# APPAREL PRODUCT EVALUATION AND QUALITY PERCEPTION OF TURKISH CONSUMERS

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**Abstract:** The purpose of this paper is to discover the product evaluation and quality perception of Turkish consumers by focusing on the product attributes and their relations with the social and demographic factors. A survey composed of six basic groups of questions was prepared. Five groups of questions belong to the product attributes that are determined based on the literature as 'Fashion or trendiness', 'Brand name or image', 'Style and fit', 'Durability and performance' and 'Price' were prepared. The questionnaire is sent to 1000 people and the respond rate is 63.2%. The data is analyzed using non parametric variance analysis and t-tests. The findings are compared with the results obtained in the previously established studies both in Turkey and the other countries.

## 1.Introduction

People have benefited clothing to protect themselves from bad conditions of environment since first age. However, in our present day, clothing is considered as a social necessity beside requirement. The business environment of fashion sector has been constantly changing and the development and implementation of marketing strategy has a critical importance forthe apparel firms to lead their growths or long term survival[1]. Thus, determination of consumers' tastes and choices with the understanding of their quality perception and analyzing the reasons lying beneath these behaviorsare significant points of concern.

Based on the consumer behavior principles, there are several factors including demographical, psychological and socio cultural factors influencing the purchasing decision. The factors such as age, gender, income and ethnicity have the ability to shape the customer expectations[2]. Nonetheless, the other component of consumer behavior is the product evaluation where consumer assess the attributes of various products offerings, evaluate them according to their importance in their own criterias and then make purchasing decisions[3].

According to Zhang et al[4], by observing the reactions of consumers to a set of product attributes anddescribing the quantitative estimates of the influences of these attributes on consumers' evaluation, purchase decisions of products can be obtained.Nonetheless, observing the consumers' attitudes towards the product attributes,by analyzing the relations between consumer characteristics and product attributes, makes a special contribution on better knowing the consumer and increasing the ability to get oriented with consumers' demands. Thus, it becomes possible for the apparel companies to better serve the customers and increase their sales in return.

Within this context, this study investigates the apparel product evaluation of customers with a purpose of discovering the quality perception by analyzing the consumers' attitudes
fowards quality dimensions in terms of product attributes. For this purpose, the significance given by the customers on the product attributes isfollowed with a further analysis on the relationship between the product attributes and the socio demographic factors.

## 2.Literature Review

Products are assessed on various attributes in relation to what consumers consider most important.The apparel product attributes are identified under three titles as price, quality and value respectively[5]. But, different product attributes are included in apparel product evaluation by different researchers.

Skgkao [6] reports that apparel attributes were workmanship in sewing, physiological comfort, usefulness, physical and chemical properties, suitability to individual preference and fashionability or brand. Fabric and garment construction, care, value, style, and service are the important attributes of apparel [7]. The aesthetic attribute is given a special care by the other researchers. Klerk and Lubbe point that consumer satisfaction with apparel products was influenced by the physical qualities as well as the psychological ones and, assessing the apparel product was not only limited to the functional aspects, but also included the aesthetics[8]. Eckman et al. support that the most important criteria for female respondents was related to aesthetic [9].Price, on the other hand, is a contradictory issue for the researchers while some researchers include this attribute, others do not. The effect of price is stated to be sometimes strong, sometimes weak, and sometimes dependent on the level of other variables [7]. Oktay indicates that the tangible factors such as seam quality, durability, material quality and smartness were found to be the most important factors affecting the consumers' choice; also in this study, it is claimed that price came after these factors[10].In a study established among Chinese consumers, price does not take place among the most important attributes that are fit, comfort, style, color, workmanship, either fabric or fiber content and fabric comfort.

In these studies, quality is not included as a single product attribute instead various dimensions of quality are concerned. In fact, quality is identified as 'fitness for use' and five dimension of quality are given as quality of design, quality of conformance, availability, safety and field use [11]. Therefore, quality can be taken as judgements of consumers about the performance and value of the product[12].

As a matter of fact, Rayman et al [12] give the 7 factors of apparel quality as performance, compliance, garment care, appearance, construction/workmanship, style/fashion, fit. Forsytheet al [13], on the other hand, included brand and price in the quality dimensions of apparel products. According to the author, the consumers evaluate the apparel products and form impression of quality and value through the use of extrinsic cues such as brand name, price, package, and store image and through the intrinsic cues which include the design, style, fabric type, fiber content and the construction details of the garment [13].

