs. They found store brand attitude positively related to value consciousness, deal proneness, reliance on internal reference prices and smart-shopper self-perceptions. In another study, researchers (Garretson et al., 2002) developed a model that states the similarities and differences in the antecedents of store brand attitude and national brands promotion attitude in context of grocery products. Burger and Schott (1972) in their study on store brand buyer identification observed that price-consciousness and brand loyalty of consumers significantly differentiate between store brand and manufacturer's brand buyers. In a consumer perception study of national, private and generic brands were found to be different on various parameters (Bellizzi et al., 1981). Private brands were viewed in the middle between national brands and generic brands. Omar (1996) performed a research to understand differences between British grocery shoppers of national brands and store brands due to the shoppers' personal characteristics and their behavioral patterns related to shopping supermarkets. In a study on understanding differences of a national brand promotion consumer and a store brand consumer, researchers (Ailawadi et al., 2001) identified the psychographic and demographic traits that potentially drive usage of the store brands and national brand promotions.

Based on consumer decision making styles, national and store brand literature, this study offers relationships between consumer decision making styles and consumers' store and national brand choices, in the context of food products. It mainly focuses on comparison between national and store brand choice on the basis of decision making styles thanks to the importance of it on decision making. In general, the study examines whether choices on national and store brand food products differs due to consumer decision making styles. More specifically, it offers relation between each dimension of consumer decision making styles and national and store brand choices. It also tests whether national and store brand choices significantly differs in consumers' demographic characteristics. Thus, the study proposes following general hypotheses and the more specific form of these research hypotheses are presented in Table 7 with their results in the study):

Hypothesis 1: Consumer decision making styles have significant effect on the choice of national brand food products.

Hypothesis 2: Consumer decision making styles have significant effect on the choice of store brand food products.

Hypothesis 3: National and store brand choices significantly differs in demographic characteristics (gender, marital status, age, income level, education and occupation)

## 3. Research Methodology

### 3.1. Sampling and Data Collection

The study focuses on customers of retail stores selling both national brands and their own brands on food product category. More specifically, the study was carried out with customers who have been purchasing from retail stores, located in Kırşehir, one of the city in Turkey. Retail stores were determined as Migros, Carrefoursa, Bim and A 101 since all of them have various food products both with their own brands and national brands. The empirical analysis was carried out based on the data obtained from customers of these retail stores. Since it is not possible to meet the population due to time and financial limitations, the sample includes $400^{1}$ customers. To have equal distribution of 400 sample, 100 sample were gathered from each retail store. While Migros and Carrefoursa have only one branch in the city, Bim and A 101 have many branches. Therefore, the data was gathered from only one branches of these two stores (Bim and A 101) in order to cope with unequal distribution of sample among different branches.

Convenience sampling and face to face survey methods were used to collect the data. The collection of data was carried out on a voluntary basis. The data collection was carried out outside the stores by means of a questionnaire which was either selfcompiled or with direct interview. The data was collected between the dates of 01.03 .2016 and 01.05.2016. The data collection was performed systematically by considering frequency of customers in the stores on certain time periods.

### 3.2. Questionnaire Design and Measures

This study used the previous studies' measurement scales to design questionnaire items. All questionnaire items (except for only nine) were measured by using five-point Likert scale from 1 to 5 , rating from strongly disagreement to strongly agreement. Totally nine questionnaire items were reversely coded with five-point Likert scale. Sproles and Kendall's (1986) original scale of consumer styles inventory was used to measure different decision making styles. Sproles and Kendall's (1986) consumer styles inventory consist of eight dimensions, including 40 items. The current study adjusted these items in consumer styles inventory with consumers' decision on food products. Since Anic et al. (2015) had studied on consumers' food related decision making styles before, the current study also used their measurement scale in order to harmonize the items with food products choices. Eight factor model including 40items, adopted in to food products is presented in Appendix (see table 8) Besides, measurement of consumer's store brand choice includes four items; "I like to buy store

[^0]brand food products", "I can advise store brand food products", "I will prefer to buy store brand food products in future", I usually buy store brand food products", adopted from Sinha and Batra (1999) and Harcar et al. (2006). Similarly, national brand choice is measured with four items as "I like to buy national brand food products", "I can advise national brand food products", "I will prefer to buy national brand food products in future", I usually buy national brand food products".

### 3.3. Data Analysis

Data were analyzed by using Statistical Package for Social Science (SPSS) version 20.0. Firstly, exploratory factor analysis was conducted in order to see the factor structure of the measure. Cronbach' alpha values were tested for internal consistency of each factor. Pearson correlation coefficients were calculated before regression analysis. Then, research hypotheses ( H 1 and H 2 ) were tested by using multiple regression analysis. In order to see the mean differences between groups, H3 hypotheses were tested by using independent samples t- test and one way ANOVA. After conducting ANOVA, Tukey test, one of the Post Hoc Tests, was used to see the differences between groups.

## 4. Results

### 4.1. Demographic Characteristics of the Respondents

A total of 400 respondents participated in the survey. The demographic profile of the respondents is presented in Table 1. Among the respondents, $46 \%$ of them were male and $49 \%$ were married. About $22 \%$ of the respondents were between the ages of 18 and $25,37 \%$ of them were between 26 and $35,20 \%$ of them were between 36 and 45 , and $14 \%$ of them were between 46 and 55 . Namely, the study included different age groups. According to the survey, $38 \%$ of the sample indicated that they had secondary education and $26 \%$ of them indicated having graduate degree, whereas $31 \%$ of the respondents indicated their education level as elementary education. The average monthly income of $45 \%$ of the respondents were stated to be between 2001-3000 Turkish Lira, whereas $25 \%$ of the respondents stated their income level as between 1001-2000 Turkish Lira. The number of the respondents, indicating their income level as lees than 1000TL and indicating as $3001-4000 \mathrm{TL}$ is of $12 \%$ and $15 \%$ respectively. In terms of their occupation, while \%23 of the respondents were housewife, $19 \%$ of them indicated their occupation as worker, $16 \%$ as government employee and $17 \%$ as tradesman. The study also included people having different occupations. Besides, $30 \%$ of the participants reported their frequency of shopping for food products as once per week, $29 \%$ as several times per week and $28 \%$ several times per month. Thus, not surprisingly, food shopping mostly necessities frequent buying. Approximately, $45 \%$ of the respondents indicated that they had mostly preferred dry foods in their store brand food product choices. Milk and milk products (22.5\%) and juices and drinks (21.75\%) preferences are at the second row. When national brand choice
considered, $42 \%$ of the respondents stated milk and milk products as their mostly bougth food products. Moreover, 17\% of the respondents indicated frozen products as mostly bougth food product with national brand. Among the survey respondents, 30\% of them reported Bim as mostly preferred retail store for its own brand. $22 \%$ of the respondents preferred Migros, whereas \%23 of preferred A101 for their store brand choices. This result shows that many respondents (approximately 50\%) preferred discount type retail stores for their store brand preferences in food product category.

