

# Determining Consumer's Perceptions of Sales Promotion Tools by Latent Class Analysis

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## ABSTRACT

According to the Regulatory Focus Theory, some people need to approach situations with positive consequences, while others prefer to avoid situations with negative consequences. It is argued that promotion-focused consumers are inclined to products with emphasis on hedonic benefit, while prevention-focused consumers are oriented towards products with emphasis on utilitarian benefit. Sales promotion tools provide a number of hedonic and utilitarian benefits in addition to monetary savings through some motivations according to the promotion and prevention focus of individuals. This study was conducted to determine individuals' attitudes towards the products they purchase thanks to sales promotion tools through latent class analysis. The data required for the analysis were obtained by face-to-face survey method with 1006 consumers who voluntarily participated in the research with convenience sampling. According to the findings of the analysis, it has been understood that there are 3 classes that are sensitive to price discount as sales promotion tool in cleaning products, while there are 4 classes that are sensitive to buy-one-get-one-free as a sales promotion tool.

**Keywords:** Regulatory Focus, Promotion Tools, Latent Class, Hedonic Value, Utilitarian Value.

**JEL Classification Codes:** M30, M10

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## INTRODUCTION

Studies conducted today have concluded that sales promotion tools directly affect the purchasing behavior of consumers. According to researches, different-focused consumers exhibit different behaviors for sales promotion tools (Meo, Abbas, Sajjad, Rizwan, Bukhari, & Hameed, 2014:202-216; Krishnan & Bhandare, 2010:40-49). Promotional packages, loyalty discounts, coupons, price discounts, sample products, memberships, sweepstakes and events that make up sales promotion tools provide a number of hedonic and utilitarian benefits together with monetary savings for consumers (Gedenk, Neslin & Ailawadi, 2006:347). Hedonic benefits can be exemplified as value, entertainment, and discovery, while savings, quality products, and ease of shopping for utilitarian benefits (Chandon, Wansink & Laurent, 2000:65-81). Monetary and non-monetary sales promotion tools may differ in terms of consumer perceptions. Doing shopping with hedonic motivations may prefer coupon discounts instead of price discounts (Schindler, 1992:446). Chandon et al. (2000) analyzed

that hedonic and utilitarian perceptions of consumers may differ according to sales promotion tools. Monetary sales promotion tool, which is one of the sales promotion tools, is more effective for utilitarian products, but less effective for hedonic products. It has been concluded that sales promotion tools are more effective when used with appropriate products. The Regulatory Focus Theory (RFT), developed by Higgins (1997), is a widely used motivation theory. Regulatory focus reveal the differences between the promotion and prevention attitudes that constitute the self-regulatory focus in the process of achieving the goals of the individual. While promotion-focused individuals are motivated to achieve desired or dreamed states, prevention-focused individuals are motivated to avoid loss and discord (Pham & Chang, 2008:229-232).

Regulatory focus act as a filter in the consumer's decision-making mechanism, directing people's attention to certain types of information. Promotion-focused individuals look for positive signals in the messages they want to convey while seeking information or evaluating. Prevention-focused individuals focus on

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negative signals to avoid making faults and negative consequences (Kirmani & Zhu, 2007:688-701). Promotion-focused consumers, who are more open to change, attach more importance to innovative characteristics and tend to buy more new products than prevention-focused consumers (Herzenstein, Posavac & Brakus, 2007:251-260). Since promotion-focused individuals tend to gain, such individuals are more susceptible to the hedonic aspects of consumption. Therefore, promotion-focused individuals are more possible to feel hedonic satisfaction. Since prevention-focused individuals are more susceptible to losses, they tend to utilitarian values more (Arnold & Reynolds, 2009:308-320).

Studies revealing the effects of regulatory focus on consumer perceptions and purchasing behaviors towards sales promotion tools are extremely limited (Pham & Chang, 2008; Ramanathan & Dhar, 2010; Zhu, Miao, Wang, & Li, 2023). It is thought that this study will make important contributions to the literature by means of factors such as the performance of the sales promotion tools applied based on the consumer characteristics (Hawkes, 2009:333-342; Li, Sun & Wang, 2007:413-421). Also, in this study the effect of the sales promotion tools applied in for different product categories on consumer purchasing behavior is explained by the promotion and prevention focus dimensions that form the regulatory focus theory. Accordingly, in study, the determination of purchasing possibilities for consumers with which profile in case of which sales promotion tool is applied with latent class analysis.

## LITERATURE REVIEW

### Regulatory Focus Theory

Regulatory focus theory provides researchers in many fields a wide range of information and a perspective based on how people approach desires and avoid pain (Higgins, 1997:1280-1300; Foerster, Higgins & Idson, 1998:1115-1131). Regulatory focus theory is based on the idea that people are motivated by vital requirements. Since the theory is based on the past experiences of individuals, it is argued that the decisions made by individuals are related to their previous experiences (Crowe & Higgins, 1997:117-132).

Regulatory focuses describe the individual's self-regulatory modes in pursuit of goals and the discrepancies among their promotion and prevention attitudes. Higgins (1997)'s regulatory focus theory tries to explain the psychological orientation of individuals about how they approach their goals. According to the

theory, some people have a strong need for situations with positive consequences, while others prefer to avoid situations with negative consequences. According to Higgins (1997), prevention and promotion motivational systems are effective in targeting goals. The purpose of prevention system is to be vigilant and maintain safety. With this reason, avoiding negative consequences makes people with a high prevention-focus happy, while the presence of negative consequences and the losses caused by these results cause pain and unhappiness to prevention-focused individuals. Responsibilities, doing what needs to be done on time, duties, and protection and safety needs motivate the prevention-focused. People with a dominant promotion focus tend to take action by taking advantage of achievements, gains, desires, self-development, ideals and all kinds of motivations to achieve.

Regulatory focus shows its effect on individuals' product searches, social relations, preferences and strategies they use. In a study on the differences between promotion-focused and prevention-focused individuals, it was understood that while promotion-focused consumers seek a wider range of desires and wishes on the global platform with alternative methods, prevention-focused consumers normally do this on local platforms (Pham & Higgins, 2005:6). Crowe and Higgins (1997) concluded that promotion-focused individuals tend to produce more criteria and alternatives when making purchasing decisions than prevention-focused individuals. The effect of this on consumer shopping behavior is that promotion-focused consumers evaluate product characteristics and qualities more than prevention-focused consumers while benefiting from the shopping experience or third-party resources (Crowe & Higgins, 1997: 117-132).

Many studies related to regulatory focus theory and purchasing behavior offer a perspective viewpoint. For example, factors such as easy return of a purchased goods and low shipping charges attract prevention-focused consumers in terms of minimizing possible losses. On the other hand, factors such as the quality of the purchased goods and shipping insurance indicate trust in the seller and motivate promotion-focused consumers (Shao, Chang & Zhang, 2013:3-4). Prevention-focused consumers think that making an uncontrolled decision about shopping is an inefficient and risky decision. On the contrary, promotion-focused consumers are more susceptible to attractive aspects of the product as they are more inclined to make progress, reach their goals and seize opportunities (Higgins, 1997:1280-1300; Kim & Kim, 2016:387-401).

## Hedonic and Utilitarian Value

Sales promotion tools provide benefits to consumers not only to save money but also to have fun and pleasure (Kwok & Uncles, 2002). Such benefits allow the consumer to spend more, as well as having a good time for shopping, which the consumer sees as a social activity (Renwarin, 2019:191-206).

The utilitarian perception of value is defined as the general determination and evaluation of the benefit obtained by the consumer. Hedonic value deals with consumer purchases associated with the shopping process, entertainment and pleasure play (Childers, Carr, Peck, & Carson, 2001:511-535). While it is argued that promotion-focused consumers tend to consider the hedonic benefit of the product, it is argued that prevention-focused consumers are more likely to consider the utilitarian benefit of the product (Chernev, 2004:141-150; Roy & Ng, 2012:81-88).

