Store Personality: Perceptions Towards Consumer Electronics Chain Stores in Turkey A Case of University Students

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ABSTRACT

The purpose of this study is to identify, develop and compare the determinants of store personality of the most preferred consumer electronics chain stores, as perceived by young consumers in Turkey. A questionnaire survey including a 22-item store personality scale was conducted among 855 students using a convenience sampling method. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) was performed. Findings suggest that greater accuracy of information is needed in the purchasing decision related to high involvement products such as consumer electronics. Also it was found that younger consumers prefer reliable stores that give accurate information, value for money, and provides price-quality fit. This study addresses the neglected area of store personality development and validation for consumer electronics relates through an understanding of young consumers perceptions towards store personality determinants.

JEL Codes: M31, M39

Introduction

In recent years, the growing importance of technology in our daily life has increased enthusiasm for consumer electronics consumption. In particular, young consumers, who are leading the adoption of new technologies, have become more ambitious in their purchases (Accenture, 2012, p. 6). In Turkey, consumer electronics is one of the fastest growing markets, with sales of 3,648 million TL in 2011 (GfK, 2011), with several new entrants establishing themselves the market. However, many of the products and brands sold in consumer electronics retail stores are perceived as being very similar (Yozgat and Deniz, 2008, p. 121). Pursuing sustainable competitive advantage in the current market environment necessitates some degree of differentiation in the products offered by consumer electronics retailers. Therefore, as individual customers tend to attribute humanized characteristics to brands or products, building a particular store personality with appropriate characteristics (Blankson and Crawford, 2012, pp. 311-315) can be an effective way to differentiate a particular store from competitors, and position itself through these characteristics, which include product availability, service quality, value for money, and store atmosphere.

The concept of "brand as a person", or in other words "brand personality", as the set of human characteristics associated with a brand (Aaker, 1997, p. 347) is an important concern for consumers, and in turn, for marketers and academicians (Grohmann, 2003, p. 224; Aaker and Fournier, 1995, p. 392; Wang and Yang, 2008, p. 460; Ambroise, *et al.,* 2005, p. 32). Customers interaction with brands is often similar to their interaction with other people, especially when the brands are attached to such meaningful objects as clothes or cars (Aaker, 1996, p. 142). As individuals tend to associate the brand with their life situations and roles (Ligas and Cotte, 1999, p. 611), interaction with brands as if they were people necessitates defining personality traits that affect the relationship between attributes of people and their behavior in various situations (Hurley, 1998, p. 116), such as purchasing. Furthermore, in order to be useful in a social context, a brand's meaning should be formed based on three components: its physical make up, functional characteristics, and characterization-i.e., personality (Ligas and Cotte, 1999, p. 612). As human or brand personalities are related in the context of retail stores (Brengman and Willems, 2008, p. 27), consumers are able to identify a particular personality related to a store based on both its tangible (design, environment, etc.) and intangible (attitude of sales personnel, service quality, etc.) components. Despite approximate similarity in price, service, merchandising and marketing activities, some stores are overwhelmingly preferred to others (Martineau, 1958, p. 47). Thus, it could be concluded that there should be other factors that

directly or indirectly affect consumers, and in turn, their preferences. Store personality is considered to be one factor responsible for differentiating and positioning a store, because when a store is humanized, it relates to self-meaning that has congruent personalities to oneself (Chan, *et al.*, 2003, p. 302), this being consistent with the "self-congruity" theory (Sirgy and Samli, 1985; Sirgy, *et al.,* 2000).

As Turkish consumer electronics chain stores are all highly competitive and implement similar marketing strategies, some degree of differentiation is necessary within their positioning strategies, especially in regard to younger consumers. In this respect, the purpose of this study is to identify and compare the determinants of store personality of the most preferred consumer electronics chain stores, as perceived by young consumers in Turkey. Additionally, it aims to explore specific store personality determinants, and also to develop a scale in a consumer electronics chain store context. Accordingly, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were applied to the most preferred consumer electronics chain stores, in order to validate the scale. The conceptual framework for the empirical research was based on store personality in retailing services. In the first section of the study, the concept of store personality is discussed. Following this, the research design and the results of the study are presented. The study is concluded by outlining the implications and recommendations for the practitioners, the limitations of the study, and opportunities for further research.

Store personality has been investigated by relatively few researchers including Martineau (1958), d'Astous and Levesque (2003), Brengman and Willems (2008). As the scales developed in these studies are too general, and based on a specific context, they cannot be appropriately applied to consumer electronics chain stores. Accordingly, the studies of these authors are utilized to develop a new scale to increase understanding of the perceptions of university students' towards consumer electronics chain stores. The findings of the present study have the potential to contribute to store personality literature by developing and validating a store personality scale for the use of consumer electronics retailers to position themselves in young consumer markets.