In the literature, three groups of factors about the apparel product attributes that contributed on quality came forward in product evaluation. They are the performance, value and aesthetic. The performance is related with the durability of the products due to the selection of right materials and application of right process such as application of right seam, good workmanship and suitable finishing. Although the definition and concept of value change according to study, it refers to general judgment about the product by the public such as price and image. Therefore, the attributes that are encountered in value are the price, brand name or image and fashion or trendiness. The aesthetic properties,on the other hand, is related with the application of right process, looking trendy and style and fit. These aesthetic properties collapse with the performance and the value but diverge in terms of style and fit. Style and fit refer to the characteristics of the product regarding the convenience for the field use and suitability to the body that are perceived by the individual itself. On this regard, the five product attributes that are'Durability and performance', 'Brand name or image', 'Price',

'Fashion or trendiness', and 'Style and fit'respectively, are selected for the analysis of product evaluation of the consumers for the apparel products.

# 3.Method

The product attributes related with the quality dimensions for apparel product are selected as durability and performance, fashion or trendiness, brand name or image, style and fit, and price. The socio demographic factors included in the survey are gender, age, education and income. A questionnaire is prepared and conducted with 6 sections and 24 questions. In the first part, multiple choice questions are asked about the socio-demographic factors, gender, age, education level and income. The rest 5 sections include the questions prepared using 5 point likert scale about product attributes. The survey is conducted online and the response rate is 63.2%. The results are subjected to the reliability analysis and the cronbach alpha is found to be 0,808. The favorable quality attributes are discovered using the mean and the standard deviation. The relationship between the socio demographic factors and the product attributes is found out using the Kruskal Willis and Mann Whitney test.

# 4. Results and Discussion

The age lie between 18 to 41 among the respondents, 38,61% of whom are female. The largest group (26-33) is composed of 279 people followed by (18-25) including 264 of respondents. 37% of the respondents belong to the first and lowest income class where only 2.71% of the respondents are in the highest income level. Regarding the education level, 71.12% of the respondents state that they had university degree or were still attending.First of all, the attitudes of consumers towards product attributes are assessed. According to Table 1, followed by style and fit, quality is the most favored attribute with a mean of 4,1305. Fashion is less favorable attribute after brand.Secondly, the relation between the sociodemographic factors and the product attributes are analyzed with statistical test in the order of gender, age, education and income.

*Table 1: The attitudes of the consumers towards product attributes*

| | | Fashion or trendiness | Brand name or image | Style and fit | Performance or durability | Price |
|---|---|---|---|---|---|---|
| N | Valid | 632 | 632 | 632 | 632 | 632 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.9110 | 2.7056 | 3.9735 | 4.1305 | 3.8754 |
| Std. Deviation | | .63764 | .73806 | .66494 | .59362 | .62057 |

## The gender factor

The relation between gender and product attributes is evaluated using Mann-Whitney test. A significant relation is found between gender-factor and the attributes fashion or trendiness, brand name or image and style and fit.

Specifically, female participants are more conscious than male participants. More females (13.94%) state that they had pace in fashion. (89.75%) of the females say that, they knew the color trends and (11.60%) of them state that they would like to buy the garment if they saw them in the fashion magazine and media. On the other hand, it is interesting to see that more male (42.01%) than females (26,23%) state that being trendy was the one of the important factors in making purchasing decision.

*Table 2: The mann-whitney test results for gender factor*

|  | Fashion or trendiness | Brand name or image | Style and fit | Performance or durability | Price |
|---|---|---|---|---|---|
| Mann-Whitney U | 42556.000 | 41019.500 | 41235.500 | 45282.000 | 44745.000 |
| Wilcoxon W | 72446.000 | 70909.500 | 116701.500 | 120748.000 | 120211.000 |
| Z | -2.155 | -2.837 | -2.749 | -.927 | -1.169 |
| Asymp. Sig. (2-tailed) | **.031** | **.005** | **.006** | .354 | .242 |

Regarding the style and fit attribute, both female and male respondents confirm that style was one of the first concern for them. Nonetheless, females are found to be more careful about the patterns and specialty in design (69,68%), buttons and accessorizes (64,76%) . 81.97% of the females feel worry about the well fitness of the clothes to their body.

Regarding the brand, male participants usually match brand quality with the image. Their choices of brand areinfluenced by their friends. 79% of the male participants answer that it affected their purchasing decision if the brand was preferred by their friends."