Utilitarian perception is related to the function and usefulness of the product (Mano & Oliver, 1993:451-466). Quality, savings and convenience are related to utilitarian perception (Ailawadi, Neslin & Gedenk, 2001:71-89; Chandon et al. 2000:65-81). Consumers with a high utilitarian value perception have goal-oriented purchasing behaviors and they take purchasing action to achieve a specific need or goal. The most important goal of consumers with utilitarian value in purchasing is to reach the purchase purpose in a timely and efficient form (Childers et al., 2001:511-535). Consumers with high hedonic value perception will tend to hedonic products more, and consumers with high utilitarian value perception are expected to tend more towards utilitarian products (Chandon et al., 2000:65-81). Another study examined effects of hedonic and utilitarian values on consumers' online shopping behaviors. Consumers who turn to hedonic shopping tend to attract the feelings of fun, pleasure and elegance in the 20-29 age group. On the other hand, utilitarian shopping inclined consumers prefer online shopping more in terms of time saving and ease of purchase. As a result, it was concluded that there are important differences between consumers with high utilitarian value and consumers with high hedonic value in the young age group (Kale, 2018:263-270).

When the literature is examined, it is understood that the regulatory focus theory and the utilitarian-hedonic value concepts are used together in a few studies. The multifaceted use of the latent class theory in this study has brought to mind the question of what types of latent classes can be in consumer perceptions of sales

promotion tools. In this study, by determining consumers' latent classes and hedonic utilitarian value perceptions, it was tried to determine which sales promotion tools they turned to in which product section. Accordingly, it is thought that significant contributions will be made to the literature regarding the marketing of consumer segments with the determined latent classes.

## Sales Promotion Tools

Sales promotion is one of the marketing programs used to maintain customer relations in order to inform the consumer and remind them of various information. Retailers need a tool to speed up consumers' purchasing processes. Sales promotion is one of the marketing mix elements and has the driving force in delivering marketing campaigns to the consumer (Kotler & Keller, 2018: 600; Kotler & Armstrong, 2012: 396).

There are many sales promotion practices in the literature. These applications direct consumers' purchasing attitudes. In addition, previous sales promotion activities used by consumers affect their orientation towards other sales promotion practices in their next shopping experience (Bridges, Briesch, & Yin, 2006: 295). Osman, Fah and Foon (2011) investigated the effects of sales promotion tools such as coupons, buy one get one free and price discounts on students' purchasing attitudes. Researchers emphasized in their studies that the sales promotion tools most preferred by consumers are buy one get one free and price discounts.

Ubeja (2014) investigated consumers' behavior towards gifted product offers. The researcher reported that the consumers participating in his study, especially young individuals, are very conscious of sales promotion tools, and that these individuals between the ages of 20-30 are very prone to switch brands to retailers that offer gifts and exchange offers.

Lindholm (2008) investigated in his study whether consumers were influenced by special promotions on their birthdays. As a result of his study, the researcher observed that the number of purchasing transactions of consumers increased during sales promotion practices, and that there was a decrease in the number of purchasing transactions of consumers when the sales promotion application ended.

Sales promotion practices are one of the easiest ways for supermarkets to compete. These applications are frequently used by supermarkets to market a new product or increase the sales of an existing product (Jaradat, Jaradat, & Yassine, 2011: 1684). There is a widely

accepted view that sales promotion tools increase sales. As mentioned above, such applications are frequently used, especially in supermarkets. Before determining the sales promotion tools used in the study, the most used sales promotion tools were determined by taking photographs in popular supermarkets in the province where the study would be conducted. Accordingly, sales promotion practices such as price discounts, buy one get one free, gift product giving and sample product distribution are included in the study. In this study, when the latent class analysis results are examined, in order to increase the readability of the article, price discount and buy one get one free sales development tools, which are the most prominent latent classes and are relatively more widely used in supermarkets, are included.

## METHOD

In this study, effects of price discounts and buy-one-get-one-free sales promotion tools on consumers' shopping behavior were investigated. The study includes cleaning products, cosmetics and personal care products of corporate food retailers among retailing businesses.

The universe of the research consists of consumers who reside in Kahramanmaraş and shop at the markets here. The population of Kahramanmaraş province consists of 1.154.102 people as of 2019. In this province, the population of Onikişubat district, one of the central districts, consists of 407.956 people, while the population of Dulkadiroğlu district, another central district, consists of 224.531 people (TUİK, 2019). Due to reasons such as not being able to access the entire universe due to time and cost constraints and not having a list of all consumers that make up the universe, the sample of the research, that is, the participants participating in the research, consisted of consumers who shopped in supermarkets between 01.01.2019 and 01.08.2019. The consumers surveyed in the study were selected according to the non-random judgmental sampling method. In the survey study, it was made in the leading markets of the province such as Akmansoy, Özçam, Marvit Gross, Ayrancılar, Migros and Lider markets. A survey was conducted in front of ten different markets in total. Since the markets are spread in two separate districts in the province of Kahramanmaraş, it can be said that the data set, which includes 1000 participants, 500 from each of these districts, is large enough to reveal latent classes. In the study, it was aimed to increase the participation rate by telling the participants that if they participated in the survey, the study would be used for scientific purposes and the existing data would never be shared with third parties. Accordingly, in the study, surveys were collected using face-to-face interview

technique with consumers residing in the central districts of Kahramanmaraş, and a total of 1100 surveys were reached. On the other hand, some surveys were eliminated because they were thought to be inaccurate, and the remaining 1006 surveys were included in the research.

The data were analyzed with help of the SPSS 22.0 'Statistical Package for The Social Science' statistical package program, which is one of the programs widely used by most researchers in today. Descriptive statistics (frequency, percentage and arithmetic mean), exploratory factor analysis and latent class analysis were used to analyze results in research. Latent Gold 5.1 program was used in the section where the purchasing attitudes of consumers with which demographic structure were determined in case of which sales promotion tool was used in the research.

### The Latent Class Analysis

The aim of the Latent Class Analysis (LCA) is to analyze multivariate data as well as creating appropriate models. In principle, latent class analysis is a multivariate regression model in which continuous or categorical data based on observed variables (Bartholomew, Knott, 1999:121; Skrondal, Rabe-Hesketh, 2004:324). Examination of the latent data from observed continuous or categorical data of consumers is possible with the latent class analyzes (Lanza, Flaherty & Collins, 2003:165).

LCA models were developed by Lazarsfeld and Henry (1968) and started to be used for classification in social and behavioral sciences. With developments in statistical calculations, the number of researchers using LCA has increased in recent years. Latent class analysis has come into use in medical (Rindskopf, 2002) and marketing (Zenor & Srivastava 1993; Dias & Vermunt 2007). With LCA, investigators obtain information about possible latent classes based on the relationships between observed variables (Tekle, Gudicha, & Vermunt, 2016:209-224).

In this analysis, structures that have been the subject of psychology such as personality, intelligence, interest and attitude cannot be observed directly. For example, a student who immediately understands what he/she has read and is successful in his/her studies is considered to be intelligent. It is seen that only a student who enjoys a certain subject or lesson has a positive attitude towards that lesson through his/her willingness to study. As in the examples, whether the observable behaviors are caused by an latent structure belonging to the person or not is examined with the latent variable models (Güngör Culha & Korkmaz, 2011: 191).

In the use of latent class analysis (LCA), the most appropriate number of classes must be determined. The number of latent class determines the fit of the model. Having more latent classes makes it easier to examine observed sequences. However, the rise in the number of latent groups causes the model to emerge, making it difficult to fit the model and increases the number of measured parameters (Lin & Dayton, 1997:249-264). For this reason, it is necessary to ensure data compatibility with the model with the most appropriate class and the least parameter (Vermunt & Magidson, 2013: 71). Although the Latent Class Analysis (LCA) does not directly determine the number of latent classes, it contains multiple statistics that show whether the model is compatible or not (Lin & Dayton, 1997: 262).