Literature Review

The concept of store personality was introduced by Martineau (1958, p. 47), who defined it as "the way in which the store is defined in the shopper's mind, partly

by its functional qualities and partly by an aura of psychological attributes". Store personality is commonly related to store image, but there are important differences in meaning. Although store image is associated with all the dimensions related to the store, store personality is restricted to those dimensions that correspond to human traits (d'Astous and Levesque, 2003, pp. 455-456). As the concept of human and brand personality are both directly transferable within the context of retail stores (Brengman and Willems, 2008, p. 27; Khan, 2010, pp. 9-10) these traits are relevant to the concept of "brand personality".

Aaker (1997) proposed the commonly accepted brand personality dimensions (sincerity, excitement, competence, sophistication, and ruggedness), and defined the concept, mainly by focusing on its positive attributes. The brand personality concept can help brand strategists enrich their understanding of people's perceptions and attitudes toward the brand. It contributes to a differentiated brand identity, guiding the communication effort and creating brand equity (Aaker, 1996, p. 150). Customers often interact with brands in the same way they interact with other people (Aaker, 1996, p. 142). When consumers view it as having human characteristics, the brand is said to have a personality. Examples of brands found to have strong personalities include Harley Davidson (ruggedness) and Nike (excitement). Madrigal and Boush (2008) stated that trait inferences can also be made about store personality from the combination of marketing mix elements in which the retailers engage. For the stores themselves, other attributes, such as ambience, design and social components are also of concern (d'Astous and Levesque, 2003, p. 457) as these could directly affect the perception of store personality. Other aspects that affect store personality are store name, store environment, service quality, store personnel, merchandise quality, and carried brand names (Brengman and Willems, 2009, p. 347).

A number of studies on store personality were conducted by Martineau (1958), who proposed the main influencing factors could be classified into three main areas: layout and architecture, symbols and colors, and advertising and sales personnel. However, d'Astous and Levesque (2003) stressed that the dimensions used by Martineau (1958) were related with image rather than personality, and they developed a 5 dimensional scale, consisting of "sophistication", "enthusiasm", "genuineness", "solidity" and "pleasantness", which included a total of 34 sub items. In the same study, they also prepared a reduced scale with the highest factor loadings: "enthusiasm" (welcomeness, enthusiasm, liveliness and dynamism); "sophistication" (chicness, being high class, elegance and style); "genuineness" (honesty, sincerity, reliability and honesty/truth); "solidity" (hardiness, solidity, reputation and prosperity) and "unpleasantness"

(annoyance, irritation, loudness and superficiality). These dimensions were those which had been most commonly accepted and used in previous studies (Brengman and Willems, 2009). In Brengman and Willems' (2008) study, in which a fashion store was evaluated in the terms of store personality, 5 major classifications were proposed. These were "store atmosphere" related with design, ambience and social factors; "merchandise" related with price, quality, style and assortment; "retailer's reputation" related with "word-of-mouth", advertising, communication and social responsibility; "service" related with direct interactivity along with "format and location".

In a store environment, factors as such as attachment, experience and structure are also important. These formations are evaluated through defining mechanisms, triggering memories linked to affect, which is either positive (Orth, Limon and Rose, 2010, p. 1207) or negative. Thus consumers develop a perception about a particular store that will affect shopping decisions. For this reasons, the design and structure of the store, and the qualities of the sales personnel represent important indicators of perceived store personality. Where the environment is formal, expressive, symbolic and has a professionally planned setting that interacts with the product, (Fiore and Ogle, 2000, p. 34) it influences the customer's perception of store personality (Harrell and Hurt, 1976). As consumers repeatedly see, touch, hear and smell the commodities, as well as experience the environment, they derive value from formal, expressive and symbolic qualities, and this process influences their beliefs about the store (Fiore and Ogle, 2000, p. 34; Darden and Babin, 1994, p. 101). Subsequently, they associate the brand with their lifestyles and roles, thus there is a strong connection with their view of "self" (Ligas and Cotte, 1999, p. 613). Thus, they use brand personality to define their sense of "self" and tend to seek brands or stores with congruent personalities (Chan, et al., 2003, p. 304), consistent with the "self-congruity" theory (Sirgy and Samli, 1985; Sirgy, et al., 2000). However, the way a store is perceived depends on the personality of each customer (Wesley, et al., 2006, pp. 167–168). The impressions in consumers' minds will result in particular store preferences (Martineau, 1958:55; Brengman and Willems, 2009, p. 352). A good impression can be achieved by building a store personality and finding a suitable "location" in the minds of a group of consumers or a market segment (Keller, 2003, p. 119), a strategy known as "positioning".