## The age factor

According to Table V, a significant relation is observed between age factor and the attributes fashion and brand attribute with a significance level $p = <0,05$ in the Kruskal Wallis test.

*Table 3: The Kruskal Wallis test results for gender factor*

|  | Fashion or trendiness | Brand name or image | Style and fit | Performance or durability | Price |
|---|---|---|---|---|---|
| Chi-Square | 10.731 | 14.509 | .851 | 3.217 | .391 |
| Df | 2 | 2 | 2 | 2 | 2 |
| Asymp. Sig. | **.005** | **.001** | .653 | .200 | .823 |

a. Kruskal Wallis Testb. Grouping Variable: Age group

The age group of (34-41) is found to be fond of purchasing known brands followed by the age group(18-25) with the percentages of 68,54% and 52,33%. The selection of branded garments by the age group is influenced by the advertisements and promotions. On the other hand, 24,34% of the age group of (18-25)state they were wearing branded garments probably because they accepted the brands as the image for themselves.

Although the age group of (34-41) is more interested in fashion, only 16,81% of this group answer positively to the question of "I like to keep pace with fashion". Nonetheless,42,42% of the age group of (18-25) state, they were interested in looking trendy.

## The education factor

The relation between the education level and the attributes, durability and performance and price are statistically significant as seen in Table 4. But from the answers, the durability and performance attribute varies according to the education level. It is interesting that all of the respondents graduated from the primary school answer the question "Durability and performance is the most important concept for purchasing garment" positively. Graduated participants match the durability and performance with the material used for the production (87%) and the life cycle of the products (83%). On the other hand, the performance and durability factors related with the workmanshipare favored by the lower education levels.For instance,66% of the primary school graduates and 67% of the secondary school graduates take care of seams and press.

*Table 4:The Kruskal Wallis test results for gender factor*

| | Fashion or trendiness | Brand name or image | Style and fit | Performance or durability | Price |
|---|---|---|---|---|---|
| Chi-Square | 6.266 | .210 | 3.946 | 8.915 | 12.243 |
| Df | 3 | 3 | 3 | 3 | 3 |
| Asymp. Sig. | .099 | .976 | .267 | **.030** | **.007** |

a. Kruskal Wallis Testb. Grouping Variable: Education level

Regarding the relation between the price and education level, the respondents with lower education level prefer buying low cost garments at the end of season. Higher educated people prefer to buy the garments sold in campaignsand special sales meaning that they follow closely the selling periods.

**The income factor**

The income factor is in a statistically significant relation with the brand name or image attribute. The participants from the higher level of the income prefer to buy the branded garments. Even the third and the fourth income level answer to the question "I prefer to purchase known brands" positively with the values of 62,35% an 66,67% in total as in Table 5.

*Table 5:The Kruskal Wallis test results for gender factor*

| | Fashion or trendiness | Brand name or image | Style and fit | Performance or durability | Price |
|---|---|---|---|---|---|
| Chi-Square | .573 | 96.189 | 3.851 | 5.688 | 1.956 |
| Df | 3 | 3 | 3 | 3 | 3 |
| Asymp. Sig. | .903 | **.000** | .278 | .128 | .582 |

a. Kruskal Wallis Testb. Grouping Variable: Net income

On the other hand, there are more positive answers from the second and third income group to the question of "it effects my purchasing decision if the garment has a visible logo on it". Parallel with this question, the same two income groups answer positively to the question "I prefer to purchase branded garments which are favored by my family and friends". Nonetheless, almost 75% of all the groups state that they would rather purchase branded garments that advertised well.

In the survey, the preference of product attributes are 'Performance and durability', 'Style and fit', 'Price', 'Fashion or trendiness' and 'Brand name or image' respectively. This result is similar to the findings of Agac and Egindir [14] established among Turkish university students. According to the authors, students value individualism in dressing and they primarily pay attention to the fact that clothes reflect their style and then they look for quality [14]. In a study made by Atilgan[15], young and educated consumers givemore importance to quality and design than the other attributes.Gokluberk[16]states that regarding the criteria preferred when buying clothes, 70 of 117 of the Turkish students attribute importance to the quality of the cloth which is followed by 28 students who prefer most recent fashion.  The differences in results come from the selection of the population where the studies in literature given here are conducted in a population limited with the university students, this survey has a broader population having different education levels.