Table 1. Demographic Characteristics of the Respondents ( $\mathrm{n}=400$ )

| Gender | Frequency | Percent | Marital Status | Frequency | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 185 | 46.3 | Married | 197 | 49.3 |
| Female | 215 | 53.7 | Single | 203 | 50.7 |
| Age | Frequency | Percent | Education Level | Frequency | Percent |
| 18-35 | 90 | 22.5 | Elementary Education | 124 | 31.0 |
| 26-35 | 150 | 37.5 | Secondary Education | 154 | 38.5 |
| 36-45 | 81 | 20.25 | University Education | 106 | 26.5 |
| 46-55 | 56 | 14.0 | Post Graduate | 16 | 4.0 |
| 56-65 | 23 | 5.75 | Occupation | Frequency | Percent |
| Average Income (Monthly) | Frequency | Percent | Self-Employed | 39 | 9.75 |
| Less than 1000TL | 50 | 12.5 | Worker | 76 | 19.0 |
| 1001-2000TL | 100 | 25.0 | Government Employee | 66 | 16.5 |
| 2001-3000TL | 180 | 45.0 | Housewife | 92 | 23.0 |
| 3001-4000TL | 62 | 15.5 | Tradesman | 70 | 17.5 |
| 4001-5000TL | 6 | 1.5 | Retired | 10 | 2.5 |
| More than 5000TL | 2 | 0.5 | Student | 47 | 11.75 |
| Mostly bought store brand food product category | Frequency | Percent | Mostly bought national brand food product category | Frequency | Percent |
| Dry Foods | 178 | 44.5 | Dry Food | 58 | 14.5 |
| Milk and Milk Products | 90 | 22.5 | Milk and Milk Products | 168 | 42.0 |
| Meat Products | 15 | 3.75 | Meat Products | 48 | 12.0 |
| Frozen Products | 30 | 7.5 | Frozen Products | 70 | 17.5 |
| Juices and Drinks | 87 | 21.75 | Juices and Drinks | 56 | 14.0 |
| The frequency of shopping for food product | Frequency | Percent | Mostly preferred retail store for its own brand | Frequency | Percent |
| Once per week | 121 | 30.25 | Migros | 88 | 22.0 |
| Several times per week | 118 | 29.5 | Carrefour | 30 | 7.5 |
| Once per month | 48 | 12.0 | Kiler | 26 | 6.5 |
| Several times per month | 113 | 28.25 | Bim | 156 | 39.0 |
|  |  |  | A 101 | 92 | 23.0 |
|  |  |  | Others | 8 | 2.0 |

Firstly, exploratory factor analysis was used to discover the factor structure of the measure and to examine its internal reliability. Kaiser- Meyer-Olkin (KMO) measure of
sampling adequacy was calculated at 0.752 and Bartlett's test of sphericity indicated statistically significant result ( $p=.000$ ). So, it can be said that the data set for this study is suitable for factor analysis. Principal component analysis was used as the extraction method and factor loadings were rotated with varimax rotation method. Factor loadings of several items were calculated at the levels of $30 \%$. Thus, they were removed from further analyses (These items removed from the analyses can be seen in Appendix, see table 8). All remaining factor loadings were calculated as greater than the level of 0.5 , indicating the required level (Hair et al., 1998). Exploratory factor analysis results revealed a total of 10 factors, having eigenvalues greater than 1 . The ten factor solution explained $70.299 \%$ of total variance, greater than the recommended level of 0.6 (Gerbing and Anderson, 1988). Besides, the internal consistency of the scale used in the study was tested by Cronbach's alpha coefficient. Cronbach's alpha values were calculated for perfectionism as (0.942); novelty consciousness (0.907); brand consciousness (0.868); confused by over choice (0.855); impulsiveness (0.742); time spent for shopping (0.720); habituation (0.780); lower price seeking (0.702); recreation consciousness (0.701) and value seeking (71.8). Since the values for each factor was greater than 0.7, there is a sufficient indicator of reliability (Fornell ve Larcker, 1981; Hair et al., 1998). Perfectionism, novelty consciousness, brand consciousness and confused by over choice decision styles were found to have higher reliability compared to others. The results of exploratory factor analysis are presented in Table 2.

Exploratory factor analysis results of this study are not totally consistent with eight factor model of Sproles and Kendall (1986) ${ }^{2}$. Two factors were added in this study and labeled as "time spent for shopping" and "value seeking". When item loadings are compared with previous studies, a number of differences reveal. For example, two items loaded negatively on the recreational-hedonistic factor in Sproles and Kendall (1986) and Anic et al. (2015) studies, were found to load on a different additional factor in this study. This factor is labeled as "time spent for shopping", similar to the study of Ünal and Erciş, 2006 who labeled the factor as "giving time for shopping and enjoy it". Similarly, in the study of Mitchell and Bates (1998) two factors on the recreational hedonism were loaded on a different factor and labeled as time-energy conserving, since the items indicated avoiding much time spending for shopping. This is also similar to the study of Hafstrom et al. (1992) and the study of Fan and Xia's (1998) who indicate the factor as time conscious. Besides, three items loaded on perfectionism and one item loaded on price/value consciousness in previous studies were found to load on a different factor in this study. This factor is labeled as value seeking. In this study the trait of price consciousness is labeled as lower price seeking, which complies with Özgen and Kurt's (2013) study. Because items loaded on this trait mostly state low price expressions, whereas items on value seeking trait indicates the expressions such as having the best value, satisfying with value and giving much care for getting value.