Most importantly, brands' objective personality traits do not exist independent of consumer perception (Zentes, Morschett and Schramm-Klein, 2008, p. 169). The process by which consumers use a product category and attribute information from memory has implications for selecting the appropriate positioning strategy to achieve

brand association (Punja and Moon, 2002, p. 276). The brand, with its symbolic and human attributes, customizes its marketing mix according to store personality. However the personality that managers aim to implement may be different to that perceived by consumers. If there is a major gap between managers' implementations and consumers' perceptions of these, then it will be impossible for managers to communicate with consumers in a satisfactory manner.

As store personality is directly related with "the perceptions of consumers", it becomes important to evaluate store personality in the context of store positioning. Perceptions are mostly formed according to the factors representing the store's "intangible assets", which, according to Hooley, *et al.* (2001), are most difficult for competitors to imitate. Therefore, if a firm can succeed in positioning itself through personality characteristics, it will make an important contribution to its performance in terms of competition and long-term survival.

While, the literature contains a number of studies on the determinants of brand personality, there is a need for further studies on store personality and its determinants, as these have received less attention. In this field, Martineau (1958) mostly focused on store image attributes to define store personality, d'Astous and Levesque (2003) utilized Aaker's (1997) brand personality dimensions to develop a general store personality scale; however, this does not fit all retail stores. One example of the development of a new scale is Brengman and Willems' (2008), which used qualitative methods to develop a scale for fashion stores based on d'Astous and Levesque (2003). In this study, we draw on this previous research (Martineau, 1958; d'Astous and Levesque, 2003; Brengman and Willems', 2008) to understand the perceptions of young consumers towards the determinants of store personality. Using survey methodology, a new store personality scale is developed for consumer electronics chain stores.

Field Study

According to the GfK Retail and Technology 2011 Report, consumer electronics is one of the fastest growing sub-sectors in Turkey, with sales of 3,648 million TL. The consumer electronics sub-sector includes of color televisions, audio appliances, video players, cash registers, audio-video cassettes, television satellite receivers and antennas, electronic scales and electronic calculators. There are various domestic and foreign actors in the Turkish market, notably Teknosa, Vatan Computer, Bimeks,

Darty, MediaMarket, BestBuy, Electroworld and Gold. These highly competitive market players need to be differentiated through their positioning strategies. A consumer electronics product is not only a tool with which the user performs a task, but also a decorative item for the home, or means to express one's personality and lifestyle (Han, *et al.*, 2001, p. 145). For this reason, the purchase of electronics products entails high involvement, in which consumers seek specific qualities in the products themselves. This very personalized approach makes the consumer electronics sector particularly suitable for store personality research.

In this competitive environment, building store personality can be a significant factor in positioning a store. Within this context, the aim of this study is to explore and compare the determinants of store personality, as perceived by young consumers, of the most preferred consumer electronics chain stores in the Turkish market. In March 2011 a questionnaire survey was conducted among 855 students from the Faculty of Economics and Administrative Sciences, Ege University in Izmir, using a convenience sampling method. The questionnaires, which took 10-15 minutes to complete, were distributed in the classes and campus area by three research assistants, who had been informed of the content. This sample was chosen due to the fact that young consumers are more familiar with consumer electronics and often influence family purchasing decisions (Hafstrom, *et al.*, 1992). In addition, the enthusiasm of young people for consumer electronics makes them a potentially highly profitable segment of the market (Accenture, 2012, p. 15).

The questionnaire consisted of three sections. The respondents were asked to state their preferred consumer electronics store in the first section. The second section gave 22 statements relating to the determinants of store personality for the consumer electronics context. These statements, generated by the author, were based on the following: Martineau's (1958) store personality determinants (architecture, colour schemes, advertising, salespeople and others), d'Astous and Levesque's (2003) determinants for store personality dimensions; and Brengman and Willems, (2008, 2009)'s five major fashion store personality determinants (store atmosphere, merchandise, reputation, service and format). Brengman and Willems, (2009) determined four categories containing different items as follows : (i) "store atmosphere": interior design, music, layout, window display (Berman and Evans, 2010, pp. 508-509); (ii) "merchandise": price, quality, product range (Berry, 1969); (iii) "service": sales people's attitudes (O'Cass, A. and Grace, D., 2008); (iv) "format": premium branded products, high-income level target (Brengman and Willems, 2009). A 5-point 'Likert' scale ranging from "strongly disagree (1)" to "strongly agree (5)" was utilized. Finally, in the last section, there were some demographic questions related to the respondent's gender,

age, income level. The questionnaire was originally prepared in Turkish, and the statements were translated into English for the tables.

