

MODELING OF PERCEPTION OF TEXTILE CONSUMERS' SATISFACTION

TEKSTİL TÜKETİCİLERİNİN TATMİN ALGISININ MODELLENMESİ

İkilem GÖCEK*, Yeşim İridağ BECEREN

Istanbul Technical University, Textile Engineering Department, Istanbul, Turkey

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ABSTRACT

The aim of this study is determining the factors that affect customer satisfaction (CS) in textile industry, modeling CS and giving solution suggestions to provide CS. CS is a wide range subject that is affected by many factors however; in this paper only perceived service quality, perceived product quality, and brand image were deeply studied as CS affecting factors. To determine these factors a consumer survey was applied on 142 survey respondents. The data gained from questionnaires was analysed by the help of SPSS program. Perceived service quality and brand image affect CS in textile industry according to the results obtained in this study. However, perceived product quality was found to have no influence on CS.

Key Words: Customer satisfaction, Perceived service quality, Perceived product quality, Brand image, Textile industry, Textile consumers.

ÖZET

Bu çalışmanın amacı tekstil endüstrisinde müşteri tatminini (MT) etkileyen faktörlerin belirlenmesi, MT'nin modellenmesi ve MT'nin sağlanması için çözüm önerileri sunabilmektir. MT birçok faktör tarafından etkilenen geniş kapsamlı bir konu olmasına rağmen bu çalışmada sadece algılanan hizmet kalitesi, algılanan ürün kalitesi ve marka imajı MT'yi etkileyen faktörler olarak ayrıntılı bir şekilde çalışılmıştır. Bu faktörlerin belirlenebilmesi için hazırlanan tüketici anketi 142 kişiye uygulanmıştır. Anketlerden elde edilen veri SPSS programı ile analiz edilmiştir. Bu çalışmada elde edilen sonuçlara göre algılanan hizmet kalitesi ve marka imajı tekstil endüstrisinde MT'yi etkilemektedir. Fakat algılanan ürün kalitesinin MT üzerine bir etkisi olmadığı bulunmuştur.

Anahtar Kelimeler: Müşteri tatmini, Algılanan hizmet kalitesi, Algılanan ürün kalitesi, Marka imajı, Tekstil endüstrisi, Tekstil tüketicileri.

* Corresponding Author: İkilem Göcek, goceki@itu.edu.tr, Tel: +90 212 251 88 29, Fax: +90 212 249 17 67

1. INTRODUCTION

In today's competition conditions, which factors cause customer satisfaction (CS), which variables change CS in what ways and how these variables can be managed, for which segments which activities can be designed are the main questions that marketing managers must consider. Especially, if it is considered that gaining new customers create four times more costs than preventing existing customers from

leaving, it can be seen that answers to these questions involve great importance for the firms. Recently, whereas the relationship marketing is defined as to ensure the relationship with customers, to provide the continuity of the relationship and to contribute to the content of the relationship, the key point of this approach is CS for the firm to acquire its aim (1). Satisfaction is a phenomenon expressing that the performance and benefits of the

products exceed the expectations of the customers. CS increase the existing customer loyalty, repurchase process, awareness of the people about the firm, decrease the price flexibility, the cost of gaining new customers and prevent the customer being affected from competitive enterprise (2).

The purpose of this study is to identify the relations and the factors affecting the CS in textile industry and to find the solution alternatives for ensuring

CS. In this sense, the factors affecting CS are considered as: perceived service quality (PSQ), perceived product quality (PPQ) and brand image (BI). In this research firstly, the basic concepts of the study were explained. Then, the field and analysis process of this study, "CS and Affecting Factors", were examined. To analyze the survey, SPSS statistical package program was used.

1.1. Customer satisfaction

Customer dissatisfaction is one of the most important problems for the firms. Since the relationship of the dissatisfied customer with the firm will be affected negatively and this customer will use the word of mouth to express his/her dissatisfaction to his/her colleagues and the people around, the firm will be affected by this negative condition in a negative way.