**Measurement Tools Used in Research**

It was decided to utilize regulatory focus theory to understand consumers' motivations. It is thought that regulatory focus theory plays a decisive role in consumers' purchasing behavior. Exploratory factor analysis in this study, which includes regulatory focus, utilitarian and hedonic value perceptions, quality and economic purchasing, variables with cross-loads were determined and excluded from the study. In terms of the variables in the survey, five variables measuring the promotion focus (Cronbach's  $\alpha = .908$ ) and four variables measuring the prevention focus (Cronbach's  $\alpha = .782$ ) dimension obtained by utilizing the studies of Higgins, Friedman, Harlow, Idson, Ayduk, and Taylor (2001), were used in this study.

**Table 1:** Demographic Characteristics of Participants

Variables	Frequencies (N)	Percentages (%)	Variables	Frequencies (N)	Percentages (%)
<b>Gender</b>			<b>Education Status</b>		
Female	379	37,7	Primary education	42	4,2
Male	627	62,3	High school	153	15,2
Total	1006	100,0	Associate degree	143	14,2
<b>Marital status</b>			Bachelor's degree	535	53,2
Single	390	38,8	Postgraduate	133	13,2
Married	616	61,2	Total	1006	100,0
Total	1006	100,0	<b>Shopping Frequency</b>		
<b>Age</b>			In 1-3 days	503	50,0
18 years and under	33	3,3	Weekly	314	31,2
19-23 years old	164	16,3	For 15 days	105	10,4
24-28 years old	147	14,6	Monthly	84	8,4
29-33 years old	134	13,3	Total	1006	100,0
34-38 years old	153	15,2	<b>Average monthly spending</b>		
39-43 years old	134	13,3	125₺ and below	449	44,6
44-48 years old	88	8,7	Between 126-250₺	264	26,2
49-53 years old	103	10,2	Between 251-375₺	130	12,9
54 years and older	50	5,1	Between 376-500₺	77	7,7
Total	1006	100,0	Between 501-625₺	34	3,4
<b>Job</b>			Between 626-875₺	12	1,2
Officer	339	33,7	876₺ and above	40	4,0
Worker	179	17,8	Total	1006	100,0
Self-employed	98	9,7	<b>Average Monthly Income</b>		
Retired	65	6,5	0-2000	172	17,1
Student	178	17,7	2001-4000	286	28,4
Housewife	44	4,4	4001-6000	257	25,5
Notworking	59	5,9	6001-8000	157	15,6
Other	44	4,3	8001 and above	134	13,4
Total	1006	100,0	Total	1006	100,0

**Table 2:** Exploratory Factor Analysis Results for Determining the Dimensions of Regulatory Focus Theory

Factor	Question Statement	Factor Weights	Explained Variance
Promotion Focus	Compared to most people, are you typically unable to get what you want out of life?	0,88	0,41
	Do you often do well at different things that you try?	0,74	
	I feel like I have made progress toward being successful in my life.	0,78	
	I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them.	0,90	
	When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do	0,80	
Prevention Focus	Growing up, would you ever "cross the line" by doing things that your parents would not tolerate?	0,81	0,27
	Did you get on your parents' nerves often when you were growing up?	0,79	
	Growing up, did you ever act in ways that your parents thought were objectionable	0,71	
<b>Kaiser-Meyer-Olkin Scale Validity</b>			0,81
<b>Bartlett's Test of Sphericity</b>		<b>Chi-Square</b>	4699,51

In the literature review, it was observed that hedonic and utilitarian value perceptions have a relationship with regulatory focuses. In order to reveal this connection, in this study was used the study of Chandon, Wansink, & Laurent (2000) on seven variables measuring utilitarian value perception (Cronbach's  $\alpha = .898$ ) and three variables measuring hedonic value perception (Cronbach's  $\alpha = .855$ ).

In line with the purpose of the study, it was desired to examine consumers' purchasing attitudes. When a literature review was conducted on purchasing attitudes, Bakewell and Mitchell (2003) examined the shopping attitudes of consumers and divided consumers into five segments as "recreational quality seekers, recreational discount seekers, shopping and fashion uninterested, trend setting loyals, confused time/money conserving". Osman, Fah and Foon (2011) adapted consumer's attitudes to their own studies by utilizing these segments. Using the variables used by Osman, Fah and Foon (2011), a preliminary survey was conducted on 150 people in this study. After examining the data with exploratory factor analysis, variables with cross-loading factor loadings were removed. When the remaining variables were examined, purchasing attitudes were renamed as "Economic Purchase Attitude" and "Quality Purchase Attitude". In the study were included three variables to determine the consumer's quality purchasing dimension (Cronbach's  $\alpha = .882$ ) and three variables to determine the economic purchasing dimension (Cronbach's  $\alpha = .839$ ).

## RESEARCH FINDINGS

### Participant Characteristics

Gender, marital status, age, education level, shopping frequency, average income and average spending information were asked to the consumers in the survey conducted for the consumers shopping behavior in the supermarkets and living in Kahramanmaraş. Information on demographic characteristics of consumers is given in Table 1 with frequencies and percentages.

When the table is examined, 37.7% of consumers in survey are women and 62.3% are men. When marital status of the respondents is examined, 38.8% are single and 61.2% are married. When the participants are examined in terms of age, the total participants aged 18 and under, aged between 44-48 and over the age of 54 constituted 17% of the general participation, while the respondents aged 19-23 formed the most participation with a rate of 16.3%. 33.7% of the respondents were officer, 17.7% were students and 17.8% were workers. 53.2% of the respondents, that is, the majority of them, have a bachelor's degree.

Knowing consumer demographic information was an important auxiliary information for the latent class analysis conducted in this study. In addition, knowing the regulatory focus and hedonic-utilitarian value perceptions of consumers and determining which sales promotion tools they prefer from which products helped to obtain a good consumer profile in this study. In this study, clues will be obtained

**Table 3:** Exploratory Factor Analysis Results for the Determination of Utilitarian and Hedonic Value Dimensions

Factor	Question Statement	Factor Weights	Explained Variance
Utilitarian Value	I think I made a profitable purchase by taking advantage of promotions.	0,76	0,45
	I see promotions as practices that relieve my budget.	0,75	
	With my savings from promotions, I can buy a better product than I always use.	0,72	
	I gain the opportunity to purchase these products through promotions on more expensive and quality products.	0,70	
	Promotions relax my budget and give me the opportunity to buy higher quality products.	0,75	
	When I take advantage of promotions, I consider myself a very adept shopper.	0,70	
	I spend less time and effort shopping by watching promotions.	0,71	
Hedonic Value	I follow promotions such as sweepstakes, contests, and gifts with pleasure.	0,77	0,21
	I find promotions such as sweepstakes and contests enjoyable.	0,90	
	I think that promotions such as sweepstakes, contests, and gifts create a pleasant and exciting atmosphere in stores.	0,77	
<b>Kaiser-Meyer-Olkin Scale Validity</b>			0,83
<b>Bartlett's Test of Sphericity</b>		<b>Chi-Square</b>	5492,78

about which consumer profiles can purchase which products, so that supermarkets can have an idea about the various products they intend to sell in the future.

**Analysis Method**

When examining data, first of all, validity and reliability analyzes of the data were made. In determining the criteria created by the variables in the scale, exploratory factor analysis was performed. Kaiser-Meyer-Olkin (KMO) scale validity and Bartlett's Test of Sphericity (sphericity test) were applied to determine whether the data set was appropriate for analysis.

Reliability levels for the regulatory focus dimensions were determined as 0.908  $\alpha$  value of Cronbach Alpha for the promotion-focused dimension and 0.782  $\alpha$  value of Cronbach Alpha for the prevention-focused dimension.

It was determined that the promotion and prevention-focused dimensions were unidimensional, and the factor loadings of items under factor are given in Table 2.

Reliability levels for the utilitarian and hedonic value perception dimensions were determined as 0.898  $\alpha$  value of Cronbach Alpha for the utilitarian value dimension and 0.855  $\alpha$  value of Cronbach Alpha for the hedonic value dimension. It was determined that the utilitarian and hedonic value dimensions were unidimensional, and factor loads in variables under factor are given in Table 3.