The findings of the study are presented in two parts. In the first part, EFA was conducted to the determinants (Martineau, 1958; d'Astous and Levesque, 2003; Brengman and Willems, 2008) of store personality in order to identify specific factors of store personality and obtain important insights about the data structure. In the second part of the study, ANOVA is performed to compare the perceptions of respondents to the specific determinants of store personality. Following this, first and second-order CFA was performed for each most preferred store in order to test the validity of scale, that is to assess its fit to the proposed theoretical basis.

Findings

The sample comprised 53.1 % female and 46.9 % male students. TeknoSa (52.4 %), MediaMarkt (27.9 %) and Vatan Computer (21.1 %) were chosen as the most preferred consumer electronics chain stores, comprising 87.9 % of the sample. The profile of the sample appears in Table 1.

Table 1. Profile of the sample

Variables	N	Valid Percent	Variables	N	Valid Percent
Sex			Monthly Income		
Female	379	53.1	650-1379 TL	236	34.6
Male	335	46.9	1380-2109 TL	174	25.5
Missing	38	--	2210-2839 TL	113	16.5
			2840-3569 TL	49	7.2
			3570-4299 TL	44	6.4
			4300-5029 TL	18	2.6
			5030-5759 TL	12	1.8
			5760-6489 TL	9	1.3
			6490 TL +	28	4.1
			Missing	69	
Total	752	100	Total	752	100
Mostly Preferred Electronic Store			Age		
TeknoSA	384	51.0	18-24	607	80.7
Mediamarkt	210	27.9	25-31	145	19.3
Vatan	158	21.1			
Total	752	100	Total	752	100

In order to establish the evaluations related to the statements determining store personality, one sample t-test was conducted. As shown Table 2, the findings of one sample t-test about the respondents' perceptions of store personality determinants revealed that young respondents (a) can easily find the products they are looking for in these stores (t=31.622 df:739 p=0.000), (b) visit these stores for its premium branded products (t=23.362 df:736 p=0.000), (c) get accurate information (t=28.401 df:747 p=0.000) and (d) receive value for their money (t=20.535 df:743 p=0.000).

Table 2. One Sample T-Test of the Respondents' Evaluations

Statements	Mean	Std. dev.	t	df	Sig.
I visit this store for the premium branded products.	3.88	0.991	25.822	854	0.000
I think stores like this sell high-priced products.	3.09	1.129	2.389	854	0.017
I appreciate the interior design of this store.	3.60	0.982	17.865	854	0.000
I think this store serves high-income customers.	2.81	1.124	-4.976	854	0.000
I appreciate the window display of this store.	3.32	1.029	8.852	854	0.000
The music played in this store enables me to take pleasure from shopping	3.31	1.072	4.007	854	0.000
I appreciate the young and dynamic sales staff of this store	3.15	1.029	15.279	854	0.000
I find more suitable consumer electronics products for young people in this store compared to other stores	3.54	0.945	19.963	854	0.000
Only the latest technology products are sold in this store.	3.65	1.080	5.674	854	0.000
The low turnover of salespeople in this store gives me confidence.	3.21	1.069	5.628	854	0.000
The salespeople in this store are very knowledgeable.	3.56	0.961	16.980	854	0.000
I can easily find what I am looking for in this store.	3.96	0.820	34.351	854	0.000
This store determines a price which is appropriate for the quality of the product.	3.71	0.899	22.905	854	0.000
Information given related to the products is correct in this store.	3.86	0.815	30.762	854	0.000
I think the advertisements of this store give accurate information.	3.66	0.900	21.403	854	0.000
I think this store always gives me value for money.	3.70	0.895	23.006	854	0.000
I do not think that this store makes false claims to increase sales.*	2.36	0.982	-18.943	841	0.000
I do not like the aggressive attitude of the salespeople towards customers.*	3.52	1.130	13.310	836	0.000
Whenever I want to buy a product from this store, they tell me that the product is out of stock *	3.69	1.030	19.489	842	0.000
The confusing layout of this store makes it difficult to find what I am looking for.*	3.74	1.009	21.286	838	0.000
This store's interior colour irritates me. *	3.77	0.996	22.269	835	0.000
The constant crowding in this store irritates me. *	3.35	1.108	9.307	846	0.000

Test value is 3 (neither agrees nor disagrees)   *recoded

An exploratory factor analyses was perfomed on the total sample in order to identify the specific determinants of the store personality with Varimax rotation. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity were computed to assess the appropriateness of factor analyses to the data. The Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy (0.834) also showed that sample adequacy was satisfactory and the Bartlett's test of sphericity was significant (p<0.000). The factor analysis of the 22 item scale yielded a 'three principal components' solution. Each of these three factors had an eigen value greater than one. The statements with factor loadings lower than 0.50 were removed from the study. During the factor analysis, eight variables that were unrelated to any factor were excluded, and a total of three factors were extracted from the remaining 13 items. The analysis produced three store personality factors, and explained 56.3% of the variance. Also, Cronbach's alpha coefficients were calculated in order to check the internal consistency and reliability of each factor. Factor loadings ranged from 0.63 to 0.81 and alpha coefficients ranged from 0.67 to 0.80, indicating a high internal consistency and reliability for the factors. The factors were declared as "Pleasantness", "Reliability" and "Welcomeness" in accordance with their respective factor loadings (Table 3).