Most of the researchers claim that the cost of gaining new customers ranges between one-fifth and one-tenth of cost of keeping existing customers. The companies must develop their strategies for keeping the existing customers, because keeping existing customers means high level of profitability (3). Since the satisfaction is an essential subject of marketing concepts, it ensures a relationship between purchase and consumption processes and post-purchase phenomenon. The positive application of this relationship results in satisfying the customers' demands so the profitability of the company (4). In some research, the factors affecting the CS are mentioned as satisfaction with store personnel, satisfaction with special store sales, satisfaction with products and services purchased at the store, satisfaction with store environment and satisfaction with value price relationships offered by the store (5,6). Customers' satisfaction carries great importance for the marketers, because repetitive sales, customer loyalty and positive word of mouth are acquired (7). The product and service quality (SQ) that result in satisfaction of customers are very important for the producers. Because when the customer buys the offered product, this experience affects the behavior of the customer as repeated buying and brand loyalty (8).

1.2. The customer satisfaction in textile industry and its importance

Customers' perceived importance of store attributes in shopping centers and in apparel retail setting can be related with shopping orientations. In addition to this store attributes and shopping orientations were found to be significant predictors of apparel store patronage behaviors. The patronage criterion is associated with merchandising, price, service, location and advertisement when purchasing apparel products (9). Fashion, fit of the garment, and retail environment are the most important factors affecting the CS negatively or positively in textile industry (10). Kind and Hathcote found in their research that size availability, pricing, colors, style selection and fit are the most important points that dissatisfy the large size groups (11). Older women are dissatisfied with the fit of ready to wear garments when they buy from home shopping catalogs. In addition to this large size women are mostly dissatisfied with fit and sizing. In current researches, it is examined if retail environment, pricing, sales people and merchandise can cause dissatisfaction. Despite the fact that size charts ensure norms for garment fit, even within the same store there can be a variation of actual measurement in the same size code. Besides, there are also more size variations in the size charts of garments in different stores and brands (10). According to Babin and Darden, people who are affected by negative feelings, avoid going to the environments that make them dissatisfied. In their study they found that fashion, availability, fit, comfortable fitting rooms, enjoying cloths, personnel attitudes and body size characteristics, pricing perceptions and product display are the most affecting factors in retail environments (12).

It seems obviously that the CS in textile industry is as important as the CS in other industries when the components and effects of the CS are considered. In order to satisfy the ready-to-made customers in textile industry, data and results obtained by the studies on CS must be considerably assessed, the points that cause dissatisfaction must be determined and solution suggestions to the problems must be displayed.

2. CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

2.1. Variables of the research & their relation with customer satisfaction

In this study, there are two variables; dependent and independent variables. Dependent variable, is the variable that can be affected by the other variable. On contrast, independent variable, is the factor variable that affects the other variable or variables. In marketing researches, the factor variable that provides the causality on investigation about the cause and effect relationships is defined as independent variable, and as the result of this investigation the affected variable is defined as dependent variable (13).

As mentioned before, in this paper the relation between CS and PSQ, PPQ and BI are sought to be demonstrated. In the current work here, the dependent variables are PSQ, PPQ and BI and the independent variables of this study are the demographic profiles of the ready-to-made customers such as customer age groups (CAG), customer educations (CE) and gender of the respondents (GOR).

In this study, after the determination of independent variables, that were considered to affect the dependent variables, CS research's questions were decided. Three research questions were prepared considering the three dependent variables. These are:

- Is there any relation between PSQ and CS?
- Is there any relation between PPQ and CS?
- Is there any relation between BI and CS?

According to our initial CS model PSQ, PPQ and BI are the factors that were considered to affect CS. Therefore, in order to test these factors if they have any effects on CS, three research questions that are mentioned above were measured by the questions in the survey form that was prepared before and evaluated by the respondents. By the help of the survey questions and statistical package program that was used to assess the answers given to the questions in the survey form, these

three research questions were assessed statistically to find the relation between these dependent variables and CS and to obtain a final CS model. Also, it was tried to be found out whether the factors, PSQ, PPQ and BI have any difference according to the independent variables such as CAG, CE and gender, which was the complementary part of our initial CS model, since according to these independent variables a difference was assumed to arise.

The content of the survey form includes the questions that are addressed to the survey respondents about PSQ, PPQ, BI and the demographic profiles of survey respondents.