Reliability levels for the economic and quality purchase dimensions were determined as 0.839  $\alpha$  value of Cronbach Alpha for the economic purchase dimension and 0.882  $\alpha$  value of Cronbach Alpha for the quality purchase dimension. It was determined that the economic and quality purchase dimensions were unidimensional, and factor loadings in items under factor are given in Table 4.

**Table 4:** Exploratory Factor Analysis Results for the Determination of Quality and Economic Purchasing Dimensions

Factor	Question Statement	Factor Weights	Explained Variance
Economic Purchasing	I look very carefully to find the best value for money.	0,815	0,30
	I buy as much as possible at sale prices	0,858	
	I should spend more time deciding on the products and brands I buy	0,722	
Quality Purchasing	Once I find a product I like, I buy it regularly	0,81	0,48
	In general, I try to get the best overall quality	0,98	
	I usually buy well-known brands	0,757	
<b>Kaiser-Meyer-Olkin Scale Validity</b>			0,72
<b>Bartlett's Test of Sphericity</b>		<b>Chi-Square</b>	3102,94

**Table 5:** Compliance Index Analysis of Perception of Price Discount Applied in Cleaning Products

Model Type	Likelihood-ratio (L <sup>2</sup> )	AIC	BIC	Number of Parameters (Npar)	Degrees of freedom (Df)
1 Class	7233,3357	7450,8457	7509,8105	12	994
2 Class	7024,7005	7274,2105	7411,7951	28	978
<b>3 Class</b>	<b>6901,9980</b>	<b>7183,5080</b>	<b>7399,7124</b>	<b>44</b>	<b>962</b>
4 Class	6796,8110	7110,3210	7405,1452	60	946
5 Class	6713,6864	7059,1964	7432,6404	76	930
6 Class	6629,7777	7007,2877	7459,3515	92	914

### Determination of Latent Classes According to the Preferences of Promotion and Prevention Focused Consumers for Sales Promotion Tools

In the study, it is aimed to determine latent classes of consumer attitudes towards sales promotion tools applied on different product groups according to their promotion and prevention focus characteristics, according to promotional product purchasing, hedonic/utilitarian value perceptions and quality/economic purchasing attitudes. In order to statistically evaluate consumers' attitudes towards sales promotion tools, consumers were asked which sales promotion tools they preferred in which product categories in their shopping.

This study was conducted on basic food products, cosmetics-cleaning products and delicatessen products. When the data obtained was examined, it was understood that latent classes were more evident, especially in cleaning and cosmetic products. For this reason, cleaning and cosmetics departments were also included in the study in order to increase the readability of the article.

### Latent Class Estimates of Consumer Perceptions for the Sales Promotion Tool of Price Discount in Cleaning Products

It has been a interesting subject to examine according to their latent classes of the differences of consumers' attitudes towards promotional products according to their regulatory focus. The fit index analysis using the

Latent Gold 5.1 program to determine the latent classes of consumers is given in Table 5 The most appropriate model was selected by using the obtained information criterion values. In this context, it was decided to choose the smallest value (7399.71) of the Bayes Information Criteria (BIC) statistic. When the values were examined, it was decided that the most suitable model with Akaike Information Criteria (AIC) 7183.50 parameter number (Npar) 44, maximum likelihood chi-square ratio (L<sup>2</sup>) 6901.99 and finally the degree of freedom (Df) 962 was the 3-class model. The selection of the most suitable model with the least class is important for better analysis of the data in latent class analyses.

After choosing the most suitable model to latent class analysis, the average values of regulatory focus, value perceptions and purchasing dimensions, which constitute the dimensions of the research, are given in Table 6. According to the table, average of prevention-focused consumers in 1st and 2nd classes, and mean of the promotion-focused consumers in 3rd class, is higher than the others. The average value table is used in latent class nomenclature.

When the Table 7 is examined, considering the sensitivity, insensitivity and indecision of consumers' interest in price discounted products, it was decided to name the consumers in the 1st class as prevention indecisive, the consumers in the 2nd class as prevention sensitive, and the consumers in the 3rd

**Table 6:** Average Values of Dimensions According to Perception of Price Discount Applied in Cleaning Products

Dimensions	1. Class	2. Class	3. Class
Promotion Focus	3,26	3,53	3,93
Prevention Focus	3,56	3,97	3,07
Hedonic Value Perception	2,68	2,25	3,48
Utilitarian Value Perception	2,99	4,17	3,86
Economic Purchase	3,58	4,43	4,19
Quality Purchase	3,68	4,00	4,29
Price Discount	3,01	3,83	3,21



**Table 7:** Parameter Estimates of Price Discount Sales Promotion Tool in Cleaning Products

Dimensions/ Demographic characteristics		Total Participants n=1006						ANOVA (One Way)	
		1.Class Prevention Indecisive		2.Class Prevention Sensitive		3. Class Promotion Indecisive			
		n	%	n	%	n	%		
Class Participations		399	39,6	363	36	245	24,4		
Price Discount Attitude	I do not agree	47	11,8	2	0,7	47	18,8	80,9	p < 0.001
	I'm undecided	206	51,7	64	17,6	134	55,1		
	I agree	146	36,5	297	81,7	64	26,1		
Utilitarian Value Perception	I do not agree	98	24,6	1	0,4	9	3,6	267,6	p < 0.001
	I'm undecided	200	50,2	39	10,7	62	25,4		
	I agree	101	25,2	323	88,9	174	71,0		
Hedonic Value Perception	I do not agree	200	50,3	229	63,1	34	13,8	149,9	p < 0.001
	I'm undecided	130	32,7	112	30,9	78	32,1		
	I agree	69	17,0	22	6,0	133	54,2		
Quality Purchase Attitude	I do not agree	49	12,4	20	5,6	1	0,5	37	p < 0.001
	I'm undecided	92	23,0	47	12,9	21	8,5		
	I agree	258	64,6	296	81,5	223	91,0		
Economic Pur- chase Attitude	I do not agree	58	14,7	0	0,0	3	1,4	131,7	p < 0.001
	I'm undecided	95	23,7	9	2,5	24	9,6		
	I agree	246	61,6	354	97,5	218	89,0		
Gender	Female	84	21,0	177	48,8	118	48,3		
	Male	315	79,0	186	51,2	127	51,7		
Marital Status	Single	181	45,5	95	26,1	114	46,7		
	Married	218	54,5	268	73,9	131	53,3		
Age	23 years and under	89	22,3	54	14,8	55	22,4		
	24-33 years old	47	11,9	51	14,1	48	19,7		
	34-38 years old	106	26,7	99	27,2	83	33,5		
	39-48 years old	53	13,1	52	14,4	29	11,9		
	49 years and older	104	26,0	107	29,5	30	12,4		
Income	0-2000₺	65	16,4	59	16,2	48	19,5		
	2001-4000₺	118	29,3	96	26,6	73	29,7		
	4001-6000₺	89	22,4	96	26,3	72	29,5		
	6001- 8000₺	59	14,8	64	17,7	34	13,9		
	8001₺ and above	68	17,1	48	13,2	18	7,4		
Job	Officer	117	29,4	141	38,8	81	33,2		
	Worker-Self-employed	138	34,5	82	22,5	58	23,7		
	Retired- Student	105	26,3	70	19,4	68	27,8		
	Housewife- Not Working	39	9,8	70	19,3	38	15,3		
Education	Primary Education	30	7,6	11	3,2	0	0,1		
	High School	82	20,6	55	14,9	17	6,9		
	Associate degree	56	14,0	56	15,6	31	12,6		
	Bachelor's degree	205	51,3	184	50,7	146	59,8		
	Postgraduate	26	6,5	57	15,6	51	20,7		
Shopping Fre- quency	In 1-3 days	189	47,5	174	47,9	140	57,3		
	Weekly	129	32,3	117	32,4	68	27,7		
	For 15 days	45	11,2	35	9,6	25	10,2		
	Monthly	36	9,0	37	10,1	12	4,8		
Average Spending	125₺ and below	186	46,5	173	47,8	90	36,9		
	Between 126- 250₺	105	26,4	96	26,3	63	25,8		
	251₺ and above	64	16,1	42	11,5	24	9,9		
	376₺ and above	44	11,0	52	14,4	68	27,4		