Table 3. Results of Exploratory Factor Analysis Recoded

Common Factors	Statements	Factor Loading	Factor Interpretation (Cumulative % of variance explained)	Cronbach Alpha
Pleasantness	The confusing layout of this store makes it difficult to find what I am looking for.*	0.799	21.775	0.80
	This store's interior colour irritates me. *	0.791		
	Whenever I want to buy a product from this store, they tell me that the product is out of stock.*	0.762		
	The constant crowding in this store irritates me.*	0.694		
	I do not like the aggressive attitude of the salespeople towards customers.*	0.640		
Reliability	Information given related to the products is accurate in this store.	0.751	41.989	0.77
	I think this store always gives me value for money.	0.735		
	I think the advertisements of this store give accurate information.	0.727		
	The salespeople in this store are very knowledgeable.	0.670		
	This store determines a price which is appropriate for the quality of the product.	0.626		
Welcomeness	I appreciate the interior design of this store.	0.812	56.032	0.67
	I appreciate the window display of this store.	0.752		
	The music played in this store enables me to take pleasure from shopping.	0.704		
KMO		0.834		
Bartlett Test		2940.500; (df: 78; p<0.05)		

In order to compare the respondents' evaluations of "Pleasantness", "Reliability" and "Welcomness" factors, and explore the differences between the most preferred stores, both a sample t-test and ANOVA were conducted. H1 is generated as follows:

H1$_{a/b/c/d/e/f/g/h/i/k/l/m/n}$: All three stores are statistically different according to (a) layout, (b) interior colour, (c) product availability, (d) crowdedness, (e) attitude of salespeople, (f)accuracy of product information, (g) value for money, (h) accuracy of information in ads, (i) knowledge of salespeople, (k) price-quality fit, (l) interior design, (m) window display and (n) in store music.

Findings of the sample t-tests (Table 4) revealed that the majority of the mean values for each item were very close among the three stores. Considering the findings, it can be proposed that, although these three are the most preferred ones, they were able to differentiate themselves to a limited extent in relation to store personality determinants. It can be said that, although young people perceive these stores as being similar in all services, Vatan Computer and Teknosa were considered to give better value for money (F=7.847 df: 2/749 p=0.000) compared with MediaMarkt. Vatan Computer sets more reasonable prices according to the quality of their products (F=7.335 df: 2/749 p=0.001) than the other two. Sales personnel in MediaMarkt are perceived to have more knowledge (F=4.662 df: 2/749 p=0.010) than those in Teknosa. Also, the respondents who preferred MediaMarkt and Teknosa reported that the music in these stores gave a more pleasurable shopping experience (F=6.601 df:2/749 p=0.001) than was stated by those who preferred Vatan Computer. Considering these findings, H1$_g$; H1$_k$; H1$_i$ and H1$_n$ are supported (p<0.05).

Table 4. Comparison of One Sample T-Test of Three Stores

Common Factors	Statements	Teknosa Mean	Teknosa t**	Teknosa df	MediaMarkt Mean	MediaMarkt t**	MediaMarkt df	Vatan Mean	Vatan t**	Vatan df
	The confusing layout of this store makes it difficult to find what I am looking for.*	3.70	13.812	386	3.71	9.873	206	3.78	10.093	142
Pleasantness	This store's interior color irritates me. *	3.74	14.750	385	3.74	10.548	200	3.77	9.972	145
	Whenever I want to buy a product from this store, they tell me that the product is out of stock.*	3.69	14.161	388	3.61	7.932	205	3.69	8.004	144
	The constant crowding in this store irritates me. *	3.30	5.590	390	3.25	3.038	206	3.49	5.283	145
	I do not like the aggressive attitude of the salespeople towards customers.*	3.41	7.368	987	3.62	8.107	204	3.56	5.600	144
	Information given related to the products is accurate in this store.	3.83	22.667	393	3.81	13.311	209	3.93	12.473	147
	I think this store always gives me value for money.	3.56	12.901	393	3.80	12.442	209	3.84	11.135	147
Reliability	I think the advertisements of this store give accurate information.	3.67	16.056	393	3.65	9.364	209	3.62	7.941	147
	The salespeople in this store are very knowledgeable.	3.45	9.607	393	3.68	11.022	209	3.63	7.233	147
	This store determines a price which is appropriate for the quality of the product.	3.56	12.811	393	3.77	11.947	209	3.86	10.594	147
	I appreciate the interior design of this store.	3.63	13.560	393	3.54	7.619	209	3.54	6.314	147
Welcomeness	I appreciate the window display of this store.	3.35	7.489	393	3.37	5.150	209	3.14	4.369	147
	The music played in this store enables me to take pleasure from shopping.	3.12	2.280	393	3.29	3.909	209	2.87	3.422	147