[^1]
## Table 2: Exploratory Factor Analysis Results

| Items | Factor loadings | Eigen value | Variance explained |
| :---: | :---: | :---: | :---: |
| Factor 1: Perfectionism, High Quality Consciousness | 0.084 | 7.336 | 10.335 |
| In purchasing food products, getting very good quality is important for me. | 0.894 |  |  |
| In general, I usually try to buy the best food products overall quality. | 0.868 |  |  |
| I make a special effort to choose the very best quality food products. | 0.871 |  |  |
| When it comes to purchasing food product, I try to get the best or perfect choice. | 0.787 |  |  |
| Factor 2: Novelty-Fashion Consciousness |  | 4.689 | 9.630 |
| I purchase the trendy food product items. | 0.772 |  |  |
| I pay attention that my nutrition is in line with trends | 0.837 |  |  |
| It is very important to me to buy food products that are in line with trends. | 0.830 |  |  |
| It is fun to buy something new. | 0.829 |  |  |
| To get variety, I shop different stores and different brands. | 0.870 |  |  |
| Factor 3: Brand Consciousness |  | 3.123 | 9.607 |
| The well-known national food product brands are best for me. | 0.646 |  |  |
| The more expensive food product brands are usually my choice. | 0.770 |  |  |
| The higher the price of a food product, the better its quality. | 0.783 |  |  |
| I prefer buying the best-selling food product brands. | 0.702 |  |  |
| The most advertised brands are usually very good choices. | 0.827 |  |  |
| Nice department and specialty stores offer me the best products. | 0.728 |  |  |
| Factor 4: Confused by Over Choice |  | 2.621 | 7.416 |
| There are so many food product brands to choose from that often I feel confused. | 0.496 |  |  |
| Sometimes it is hard to choose which grocery stores to shop. | 0.865 |  |  |
| The more I learn about food products the harder it seems to choose the best. | 0.767 |  |  |
| Factor 5: Impulsiveness, Carelessness |  | 2.446 | 6.527 |
| I should plan my shopping of food products more carefully than I do. | 0.668 |  |  |
| I am impulsive when purchasing food products. | 0.769 |  |  |
| Often I make careless food product purchases I later wish I had not | 0.671 |  |  |
| I carefully watch how much I spend.* | 0.739 |  |  |
| Factor 6: Time spent for shopping |  | 2.021 | 6.505 |
| Shopping in the grocery stores wastes my time.* | 0.694 |  |  |
| I make shopping trips fast.* | 0.759 |  |  |
| Factor 7: Habituation, Brand Loyalty |  | 1.828 | 6.142 |
| I have favorite food product brands I buy over and over. | 0.725 |  |  |
| Once I find a food product or brand I like, I stick with it. | 0.641 |  |  |
| I buy the same food product brand each time. | 0.602 |  |  |
| Factor 8: Lower Price Seeking |  | 1.587 | 6.020 |
| I buy food products as much as possible at sale prices. | 0.604 |  |  |
| The lower price food products are usually my choice. | 0.459 |  |  |
| Factor 9: Recreation, Hedonistic Consciousness |  | 1.357 | 4.464 |
| Shopping for food products is not a pleasant activity for me.* | 0.720 |  |  |
| Going shopping for food products is one of the enjoyable activities of my life. | 0.760 |  |  |


| I enjoy shopping just for the fun of it. | 0.615 |  |  |
| :--- | :--- | :--- | :--- |
| Factor 10: Value Seeking |  | 1.112 | 3.655 |
| I look carefully to find the best value for money. | 0.526 |  |  |
| I really do not give much purchases much thought or care.* | 0.739 |  |  |
| A product does not have to be perfect, or the best value, to satisfy me.* | 0.709 |  |  |
| I shop quickly, buying the first product or brand I find that seems good <br> enough.* | 0.772 |  |  |
| Total Variance Explained (\%) : 70.299 <br> Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.752 <br> Bartlett's Test of Sphericity; Approx. Chi Square : 9659.996 <br> df $: 780$ <br> Sig :.000 |  |  |  |

* indicates the items reversely coded.

Source: Calculated from exploratory factor analysis results.

Before testing the hypotheses with multiple regression analysis method, pearson correlation statistic is presented in Table 3. While correlation coefficient between 0.21 and 0.30 indicates very weak relationship, the coefficient between 0.71 and 0.80 indicates strong and the coefficient between 0.91 and 1.00 indicates very strong relationship (Nakip, 2003: 322). The results show weak relations between independent variables. That is, there is little or no multicollinearity in the data set.

Table 3: Results of Pearson Correlation

|  | Perfec | Novelt <br> cons. | Brand <br> cons. | Confu. | Impuls | Time <br> spent | Habit <br> cons. | Low. <br> price | Rec. <br> cos. | Val. <br> seek | Store |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | Nation.

After conducting correlation analysis, multiple regression analysis is performed in order to see the causation. Indeed, Table 4 summarizes two different multiple regression models, one is for store brand choice (dependent variable) and the other one is for national brand choice (dependent variable). Consumer decision making styles are the independents variables for both models. Thus, the table shows the
comparison of store brand and national brand choices based on the decision making styles.

For multiple regression analysis, variance inflation factor (VIF) and tolerance values were calculated at recommended levels, as $<10$ for VIF value; and $>0.1$ and $>0.2$ for tolerance value. Thus, collinearity statistics satisfied the required levels. Besides, Durbin Watson values were calculated between 1.5 and 2.5 , indicating no autocorrelation in the multiple linear regression models (Tonta, 2008). Results of multiple regression analysis, estimate, $t$ values, significance levels and model summaries are presented in Table 4.

Table 4: Multiple Regression Analysis Results

| Consumer Decision Making Styles | Store Brand Choice |  |  | National Brand Choice |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimate | t value | p | Estimate | t value | p |
| Perfectionism | -0.030 | -0.554 | 0.580 | 0.021 | 0.396 | 0.692 |
| Novelty-Fashion Consciousness | -0.077 | -1.454 | 0.147 | 0.155 | 2.963 | 0.003*** |
| Brand Consciousness | 0.038 | 0.692 | 0.489 | 0.024 | 0.446 | 0.656 |
| Confused by Over Choice | 0.043 | 0.801 | 0.424 | -0.134 | -2.303 | 0.05** |
| Impulsiveness, Carelessness | 0.106 | 1.873 | 0.062* | 0.000 | 0.002 | 0.998 |
| Time spent for shopping | -0.50 | -0.901 | 0.394 | 0.068 | 1.439 | 0.188 |
| Habituation, Brand Loyalty | 0.223 | 4.012 | 0.000*** | 0.026 | 0.467 | 0.641 |
| Lower Price Seeking | 0.288 | 5.521 | 0.000*** | 0.012 | 0.220 | 0.826 |
| Recreation, Hedonistic Consciousness | 0.150 | 2.678 | 0.008*** | -0.013 | -0.233 | 0.816 |
| Value Seeking | 0.022 | 0.451 | 0.664 | 0.101 | 1.915 | 0.092* |
| Model Summary |  |  |  |  |  |  |
| Model F | 3.774 |  |  | 5.831 |  |  |
| Model Significance | 0.000 |  |  | 0.000 |  |  |
| Model R | 0.268 |  |  | 0.326 |  |  |
| Model R ${ }^{2}$ | 0.072 |  |  | 0.107 |  |  |

*** $p<0.01$; ** $p<0.05,{ }^{*} p<0.10$
Source: Calculated from survey results.
The results of the research hypotheses reveal that four of ten hypotheses are supported for store brand choice and three are supported for national brand choice. However, there is no common decision making style affecting both consumer store and national brand food product. That is, consumers' food product choices based on national and store brand are affected by different factors. This can be indicated as one of the main results of this study. Because there is still a strong support for earlier studies indicating that the effects of different factors on store and national brand choices (Burger and Schott, 1972; (Bellizzi et al., 1981; Garretson et al., 2002).