**Table 8:** Consumers Sensitive to Price Discount Sales Promotion Tool in Cleaning Products

Dimensions/ Demographic characteristics	2.Class Prevention Sensitive
Utilitarian Value Perception	High
Hedonic Value Perception	Low
Quality Purchase Attitude	High
Economic Purchase Attitude	High
Gender	Female/Male
Marital Status	Married
Age	49 years and older
Income	2001-6000₺
Job	Officer
Education	Bachelor's degree
Shopping Frequency	1-3 days
Average Spending	up to 125₺

**Table 9:** Fit Index Analysis of Buy-One-Get-One-Free Application in Cleaning Products

Model Type	Likelihood-ratio (L <sup>2</sup> )	AIC	BIC	Number of Parameters (Npar)	Degrees of freedom (Df)
1 Class	7275,5934	7493,1034	7552,0683	12	994
2 Class	7068,7291	7318,2391	7455,8237	28	978
3 Class	6888,5010	7170,0110	7386,2155	44	962
<b>4 Class</b>	<b>6763,2982</b>	<b>7076,8083</b>	<b>7371,6325</b>	<b>60</b>	<b>946</b>
5 Class	6706,5046	7052,0146	7425,4587	76	930
6 Class	6623,3710	7000,8810	7452,9448	92	914

class as promotion indecisive. In addition, ANOVA test results according to price discount attitude, utilitarian value perception, hedonic value perception, quality purchasing attitude and economic purchasing attitude of each class are also included in the table. The p values of the ANOVA test performed according to each class are given in the table.

The latent classes of consumers' perceptions of the price discounted sales promotion tool applied in cleaning products are presented in Table 4.7. When the table is analyzed, the conditional probabilities of the classes can be explained as follows:

2. Class Prevention-Sensitive: In this class, where there are more prevention-focused consumers, the probability of purchasing cleaning products through price discount is 81%. The class consists of individuals with 73% probability of being married, 38% probability of being officer, 66% probability of bachelor's degree and postgraduate education, 1-3 days of shopping frequency with a high probability of shopping up to 125₺.

According to the results of the conditional probabilities, the profiles of consumers sensitive to promotional products in case of price discounts for cleaning products are given in Table 8.

Only the options with the highest probabilistic values sensitive to price discount are included in the table. When evaluated in general, majority of married and prevention-focused consumers are more sensitive in case of price discounts in cleaning products.

#### **Latent Class Estimates of Consumer Perceptions for Buy-One-Get-One-Free Sales Promotion Tool in Cleaning Products**

Latent classes were determined in order to analyze the effect of buy-one-get-one-free sales promotion tool in cleaning products on consumer perceptions. In analysis, when fit index analysis in Table 9 was examined, it was decided that the smallest value of the Bayes Information Criteria (BIC) statistic was 7371.63 and the 4-class model was the most appropriate model.

**Table 10:** Average Values of Dimensions According to Perception of Buy-One-Get-One-Free Sales Promotion Tool Applied in Cleaning Products

Dimensions	1. Class	2. Class	3. Class	4. Class
Promotion Focus	3,53	3,65	3,46	3,95
Prevention Focus	3,20	3,85	3,75	3,06
Hedonic Value Perception	2,82	2,46	1,86	3,77
Utilitarian Value Perception	2,92	4,23	3,55	3,79
Economic Purchase	3,59	4,51	3,89	4,08
Quality Purchase	3,55	4,18	3,72	4,38
Buy-One-Get-One-Free	2,95	3,70	2,38	3,91

After choosing the most suitable model to latent class analysis, average values of the dimensions of regulatory focus, value perceptions and purchasing, which constitute the dimensions of research, are given in Table 4.10. According to table, the average value of promotion-focused consumers in 1st and 4th classes, and mean of the prevention-focused consumers in 2nd and 3rd classes, is higher than the others.

In the average value table, the classes of consumers are named according to their promotion and prevention focus values. In Table 11, the class names were determined as promotion indecisive, prevention-sensitive, prevention-insensitive, and promotion-sensitive, respectively, according to consumers' attitude to purchase promotional products. The p values of the ANOVA test performed according to each class are given in the table.

The latent classes of consumers' perceptions of the buy-one-get-one-free sales promotion tool applied in cleaning products are presented in Table 11 When the latent classes are examined, conditional probabilities can be explained as follows:

2. Class Prevention Sensitive: This class consists of consumers with high attitude to purchase promotional products, low hedonic value, high utilitarian value, and high probability of purchasing economic and quality

products. The class consists of consumers who are 60% probability to be women and married, 75% probability to have bachelor's degree and postgraduate education, and spend an average of 125₺ and below with a frequency of 1-3 days.

4. Class Promotion Sensitive: The most basic characteristics of this class are the majority of promotion-focused consumers who tend to promotional products, the high level of utilitarian and hedonic value, and the high probability of purchasing both quality and economic products.

Based on these results, Table 12 shows the most prominent characteristics of the latent classes sensitive to promotional products in the case of applying buy-one-get-one-free sales promotion tool in cleaning products.

It is understood that when buy-one-get-one-free sales promotion tool is applied to cleaning products, consumers with a high utilitarian value level, generally married, especially between 34-38 years old, and officer, are more likely to purchase quality and economic products.

**Table 11:** Parameter Estimates of Buy-One-Get-One-Free Sales Promotion Tool in Cleaning Products

Dimensions/ Demographic characteristics		Total Participants n=1006								ANOVA (One Way)	
		1.Class Promotion Indecisive		2. Class Prevention Sensitive		3.Class Prevention Insensitive		4. Class Promotion Sensitive			
		n	%	n	%	n	%	n	%		
Class Participations		320	31,7	296	29,4	205	20,6	185	18,3		
Buy-One-Get-One-Free Attitude	I do not agree	93	28,9	26	8,7	104	51,2	11	6,0	95,3	p < 0.001
	I'm undecided	137	42,8	95	31,7	76	36,6	50	27,0		
	I agree	90	28,3	175	59,6	25	12,2	124	67,0		
Utilitarian Value Per- ception	I do not agree	86	27,0	1	0,3	15	7,6	5	2,8	154	p < 0.001
	I'm undecided	159	49,4	18	6,1	80	39,0	46	24,6		
	I agree	75	23,6	277	93,6	110	53,4	134	72,6		
Hedonic Value percep- tion	I do not agree	107	33,6	161	54,1	186	90,7	9	4,9	162,9	p < 0.001
	I'm undecided	138	43,0	109	37,3	18	9,0	55	29,6		
	I agree	75	23,4	26	8,6	1	0,3	121	65,5		
Quality Purchase Attitude	I do not agree	40	12,5	4	1,3	27	13,2	0	0,0	45,9	p < 0.001
	I'm undecided	91	28,2	32	10,9	30	14,8	6	3,4		
	I agree	189	59,3	260	87,8	148	72,0	179	96,6		
Economic Purchase Attitude	I do not agree	48	14,9	0	0,0	11	5,3	4	2,0	69,6	p < 0.001
	I'm undecided	71	22,0	5	1,7	33	16,0	19	10,1		
	I agree	201	63,1	291	98,3	161	78,7	162	87,9		
Gender	Female	81	25,2	179	60,2	39	19,2	81	43,7		
	Male	239	74,8	117	39,8	166	80,8	104	56,3		
Marital Status	Single	182	57,2	116	39,3	27	12,9	64	34,8		
	Married	138	42,8	180	60,7	178	87,1	121	65,2		
Age	23 years and under	98	30,6	65	22,0	9	4,2	25	13,6		
	24-33 years old	50	15,8	63	21,2	9	4,5	24	13,1		
	34-38 years old	85	26,5	86	28,9	47	23,0	70	37,7		
	39-48 years old	37	11,4	37	12,7	27	13,3	33	17,7		
	49 years and older	50	15,7	45	15,2	113	55,0	33	17,9		
Income	0-2000₺	66	20,6	67	22,5	21	10,1	19	10,3		
	2001-4000₺	111	34,7	82	27,7	53	26,3	39	20,9		
	4001-6000₺	70	21,8	72	24,4	55	26,8	59	32,4		
	6001- 8000₺	30	9,4	45	15,1	46	22,4	37	19,7		
	8001₺ and above	43	13,5	30	10,3	30	14,4	31	16,7		
Job	Officer	55	17,4	99	33,5	102	49,5	83	44,8		
	Worker-Self-employed	107	33,5	57	19,4	62	30,3	50	27,1		
	Retired- Student	113	35,4	72	24,3	30	14,8	28	15,0		
	Housewife-Not Working	45	13,7	68	22,8	11	5,4	24	13,1		
Education	Primary Education	18	5,7	5	1,8	18	9,0	0	0,0		
	High School	65	20,4	25	8,6	50	24,3	13	6,8		
	Associate degree	49	15,2	40	13,4	34	16,4	21	11,3		
	Bachelor's degree	172	53,6	165	55,5	91	44,4	107	58,3		
	Postgraduate	16	5,1	61	20,7	12	5,9	44	23,6		
Shopping Frequency	In 1-3 days	150	47,0	170	57,3	84	40,8	99	53,6		
	Weekly	104	32,6	85	28,8	68	33,7	56	30,0		
	For 15 days	37	11,7	18	6,1	30	14,4	20	10,8		
	Monthly	29	8,7	23	7,8	23	11,1	10	5,6		
Average Spending	125₺ and below	170	53,4	165	55,5	68	33,2	46	24,8		
	Between 126- 250₺	80	25,2	70	23,5	57	27,7	57	30,8		
	251₺ and above	48	14,5	21	7,5	37	17,9	24	13,3		
	376₺ and above	22	6,9	40	13,5	43	21,2	58	31,1		