The questions in the PSQ section of the survey form are related with the number of the sales personnel that needs to be present at the store, attitude and the behavior of the sales personnel, education and sophistication level of the sales personnel, physical appearance of the sales personnel, if the sales personnel is the right person for the job she/he is chosen to and if the sales personnel is aware of the special offers and the discounts of the company. The PPQ section of the survey form includes questions about price of the ready-to-made product, brand name, the satisfaction degree (level) of the ready-to-made product for the ready-to-made consumers' needs, complaints about the product, performance of the ready-to-made product, if the design of the ready-to-made product is appropriate for its purpose of usage. The BI section of the survey consists of the questions regarding product range of the company, if different styles of apparels are offered for different customer segments, price range of the company for its ready-to-made products, size range of the ready-to-made products of the company, availability of all of the products in the stores that are advertised by the company, perception of the ready-to-made customers about the social responsibility of the company and reliability of the brand.

By using these questions and their contents, the aim was to measure the factors; PSQ, PPQ and BI and find out how much the content of these PSQ, PPQ and BI factors affects CS.

2.2. Research hypotheses & analysis

H1₀ = There is no relation between PSQ and CS.

H1₁ = A relation exists between PSQ and CS.

H2₀: There is no relation between PPQ and CS.

H2₁: A relation exists between PPQ and CS.

H3₀: There is no relation between BI and CS

H3₁: A relation exists between BI and CS.

When the relation between PSQ and CS was analyzed, the value of the significance level was found as "0.000" (Table 1). Since the significance value is less than 0.05 for 95% confidence interval, there is no sufficient evidence to reject H1₁ hypothesis which implies that a relation exists between PSQ and CS according to the ready-to-made customers. As a result of this analysis, there is a relation between PSQ and CS. The other results that were acquired by applying paired samples t-test are "There is no sufficient evidence to reject H2₀, thus there is no relation between PPQ and CS." and "There is no sufficient evidence to reject H3₁, thus there is a relation between BI and CS."(Table 1).

H4₀: There is no difference in PSQ according to CAG.

H4₁: There is a difference in PSQ according to CAG.

H5₀: There is no difference in BI perception according to CAG.

H5₁: There is a difference in BI perception according to CAG.

To analyze these hypotheses based on CAG, as the number of age groups is more than two, ANOVA was used. Firstly it was tested if the variances were scattered homogeneously or not. To do this, hypotheses related with homogeneity of variances were created.

H₀: The variances belonging to hypothesis 4 are scattered homogeneously.

H₁: The variances belonging to hypothesis 4 are not scattered homogeneously.

The significance level of "PSQ according to age groups" is "0.081"

which is greater than 0.05 for the confidence interval 95% (Table 2). Therefore, there is no sufficient evidence to reject H_0 and it can be accepted that the variances belonging to hypothesis 4 are scattered homogeneously. Since the variances are scattered homogeneously, Scheffe test can be used as post-hoc test in ANOVA analysis. The significance level of "PSQ according to age groups" is "0.223" greater than 0.05 for 95% confidence interval (Table 3). As a result, there is no sufficient evidence to reject the hypothesis H4₀. Thus, there is no difference in PSQ according to CAG. In addition to ANOVA test, to control if there is any difference between age groups related with PSQ, Scheffe test was applied. Also, according to Scheffe statistics, since all the significance levels of the variables were found greater than 0.05 for 95% confidence interval, there is no difference in PSQ according to CAG. From the analysis of hypothesis H5 it was obtained that there is no difference in BI perception according to CAG (Table 2 and 3).

H6₀: There is no difference in PSQ according to CE.

H6₁: There is a difference in PSQ according to CE.

In the analysis of these hypotheses H6, since the variances are scattered homogeneously, Scheffe test was used (Table 2). In ANOVA test, as the significance level obtained is 0.160 for H6 which is greater than 0.05 (%95confidence interval), there is no sufficient evidence to reject the hypothesis H6₀ (Table 3). Thus, there is no difference in PSQ according to CE which was also proved by Scheffe statistics.

H7₀: There is no difference in BI perception according to CE.

H7₁: There is a difference in BI perception quality according to CE.