Impulsiveness/carelessness, habituation/brand loyalty, lower price seeking and recreation consciousness have significant effects on the choice of store brand food product, whereas novelty/fashion consciousness, confused by over choice and value
seeking have statistically significant effects on the choice of national brand food products. Thus, H1c, H1g, H1i and H2d H2e, H2f, H2h hypotheses are supported (see these hypotheses in Table 7).

When considered the effects of decision styles on consumers' store brand choices, lower price seeking is found to have the strongest effect ( $\beta=0.288, \mathrm{t}=5.521, \mathrm{p}<.01$ ). That is lower price seeking consumers are more likely to choose store brand food products. Besides, consciousness of habituation or brand loyalty is one of the traits having strong effect on store brand choice ( $\beta=0.223$, $\mathrm{t}=4.012, \mathrm{p}<.01$ ). In other words, habitual or brand loyal consumers are more likely to choose national brand food products. Recreation or hedonistic consciousness has also statistically significant effect on store brand choice ( $\beta=0.150, \mathrm{t}=2.678, \mathrm{p}<.01$ ). Since the relation is positive, he more a consumer is recreational or hedonistic, the more likely he is to buy store brand. This is also one of the important findings of this study that should be evaluated. Lastly, the trait of impulsiveness or carelessness significantly affect consumers' choice on store brand food product ( $\beta=0.106, \mathrm{t}=1.873, \mathrm{p}<.10$ ).

When the multiple regression model for national brand choice is examined, three traits are found to be effective on consumers' choices. Firstly, novelty-fashion consciousness has significant and the strongest effect on national brand food product choice ( $\beta=0.155, \mathrm{t}=2.963, \mathrm{p}<.01$ ). Thus, consumers seeking for trendy food products and satisfying with variety might choose national brand products. Besides, confused by over choice consumers are found less likely to buy national brand food products. That is, confused by over choice has a significant but negative effect on national brand choice ( $\beta=-0.134, \mathrm{t}=-2.303, \mathrm{p}<.05$ ). Lastly, the trait labeled as value seeking is also found to have significant effect on national brand choice $(\beta=0.101, t=$ 1.915, $p<10$ ).

The other hypotheses about the effects of decision making styles on national and store brand choices received no support (see these hypotheses in table 7).

Given the results of regression analysis and H 1 and H 2 hypotheses were tested, independent samples t-test and one way ANOVA were used to test the H3 hypotheses. In order to see if national and store brand choices significantly differs in gender and marital status, t-test was used. When conducting independent samples ttest, Levenene's Test for Equality of Variances is evaluated to meet the assumption of equality of variance. Test results for equality of variances met the required level of significance $>0.05$, indicating equal variances assumed. Similarly, when conducting one way ANOVA, Test of Homogeneity of Variances were tested with Levene Statistic and the results satisfied the required level of significance $>0.05$. Table 5 shows the results of independent samples t-test.

Table 5: Independent Samples T- test Analysis Results

*** $p<0.01$; **p<0.05
Source: Calculated from survey results.
According to t-test results, both store and national brand food product choices differ in gender at the significance levels of $p<.01$ and $p<.05$, respectively. When compared to male consumers, females appeared more likely to prefer national brand food products, while male consumers are more likely to choose store brand food products. Marital status of the consumers has only effect on store brand choice at the significance level of $p<.05$. As mean levels compared, married consumers are more likely to prefer store brand food products.

In order to see whether national and store brand choices significantly differs in demographic characteristics of age, income level, education and occupation, one way ANOVA is conducted. The results are presented in Table 6.

Table 6: One Way ANOVA Results

|  | Age |  | Income level |  | Education |  | Occupation |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | F | $\mathbf{P}$ | $\mathbf{F}$ | $\mathbf{P}$ | $\mathbf{F}$ | $\mathbf{P}$ | $\mathbf{F}$ | $\mathbf{P}$ |
|  | 1.542 | 0.189 | 2.477 | $\mathbf{0 . 0 3 2}^{\star \star}$ | 0.979 | 0.430 | 1.603 | 0.133 |
| National Brand Choice | 2.239 | $\mathbf{0 . 0 6 4}^{* *}$ | 10.457 | $\mathbf{0 . 0 0 0}^{* * *}$ | 2.857 | $\mathbf{0 . 0 1 5}^{* *}$ | 2.387 | $\mathbf{0 . 0 2 1}^{* *}$ |

${ }^{* * *} p<0.01$; ** $p<0.05,{ }^{*} p<0.10$
Source: Calculated from survey results.
According to the results of ANOVA, there is significant differences in the mean levels of consumers' store brand choices for their income levels ( $p<.05$ ). Similar result is true for national brand choices, with the significance level of $p<.01$. Thus, national and store brand choices of consumers significantly differ with respect to their income levels.

One way ANOVA results also reveal that there is significant differences in the mean levels of consumers' national brand choices for age, education and occupation at the significance levels of p<.05. Yet, consumers' store brand food product choices do not significantly differ in these demographic characteristics.

After evaluating whether there is any evidence that the mean population differs, Tukey multiple comparison test is used to investigate which of the means are different. For education level, the most significant difference ( $\mathrm{p}<.05$ ) in national brand choices emerges from between the groups of the consumers having elementary and university education. Besides, the significant difference ( $p<.10$ ) between age groups emerges from $56-65$ and 18-25 age levels. There is also significant difference ( $\mathrm{p}<.05$ ) in national brand choices between the consumers indicating their occupation as housewife, as tradesman and as student.

