Journal of Social Sciences of Mus Alparslan University

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Araştırma Makalesi ● Research Article

Determination of Factors Affecting Consumers' Bulgur Consumption Preferences

Tüketicilerin Bulgur Tüketim Tercihlerini Etkileyen Faktörlerin Belirlenmesi

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Abstract: This research aims to determine the factors that affect the bulgur consumption preferences of consumers. The ethics committee approval of the research is given by the Scientific Research and Publishing Ethics Board of Mardin Artuklu University with the decision dated 01.03.2021 and numbered 2021/2-12. The research data is obtained by using a face-to-face survey technique from 401 individuals living in the city center of Mardin by convenience sampling. In the analysis of the data, exploratory factor analysis and descriptive statistics are used. According to the research findings, the participants consider food quality, marketing activities, physical properties, and taste-price factors in their bulgur consumption preferences. According to the demographic characteristics of the participants, bulgur consumption preferences differ significantly. These are taste-price according to a different gender; occupation and the number of individuals in the household; food quality according to different marital status groups; food quality and marketing activities according to different education levels; marketing activities according to different household income groups. There is no significant difference between the groups according to the age variable.

Keywords: Purchasing decision process, consumption preferences, bulgur, Mardin.

Öz: Bu araştırmanın amacı, tüketicilerin bulgur tüketim tercihlerini etkileyen faktörlerin belirlenmesidir. Araştırmanın etik kurul izni, Mardin Artuklu Üniversitesi Bilimsel Araştırma ve Yayın Etiği Kurulu'nun 01.03.2021 tarih ve 2021/2-12 sayılı kararı ile alınmıştır. Araştırma verileri; kolayda örnekleme yöntemiyle Mardin ili merkezinde yaşayan 401 bireyden yüz yüze anket tekniği aracılığıyla elde edilmiştir. Verilerin analizinde açımlayıcı faktör analizi ve tanımlayıcı istatistiklerden yararlanılmıştır. Araştırmanın bulgularına göre katılımcılar bulgur tüketim tercihlerinde; besin kalitesi, pazarlama faaliyetleri, fiziksel özellikler ve tat-fiyat faktörlerini dikkate almaktadırlar. Katılımcıların demografik özelliklerine göre bulgur tüketim tercihlerinde anlamlı düzeyde farklılıklar tespit edilmiştir. Katılımcıların tercihleri; farklı cinsiyet, meslek ve evdeki birey sayısı gruplarına göre tat-fiyat, farklı medeni durum gruplarına göre besin kalitesi, farklı eğitim seviyelerine göre besin kalitesi ve pazarlama faaliyetleri, farklı hane halkı gelir seviyesi gruplarına göre ise pazarlama faaliyetleri

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Cite as/ Atıf: Kayaoğlu, A. & Gülmez, Y. S. (2022). Determination of factors affecting consumers' bulgur consumption preferences. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, *10*(2), 869-885. http://dx.doi.org/10.18506/anemon.962334
Received/Geliş: 04 July/Temmuz 2021
Accepted/Kabul: 03 July/Temmuz 2022
Published/Yayın: 30 August/Ağustos 2022

e-ISSN: 2149-4622.

faktörleri bağlamında anlamlı düzeyde farklılaşmaktadır. Yaş değişkenine göre ise gruplar arası anlamlı düzeyde bir farklılık bulunmamıştır.

Anahtar Kelimeler: Satın alma karar süreci, tüketim tercihleri, bulgur, Mardin.

Introduction

Many people think that the most important stage in a sale is the moment to deliver the money. However, it is very important how consumer behavior is affected by which factors. Because there is a process that starts before the sale and continues after the sale. For this reason, each step or stage in the consumer purchasing decision process plays an important role in this process.

Businesses must pay attention to every step of the purchasing decision process to maximize their profit level. The purchasing behavior of consumers is determined by many different factors. The consumer purchasing decision process provides an understanding of how consumers complete the journey from knowing about a product to making a purchase decision, what basic steps they go through, and even the ongoing process after the purchase. In this context, understanding the process is crucial for marketing and sales when it comes to creating a marketing plan that convinces you to buy products or services.

The consumer purchasing decision process consists of pre-purchase, purchase-time, and post-purchase behaviors. However, certain models that will provide a more detailed understanding of the process are widely available in the literature. The five-stage consumer purchasing decision process, which consists of problem identification, information search, alternative evaluation, purchasing, and post-purchase behaviors, is one of the most frequently used methods. The buyers can use all five stages during the decision-making process towards a product or they can also skip one or more stages, it all depends on the consumer's mind (Kotler, 2017: 155). Therefore, understanding the purchasing decision process for any product or service is one of the main arguments that help businesses to understand their target audience.

In this study bulgur, which is one of the main food products widely consumed in our country, has been examined to determine the factors that affect the purchasing decisions of individuals who consume it. Bulgur is healthy and nutritious food in the grain group, basically consisting of water and wheat, obtained by cleaning, boiling, drying, peeling the skin, grinding in mills, and separating them according to different sizes. In this context, the research is carried out in Mardin, one of the most important bulgur production centers and home to many traditional consumption forms for centuries.

Mardin is located in the “Fertile Crescent” region of the Mesopotamian Plain, known as the most fertile land in the world, where agricultural activities are born. Bulgur production facilities have been established in Mardin since the early 1990s and the transition to machine power has become widespread. At first, people had a hard time giving up their habits, but since the 2000s, consumers have preferred to buy ready-made bulgur. As a result of this, industrialization in the city has increased to a great extent. As a result, bulgur produced in Mardin; has become one of the most demanded products by both consumers and food suppliers (Sun and Gülmez, 2021: 158). In this study, the factors affecting bulgur consumption preferences and the differentiation of consumers' preferences according to demographic characteristics are investigated. Businesses and brands in the relevant sector will benefit from the results of the study. Similarly, It is thought that the findings to be obtained by answering the research questions will contribute to both domestic and foreign literature. No research has been found on bulgur consumption in English literature. In the domestic literature, certain studies on bulgur have been identified, but there are very few studies on bulgur consumption preferences. In this context, it is anticipated that this study will be the first research conducted in the field of marketing.