**Table 12:** Consumers Sensitive to Buy-One-Get-One-Free Sales Promotion Tool in Cleaning Products

Dimensions/ Demographic characteristics	2. Class Prevention Sensitive	4. Class Promotion Sensitive
Utilitarian Value Perception	High	High
Hedonic Value Perception	Low	High
Quality Purchase Attitude	High	High
Economic Purchase Attitude	High	High
Gender	Female	Male
Marital Status	Married	Married
Age	34-38 years old	34-38 years old
Income	2001-4000₺	4001-6000₺
Job	Officer	Officer
Education	Bachelor's degree	Bachelor's degree
Shopping Frequency	1-3 days	1-3 days
Average Spending	up to 125₺	Between 126-250₺

**Latent Class Estimates of Consumer Perceptions for Price Discount Sales Promotion Tool in Cosmetic Products**

It is aimed to determine the consumer perceptions towards price discount applications in cosmetic products and to investigate the latent classes with the obtained data. When the fit index analysis in Table 13 was examined, it was decided that the minimum value of Bayes Information Criteria (BIC) was 7503.05 and the 3-class model was the most suitable model in study.

Averages of regulatory focus, hedonic/utilitarian value perceptions and economic/quality purchasing dimensions are given in Table 14. According to table, there are promotion-focused consumers in 1st and 3rd classes, and prevention-focused consumers in 2nd class. The names of the latent classes were determined according to the average values and these names are shown in Table 15. The classes included in the latent class analysis were named as promotion-insensitive, prevention-sensitive, and promotion-sensitive, respectively.

**Table 13:** Fit Index Analysis of Price Discount Perception in Cosmetic Products

Model Type	Likelihood-ratio (L <sup>2</sup> )	AIC	BIC	Number of Parameters (Npar)	Degrees of freedom (Df)
1 Class	7383,8540	7598,5914	7657,5563	12	994
2 Class	7177,5129	7424,2503	7561,8349	28	978
<b>3 Class</b>	<b>7008,1096</b>	<b>7286,8470</b>	<b>7503,0515</b>	<b>44</b>	<b>962</b>
4 Class	6913,8740	7224,6114	7519,4356	60	946
5 Class	6844,7202	7187,4577	7560,9017	76	930
6 Class	6731,2907	7106,0282	7558,0920	92	914

**Table 14:** Average Values of Dimensions According to Perception of Price Discount Sales Promotion Tool Applied in Cosmetic Products

Dimensions	1. Class	2. Class	3. Class
Promotion Focus	3,50	3,59	3,88
Prevention Focus	3,34	4,03	3,07
Hedonic Value Perception	2,46	2,31	3,49
Utilitarian Value Perception	3,02	4,25	3,76
Economic Purchase	3,59	4,50	4,12
Quality Purchase	3,56	4,11	4,29
Price Discount	2,80	3,56	4,02

**Table 15:** Parameter Estimates of Price Discount Sales Promotion Tool in Cosmetic Products

Dimensions/ Demographic characteristics		Total Participants n=1006						ANOVA (One Way)  F Sig.	
		1. Class Promotion Insensitive		2. Class Prevention Sensitive		3. Class Promotion Sen- sitive			
		n	%	n	%	n	%		
Class Participations		426	42,4	306	30,4	274	27,2		
Price Discount Attitude	I do not agree	174	40,8	44	14,3	19	7	134,2	p < 0.001
	I'm undecided	142	33,5	87	28,4	58	21		
	I agree	110	25,7	175	57,3	197	72		
Utilitarian Value Perception	I do not agree	96	22,5	0	0,2	12	4,3	253,2	p < 0.001
	I'm undecided	210	49,4	23	7,5	68	24,7		
	I agree	120	28,1	283	92,3	194	71		
Hedonic Value Per- ception	I do not agree	233	54,6	191	62,2	40	14,5	166,1	p < 0.001
	I'm undecided	135	31,8	97	32	88	32		
	I agree	58	13,6	18	5,8	146	53,5		
Quality Purchase Attitude	I do not agree	62	14,5	9	2,9	0	0	73,4	p < 0.001
	I'm undecided	103	24,2	34	11,3	21	8		
	I agree	261	61,3	263	85,8	253	92		
Economic Purchase Attitude	I do not agree	58	13,6	0	0	4	1,4	126	p < 0.001
	I'm undecided	95	22,2	6	2	26	9,5		
	I agree	273	64,2	300	98	244	89,1		
Gender	Female	96	22,5	151	49,4	132	48,2		
	Male	330	77,5	155	50,6	142	51,8		
Marital Status	Single	144	33,8	89	29	157	57,4		
	Married	282	66,2	217	71	117	42,6		
Age	23 years and under	71	16,6	53	17,2	74	26,9		
	24-33 years old	43	10	47	15,2	58	21,1		
	34-38 years old	113	26,8	84	27,7	88	32,1		
	39-48 years old	64	14,9	42	13,8	28	10,3		
	49 years and older	135	31,7	80	26,1	26	9,6		
Income	0-2000₺	64	15,1	51	16,7	57	20,7		
	2001-4000₺	122	28,6	79	25,9	85	31		
	4001-6000₺	99	23,2	80	25,9	79	28,8		
	6001- 8000₺	67	15,7	55	18	35	12,8		
	8001₺ and above	74	17,4	41	13,5	18	6,7		
Job	Officer	132	31,1	119	38,8	88	32,1		
	Worker-Self-employed	146	34,2	64	20,8	67	24,5		
	Retired- Student	99	23,1	58	19,3	86	31,3		
	Housewife-Not Working	49	11,6	65	21,1	33	12,1		
Education	Primary Education	33	7,7	9	2,8	1	0,2		
	High School	85	19,8	43	14,1	25	9,3		
	Associate degree	63	14,8	46	15,2	33	12,1		
	Bachelor's degree	213	50,2	157	51,3	165	60		
	Postgraduate	32	7,5	51	16,6	50	18,4		
Shopping Frequency	In 1-3 days	183	42,9	153	50,1	167	60,9		
	Weekly	146	34,1	98	31,8	71	26		
	For 15 days	54	12,8	25	8,2	26	9,4		
	Monthly	43	10,2	30	9,9	10	3,7		
Average Spending	125₺ and below	174	40,9	157	51,3	118	43		
	Between 126- 250₺	120	28,3	76	24,9	67	24,6		
	251₺ and above	71	16,6	33	10,9	26	9,5		
	376₺ and above	61	14,2	40	12,9	63	22,9		