In summary, Table 7 presents all of the research hypotheses and their results.
Table 7: Results of Hypotheses Tests

| H1 | Consumer decision making styles have significant effect on the choice of national brand <br> food products. |
| :--- | :--- |
| H1a | Perfectionism- high quality consciousness has a significant effect on national brand choice. |
| H1b | Brand consciousness has a significant effect on national brand choice. |
| H1c | Novelty- fashion consciousness has a significant effect on national brand choice (Supported) |
| H1d | Recreation consciousness has a significant effect on national brand choice. |
| H1e | Lowe price seeking has a significant effect on national brand choice* |
| H1f | Impulsiveness- carelessness has a significant effect on national brand choice. |
| H1g | Confused by over choice has a significant effect on national brand choice (Supported) |
| H1h | Habituation- brand loyalty has a significant effect on national brand choice. |
| H1। | Time spent for shopping has a significant effect on national brand choice. |
| H1i | Value seeking has a significant effect on store national choice (Supported) |
| H2 | Consumer decision making styles have significant effect on the choice of store brand food <br> products. |
| H2a | Perfectionism- high quality consciousness has a significant effect on store brand choice. |
| H2b | Brand consciousness has a significant effect on store brand choice. |
| H2c | Novelty- fashion consciousness has a significant effect on store brand choice. |
| H2d | Recreation consciousness has a significant effect on store brand choice (Supported) |
| H2e | Lower price seeking has a significant effect on store brand choice.* (Supported) |
| H2f | Impulsiveness- carelessness has a significant effect on store brand choice (Supported) |
| H2g | Confused by over choice has a significant effect on store brand choice. |
| H2h | Habituation- brand loyalty has a significant effect on store brand choice (Supported) |
| H2l | Time spent for shopping has a significant effect on store brand choice. |
| H2i | Value seeking has a significant effect on store brand choice. |
| H3 | National and store brand choices significantly differs in demographic characteristics <br> (gender, marital status, age and income levels, education and occupation). <br> National brand choice differs in gender, age, income level, education and occupation (Supported) <br> Store brand choice differs in gender, marital status and income level (Supported) |

## 5. Conclusion

This study hypotheses significant effects of consumer decision making styles on national and store brand choices. The results of the study reveals that consumers' national and store brand choices are affected by different decision making styles. This is one of the important results of this study, since it makes the comparison between two brands more valuable and requires different strategies to be developed. It also supports previous studies, indicating the importance of differences on store and national brand evaluations (Bellizzi et al., 1981; Garretson et al., 2002).

It is revealed in this study that four factors out of ten have significant effects on consumers' store brand food product choices. These factors are determined as lower price seeking, habituation/brand loyalty, impulsiveness/carelessness and recreation consciousness. On the other hand, the factors affecting national brand food product choice are found as novelty fashion consciousness, confused by over choice and value seeking.

It is supported in this study that if consumers are sensitive to lower price and search for lower price among alternatives, they are likely to buy store brand food products. This result shows that there is still strong evidence supporting earlier studies that indicate the importance of price on store brand choice (Burger and Schott, 1972; Burton et al., 1998). The result of current study is also consistent with The Nielsen Company's report (2014), stating that more than half of consumers purchase store brand to save money. So it is still advisable for retailers to position their own brands (on food products) with lower price in order to compete. Because lower price seeking is found as a trait having the strongest influence on store brand food products.

In consumer decision making styles literature, many studies labeled and treated price consciousness as price/value consciousness or value for money. However, there are also studies dictating and labeling lower price differently (Özgen and Kurt, 2013). Some items loaded on perfectionism and price consciousness in previous studies (Sproles and Kendall, 1986; Mitchell and Bates, 1998) are loaded on a different factor in this study. This factor is labeled as value seeking and found to have significant effect on national brand food product choice. While no significant effect of lower price is found, value seeking is found to affect national brand food product choices. That means consumers giving care to their food product purchasing, demanding to have best value and giving time for this are likely to prefer national brand on their food product choices. So, manufacturers can respond to value seeking consumers by extending their alternatives with different prices and qualities. Because comparing prices and quality of products for getting best value and spending time for shopping is one the characteristics of value seeking consumers.

This study also reveals significant relation between habituation/brand loyalty and store brand food product choice, whereas it has no significant effect on national brand
choice. That is habitual consumers are more likely to prefer store brand on their food product shopping. This results also indicates the importance of loyalty on store brand choice. Besides brand loyal consumers, impulsive/careless consumers have tendency to prefer store brand food products. That is, consumers not planning and not giving so much care to their shopping of food products are likely to choose store brand. This result may be evaluated with value seeking trait. Consumers giving time for their shopping and requiring value have tendency to choose national brand, whereas impulsive consumers have tendency to choose store brand food products.

Another significant result for store brand choice is about recreation or hedonistic consciousness. Since the result reveals positive relationship, recreational/hedonistic consumers can be treated as more likely to choose store brand on their shopping of food products. That means consumers enjoying food product shopping and be pleased with this shopping will likely to buy store brand. This is also one of the important findings of this study that should be evaluated. Thus, it is advisable for retailers to add hedonistic values to their brands. For example, they can design food packaging as more colored or as more alluring so that they can create purchase desire and positive emotions.

For national brand choices, novelty/fashion consciousness is found to have significant effect. That means consumers searching for food products in line with trends and willing to buy new food products will focus on national brands in stores. Indeed, marketers can use the advantage of novelty-fashion consciousness by promoting and advertising new products. Lastly, a negative relationship exists between confused by over choice and national brand food product choice. If consumers have difficulty in choosing among the alternatives, they will be more likely to avoid buying national products.

When national and store brand choices are examined with demographic characteristics, both national and store brand choices are found to differ in gender and income level. Store brand food product choice differs in marital status, whereas national brand choice differs in education and occupation. Similarly, Ailawadi et al. (2001) identified different demographic traits for store brands and national brands and advised different promotions for these two types. Thus, consumers' educational level and occupations can be more strategically used for national brand food products. Since both brand choices differ in income level, the significant effect of lower price on store brand choice should not be ignored.

In summary, consumers who mostly prefer store brand on their food product shopping can be profiled as lower price seekers, habitual/brand loyal, recreational/hedonistic and impulsive/careless. On the other hand, consumers who mostly prefer national brand food products can be profiled as novelty/fashion conscious, confused by over choice and value seekers. Thus, these different profiles requires different positioning strategies for national and store brand food products.

One of the limitations of this study is to carry out the research without classifying the retail stores with different types (e.g., discount stores). In general the research focuses on food products and does not evaluate certain food product category such as milk and milk products, juices and drinks and so on, thus indicating another limitation of the study. Future researches can make similar comparisons between different categories of food product. Apart from food products, future researches can also compare national and store brand choices on different product categories such as personal care products and cleaning products.