Test value is 3 (neither agrees nor disagrees)
*recoded
**p<0.05

EFA is essential in determining the underlying constructs for a set of measured variables. In order to test how well the measured variables represent the number of constructs (Brown, 2006), CFA was conducted with Maximum Likelihood Estimation in LISREL 8.80 (Jöreskog and Sörbom, 1997). CFA verifies the factor structure of a set of observed variables and statistically tests the validity and reliability of a hypothesized factor model (Suhr, 2006, p. 1). The hypotheses tested are as follows:

H2: The correlated (first-order) store personality factors explain an important proportion of the variance in the data.

H3: The set of store personality determinants comprises the latent variable, overall store personality.

First-order CFA was performed to examine the construct more closely and establish construct validity for each of the most preferred consumer electronics chain stores. The estimation of the first-order CFA model revealed that the data defined three factors with regression coefficients varying among the three stores. All the coefficients were significant at the 5 % level (Table 5). Therefore, the hypothesis H2 was supported. Vatan Computer store had the highest correlations between "pleasantness and reliability" (r=0.68), "reliability and welcomeness" (r=0.74), "pleasantness and welcomeness" (r=0.52) respectively. In order to obtain as much understanding of the data as possible, second-order factor analysis was performed (McClain, 1996, p. 131; Correia, *et al.*, 2008, p. 167). In comparison to first-order models with correlated factors, second-order factor models can provide a more interpretable model (Chen, et. al., 2005, p. 472).

Second-order CFA was conducted on the three-dimensional model of perceived store personality and compared each store independently, with the same items. Figure 1 presents the hierarchical construct of perceived store personality, consisting of several correlated first-order factors and a single second-order factor. In this model, the latent variables were "perceived store personality", "pleasantness", "reliability", "welcomeness", and the observed variables are store personality determinants. "Pleasantness" and "reliability" were represented by five items each, and "welcomeness" by three items.