**Table 16:** Consumers Sensitive to Price Discount Sales Promotion Tool in Cosmetic Products

Dimensions/ Demographic characteristics	2.Class Prevention Sensitive	3. Class Promotion Sensitive
Utilitarian Value Perception	High	High
Hedonic Value Perception	Low	High
Quality Purchase Attitude	High	High
Economic Purchase Attitude	High	High
Gender	Female/Male	Female/Male
Marital Status	Married	Single
Age	34-38 years old	34-38 years old
Income	2001-6000₺	2001-4000₺
Job	Officer	Officer
Education	Bachelor's degree	Bachelor's degree
Shopping Frequency	1-3 days	1-3 days
Average Spending	up to 125₺	up to 125₺

When the 3-class model determined in latent class analysis in Table 15 is examined, the classes with the highest probability of purchasing promotional products are the 2nd and 3rd classes, and these classes consist of prevention and promotion-focused consumers. When these classes are examined;

2. Class Prevention Sensitive: The most basic characteristic of this class is that the prevention-focused consumers are in the majority, the hedonic value level is very low and the utilitarian value level is high. Consumers in this class are more likely to buy quality and economic products. When the class is analyzed in terms of demographic characteristics, it is composed of married people with a probability of 71%, and consumers aged 46 and over with a probability of 26%.

3. Class Promotion Sensitive: The main characteristic of this class is its high hedonic value and utilitarian value. In addition, quality and economic purchasing attitudes are high.

Based on these results, Table 16 shows the most distinctive characteristics of the latent classes sensitive

to promotional products in case of price discount promotion in cosmetic products.

If the price discount sales promotion tool is applied to cosmetic products, it is understood that consumers with a high utilitarian value level, between the ages of 34-38 and who are officer, are more probability to purchase quality and economic products.

**Latent Class Estimates of Consumer Perceptions for Price Buy-One-Get-One-Free Sales Promotion Tool in Cosmetic Products**

In order to determine the consumer perceptions of buy-one-get-one-free application in cosmetic products, questions were asked to the consumers about whether they would buy promotional products if they were applied for buy-one-get-one-free application in cosmetic products. When the fit index analysis in Table 17 was examined, it was decided that the minimum value of Bayes Information Criteria (BIC) was 7521.17 and the 2-class model was suitable for the purpose of the study.

**Table 17:** Fit Index Analysis of Buy-One-Get-One-Free Perception in Cosmetic Products

Model Type	Likelihood-ratio (L <sup>2</sup> )	AIC	BIC	Number of Parameters (Npar)	Degrees of freedom (Df)
1 Class	7416,4748	7633,9848	7692,9497	12	994
2 Class	7209,8209	7459,3309	7596,9155	28	978
<b>3 Class</b>	<b>7023,4635</b>	<b>7304,9736</b>	<b>7521,1780</b>	<b>44</b>	<b>962</b>
4 Class	6938,2497	7251,7598	7546,5840	60	946
5 Class	6833,1987	7178,7088	7552,1528	76	930
6 Class	6771,6164	7149,1264	7601,1902	92	914

**Table 18:** Average Values of Dimensions According to Perception of Buy-One-Get-One-Free Sales Promotion Tool Applied in Cosmetic Products

Dimensions	1. Class	2. Class	3. Class
Promotion Focus	3,52	3,57	3,86
Prevention Focus	3,37	4,01	3,07
Hedonic Value Perception	2,42	2,29	3,52
Utilitarian Value Perception	3,00	4,25	3,79
Economic Purchase	3,64	4,47	4,08
Quality Purchase	3,50	4,16	4,31
Buy-One-Get-One-Free	2,53	3,42	3,79

Averages of regulatory focus, hedonic/utilitarian value levels and economic/quality purchasing dimensions are given in Table 18. According to table, average of promotion-focused consumers in 1st and 3rd classes, and mean of the prevention-focused consumers in 2nd class, is higher than the others.

Considering the averages of promotion focus, prevention focus and buy-one-get-one-free promotion perception in study in Table 18, 3 classes were observed in Table 19 in analysis. Names of classes were determined as promotion-insensitive, prevention-sensitive, and promotion-sensitive.

In Table 19, it is understood that three different latent classes for consumers' attitudes emerge when buy-one-get-one-free promotion is applied in cosmetic products. When the classes with the possibility of purchasing promotional products are examined;

2. Class Prevention Sensitive: When the prevention-focused consumers who tend to buy promotional products are examined, the most basic characteristic of this class is that the hedonic value of the consumers is very low and the utilitarian value is high. Another characteristic of the class is the high probability of purchasing quality and economic products. When the class is examined in terms of demographic characteristics, it consists of consumers who are married with a probability of 72%, majority of whom are among the ages of 34-38 and 49 years old and over.

3. Class Promotion Sensitive: The main characteristics of this class are that the majority of consumers are promotion-focused and consumers have a high attitude to purchase promotional products. Consumers of this class have lower utilitarian value perception and higher hedonic value perception compared to consumers in the 2nd class. In addition, this class consists of younger consumers compared to class 2.

Based on these results, Table 20 shows the most distinctive characteristics of the latent classes sensitive to promotional products in case of buy-one-get-one-free promotion in cosmetic products.

It is understood that when buy-one-get-one-free sales promotion tool is applied to cosmetic products, consumers with a high utilitarian value level and 34-38 years old are more likely to purchase quality and economic products.



**Table 19:** Parameter Estimates of Buy-One-Get-One-Free Sales Promotion Tool in Cosmetic Products

Dimensions/ Demographic characteristics		Total Participants n=1006						ANOVA (One Way)	
		1. Class Promotion Insensitive		2. Class Prevention Sensitive		3. Class Promotion Sen- sitive			
		n	%	n	%	n	%		
Class Participa- tions		422	41,9	300	29,8	284	28,3		
Buy-One-Get- One-Free Attitude	I do not agree	197	46,7	55	18,5	28	9,7	115,5	p < 0.001
	I'm undecided	143	33,8	99	33	74	26,3		
	I agree	82	19,5	146	48,5	182	64		
Utilitarian Value Perception	I do not agree	97	23	0	0	11	3,9	245,5	p < 0.001
	I'm undecided	214	50,7	22	7,5	65	22,8		
	I agree	111	26,3	278	92,5	208	73,3		
Hedonic Value Perception	I do not agree	236	55,9	191	63,5	36	12,8	188,4	p < 0.001
	I'm undecided	136	32,1	93	31,2	92	32,5		
	I agree	50	12	16	5,3	156	54,7		
Quality Purchase Attitude	I do not agree	66	15,6	5	1,8	0	0,1	89,2	p < 0.001
	I'm undecided	109	25,9	32	10,5	18	6,3		
	I agree	247	58,5	263	87,7	266	93,6		
Economic Pur- chase Attitude	I do not agree	56	13,4	0	0	5	1,9	91,7	p < 0.001
	I'm undecided	86	20,1	10	3,2	33	11,5		
	I agree	280	66,5	290	96,8	246	86,6		
Gender	Female	84	19,8	162	54	133	46,9		
	Male	338	80,2	138	46	151	53,1		
Marital Status	Single	146	34,6	84	28	160	56,3		
	Married	276	65,4	216	72	124	43,7		
Age	23 years and under	70	16,6	51	17,2	76	26,7		
	24-33 years old	40	9,5	46	15,3	61	21,4		
	34-38 years old	110	26,1	88	29,1	90	31,5		
	39-48 years old	62	14,5	40	13,3	32	11,5		
	49 years and older	140	33,3	75	25,1	25	8,9		
Income	0-2000₺	64	15,2	51	17,1	57	20		
	2001-4000₺	119	28,3	78	26	88	31,1		
	4001-6000₺	95	22,4	82	27,3	80	28,2		
	6001- 8000₺	70	16,5	51	17,1	37	12,8		
	8001₺ and above	74	17,6	38	12,5	22	7,9		
Job	Officer	129	30,7	122	40,7	87	30,7		
	Worker-Self-employed	140	33,1	63	21,1	74	26,1		
	Retired- Student	102	24,2	54	17,8	88	30,8		
	Housewife-Not Working	51	12	61	20,4	35	12,4		
Education	Primary Education	33	7,9	9	2,9	0	0,1		
	High School	76	18	43	14,3	34	12,1		
	Associate degree	64	15,2	44	14,6	35	12,2		
	Bachelor's degree	219	51,7	151	50,7	165	58		
	Postgraduate	30	7,2	53	17,5	50	17,6		
Shopping Fre- quency	In 1-3 days	168	39,9	155	51,7	180	63,2		
	Weekly	150	35,5	94	31,3	70	24,7		
	For 15 days	58	13,8	22	7,3	25	8,9		
Average Spending	Monthly	46	10,8	29	9,7	9	3,2		
	125₺ and below	178	42,3	149	49,8	121	42,7		
	Between 126- 250₺	118	27,8	77	25,5	70	24,6		
	251₺ and above	68	16,1	33	11,1	29	10,2		
	376₺ and above	58	13,8	41	13,6	64	22,5		