1. Consumers’ Purchasing Behaviors

Consumer purchasing behavior refers to the selection, purchase, and consumption of products and services to satisfy needs and wants (Kumar, 2010: 218). Although there are behavioral types that vary from person to person in the decision-making process, in general; cultural, social, personal,

psychological, and economic factors affect consumers (Ramya and Ali, 2016). For this reason, the purchase decision expresses the result of all these factors. Consumers try to find an answer to the question of which product or service they want to consume, and they choose among the alternatives they have determined by understanding which products offer more benefits. Therefore, every purchasing decision process is a problem-solving process (Engel, Blackwell, and Kollat, 1978).

Certain questions need to be answered in order to understand the behavior of consumers (Ramya and Ali, 2016: 76):

i. What kind of consumers does the market consist of and what is the strength of the business?

ii. What are/are consumers buying?

iii. Why are they buying?

iv. Who is involved in purchasing?

v. How do they buy?

vi. When do they buy?

The answers generated for these questions provide an understanding of how buyers respond mostly to marketing stimuli. One of the issues that needs to be understood is how the decision-making process works. The decision-making process of consumers refers to their approach to the market, how/why they behave, their viewpoints, and how changing orientations affect overall buyer behavior. Many models for consumer purchasing decisions for products and services have been proposed by researchers. In these models, researchers focused on the final direction of planned or unplanned purchase decisions (Prasad and Jha, 2014: 335).

The five-stage purchase decision process model is a widely used tool for marketers to understand consumer and consumer behavior better. The basic assumption of the model is that the process by which consumer purchases a product is a process that begins long before the moment of purchase and continues even after the purchase is made. As the name suggests, there are five different stages in the process: determining the need, searching for information, evaluating alternatives, making a purchase decision, and post-purchase behavior (Comegys et al., 2006: 337). Below are five stages in the consumer purchasing decision process.

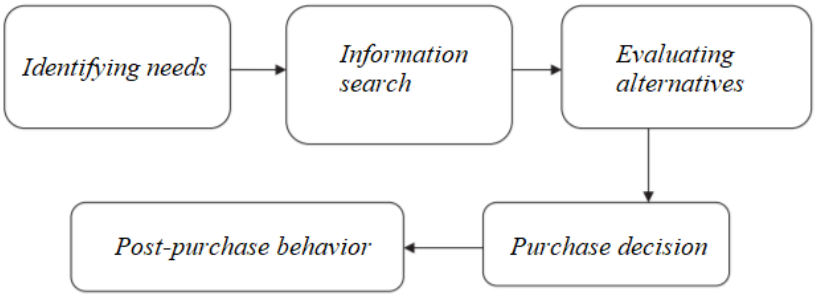

Figure 1. Five-Stage Purchase Decision Process Model (Kotler and Keller, 2006: 191)

Identifying needs: identifying problems or needs is the first stage of the purchasing decision process. The presence and manifestation of need can be caused by internal or external stimuli. Internal stimuli included in Maslow's hierarchy of needs are hunger, thirst, etc. it is triggered by basic needs. External stimuli, on the other hand, may be commodities that are considered to be purchased after a well-designed advertisement or a conversation with a friend (Munthiu, 2009: 28).

Information search: the second step in the consumer purchase decision process is information search. When consumers need a particular product, they are looking for information about various alternatives. This information usually relates to the price, quality, characteristics, and availability of the

product or the date of delivery. Warranty, service, after-sale services, payment terms, etc. information about it are also important. At this stage, businesses can provide product information to the consumer in a useful, accurate, and easy-to-understand format. Consumers first contact their relatives, friends, and acquaintances for information. Media, on the other hand, is the second important source of information (television, radio, internet, magazines, newspapers, etc.). The company's sales staff can play a decisive role at this stage of the purchase decision process (Oblak et al., 2017: 39).

Evaluating alternatives: once consumers have gathered enough information, the third stage of the purchase decision process begins, in which they develop alternatives that meet their needs. At this stage, attitudes towards different brands are reached through some evaluation criteria. How consumers evaluate their purchasing alternatives depends on individual and specific purchasing situations. In some cases, consumers use careful and logical calculations, and sometimes they make little or no evaluations.; instead, they buy impulsively and rely on their intuition (Kotler and Armstrong, 2010, Islam and Chowdhury, 2018: 292).

Purchase decision: at this stage, all the previously mentioned situations are embodied, and the consumers' purchase action takes place. In the fourth stage, consumers' decision to buy is usually in the direction of choosing the brand whose intention to buy is formed. But unplanned trends can occur between the intention to buy and the act of buying, such as the attitudes of others or buying the lowest priced one. At the same time, a decision not to buy a product or service, such as a decision to purchase a product or service, a decision to postpone the purchase, or a decision to replace the product or service that it wants with another product or service, are situations that may arise at this stage.

Post-purchase behavior: the extent to which consumers are satisfied with the purchase decision clearly affects their behavior from then on. Being satisfied with the sale can increase the likelihood that the product will be purchased again. For example, data on car brand selection shows a high correlation between being very satisfied with the last brand purchased and the intention to buy that brand again (Munthiu, 2009: 30). Satisfied individuals often tend to say good things to others about that brand. On the other hand, a customer who criticizes the brand and is dissatisfied is likely to harm the business.