## Appendix (see table 8)

## Table 8: Consumer Style Inventory- Eight Factor Model

| Items |  |
| :---: | :---: |
| Perfectionist, High-Quality Conscious Consumer |  |
| 11 | In purchasing food products getting very good quality is important for me. |
| 12 | In general, I usually try to buy the best food products overall quality. |
| 13 | I make a special effort to choose the very best quality food products. |
| 14 | When it comes to purchasing food product, I try to get the best or perfect choice. |
| 15 | My standards and expectations for products I buy are very high. |
| 16 | I really do not give much purchases much thought or care.* |
| 17 | A product does not have to be perfect, or the best, to satisfy me.* |
| 18 | I shop quickly, buying the first product or brand I find that seems good enough.* |
| Brand Conscious Consumer |  |
| 19 | The well-known national food product brands are best for me. |
| 110 | The more expensive food product brands are usually my choice. |
| 111 | The higher the price of a food product, the better its quality. |
| 112 | I prefer buying the best-selling food product brands. |
| 113 | The most advertised brands are usually very good choices. |
| 114 | Nice department and specialty stores offer me the best products |
| Novelty-Fashion Conscious Consumer |  |
| 115 | I purchase the trendy food product items. |
| 116 | I pay attention that my nutrition is in line with trends |
| 117 | It is very important to me to buy food products that are in line with trends. |
| 118 | It is fun to buy something new. |
| 119 | To get variety, I shop different stores and different brands. |
| Recreational, Hedonistic Consumer |  |
| 120 | Shopping for food products is not a pleasant activity for me.* |
| 121 | Going shopping for food products is one of the enjoyable activities of my life. |
| 122 | Shopping in the grocery stores wastes my time.* |
| 123 | I make shopping trips fast.* |
| 124 | I enjoy shopping just for the fun of it |
| Price Conscious Consumer |  |
| 125 | I buy food products as much as possible at sale prices. |
| 126 | The lower price food products are usually my choice. |


| I27 | I look carefully to find the best value for money |
| :--- | :--- |
| Impulsive-Careless Consumer |  |
| I28 | I should plan my shopping of food products more carefully than I do |
| I29 | I am impulsive when purchasing food products. |
| I30 | Often I make careless food product purchases I later wish I had not |
| I31 | I carefully watch how much I spend.* |
| I32 | I take the time to shop carefully for best buys.* |
| Confused by Over Choice Consumer |  |
| I33 | There are so many food product brands to choose from that often I feel confused. |
| I34 | Sometimes it is hard to choose which grocery stores to shop. |
| I35 | The more I learn about food products the harder it seems to choose the best. |
| I36 | All the information I get on different food products confuses me. |
| Habitual- Brand Loyal Consumer |  |
| I37 | I have favorite food product brands I buy over and over. |
| I38 | Once I find a food product or brand I like, I stick with it. |
| I39 | I buy the same food product brand each time. |
| I40 | I change brands I buy regularly.* |

Items in italics (I5, I32, I36, I40) were extracted from analyses because of their factor loadings in exploratory factor analysis are less 0.40 .

* indicates the items reversely coded.

Source: Sproles and Kendall (1986), Anic et al. (2015).

## References

AILAWADI, K. L.; SCOTT, A. N. and GEDENK, K. (2001). Pursuing the Value-Conscious Consumer: Store Brands versus National Brand Promotions. Journal of Marketing. 65(January). pp. 71-89.

ALLEN, D.E. and ANDERSON, P.F. (1994). Consumption and Social Stratification: Bourdieu's Distinction. In NA - Advances in Consumer Research Volume 21, Allen, S.T. and Roedder J. D. (Eds.). Provo, UT: Association for Consumer Research. pp. 70-74.

AKTURAN, U. and TEZCAN, N. (2007). Profiling Young Adults: Decision-Making Styles of College Students for Apparel Products. Paper presented at the conference 6ème Journées Normandes de Recherche sur la Consommation: Société et consommations, Groupe ESC Rouen. pp. 1-13.

ANIĆ, I.-D.; RAJH, E. and RAJH, S.P. (2015). Exploring Consumers' Food-Related Decision-Making Style Groups And Their Shopping Behavior. Ekonomska Istraživanja. 28(1), pp. 63-74.

ANIC, I. A.; CIUNOVA- SULESKA, A. and Rajh, E. (2010). Decision-Making Styles of Young-Adult Consumers in the Republic Of Macedonia. Ekonomska Istrazivanja. 24, pp. 102-113.

ARROBA, T. (1977). Styles of Decision-Making and Their Use: An Empirical Study. British Journal of Guidance and Counseling. 5, pp. 149-158.

ATIG (2014). Araştırma Raporu: Türk Perakende Sektörü ve Beklentilerimiz. https://www.atig.com.tr/arastirma/raporlar/tr/perakende_sektor_raporu.pdf (24.06.2014).

BAKEWELL, C. and MITCHELL, V. (2004). Male Consumer Decision-Making Styles. International Review of Retail, Distribution and Consumer Research. 14, pp. 223-240.

BAUER, H.S., SAUER, N.E. and BECKER, C. (2006), Investigating the Relationship between Product Involvement and Consumer Decision Making Styles", Journal of Consumer Behavior, 5 (4), pp. 342-354.

BECKETT, J. (1992). Grocers Revamp Brands: Food Chains Improve Look of Private Labels, San Francisco Chronicle. March 2, pp. BI.

BELLIZZI, J. A.; HAMILTON, J. R. and KRUECKEBERG, H. and MARTIN, W. S. (1981). Consumer Perceptions of National, Private and Generic Brands. Journal of Retailing 57(4), pp. 56-70.

BETTMAN, J.R. (1979). An Information Processing Theory of Consumer Choice. Reading. MA: Addison Wesley.

BURGER, P. C. and SCHOTT, B. (1972). Can Private Brand Buyers be Identified? Journal of Marketing Research. IX (May), pp. 219-222.

BURTON, S.; LICHTENSTEIN, D. R. and GARRETSON, J. A. (1998). A Scale for Measuring Attitude toward Private Label Products and an Examination of Its Psychological and Behavioral Correlates. Journal of the Academy of Marketing Science. 26(4), pp. 293-306.

CUNNINGHAM, I. C. M.; Hardy, A. P. ad Imperia, G. (1982). Generic Brands versus National Brands and Store Brands. Journal of Advertising Research. 22(5), pp. 25-32.

CHINTAGUNTA, P. K. (1993). Investigating Purchase Incidence, Brand Choice and Purchase Quantity Decisions of Households. Marketing Science. 2(spring), pp. 184-208.

CHUNG, H. (2008). Essays on Store Brand Management: The Case of Vertically Differentiated Product Categories, PhD Dissertation, Syracuse University, 2008.

DARDEN, W. R. and Ashton, D. (1974). Psychographic Profiles of Patronage Preference Groups. Journal of Retailing. 50(4), pp. 99-112.

DEACON, R.E. and FIREBAUGH, F.M. (1975). Home Management Context and Concepts. Boston: Houghton Mifflin.