Figure 1. Second-Order Confirmatory Factor Analysis of Perceived Store Personality
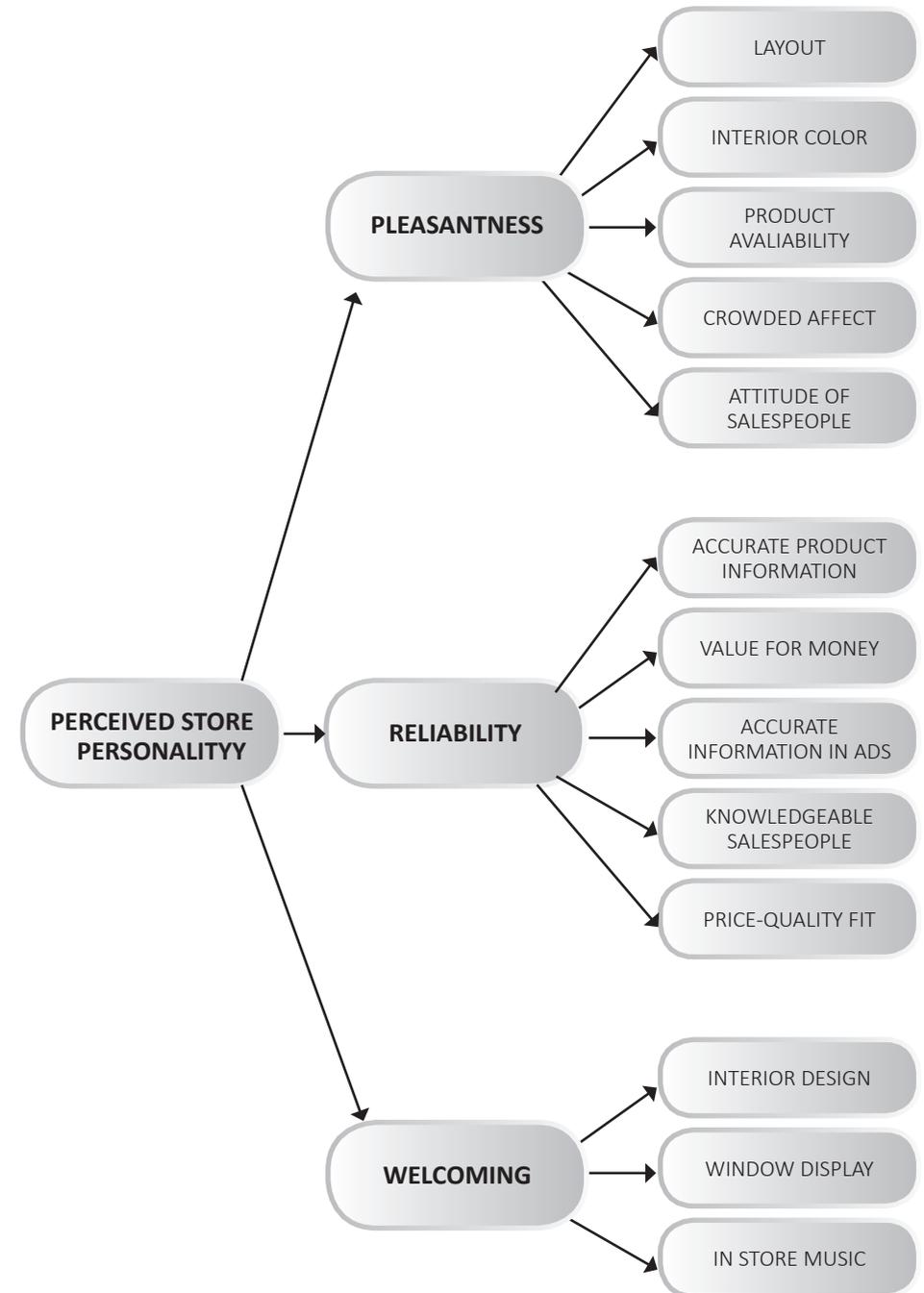
The standardized regression coefficients of the models and associated t-values for the 13 items are shown in Table 5. The output revealed that every standardized regression coefficient and the associated t-values are significant (p ≤ 0.05). The resulting fit indices (GFI, CFI, AGFI, RMSEA, χ^2/df) for all three store personality models displays satisfactory measure fit, which supported the construct validity of the measures. In order to assess the convergent validity of "pleasantness", "reliability" and "welcomeness" constructs, construct reliability was computed. Construct reliability values ranged from 0.617 to 0.893, which shows an acceptable convergent validity. Discriminant validity is computed by latent variable correlation matrix (Table 6). As seen from the Table 6, although some of the AVE (Average Variance Exracted) values are at moderate level (AVE<0.5) (Paswan, 2009), the square root values of AVE for all three stores are larger than the correlations, which demonstrates an acceptable discriminant validity.

Table 5. Results of the CFA of Store Personality Scale Among the Most Preferred Consumer Electronics Chain Stores

Predictive Parameter Estimates	TEKNOSA (N=384)			MEDIAMARKT (N=210)			VATAN (N=158)		
	t-value	Standardized Regression Coefficients	R2	Standardized Regression Coefficients	t-value	R2	Standardized Regression Coefficients	t-value	R2
PERCEIVED STORE PERSONALITY → PLEASANTNESS	2.77*	0.37	0.13	0.66	5.19*	0.44	0.69	5.53*	0.48
PERCEIVED STORE PERSONALITY → RELIABILITY	3.22*	0.83	0.68	0.86	4.44*	0.74	0.98	10.04*	0.97
PERCEIVED STORE PERSONALITY → WELCOMENESS	2.64*	0.50	0.25	0.50	4.88*	0.25	0.82	8.22*	0.56
PLEASANTNESS → LAYOUT	7.60*	0.76	0.58	0.77	7.73*	0.60	0.82	6.33*	0.67
PLEASANTNESS → INTERIOR COLOR	7.49*	0.74	0.55	0.74	7.58 *	0.55	0.83	6.35*	0.69
PLEASANTNESS → PRODUCT AVAILABILITY	7.34*	0.74	0.51	0.60	6.59*	0.36	0.58	5.52*	0.34
PLEASANTNESS → CROWDEDNESS	6.09*	0.54	0.30	0.48	5.57*	0.23	0.45	4.77*	0.20
PLEASANTNESS → ATTITUDE OF SALESPEOPLE	-	0.50	0.36	0.61	-	0.37	0.46	-	0.21
RELIABILITY → ACCURACY OF PRODUCT INFORMATION	6.25*	0.54	0.41	0.69	5.08*	0.48	0.76	10.68*	0.58
RELIABILITY → VALUE FOR MONEY	6.65*	0.72	0.52	0.69	5.07*	0.48	0.85	11.88*	0.72
RELIABILITY → ACCURACY OF INFORMATION IN ADS	6.66*	0.73	0.53	0.73	5.14*	0.53	0.78	10.99*	0.61
RELIABILITY → KNOWLEDGABLE SALESPEOPLE	-	0.55	0.30	0.42	-	0.17	0.73	-	0.53
RELIABILITY → PRICE-QUALITY FIT	5.55*	0.53	0.28	0.47	4.30*	0.22	0.83	11.61*	0.68
WELCOMENESS →INTERIOR DESIGN	-	0.55	0.30	0.82	-	0.67	0.74	-	0.55
WELCOMENESS → WINDOW DISPLAY	3.43*	0.67	0.45	0.72	7.30*	0.52	0.83	10.44*	0.69
WELCOMENESS → IN STORE MUSIC	2.86*	0.30	0.088	0.54	6.34*	0.30	0.70	9.20*	0.49
Overall Model Fit:	GFI=0.93, AGFI=0.90,CFI= 0.90, RMSEA=0.033, χ262=96.34,χ2/ df=1.55			0.94,GFI=0.95, AGFI=0.90,GFI=0.90, /RMSEA=0.031, χ262=73.67, χ2/ df=1.18			0.98,CFI=0.90, AGFI=0.87,CFI= 0.90, /RMSEA=0.074, χ262=259.78, χ2/ df=4.19		