2.Literature Review

In recent years, research on consumer behavior and the development of decision-making processes has taken an important place in the marketing literature. For this reason, academic publications aimed at using five steps in the purchase decision process (Figure 1) are extensively examined in this title.

The research, first conducted by Qazzafi (2019), focused on the process of consumer buying behavior. The study aims to examine consumers' purchasing decision process in high or low participation products. The study is focused on secondary data and does not use empirical data. The findings of the study support the conclusion that consumers use all five stages of the consumer purchase decision process while purchasing high-attendance or costly products. And also consumers are more likely to skip one or more stages at low-attendance or daily use products.

Dölekoğlu and Çelik (2018) examined the consumption habits of consumers in Generation Y for food products and services. In the study, a survey study is conducted with 300 individuals between the ages of 8-37 and living in the provincial center of Adana. 50.7% of respondents are women and 45.7% are full-time employees. 60.7% of respondents prefer to eat outside their own living area at least 1 time a week. It is understood that 84% of participants spend between 100-500 TL per month eating outside their homes. It has been determined that the most preferred products are traditional food products with meat weight (kebab, etc.). Researchers stated that participants consisted of people who are not innovative in food consumption, who accepted healthy eating more in discourse than behavior but are conscious about issues such as food safety.

Baştürk et al. (2014) aimed to identify marketing factors affecting the purchasing decision process of consumers who buy ready-made food products from Super Markets in Igdir province. The study examined the functional and hedonic benefits that consumers expect from the purchase process. Data is

collected from 408 participants using the easy sampling technique in the study, which is designed based on the identifier and experiment. According to research findings, the elements of the marketing mix that affect consumers' behavior in the purchasing process are as follows in order of importance: "product-distribution, price, product, promotion-distribution". In addition, it has been revealed that functional behaviors are more exhibited than gratification when consumers purchase ready-made food products, and those who perform functional behaviors care more about all marketing mix factors.

Understanding the factors influencing consumers in the purchasing decision process is vital in recent times as marketing has become more consumer-oriented. As a matter of fact, the research conducted by Ilunga (2018) emerged with this awareness. In this study, the behaviors of X and Y-generation consumers are compared during the cosmetic purchasing decision process. In this study, in which the five-stage purchasing model is used, the quantitative research approach is applied. A sample size of 379 people is determined using the probabilistic random sampling method (Westville campus and Howard college students born 1965-1999). In addition, 377 valid questionnaires are obtained. As a result of the analysis of the data, it is revealed that the majority of the 377 participants are from the Y generation (approximately 60%). The findings showed that the needs of each generation (X and Y) consumers are triggered by different motives in the cosmetic purchasing decision process. While most X-generation consumers purchase cosmetics to meet the need to enhance beauty, the Y generation is more likely to be driven by physiological needs compared to the X generation. Also, the Y generation is more likely to be influenced by advertisements compared to the X generation. In addition, it has been revealed that both generations see social networking platforms as a source of information in the cosmetics purchasing decision process. And generation Y is more likely to see previous brands as a source of information compared to generation X. It has been understood that loyalty, quality, and price are the main criteria used by the X and Y generation consumers in the cosmetic purchase decision process. However, the Y generation is also likely to partly take the advice of their salespeople. Finally, the research findings showed that both generations used satisfaction as a basic criterion in the cosmetic purchasing decision process.

Nørgaard et al. In his study (2007), aimed to contribute to family decision-making when buying food. It, therefore, proposes a theoretical framework for structuring future work in the family purchase decision process, which involves the influence and participation of children at certain stages of the process. The conceptual framework is developed based on earlier theoretical work focusing on family shopping. The framework is tested in a survey of 451 Danish families with children aged 10-13. The fact that the family purchase decision process is usually a joint activity and that children are actively involved in it determines their impact. Research findings show that children participate in the initial stage of the family food purchase process by playing an igniter role, then influencing the overall decision-making of the family, and finally, a 3-stage process is carried out that reaches the selection stage. In this context, parents do not always agree on how much influence children have at various stages of the process. this indicates the importance of listening to both sides in research on family dynamics and daily food purchasing processes.

Companies want to know how consumers behave and make purchasing decisions in order to improve their marketing strategies and become more competitive in the market. As a matter of fact, Ioanid (2020) in her research stated that it becomes difficult to make decisions in cases where there is not much difference between products in terms of quality and price, and a brand has more options. She, therefore, investigated what consumer decisions are based on. The findings show that today's decisions are mostly based on self-branding, social validity, and identity play, and also refer to moments that are important in the decision process.

Zhang (2020) examined the decision-making processes used when purchasing e-book products in academic libraries. For this purpose, he adapted the five-stage framework with some minor revisions and conducted interviews with research participants. he then analyzed the different steps of decision-making processes based on the data provided by people. He examined the data to investigate the

differences and similarities in the decision processes mentioned and stated that the process consists of the formulation, conceptualization, elaboration, and evaluation stages of the problem.

3.Method

3.1. The Purpose and Questions of the Research

This research aims to determine the factors affecting the consumption preferences of bulgur consumers living in the center of Mardin province. Determining whether there is a differentiation between groups in the context of factors affecting consumers' preferences in terms of demographic characteristics is the side goal of the research. In this context, answers to the following questions are sought to achieve the research objectives:

- What are the factors affecting participants' bulgur consumption preferences?
- Do the factors affecting the preferences of participants differ according to their demographics?