DELOITTE, 2015-2016 Private Label Sourcing Survey: Shifts in Countries and Capabilities, September, 2015:2

DHAR, S. K. and HOCH, S. (1997). Why Store Brand Penetration Varies by Retailer. Marketing Science. 16(3), pp. 208-227.

DICK, A.; JAIN, A. and RICHARDSON, P. (1995). Correlates of Store Brand Proneness: Some Empirical Observations. Journal of Product \& Brand Management. 4(4), pp. 15-22.

DU PLESSIS, P. and ROUSSEAU, G. (1999). Consumer Behavior: A Multicultural Approach. Sigma, GA: Halfway House.

DU, R.; LEE, E. and STAELIN, R. (2005). Bridge, Focus, Attack, or Stimulate: Retail Category Management Strategies with a Store Brand. Quantitative Marketing and Economics. 3(4), pp. 393-413.

DURVASULA, S.; LYSONSKI, S. and ANDREWS, J. C. (1993). Cross-Cultural Generalizability of a Scale for Profiling Consumers' Decision-Making Styles. The Journal of Consumer Affairs. 27(1), pp. 55-65.

FAN, J. X.; and XIAO, J. J. (1998). Consumer Decision-Making Styles of Young- Adult Chinese. The Journal of Consumer Affairs. 32(2), pp. 275-294.

FIRAT, D. (2011). The Use of Decision Making Styles as a Market Segmentation Variable: A Study in Turkey. The Journal of American Academy of Business. 16, pp. 223-229.

FORNELL, C. and LARCKER, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18 (81), pp. 39-50.

GARMAN, E.T. (2002). Consumer Economic Issues in America. Cincinnati: Thomson Learning.

GARRETSON, A. J.; FISHER, D. and BRUTON, S. (2002). Antecedents of Private Label Attitude and National Brand Promotion Attitude: Similarities and Differences. Journal of Retailing. 78, pp. 9199.

GEGEZ, A. E. (2007). Pazar Araştırmaları. Beta Yayıncılık: İstanbul.

GERBING, D.W. and ANDERSON, J.C. (1988). An Update Paradigm for Scale Development Incorporating Unidimensionality and its Assessment. Journal of Marketing Research, 22, pp.1119.

GILBERT, D. (2001). Retail Marketing Management. Harlow: Pearson Education.

GOLDSMITH, E. (1996). Resource Management for Individuals and Families. St. Paul, MN: West.

GORDON, I. (2008) .The marketer's challenge: How to Teach Customers New Behaviors. Ivey Business Journal Online. 72(5), p. 80.

GÖNEN, E. and ÖZMETE, E. (2006) .Decision-Making Styles of Young Turkish Consumers. Journal of the Home Economics Institute of Australia. I3 (<br>), pp. 26-33.

HAFSTROM, J.L.; CHAE, J.S. and CHUNG, Y.S. (1992). Consumer Decision Making Styles: Comparison between United States and Korean Young Consumers. The Journal of Consumer Affairs, 26, pp. 146-158.

HAIR, J.; ANDERSON, E.; TATHAM, R.L. and BLACK, W.C. (1998). Multivariate Data Analysis (International 5th Edition). NewYork: Prentice-Hall, Inc.

HANZAEE, K. H. (2009). Iranian Generation Y Female \& Male Decision-Making Styles: Are They Different? The Journal of American Academy of Business. 14(2), pp. 57-63.

HARCAR, T.; KARA, A. and KÜÇÜKEMIROĞLU, O. (2006). Consumer's Perceived Value and Buying Behavior of Store Brands: An Empirical Investigation. The Business Review. 5 (2). pp. 55-62.

HENRIE, K. M. and TAYLOR, D. C. (2009) .Use of Persuasion Knowledge by the Millennial Generation. Young Consumers. 10(1), pp. 71-81.

HIU, A. S. Y.; SIU, N. Y. M.; WANG, C. C. L. and CHANG, L. M. K. (2001). An Investigation of DecisionMaking Styles of Consumers in China. The Journal of Consumer Affairs. 35(2), pp. 326-345.

HOCH, S. J. (1996). How Should National Brands Think About Store Brands? Sloan Management Review. 37(2), pp. 89-102.

HUNG, K.-M. (2004). Consumer Decision-Making, Perceived Product Value, and Purchasing Behavior in the Taipei Digital Camera Market (Doctoral Dissertation).

JACOBY, J. (1976). Consumer Psychology: An Octennium. Annual Review of Psychology. 27, pp. 331358.

JACOBY, J. and CHESTNUT, R.W. (1978). Brand Loyalty Measurement and Management. New York: John Wiley \& Sons.

JANOFSKY, M. (1993). Discount Brands Flex Their Muscles. New York Times. April 24, p. 37.

KAMARUDDIN, A.R. and MOKHLIS, S. (2003). Consumer Socialization, Social Structural Factors and Decision-Making Styles: A Case of Adolescents in Malaysia. International Journal of Consumer Studies, 27, pp. 145-156.

KAVAS, A. and YEŞILADA, F. (2007). Decision Making Styles of Young Turkish Consumers. European Journal of Economics, Finance and Administrative Sciences (9), pp. 73-81.

KENNEDY, T. (1992). Panel Discusses Threats to Brand-Name Foods by Lower-Priced Private Labels. Minneapolis Star Tribune. March 26, p. 7D.

KOTLER, P. and ARMSTRONG, G. (2006). Principles of Marketing. (11th Ed.). New York: Pearson Education.

LASTOVICKA, J. L. (1982). On the validation of Lifestyle traits: A Review and Illustration. Journal of Marketing Research. 19, 126-138.

LEVY, M. and WEITZ, B. A. (2008). Retailing Management. (7th Ed.). Berkshire: Mc-Grawhill.

LIHRA, T. and GRAF, R. (2007). Multi-Channel Communication and Consumer Choice in the Household Furniture Buying Process. Direct Marketing, 7(3), pp. 146-160.

LYSONSKI, S.; DURVASULA, S. and ZOTOS, Y. (1996). Consumer Decision-Making Styles: A MultiCountry Investigation. European Journal of Marketing. 30(12), p. 10.

MACDONALD, Andrew (1998). Snap! Crackle! Ffffffft!: Consumer Revolution Takes the Pop! Out of Breakfast Giant. The Ottawa Citizen. December 3, p. DI.

MARTIN, K. and KUBOMURA, K. (1999). Top 100 Food Companies Worldwide. Food Engineering. December, p. 26.

MCDONALD, W. J. (1993). The roles of demographics, purchase histories, and shopper decision making styles in predicting consumer catalogue loyalty. Journal of Direct Marketing. 7, p. 55-65.