**Table 20:** Consumers Sensitive to Buy-One-Get-One-Free Sales Promotion Tool in Cosmetic Products

<b>Dimensions/ Demographic characteristics</b>	<b>2.Class Prevention Sensitive</b>	<b>3. Class Promotion Sensitive</b>
Utilitarian Value Perception	High	High
Hedonic Value Perception	Low	High
Quality Purchase Attitude	High	High
Economic Purchase Attitude	High	High
Gender	Female	Male
Marital Status	Married	Single
Age	34-38 years old	34-38 years old
Income	4001-6000₺	4001-6000₺
Job	Officer	Retired-Student- Officer
Education	Bachelor's degree	Bachelor's degree
Shopping Frequency	1-3 days	1-3 days
Average Spending	up to 125₺	up to 125₺

## CONCLUSION

When the literature is examined, it can be said that there is a conceptual relationship between hedonic and utilitarian perception and sales promotion tools (Schindler, 1992:431-451; Chandon et al., 2000:65-81; Santini et al., 2015:423), between hedonic and utilitarian value perceptions and promotion and prevention focuses which create regulatory focuses (Arnold & Reynolds, 2009:308-320; Lee, Liu & Cheng, 2018:789-805), and finally between regulatory focus and sales promotion tools (Ramanathan & Dhar, 2010: 542-552).

In latent class analysis, it was understood that in case of price discount in cleaning products, there are three different classes and only one of these three classes is sensitive to promotional products. It has been observed that purchase probability of consumers in prevention sensitive latent class is higher than the other classes in the case of applying a price discount sales promotion tool in cleaning products. In the prevention sensitive latent class, consumers with high utilitarian value, low hedonic value, married and officer are more likely to purchase promotional products than consumers with other demographic characteristics.

It has been understood that four different latent classes are formed in the case of buy-one-get-one-free application in cleaning products, and two classes out of these four classes are sensitive to the sales promotion tool. Among these classes, mostly women and married consumers, who are in the prevention sensitive latent class, have a low hedonic value and a high utilitarian value, and are more possible to purchase products with sales promotion. Consumers with high utilitarian and

hedonic value levels, high married rates, and average shopping of 376₺ and above are in the majority in the latent class of promotion-sensitive. Consumers with such characteristics are also more likely to purchase products with sales promotion.

In the case of applying the price discount sales promotion tool in cosmetic products, it has been understood that three different latent classes are formed and two classes out of these three classes are sensitive to the sales promotion tool. Among these classes, consumers in the prevention sensitive latent class with low hedonic value perception, high utilitarian value perception, mostly married, officer, 34-38 years old, shopping for 125₺ on average are more likely to purchase. Consumers who are in the promotion-sensitive latent class, have a high hedonic and utilitarian value perception, are between 34-38 years old, are officer, have a high probability of economic and quality purchasing, and shoppers up to 125₺ on average are more likely to purchase.

It has been understood that three different latent classes are formed in the case of buy-one-get-one-free application in cosmetic products, and two classes out of these three classes are sensitive to the sales promotion tool. Consumers in the prevention-sensitive latent class have a high utilitarian value perception and a low hedonic value perception, mostly married, between 34-38 years old, officer, and shopping up to 125₺ on average, are more likely to purchase. Consumers in the promotion-sensitive latent class with a high hedonic and utilitarian value perception, single and male-dominated, aged 34-38, officer, retired and students, with a high probability of economic and quality purchase, and shopping up to

125₺ on average, are more likely to purchase. Promotion-sensitive latent class consists of consumers with less utilitarian value perception and more hedonic value perception than prevention-sensitive latent class.

Prevention-focused individuals focus on negative signals to avoid making mistakes and negative consequences (Kirmani & Zhu, 2007: 689). In this context, prevention-focused individuals are more sensitive to losses and shocks and are more oriented towards utilitarian values. Because the utilitarian perception of value is based on precise and concrete data regarding success or failure (Arnold & Reynolds, 2009: 312). Prevention-focused consumers are more likely to consider the utilitarian benefit of the product (Chernev, 2004: 114; Roy & Ng, 2012: 82). When the results obtained in this study were examined, it was observed that the study was similar to literature studies. In the study, it was determined that when price reductions and buy one get one free sales promotion tools were applied in cleaning and cosmetic products, the utilitarian value perception level of prevention-sensitive latent classes was high and the hedonic value perception level was low.

Imagination and pleasure are the main factors of hedonic consumption (Hirschman & Holbrook, 1982: 94). Experiencing these factors requires the desire, dreaming, broad thinking and deep abstraction characteristics of the promotion focus (Higgins 1997: 1283; Arnold & Reynolds, 2009: 312). Promotion-focused consumers are better at focusing on the hedonic benefit of the products they purchase. In the study, when the latent class analyzes were examined, it was seen that the hedonic value level of the promotion-sensitive latent class was high in case of buy one get one free in cleaning products and in case of buy one get one free and price discount in cosmetic products.

#### **Contribution of the study to the literature**

With this study, it was concluded that latent class analysis can be used in the field of marketing. Accordingly, in the study, through the latent class analysis, it was tried to become more clear which consumers purchased the products sold in supermarkets. With this study, it is aimed for corporate supermarkets to better understand the consumers who prefer them, to improve the quality of the products they offer to consumers, and to directly appeal to certain consumers through various advertisements and promotions for the products. In addition, the study tried to show that latent class analysis can be used to determine utilitarian and hedonic value perceptions from consumer behaviors.

Therefore, it was understood in the study that it is possible to obtain strong empirical evidence on the effect of regulatory focus theory on consumers' purchasing behavior from products to which sales promotion tools are applied.

Considering the dimensions of regulatory focus, hedonic value perception, utilitarian value perception, economic purchasing and quality purchasing, determining the latent classes of consumers provides the opportunity for supermarket managers to predict which consumers may turn to which sales promotion tools. Thus, consumers' perceptions of the sales promotion tools applied in the supermarket departments can be explained with the regulatory focus theory. With the help of latent class analysis, supermarkets operating in an intensely competitive environment can reduce their costs and increase their profitability rates.

Conceptually, this study allows examining the effects of regulatory focus on consumers' attitudes to purchase products for which sales promotion tools are applied, based on their perceptions of sales promotion tools.

#### **Limitations and Future Lines of Research**

Due to time and cost constraints, which are the main constraints of the study, the sample of the study consisted of consumers shopping at markets operating in Kahramanmaraş province. Therefore, it is not possible to make a generalization about the universe in the study based on the data obtained with the non-random sampling method. In future research on the subject, the conceptual structure can also be tested using data obtained by random sampling method. Due to current limitations, this study included consumers who shop at traditional markets. Therefore, in future studies, various studies can be conducted on consumers who shop from online markets. Additionally, future research can be conducted for various departments such as clothing, sports and outlet departments, which could not be included in the study due to significant limitations.

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