3.2. The Research Universe and Sampling

The research universe includes individuals living in the center of Mardin province. In choosing the research universe, it is important that the city is an important gastronomic Center located in the "Fertile Crescent" region on the Mesopotamian Plain, which is one of the important centers of bulgur production and hosts many traditional forms of consumption over the centuries. A face-to-face survey technique is applied using the easy sampling method in the study, and the research is conducted between March and May 2021. 414 individuals participated in the study, but 13 surveys answered by the participants are considered invalid, and the observed number of samples consisted of 401 people.

3.3. Data Collection Tools

The questionnaire form used in this study is created by the researchers by scanning the literature. While preparing the scale, some studies in the literature are used (Akçi & Çiftci, 2016; Özbay, 2014; Özbay, Karataş, & Aasim, 2016; Musaiger, 1993). The research was evaluated in terms of ethics and ethics committee permission was obtained on 01.03.2021 in order to apply the questionnaire. The first part of the survey form, which consists of two parts, is aimed at determining the demographic characteristics of participants. In the second section, 21 question statements containing elements that may affect the decisions of bulgur consumers are asked based on the studies mentioned. The importance of each question phrase on the scale from the point of view of consumers is measured via the Likert scale of 5 (1: strongly disagree, 2: disagree, 3: neither agree nor disagree, 4: agree, 5: strongly agree).

3.4. Analysis of the Data

Exploratory factor analysis is used in the study to test the validity of the scale and to determine the factors affecting consumer preferences. In addition, Cronbach's Alpha value is calculated to determine the reliability level. This result is 0.886 and it is understood that reliability is high (Özdamar, 2002). As a result of the normality test, it is determined that the data do not show a normal distribution, that is, they exhibit a heterogeneous structure. For this, Shapiro Wilk test is applied and it is understood that the p values obtained below the 0.05 significance level (Otrar, n.d.). For this reason, nonparametric Kruskal Wallis and Man Whitney U analysis techniques are used to determining whether the participants' behavior and attitudes differed in the context of their demographic characteristics (Kalaycı, 2006: 99). The Post-hoc test is applied to determine between which groups the differentiation occurred for the expression in question.

4.Findings

Data on the demographic characteristics of respondents are included in Table 1. According to this, 53.1% of the participants are women and 46.9% are men. When the ages of the participants are examined, it is understood that the number of individuals between the ages of 18 and 34 is intense. In addition, it is understood that the participation of individuals in the 35-49 age group in the study is quite high. Considering the educational situation, about 80% of all participants are graduated from high school, middle school, and primary school, and about 20% are associate's degree, bachelor's degree,

and postgraduate degrees. When the marital status of the participants is examined, it is understood that 71.6% of the individuals are married and 28.4% are single. In addition, participants are respectively housewives, private sector employees, and students. The participation of tradesman individuals is conspicuous. When the household income level of the participants is examined, it is found that about 60% had an income of under 3000 TL, and about 30% had an income in the range of 3000-6000 TL. Finally, looking at the number of individuals in the household of participants; about 70% are in the range of 1-6 people, and about 30% are more than 7 people.

Table 1. Demographic Characteristics of Participants

Age	**n**	**%**	**Educational Level**	**n**	**%**
18-34	160	39.9	Primary school	75	18.7
35-49	118	29.4	Middle school	86	21.4
50-65	81	20.2	High school	154	38.4
66 +	42	10.5	Associate's degree	27	6.7
Gender	**n**	**%**	Bachelor's degree	46	11.5
Woman	213	53.1	Postgraduate degrees	13	3.2
Man	188	46.9	**Job**	**n**	**%**
Marital Status	**n**	**%**	Student	70	17.5
Single	114	28.4	Housewife	115	28.7
Married	287	71.6	Civil servant	36	9.0
Number of Individuals in the Household	**n**	**%**	Tradesman	64	16.0
1-3	159	39.7	Private sector employee	72	18.0
4-6	119	29.7	Retired	44	11.0
7-9	95	23.7	**Household Income**	**n**	**%**
10 +	28	7.0	0-3000 TL	234	58.4
			3001-6000 TL	120	29.9
Total	**n**	**%**	6001-9000 TL	37	9.2
	401	100%	9001 TL +	10	2.5

Firstly, an attempt is made to answer the first research question. For this reason, exploratory factor analysis is applied to the data to determine which factors are collected under the scale statements that make up the second part of the questionnaire. Looking at Table 2, the finding of 0.848 results obtained by the Kaiser-Meyer-Olkin (KMO) sample adequacy test means that the sample adequacy is at a good level. According to Nakip (2013: 518) Kaiser-Meyer-Olkin (KMO) sample adequacy test is used to measure the validity and sampling adequacy of factor analysis, and it is proposed that the rate to be obtained is over 60%. In the Bartlett Globality test, it is determined whether the scale is suitable for factor analysis (Tatlıdil, 2002). As a matter of fact, the integrity of the research universe is being tested with this test. In this context, The Chi-Square value obtained from the Bartlett globality test is found to be 3169,214 (p=0.000) and this value showed the existence of a relationship between substances. Therefore, it is understood that the scale has a factorable structure.

Table 2. KMO and Bartlett Test

Kaiser-Meyer-Olkin Measure Of Sample Eligibility		.848
Bartlett's Globality Test	Approximate Chi-Square Value	3169.214
	Degrees of Freedom	190
	p	.000

Table 3 shows the results of exploratory factor analysis. Accordingly, the variables are collected under 4 factors and the total variance described is 62.140%. But 1 question phrase in the research scale (the swelling capacity of bulgur is important) is removed (Nakip, 2013) from the scale due to overlapping. In this context, the scale consisting of 20 question statements is collected under a total of

4 factors. The factors obtained are called food quality, marketing activities, physical characteristics, and taste-price.