MILLER, R.L. and STAFFORD, A.D. (2001). Economic Issues for Consumers. Belmont, CA: Wadsworth Thomson Learning.

MISHRA, A. A. (2010). Consumer Decision-Making Styles and Young-Adult Consumers: An Indian Exploration. Journal of Business Research. 2(3), pp. 45-62.

MITCHELL, V.-W. and BATES, L. (1998). U.K. Consumer Decision-Making Styles. Journal of Marketing Management. 14, pp. 199-225.

MOKHLIS, S. and SALLEH, H. S. (2009). Consumer Decision-Making Styles in Malaysia: An Exploratory Study of Gender Differences. European Journal of Social Sciences. 10(4), pp. 574584.

MOCHIS, G. P. (1976). Shopping Orientation and Consumer Uses of Information. Journal of Retailing. 52(2), pp. 61-70.

MOWEN, J. and MINOR, M. (2000). Consumer behavior, a framework. Englewood Cliffs, NJ: PrenticeHall.

MYERS, J. G. and NICOSIA, F. M. (1968). On the study of Consumer Typologies. Journal of Marketing Research. Vol. (5), pp. 182-193.

NAHAVANDI, A. (2006). The Art and Science of Leadership. (4th Ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

NAKİP, M. (2003). Pazarlama Araştırmaları: Teknikler ve SPSS Destekli Uygulamalar, Seçkin Publication. Ankara.

NIJSSEN, E. J. and HANS, C. M.; TRIJP, V. (1998). Branding Fresh Food Products: Exploratory Empirical Evidence from the Netherlands. European Review of Agricultural Economics. 25(2), pp. 228-242.

OMAR, O. E. (1996). Grocery Purchase Behavior for National and Own-Label Brands. The Services Industries Journal. 16(1), pp. 58-66.

ÖZGEN, Ö. and KURT, S.D. (2013). Analysis of Decision Making Styles of Social Media Opinion Leaders and Seekers. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 15(2), pp. 253266.

QUELCH, J. A. and HARDING, D. (1996). Brands versus Private Labels: Fighting to Win. Harvard Business Review. 74, pp. 99-109.

RAJU, J. S.; SETHURAMAN, R. and DHAR, S. K. (1995). The Introduction and Performance of Store Brands. Management Science. 41(6), 957-978.Rice and Tucker, 1986

RICE, A.S. and TUCKER, S.M. (1986). Family Life Management. New York, NY: Macmillan Publishing Company.

RICHARDSON, P.; DICK, A. and JAIN, A. (1994). Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality. Journal of Marketing. 56(October), pp. 28-36.

ROBBINS, S. P. and JUDGE, T. A. (2007). Organizational Behavior. (12th Ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

SAPMAZ, Kadriye and YERCAN, Murat (2015). The Analysis of Consumer Preferences Towards Store Brand and Manufacturer Brand Food Products: The Case of IZMIR Province. Ege Üniversitesi Ziraat Fakültesi Dergisi. 52(3). pp. 317-325.

SAYMAN, S.; HOCH, S. J. and RAJU, J. S. (2002). Positioning of Store Brands. Marketing Science, 21(4), pp. 378-397.

SCHIFFMAN, L. G. and KANUK, L. L. (2006). Consumer Behavior. (8th Ed.). New Jersey: Pearson Prentice Hall.

SETHURAMAN, R. and COLE, C. (1999). Factors Influencing the Price Premiums That Consumers Pay for National Brands Over Store Brands. Journal of Product and Brand Management. 8(4), pp. 340-351.

SINHA, Indrajit and BATRA, Rajeev (1999). The Effect of Consumer Price Consciousness on Private Label Purchase. International Journal of Research in Marketing. 16 (3), pp. 237-51.

SIU, Y. M.; HUI, S. Y.; WANG, C. L. and CHANG, M. K. (2001). An Investigation of Decision-Making Styles of Consumers in China. Journal of Consumer Affairs. 35, pp. 326-345.

SPROLES, G.B. (1985). From Perfectionism to Faddism: Measuring Consumer's Decision-Making Styles. American Council on Consumer Interests. pp. 79-85.

SPROLES, E. K. and SPROLES, G. B. (1990). Consumer Decision-Making Styles as a Function of Individual Learning Styles. The Journal of Consumer Affairs. 24(1), 134-147.

SPROLES, G. B. and KENDALL, E. L. (1986). A Methodology for Profiling Consumers' DecisionMaking Styles. The Journal of Consumer Affairs. 20(2), pp. 267-279.

TONTA, Y. (2008), Regresyon Analizi, Hacettepe Üniversitesi, yunus.hacettepe.edu.tr/ tonta/courses/fall2008/sb5002.

THE NIELSEN COMPANY (2014). State of Private Label around the World: Where it's Growing, Where it's not, and What the Future Holds? November 2014.

TOOMMONGKOL, W. (2011). Product Quality in the Distribution Channel for Retail Food Products. PhD Dissertation. The Pennsylvania State University, p.18.

UÇAR R.B. and DUFF Medine (2008). Özel Markalara Özel Üretim Yapın. Para Dergisi, ss.8-14 Haziran.

ÜNAL, S. and ERCIŞ, A. (2006). The Effect of Consumers' Values on Decision Making Styles. Ticaret ve Turizm Eğitim Fakültesi Dergisi, 1, pp. 23-48.

WALSH, G.; MITCHELL, V.-W. and HENNIG-THURAU, T. (2001). German Consumer Decision-Making Styles. The Journal of Consumer Affairs. 35(1), pp. 73-95.

WANG, C.-L.; SIU, N, Y. M. and HUI, A. S. Y. (2004). Consumer Decision-Making Styles on Domestic and Imported Brand Clothing. European Journal of Marketing. 38(1/2), pp. 239-252.

WESLEY, S.; LEHEW, M. and WOODSIDE, A. G. (2006). Consumer Decision-Making Styles and Mall Shopping Behavior: Building Theory Using Exploratory Data Analysis and the Comparative Method. Journal of Business Research. 59, pp. 535-548.

WIND, Y. (2008). A Plan to Invent the Marketing We Need Today. MIT Sloan Management Review. 49(4), pp. 21-28.


[^0]:    ${ }^{1}$ In the cases that the size of population is equal to or bigger than 10.000.000 and studied with $95 \%$ confidence interval, sample size of 384 is indicated as adequate, provided that the researcher collect the data from individuals among the sample (Gegez, 2007, p. 259, 261). The study was carried out with sample size of 400, because of getting the information that four retail stores mentioned above have met the required number during this research process.

[^1]:    ${ }^{2}$ (Eight factor model including 40-items, can be seen in Appendix, table 8).