In the analysis of hypothesis H7, since the variances are scattered homogeneously, Scheffe test was used as well (Table 2). In ANOVA test, as the significance level obtained is 0.003 which is less than 0.05 (%95confidence interval), there is no sufficient evidence to reject the hypothesis H7₁ (Table 3). Therefore;

there is a difference in BI perception according to CE. Apart from this, in Scheffe statistics for two groups significance levels are less than 0.05 (Table 4). These are: "High school graduate/student" (HSG/S) and "Master graduate/student" (MG/S).

Since the significance level for these two groups are less than 0.05 (0.004), there is a difference in BI between these two groups. As shown in Table 4 (Scheffe test), difference of means between "HSG/S" and "MG/S" is 0.5225, but in adverse difference of

means between "MG/S" and "HSG/S" is -0.5225. Thus, it can be said that since BI perception affects "HSG/S" more than "MG/S", the respondents in "HSG/S" education level care about BI more than the respondents in MG/S.

Table 1. Paired samples t-test results referred to hypothesis 1, 2 and 3

Paired Samples T-Test			
		Mean	Sig. 2-tailed
Customer Satisfaction	Perceived Service Quality	7,288E-02	0,000
	Perceived Product Quality	2,819E-02	0,168
	Brand Image	-0,1589	0,000

Table 2. Test of homogeneity of variances referred to hypothesis 4-7

Test of Homogeneity of Variances			
		Levene Statistic	Sig.
Age Groups	Perceived Service Quality	1,764	0,081
	Perceived Product Quality	1,495	0,156
	Brand Image	1,228	0,283
Education	Perceived Service Quality	0,597	0,618
	Perceived Product Quality	0,599	0,617
	Brand Image	1,993	0,118

Table 3. ANOVA tests referred to hypothesis 4-7

ANOVA (Between Groups)			
		Mean Square	Sig.
Age Groups	Perceived Service Quality	0,207	0,223
	Perceived Product Quality	9,693E-02	0,851
	Brand Image	0,199	0,701
Education	Perceived Service Quality	0,272	0,160
	Perceived Product Quality	0,163	0,435
	Brand Image	1,242	0,003

Table 4. Scheffe tests referred to hypothesis 7

Multiple Comparisons / Dependent Variable: Brand Image / Scheffe							
(I) Education	(J) Education	Mean Difference (I-J)	Sig.	(I) Education	(J) Education	Mean Difference (I-J)	Sig.
High school student or graduated	Undergraduate student / graduated	0,2568	0,169	Master student or graduated	High school student/graduated	-0,5225	0,004
	Master student / graduated	0,5225	0,004		Undergraduate student / graduated	-0,2657	0,156
	Doctorate student / graduated	0,4274	0,193		Doctorate student / graduated	-9,5111E-02	0,972
Undergraduate student or graduated	High school student / graduated	-0,2568	0,169	Doctorate student or graduated	High school student / graduated	-0,4274	0,193
	Master student / graduated	0,2657	0,156		Undergraduate student / graduated	-0,1706	0,819
	Doctorate student / graduated	0,1706	0,819		Master student / graduated	9,511E-02	0,972

H8₀: There is no difference in PSQ according to GOR.

H8₁: There is a difference in PSQ according to GOR.

According to independent sample t-test; since there are two groups, the variances between two groups must be controlled. Because the tests of the groups with equal variances and not equal variances are different, the significance levels obtained from these tests are also different. To test if the variances are equal or not for H8, hypotheses related with variance equivalence were formed such as:

H₀: The variances of two groups based on gender related to H8 are equal.

H₁: The variances of two groups based on gender related to H8 are not equal.

To identify if the variances equal or not, the Levene's test was considered (Table 5). If the significance level obtained from Levene's test is greater than 0.05 for 95% confidence interval then, it is obvious that there is no sufficient evidence to reject H₀ implying the equivalence of variances. Then in this condition; the line of "equal variances assumed (EVA)" is considered and this line's significance 2-tailed value is valid. Otherwise, if equal variances are not assumed, the line of "equal variances not assumed (EVNA)" is considered and this line's significance 2-tailed value is valid. As H8 is considered; the significance level of Levene's test was obtained as 0.135 which means equal variances are assumed and since the significance 2-tailed value is 0.031, then there is sufficient evidence rejecting the H8₀,

so that H8₁ is accepted. As a result, there is a difference in PSQ according to GOR.