Table 3. Exploratory Factor Analysis Results for Determining Factors Affecting Participants' Purchasing Preferences

Question statements	F 1	F 2	F 3	F 4
Factor 1: Food quality				
The nutritional value of bulgur is important.	.803			
It is important whether the bulgur is organic production or not.	.795			
It is important whether the bulgur has a quality certificate (TSE, ISO, HACCP, etc.).	.633			
It is important from which wheat the bulgur is produced.	.479			
Factor 2: Marketing activities				
Gifts and promotions of bulgur in the package are important.		.889		
Cooking/tasting is important for bulgur.		.763		
It is important that bulgur is sold at many points.		.681		
The packaging and wrapping of bulgur are important.		.662		
The brand and advertisements of bulgur are important.		.587		
Factor 3: Physical properties				
The ease of cooking bulgur is important.			.838	
The shape of the bulgur grains is important.			.745	
The city where bulgur is produced is important.			.551	
The time that bulgur stays fresh after cooking is important.			.534	
It is important that the bulgur grains are the same size.			.487	
The color of bulgur is important.			.416	
Factor 4: Taste-price				
The price of bulgur is important.				.695
Suggestions from my environment are important.				.694
The taste/flavor of bulgur is important.				.673
It is important that the bulgur does not contain foreign matter (stone, soil, etc.).				.627
Cleanliness of bulgur is important.				.587
Eigenvalues	6.318	2.425	2.133	1.552
Explained Variance (%)	31.592	12.126	10.663	7.760
KMO Test: 0.848 **Bartlett Globality Test X^2:** 3169.214 **df:** 190 **p:** 0.00				

The first factor has been called nutrient quality because it includes statements about nutrient properties, content, and quality. The second factor; promotion, packaging, etc. because it contains statements, it is called marketing activities. The third factor is called physical properties. This is because the expressions contained in this factor are related to the shape and grain size. The fourth factor has been called taste-price because it is related to taste and costs.

As a result of the analysis conducted to find an answer to the second research question, it is found that the data does not show a normal distribution, that is, a heterogeneous structure. According to Tabachnick and Fidell (2013), the homogeneous structure of the data is measured by the skewness and kurtosis values between -1.5 and +1.5. Therefore, it is understood that the research data has a heterogeneous structure because these values are not within the determined range. In this context, Kruskal Wallis and Mann Whitney U analyses, which are nonparametric tests, are used to determine whether participants' preferences differed according to age, gender, education level, marital status, occupation, household income, and the number of household individuals (see for Kruskal Wallis and Mann Whitney U Analyses at Table 4-10).

Table 4. Kruskal Wallis analysis results for age variable and preferences of participants

	Age	N	Ranking Averages	X2	df	p
Food quality	18-34	160	196.37	13.146	3	.004
	35-49	118	188.32			
	50-65	81	197.72			
	66 +	42	260.58			
	Total	401				
Marketing activities	18-34	160	202.97	9.527	3	.123
	35-49	118	209.24			
	50-65	81	169.57			
	66 +	42	230.94			
	Total	401				
Physical properties	18-34	160	217.29	11.181	3	.110
	35-49	118	202.77			
	50-65	81	164.89			
	66 +	42	203.62			
	Total	401				
Taste-price	18-34	401	186.18	17.793	3	.000
	35-49	160	187.60			
	50-65	118	218.53			
	66 +	81	261.29			
	Total	42				

Table 4 shows the results of the Kruskal Wallis test. This analysis aims to test whether participants' preferences for factors tend to differ according to different age groups. According to the results, no significant differences between groups are found in the scores of participants on marketing activities and physical characteristics ($p>0.05$) factors. A significant level of differentiation is found when looking at the scores related to the food quality and taste-price factors. According to Genç and Soysal (2018: 26); some of the parametric multiple comparison tests can be used after non-parametric tests. This is advantageous in terms of both ease of implementation and reliability. It is more accurate to use parametric multiple comparison tests, especially if the homogeneity of group variances cannot be achieved. Therefore, the Post-hoc Bonferroni test is applied to determine between which groups the differentiation occurred for the expression in question (Cevahir, 2020: 56). Accordingly, when pairwise comparisons are made, it is determined that statistical values related to food quality and taste-price factors are significant in favor of the participants aged 18-34 and 35-49, and against the participants aged 66 and over.

To test whether there is a significant level of differentiation between the average score of participants on consumption preference factors in the context of the gender variable, the Mann Whitney U test is applied and its results are shown in Table 5.

Table 5. Mann Whitney U analysis results for gender variable and participants' preferences

	Gender	N	Ranking Averages	p
Food quality	Woman	213	195.07	.269
	Man	188	207.72	
	Total	401		
Marketing activities	Woman	213	195.45	.304
	Man	188	207.29	
	Total	401		
Physical properties	Woman	213	197.88	.564
	Man	188	204.54	
	Total	401		

Taste-price	Woman	213	218.62	.001
	Man	188	181.03	
	Total	401		

In Table 5, the results of the Mann Whitney U test, which is conducted to test whether the distribution of consumption preference factors of participants in different gender groups tends to differ, are included. According to the results obtained as a result of the analysis, the participants' scores on food quality, marketing activities, and physical characteristics ($p>0.05$) factors do not differ significantly. A significant level of differentiation is found when looking at the scores related to the taste-price factor. According to Balcı (2009: 284); ranking averages are taken into account to determine the direction of the difference between groups in the Mann Whitney U test. Considering the ranking averages in Table 5, the difference between the groups regarding the taste-price factor is in favor of women.

The Mann Whitney U test is conducted to test whether there is a significant level of differentiation between the average score of participants on bulgur preference factors in the context of the marital status variable. The results are shown in Table 6.