The other finding of the survey is that gender characteristics are in relation with fashion or trendiness, brand name or image, and style and fit attributes. The product properties, such as design, comfort, individuality have a decisive role on apparel's buying behaviour, which vary depending on a set of factors, mainly on sex [17].Nonetheless, the

results of the survey are different from the findings of Akin and Bastug[18] which claim that female respondents are more affectual towards both brand and fashion. In this survey, brand name or image is much more favored by male respondents.

The findings of the survey show that age factor is related with the fashion or trendiness and brandname or image. Even the age group of (34-41)is more interested in fashion. This result is supported by Rocha et al [19]who claim that marketers should highlight the benefits of fashion products as older consumers considered their clothing consumption in a more strategic manner than younger consumers and mature subjects purchased apparel for pleasure or need, but less for conformity. Survey results also show that females have pace in fashion, they know the color trends and they would like to buy the garments if they see them in the fashion magazine and media. This implication find a base in literature because new fashion is encountered via catalogue illustrations, social gatherings and window displays [20] . Moreover, fashion consciousness refer to a person's degree of involvement with the styles or fashion of clothing[20].The other result regarding age factor is that,for the respondents in the age group of(18-25), it is important to look trendyin paralell with the literature that younger consumers (under 30) tend to be very conscious of their image [21].

In the results of the survey regarding the education level, education level is related with the durability and performance and price and; higher educated people care much about the production and raw material characteristics. According to Oktay[10], apparel quality when defined and measured from industry perspective tend to focus on physical properties that can be measured objectively. Besides,Aktuglu and Temel[22]claim that lower educated people prefer to buy simpler products while higher educated people would rather buy functional products having more technical properties in similar with results.

Finally, the survey reveal that the income level is in relation with purchasing branded apparel. This result is in paralell with the findings. According to Agac and Egindir[14], the expenditure on apparel is effected from the income level.Increasingly, in fashion marketing, brands are seen as cues of achievement and identification for fashion conscious and materialistic consumers[23].The people from higher educated level prefer higher priced products[22].

## *5. Conclusion*

*Conducted to determine the quality perception by analyzing the consumer attitudes towards quality dimension in terms of product attributes and to carry out the relationship between select socio demographic factors and product attributes, the results reveal that the durability and performance, style and fit are the most favorable product attributes followed by price. Moreover, the importance given by the customers to the product attributes, differ according to the socio economic characteristics of the consumers.*

*The study is limited with the Turkish consumers only. But, the results obtained are compared with the previous findings in the studies which are established in both Turkey and the other countries. Although, the product attributes handled are not the same in all the studies, many cues and similar findings are found from the literature. Nonetheless, the importance of the product given by the customer to the attributes is influenced by the socioeconomic properties. This enables to state that the rate of development of the country affect the customers' choice in terms of apparel quality dimensions in terms of product attributes.*

*The findings of the survey conducted in a large population are valuable for the apparel manufacturers which establish customer oriented strategies. As the quality*

*perception and importance given by the customers is influenced by socio demographic properties and it changes with time, it is recommended to the apparel manufacturers to analyze their market well in order to better determine the segments of the market with up to date information.*

## *References*

[1] Moore,M.; Fairhurst, A.: Marketing capabilities and firm performance in fashion retailing, *Journal of Fashion Marketing and Management*, Vol.7, No.4, 2003,pp.386-397

[2] Gagliano, K.B., Hathcote, J.: Customer expectations and perceptions of service quality in retail apparel specialty stores, *Journal of Services Marketing*, Vol .8, No.1,1994, pp. 60 – 69

[3] Dickson, M.A.; Lennon, S. J., Montalto, C.P., Shen, D., Zhang, L.: Chinese consumer market segments for foreign apparel products, *Journal of Consumer Marketing*, Vol.21, No.5,2004, pp.301-317

[4] Zhang, Z.; Li, Y., Gong,C., Wu,H.: Casual wear product attributes:A Chinese consumers' perspective,*J of Fashion Marketing and Management*, Vol.6,No.1,2002, pp.53-62

[5] Zeithaml, V.,A.:Consumer perceptions of price, quality and value: A means- end model and synthesis of evidence, *Journal of Marketing*, Vol 52, No 3,1988, pp2-22

[6] Skgkao, S.: Consumers perceptions of apparel quality-Part1:Structure of apparel quality perceived by female college students, *Journal of Textile Machinery Society of Japan*, Vol.47, No.2, 1994, pp.46-51

[7] Abraham-Murali, L.; Littrell, M.A.: Consumers' perception of apparel quality over time: An exploratory study, *Clothing and Textile Research Journal*, Vol.13, No.3, 1995, pp.149-158