According to Table 5, as the mean value of the females is greater than the males, it can easily be concluded that female respondents care about PSQ more than male respondents.

H9₀: There is no difference in BI perception according to GOR.

H9₁: There is a difference in BI perception according to GOR.

As H9 is considered; the significance level of Levene's test is obtained as 0.068 which means equal variances are assumed for the hypothesis and since the significance 2-tailed value is 0.314 for H9, then there is no sufficient evidence to reject the H9₀, so that H9₀ is accepted (Table 5). As a result, there is no difference in BI perception according to GOR.

3. METHOD

3.1. Data & field process

To identify the factors affecting CS in textile industry, the field process of the study includes selection of sampling technique and data collection, handing out the prepared survey to the sample that is considered to respond, suppositions and constraints of the research and finally analyzing the data by SPSS program to determine the details of the sample.

The sampling technique used in this research is nonprobability sampling. Convenience sampling, one of the nonprobability sampling technique, was chosen for this study. Since the

application of convenience sampling is easy, and does not require a lot of time, convenience sampling was preferred while gathering the data and as a requirement in the collection of the survey the desired minimum number of the survey respondents was 100. After the survey application process, the 142 survey forms were collected. When applying the previously prepared survey forms, both face to face and e-mail techniques were used. The data collection method was determined by considering the factors such as sampling technique, sampling size and characteristics, number of questions and the time constraint.

3.2. Statistical analysis of the data

To identify the relationship hypotheses between PSQ, PPQ and BI and CS, the paired samples t-test was used. ANOVA test was used for the examination of some of the differences in the means of independent groups' hypotheses. In other words, by the help of ANOVA analysis; it was tested if there was any difference between different groups or categories in the dependent variables (PSQ, PPQ and BI) affecting CS. After ANOVA analysis was performed, to identify which groups' means were different from the others and which groups made the differences, post-hoc tests were used. In this study, for the conditions that equal variances and unequal variances are assumed, Scheffe test was used. The hypotheses of each dependent variable, based on only two independent different groups, were tested by independent samples t-test in this study.

Table 5. Independent samples t-tests/Independent samples t-test groups statistics referred to hypothesis 8 and 9

			Independent Samples Test			Independent Samples T- Test (Group Statistics)				
			Levene's Test	T-test	For Equality of Means			N	Mean	
			Sig.	T	Sig.2-tailed					
PSQ	EVA EVNA	Gender	0,135	-2,178	0,031	PSQ	Gender	Male	42	4,0923
				-2,083	0,041			Female	100	4,2494
BI	EVA EVNA		0,068	-1,011	0,314	BI	Gender	Male	42	3,9024
				-1,075	0,285			Female	100	4,0000

4. RESULTS AND DISCUSSIONS

According to the CS model that was assumed at the beginning of this study, PSQ, PPQ and BI were the factors that were considered to have influence on CS. In order to find if they have any effect on CS, three research questions were formed. Also, in order to examine these research questions based on the relation between the dependent variables PSQ, PPQ and BI and CS and if the independent variables CAG, CE and gender create any difference in dependent variables, some hypotheses were created. After the analysis of these hypotheses, the obtained results were evaluated based on two different hypothesis groups. According to the statistical evaluation of these results, the initial CS model was modified and the final CS model was created. As the results considered, textile firms should never ignore BI and SQ in their marketing and sales strategies, since SQ and BI affect CS directly according to the textile ready-to-made customers' perception. Thus, to increase the number of customers and to create loyal customer profile, firms should consider these two important factors. In other words, textile firms should base their strategies on BI and PSQ, since our CS model includes SQ and BI as affecting factors.

In this analysis, by considering age groups of survey respondents, it is

found that there are no differences in PSQ, and BI according to the respondent ages. This yields that textile firms do not have to consider the age of the ready-to-made consumers based on these two dependent variables when they are creating their marketing strategies. Briefly, textile firms in the market needn't to make distinct segmentations according to their ready-to-made customers' ages in their marketing activities when considering PSQ, and BI.