Table 6. Mann Whitney U analysis results for marital status variable and preferences of participants

	Marital Status	**N**	**Ranking Averages**	**p**
Food quality	Single	114	181.13	.029
	Married	287	208.89	
	Total	401		
Marketing activities	Single	114	188.96	.187
	Married	287	205.78	
	Total	401		
Physical properties	Single	114	213.68	.165
	Married	287	195.97	
	Total	401		
Taste-price	Single	114	185.12	.080
	Married	287	207.31	
	Total	401		

The Table 6 shows the results of the Mann Whitney U test, which is conducted to test whether the distributions of participants in different marital status groups related to consumption preference factors tend to differ. According to the findings obtained as a result of the analysis, there is no significant differentiation in the participants' scores on marketing activities, physical characteristics, and taste-price ($p>0.05$) factors. But it is found that their scores on the food quality factor ($p<0.05$) differed significantly compared to marital status groups. When the group ranking averages are examined, it is seen that the highest-ranking average for food quality is in married and the lowest is in single individuals. Considering the ranking averages in Table 6, the difference between the groups regarding the food quality factor is in favor of married.

The Kruskal Wallis test is applied to test whether there is a significant level of differentiation for the consumption preference factors of responders in the context of the education level variable. The findings are shown in Table 7.

Table 7. Results of Kruskal Wallis analysis on education level variable and preferences of participants

	Educational Level	N	Ranking Averages	X2	df	p
Food quality	Primary school	75	240.76	18.208	5	.003
	Middle school	86	177.98			
	High school	154	204.57			
	Associate's degree	27	163.28			
	Bachelor's degree	46	180.09			
	Postgraduate degrees	13	233.96			
	Total	401				
Marketing activities	Primary school	75	203.73	14.723	5	.012
	Middle school	86	209.25			
	High school	154	197.08			
	Associate's degree	27	218.50			
	Bachelor's degree	46	159.37			
	Postgraduate degrees	13	288.00			
	Total	401				
Physical properties	Primary school	75	218.77	10.809	5	.055
	Middle school	86	198.15			
	High school	154	188.81			
	Associate's degree	27	175.19			
	Bachelor's degree	46	212.21			
	Postgraduate degrees	13	275.81			
	Total	401				
Taste-price	Primary school	75	221.44	10.489	5	.063
	Middle school	86	194.30			
	High school	154	207.55			
	Associate's degree	27	143.20			
	Bachelor's degree	46	197.99			
	Postgraduate degrees	13	180.54			
	Total	401				

The Table 7 shows the findings of the Kruskal Wallis test, which is conducted to test whether the distributions of consumption preference factors of responders at different educational levels tend to differ. According to the results obtained as a result of the analysis, it is found that there is no significant differentiation in the participants' scores on physical characteristics and taste-price ($p>0.05$) factors. However, it is found that their scores on food quality and marketing activities ($p<0.05$) factors differed significantly according to different educational level groups. The Post-hoc Bonferroni test is applied to determine between which groups the differentiation occurred for the expression in question. Accordingly, when pairwise comparisons are made, it is seen that the statistical values related to food quality and marketing factors are significant in favor of the bachelor's degree participants and, against the primary school degree participants.

The results of the Kruskal Wallis test, conducted to determine whether there is significant differentiation in the consumption preferences of participants in different professional groups, are shown in Table 8.

Table 8. Kruskal Wallis analysis results for occupation variable and preferences of participants

	Job	N	Ranking Averages	X2	df	p
Food quality	Student	70	193.14	5.376	5	.372
	Housewife	115	212.38			
	Civil servant	36	224.19			
	Tradesman	64	191.63			
	Private sector employee	72	182.76			
	Retired	44	208.26			
	Total	401				
Marketing activities	Student	70	187.36	6.971	5	.223
	Housewife	115	209.10			
	Civil servant	36	234.65			
	Tradesman	64	195.52			
	Private sector employee	72	204.81			
	Retired	44	175.73			
	Total	401				
Physical properties	Student	70	207.38	7.121	5	.212
	Housewife	115	201.18			
	Civil servant	36	239.50			
	Tradesman	64	200.60			
	Private sector employee	72	178.09			
	Retired	44	196.94			
	Total	401				
Taste-price	Student	70	207.37	16.565	5	.005
	Housewife	115	216.77			
	Civil servant	36	178.68			
	Tradesman	64	153.23			
	Private sector employee	72	215.75			
	Retired	44	213.25			
	Total	401				

The Table 8 shows the findings of the Kruskal Wallis test, which is conducted to test whether the distribution of participants in different occupational groups on consumption preference factors tends to differ. According to the results, no significant differentiation is found on the participants' scores on nutrient quality, marketing activities, and physical characteristics ($p>0.05$) factors. But it is found that their scores on the taste-price ($p<0.05$) factor differed significantly in different professional groups. The Post-hoc Bonferroni test is applied to determine between which groups the differentiation occurred for the said expression. Accordingly, when pairwise comparisons are made, it is seen that the statistical values related to the taste-price factor are significant in favor of the student participants and, against the tradesmen participants.

The results of the Kruskal Wallis test, which is conducted to determine whether there is significant differentiation in the consumption preferences of participants in different income level groups, are shown in Table 9.