[8] Klerk, H. M.; Lubbe, S.J.:The role of aesthetics in consumers' evaluation of apparel quality: A conceptual framework, *Journal of Family Ecology and Consumer Sciences*, Vol.32, 2004,pp.1-7

[9] Eckman, M.; Damhorst, M. L., Kadolph, M.L.: Toward amodel of the in-store purchase decision process: Consumer use of criteria for evaluating women's apparel, *Clothing and Textiles Research Journal*, Vol.8,No.2,1990, pp.13-22

[10] Oktay, K., Kirgizistanda yasayan tuketicilerin giyim tercihleri uzerine bir araştırma (A survey on the clothing preferences of Kyrgyzstan), *Sosyal Bilimler Dergisi*, Vol.15,2006, pp.197-211

[11] Kuei,C.H,;Min, H. L.:An integrated approach to service quality improvement, *International Journal of Quality Science*, Vol.2,No.1,1997, pp.24 - 36

[12] Rayman,D.;Burns,D.J., Nelson,C.N.: Apparel product quality: Its nature and measurement", *Journal of Global Academy of Marketing Science,*Vol.21, No.1,2011, pp.66-75

[13] Forsythe,S.; Bethpresley, A., Wilsoncaton, K.: Dimensions of apparel quality influencing consumer's perceptions, *Perceptual and Motor Skills*, Vol.83, 1996,pp.299-305

[14] Agac, S.; Egindir,N.Y.: Universite ogrencilerinin giyim ihtiyaclarini karsilama ve moda konusundaki gorus ve davranislari (Meeting and behaviors the needs of university students' clothes needs and their opinions on fashion,Available from http://www.sdergi.hacettepe.edu.tr/makaleleler_cerceve.htm*Accessed*:2012 May 31

[15] Atılgan T.: Ege universitesi ogrencilerinin tekstil urunlerinin markalari hakkındaki gorusleri uzerine bir arastirma (A survey about the attitudes of the Aegen University students towards textile brands), *Ege Akademik Bakış Dergisi*, Vol.3, No.1-2, 2003, pp.90-118

[16] Gokluberk Ozlu, P.:The effect of culture of different countries in university students while wearing clothes and making choices for their clothes, *Tekstil ve Konfeksiyon,*Vol.4,2008, pp.311-321

[17] Morganosky, M.A.:Aesthetic, function, and fashion consumer values: Relationships to other values and demographics,*Clothing and Textiles Research Journal, V*ol.6, No.1, 1987,pp.15-19

[18] Akın, H.B.; Bastug, S.:Gelir duzeyi ve cinsiyete gore tuketicilerin hipermarketlerde alisveris tercihleri uzerine Konya ili merkezinde bir arastirma (A survey about purchasing preferences of the consumers in hypermarkets based on the income level and gender)", *Selcuk Universitesi Karaman I.I.B.F. Dergisi*, Vol.12, No.9, 2007,pp.264-271

[19] Rocha, M. A.V.; Hammond, L., Hawkins, D.:Age, gender and national factors in fashion consumption, *Jof Fashion Marketing and Management,*Vol.9,No.4, 2005, pp.380-390

[20] Nam, J.; Hamlin, R., Gam, H.J., Kang, J.H.K., Kumphai, P., Starr, C., Richards, L.:The fashion conscious behaviours of mature female consumer,*International Journal of Consumer Studies*, Vol.81, 2007, pp.102-108

[21] Kamineni, R.; O'Cass, A.:The effect of materialism, gender and nationality on consumer perception of a high priced brand", Presented at ANZMAC 2000, Visionary Marketing for the 21ˢᵗ Century, Facing the Challenge,*Gold Coast, Queensland,28th November - 1st* December 2000,

[22] Aktuglu,I.K.; Temel, A.: Tuketiciler markalari nasiltercih ediyor: Kamu sektoru calisanlarinin giysi markalari tercihini etkileyen faktorlere yonelik bir arastirma (An investigation about the preferences of the consumer towards brand and the Factors affecting this attitude),*Selcuk Universitesi Sosyal Bilimler Enstitusu Dergisi,Vol.15,2006,pp 43–59.*

[23] Kamineni, R.: Influence of materialism, gender and nationality on consumer brand perceptions, *Journal of Targeting, Measurement and Analysis for Marketing*, Vol.14, No.1,2005, pp.25-32