By considering genders of survey respondents, it is found that there is no difference in BI according to the GOR. On the other hand, it is found that PSQ shows difference according to GOR. Therefore, textile firms should create different strategies for PSQ but needn't create different strategies for BI when considering genders of the ready-to-made consumers. Since SQ perception of the females are more than the males and females care about PSQ more than males, textile firms should highlight SQ more in products for females. In contrast, there is no need to emphasize SQ in marketing strategies when males are considered.

According to educations of the respondents, it is found that there is no difference in PSQ, but there is a difference in BI perception. BI perception has difference between "HSG/S" and "MG/S" education levels. Due to the obtained data, the

respondents, refer to "HSG/S" group, have higher BI perception than the respondents refer to "MG/S" group. So that, textile firms should consider the educations of ready-to-made consumers that they target and when they want to use BI as a marketing strategy, especially they should consider the difference in BI perception for "HSG/S" and "MG/S" group.

5. CONCLUSIONS

The dependent variables, PSQ and BI, affect CS in textile industry according to the results obtained in this study. However, the other dependent variable, PPQ, was found to have no influence on CS. Determining if the dependent variables affecting CS show differences and if they depend on consumer age, gender and education can be beneficial for the firms in textile industry to reach ready-to-made customers, to identify marketing and sales strategies. Thus, textile firms can know the requirement for the ready-to-made consumer profile that they target to satisfy. In conclusion; the gathered data from the analysis of this study is important for acquiring the CS for textile industry. This research can be improved by adding new dependent variables to the data gained from this study. So that a comprehensive CS model can be achieved.

REFERENCES

1. Grönroos, C., 1996, "Relationship Marketing: Strategic and Tactical Implications", *Management Decision*, Vol. 34 No. 3, 5-14.
2. Peter, J.P. and Olson, J.C., 2005, "*Consumer Behaviour and Marketing Strategy*", The McGraw-Hill Companies, Inc., New York.
3. Ahmad, R. and Buttle, F., 2001, "Retaining Business Customers Through Adaptation and Bonding: a Case Study of HdoX", *Journal of Business & Industrial Marketing*, Vol. 16 No. 7, 553-573.
4. Hicks, J.M., 2005, "Delighted customers buy again: An investigation into the impact of consumer knowledge on consumer satisfaction and delight of flowering potted plants", *Master of Science*, Michigan State University.
5. Warrington, P.T., 2002, "Customer evaluations of e-shopping: the effects of quality-value perceptions and e-shopping satisfaction on e-shopping loyalty", *PhD Thesis*, The University of Arizona.
6. Westbrook, R. A., 1981, "Sources of consumer satisfaction with retail outlets", *Journal of Retailing*, Vol.57 No.3, 68-85.
7. Didier, S.M., 2003, "The marketing function and consumer satisfaction online", *PhD Thesis*, Capella University.
8. Dubrovski, D., 2001, "The role of customer satisfaction in achieving business excellence", *Total Quality Management*, Vol. 12, No. 7-8, 920-925.
9. Ma, Y.J. and Niehm, L.S., 2006, "Service Expectations of Older Generation Y Customers an Examination of Apparel Retail Settings", *Managing Service Quality*, Vol. 16 No. 6, 620-640.
10. Otieno, R., Harrow, C. and Lea-Greenwood, G., 2005, "The Unhappy Shopper, a Retail Experience: Exploring Fashion, Fit and Affordability", *International Journal of Retail & Distribution Management*, Vol. 33 No. 4, 298-309.
11. Kind, K.O. and Hathcote, J.M., 2000, "Speciality-size college females: satisfaction with retail outlets and apparel fit", *Journal of Fashion Marketing & Management*, Vol. 4, pp. 315-24.
12. Babin, B.J. and Darden, W.R., 1995, "Consumer self-regulation in a retail environment", *Journal of Retailing*, Vol. 71, pp. 47-70.
13. Özdamar, K., 2004, "*Paket Programlarla İstatistiksel Veri Analizi I-II [Statistical Data Analysis with Package Programs I-II]*", Kaan Kitabevi, Eskişehir, Turkey.