Table 9. Kruskal Wallis analysis results for household income variable and participants' preferences

	Household Income	N	Ranking Averages	X2	df	p
Food quality	0-3000 TL	234	207.80	6.773	3	.079
	3001-6000 TL	120	198.53			
	6001-9000 TL	37	188.89			
	9001 TL +	10	116.25			
	Total	401				
Marketing activities	0-3000 TL	234	194.46	10.899	3	.012
	3001-6000 TL	120	217.17			
	6001-9000 TL	37	216.18			
	9001 TL +	10	103.75			
	Total	401				
Physical properties	0-3000 TL	234	201.11	4.328	3	.228
	3001-6000 TL	120	190.04			
	6001-9000 TL	37	221.70			
	9001 TL +	10	253.25			
	Total	401				
Taste-price	0-3000 TL	234	209.54	5.897	3	.117
	3001-6000 TL	120	194.74			
	6001-9000 TL	37	163.05			
	9001 TL +	10	216.65			
	Total	401				

The Table 9 shows the findings of the Kruskal Wallis test, which is conducted to test whether the distribution of participants in different household income level groups on consumption preference factors tends to differ. According to the results, no significant differentiation is found in the participants' scores on food quality, physical properties, and taste-price ($p>0.05$) factors. But it is found that their scores on the marketing activity factor ($p<0.05$) differed significantly according to different income groups. The Post-hoc test is applied to determine between which groups the differentiation occurred for the said expression. Accordingly, when pairwise comparisons are made, it is seen that the statistical values related to the marketing activity factor are significant in favor of the participants with an income of 9001 TL and above, and against the participants in other income groups.

The results of the Kruskal Wallis test, which is conducted to determine whether there is significant differentiation in the consumption preferences of participants with different numbers of household individuals, are shown in Table 10.

Table 10. Kruskal Wallis analysis results for the variable number of individuals in households and the preferences of participants

	Number of individuals in households	N	Ranking Averages	X2	df	p
Food quality	1-3	159	200.93	3.648	3	.302
	4-6	119	212.26			
	7-9	95	196.83			
	10 +	28	167.68			
	Total	401				
Marketing activities	1-3	159	189.98	5.245	3	.155
	4-6	119	219.09			
	7-9	95	202.64			
	10 +	28	181.16			
	Total	401				
Physical properties	1-3	159	201.42	1.126	3	.771
	4-6	119	206.28			
	7-9	95	199.64			
	10 +	28	180.77			
	Total	401				
Taste-price	1-3	159	164.34	29.551	3	.000
	4-6	119	215.61			
	7-9	95	239.88			
	10 +	28	215.16			
	Total	401				

In the Table 10, the findings of the Kruskal Wallis test, which is conducted to test the tendency of differentiation of participants' distribution of consumption preference factors based on the number of individuals in households, are shown. According to the results, it is found that there is no significant differentiation in the participants' scores regarding food quality, marketing activities, and physical characteristics factors. But it seems that the scores of the factor of taste-price ($p<0.05$) differ significantly according to the number of individuals in the household. The Post-hoc test is applied to determine between which groups the differentiation occurred for the said expression. Accordingly, when pairwise comparisons are made, it is seen that the statistical values of the taste-price factor are significant in favor of the participants whose households consisted of 1-3 people and, against the participants in other groups.

5.Conclusion

In this study, consumers' purchasing decision process is discussed in the context of bulgur product, which is one of the main food items. Factors affecting consumers' bulgur consumption preferences are determined in the study. It is determined that the factors that consumers take into account when making choices are food quality, marketing activities, physical characteristics, and taste-price. Determining these dimensions is especially valuable for businesses and brands operating in the sector. It is thought that production and marketing activities carried out sensitively to the determined dimensions will be beneficial for consumers.

The findings obtained in different studies have similarities and differences with the current study. According to Baştürk et al. (2014), when consumers buy ready-made food products, they display functional behaviors rather than satisfaction and they care more about all marketing elements. In the current study, it can be said that food quality, physical properties, and taste-price factors, support the findings of Baştürk et al. (2014). In addition, the marketing activities factor in the buying decision process of bulgur is related to marketing mix elements in the same study. Similarly, Ioanid (2020) stated in his research that it becomes difficult to make a decision when there is not much difference between products in terms of quality and price. For this reason, she determined that one of the main points on which consumer decisions are based is to act with the brand. This finding is also accepted based on the

marketing activities dimension in the current study. Akçi and Çiftci (2016) focused on both the reasons for consuming bulgur and the variables that affect bulgur consumption. The current study does not measure the reasons for consuming bulgur, since it intends to reveal the dimensions affecting the purchasing decision process. However, in the study; it is certain that the elements of cheapness, taste, durability, locality, and practicality enrich the work.

According to the demographic characteristics of consumers, it is understood that they take into account all the factors in bulgur consumption preferences at different levels. The preferences of participants differ according to taste-price in different gender, different occupations, and different household number groups. The preferences of participants differ significantly according to food quality in different marital status groups, food quality and marketing activities at different educational levels, and marketing activities in different household income level groups. No significant differences are found between the groups according to the age characteristics of the participants. According to research findings, participants choose to consume bulgur, taking into account the factors of food quality and marketing activities.

Determining the factors that consumers take into account in the purchasing decision process regarding bulgur, one of the main food products, provides some tips for businesses operating in this field. According to the findings of the research, the development of messages to be given to convince consumers in the purchasing decision process by food quality, marketing activities, physical characteristics, and taste-price factors will provide advantages for businesses involved in the sector. In addition, significant differences observed in terms of demographic variables need to be taken into account.

This study focuses solely on the bulgur product in determining the factors involved in consumers' purchasing decision process. In addition, the research is carried out in Mardin province sampling through easy sampling. This method restricts the generalization of research findings to individuals living in other cities, that is, to the entire universe of research. Future research can be carried out with different methods and for different products. Increasing the number of research in this area will ensure both the development of efforts towards the sector and the enrichment of the literature.

References

Akçi, Y., & Çiftci, V. (2016). Bulgur Tüketimi: Güneydoğu Anadolu Bölgesi Tüketicilerinin İncelenmesi. Balkan Sosyal Bilimler Dergisi, 818-832.

Balcı, A. (2009). İlköğretim 8. Sınıf öğrencilerinin kitap okuma alışkanlığına yönelik tutumları. Mustafa Kemal University Journal of Social Sciences Institute, 6(11), 265-300.

Baştürk, F., Yıldız, S., &İnan, P. (2014). Hazır Gıda Ürünleri Satın Alma Davranışını Etkileyen Pazarlama Faktörlerinin İncelenmesi: Iğdır İlinde Bir Araştırma. Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 4(1), 223-236.

Cevahir, E. (2020). SPSS ile Nicel Veri Analizi Rehberi. Kibele.

Comegys, C., Hannula, M., & Väisänen, J. (2006). Longitudinal comparison of Finnish and US online shopping behaviour among university students: The five-stage buying decision process. Journal of Targeting, Measurement and Analysis for Marketing, 14(4), 336-356.

Dölekoğlu, C.Ö., & Çelik, O. (2018). Y kuşağı tüketicilerin gıda satın alma davranışı. Kahramanmaraş Sütçü İmam Üniversitesi Tarım ve Doğa Dergisi, 21, 55-66.

Genç, S., & Soysal, M.İ. (2018). Parametrik ve Parametrik Olmayan Çoklu Karşılaştırma Testleri. Black Sea Journal of Engineering and Science, 1(1), 18-27.

Engel, J. F., Blackwell, R. D., & Kollat, D. T. (1978). Consumer Behavior. Dryden Press.

Ilgunga, K.C. (2018). Consumers Buying Decision Process Towards Cosmetics: A Comparison of the Generations X and Y in Durban (Unpublished Master Thesis). Kwazulu-Natal University School of Management, IT and Governance.

Ioanid, A. (2020). Factors Influencing Marketing Decisions. FAIMA Business & Management Journal; Bucharest, 8(3), 53-61.

Kalaycı, Ş. (2006). SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri, Asil Yayın Dağıtım.

Kotler, P. (2017). Principles of Marketing (7th European ed). Pearson Education.

Kotler, P., & Keller, K. L. (2006). Marketing Management (12th ed). Prentice Hall.

Kumar, P. (2010). Marketing of Hospitality & Tourism Services. Tata McGraw-Hill Education.

Munthiu, M. C. (2009). The buying decision process and types of buying decision behaviour. Sibiu Alma Mater University Journals. Series A. Economic Sciences, 2(4), 27-33.

Musaiger, A. O. (1993). Socio-cultural and economic factors affecting food consumption patterns in the Arab countries. Journal of the Royal Society of Health, 113(2), 68-74.

Nakip, M. (2013). Pazarlamada araştırma teknikleri. Seçkin Publishing.

Nørgaard, M. K., Bruns, K., Christensen, P. H., & Mikkelsen, M. R. (2007). Children's influence on and participation in the family decision process during food buying. Young Consumers, 8(3), 197-216.

Oblak, L., Pirc Barčić, A., Klarić, K., Kitek Kuzman, M., & Grošelj, P. (2017). Evaluation of factors in buying decision process of furniture consumers by applying AHP method. Drvna industrija: Znanstveni časopis za pitanja drvne tehnologije, 68(1), 37-43.

Otrar, M. (n.d.). Dağılımların Normalliği ve Normalliğin Test Edilmesi (Date of access: 11.04.2022). https://mustafaotrar.net/istatistik/dagilimlarin-normalligi-ve-normalligin-test-edilmesi/

Özbay, M. (2014). Karaman İli Kentsel Alanında Tüketicilerin Bulgur Tüketim Alışkanlıkları ve Bunu Etkileyen Faktörlerin Belirlenmesi Üzerine Bir Araştırma (Unpublished Master Thesis). Karamanoğlu Mehmetbey Üniversitesi Fen Bilimleri Enstitüsü.

Özbay, M., Karataş, M., & Aasim, M. (2016). Determination of different demographic, socio-economic factors on bulgur consumption in Karaman. Journal of Applied Biological Sciences 10(3): 53-60.

Özdamar K. (2002). Paket Programlarla İstatistiksel Veri Analizi-1 (4. Baskı).Kaan Kitabevi.

Prasad, R.K., & Jha, M.K. (2014). Consumer buying decisions models: A descriptive study. International Journal of Innovation and Applied Studies, 6(3), 335-351.

Ramya, N., &Ali, M. (2016). Factors affecting consumer buying behavior. International journal of applied research, 2(10), 76-80.

Sun, F., & Gülmez, Y.S. (2021). Mardin Bulgurunun Coğrafi İşaret Belgesi ile Tescillenme Süreci. Kayaoğlu, A. (Ed.), *Coğrafi İşaretli Ürünlerin Pazarlanması: Mardin Bulguru Örneği*. Mardin Artuklu Üniversitesi Yayınları.

Tabachnick, B.G., & Fidell, L.S. (2013). Using multivariate statistics: International edition. Pearson.

Tatlıdil, H. (2002). Uygulamalı Çok Değişkenli Istatistiksel Analiz. Akademi Matbaası.

Qazzafi, S. (2019). Consumer Buying Decision Process Toward Products. International Journal of Scientific Research and Engineering Development, 2(5), 130-134.

Zhang, M. (2020). Decision-making processes in academic libraries: How did academic librarians purchase e-book products?. The Journal of Academic Librarianship, 46(6), 1-9.

Beyan ve Açıklamalar (Disclosure Statements)

1. Araştırmacıların katkı oranı beyanı / Contribution rate statement of researchers: Birinci yazar /First author %50, İkinci yazar/Second author %50.

2. Yazarlar tarafından herhangi bir çıkar çatışması beyan edilmemiştir (No potential conflict of interest was reported by the authors).