*Significant at p ≤ 0.05

Table 6. The Latent Variable Correlation Matrix: Discriminant Validity

		Reliability	Pleasantness	Welcoming
Teknosa (n=384)	Reliability	0.62		
	Pleasantness	0.30	0.67	
	Welcomeness	0.41	0.18	0.53
MediaMarkt (n=210)	Reliability	0.61		
	Pleasantness	0.57	0.65	
	Welcomeness	0.43	0.33	0.70
Vatan Computer (n=158)	Reliability	0.79		
	Pleasantness	0.68	0.75	
	Welcomeness	0.74	0.52	0.76

Note: Square root of AVE is on the diagonal.

The values of some other goodness-of-fit indices are the following: $GFI_{TEKNOSA}$ = 0.93, $AGFI_{TEKNOSA}$ = 0.90, $CFI_{TEKNOSA}$ = 0.94, $RMSEA_{TEKNOSA}$ = 0.033, $\chi^2/df_{TEKNOSA}$=1.55; $GFI_{MEDIAMARKT}$=0.95, $AGFI_{MEDIAMARKT}$=0.90, $CFI_{MEDIAMARKT}$=0.98, $RMSEA_{MEDIAMARKT}$=0.031, $\chi^2/df_{MEDIAMARKT}$=1.18; GFI_{VATAN}=0.90, $AGFI_{VATAN}$=0.87, CFI_{VATAN}= 0.90, $RMSEA_{VATAN}$=0.074, χ^2/df_{VATAN}=4.19. Therefore, the three store personality factors determined perceived store personality, thus H3 is supported. The factor "reliability" had the highest standardized regression coefficients among the three stores. This means that when "reliability" increases by one, the perceived store personality increases by 0.83; 0.86 and 0.98. In all three stores, the most important determinants for the "pleasantness" factor are "layout" ($\beta_{Teknosa}$=0.76; $\beta_{MediaMarkt}$=0.77; β_{Vatan}=0.82) and "interior color" ($\beta_{Teknosa}$=0.74; $\beta_{MediaMarkt}$=0.74; β_{Vatan}=0.83). The reliability factor derives mainly from the "accurate information in ads" ($\beta_{Teknosa}$=0.73; $\beta_{MediaMarkt}$=0.73) and "value for money" ($\beta_{Teknosa}$=0.72; $\beta_{MediaMarkt}$=0.69) in Teknosa and MediaMarkt; "value for money" (β_{Vatan}=0.85) and "price-quality fit" (β_{Vatan}=0.83) in Vatan Computer. The highest coefficients for the "Welcomeness" factor were "window display" ($\beta_{Teknosa}$=0.67; β_{Vatan}=0.83) in Teknosa and Vatan Computer; "interior design" ($\beta_{MediaMarkt}$=0.82) in MediaMarkt.

Conclusion and Implications

The consumer electronics market is one of the fastest growing in Turkey. In recent years, the entry of global chain stores into the Turkish market and the extension policies of local chain stores have increased competition in this sector. As 34.6 % of the population in Turkey comprises young people (TSI, 2011, p. 13), the interest in consumer electronics is growing rapidly, thus forcing consumer electronics retailers to be more innovative in the diversification of their marketing and positioning strategies. However, it can be seen that there is insufficient diversity in the retailing mix policies and strategies among the retailers with regard to factors such as goods and services offered, store location, operating procedures, pricing tactics, store atmosphere, customer services and promotional methods. Within this context, the purpose of this study is to identify and compare the determinants of the most preferred consumer electronics chain stores' personalities, as perceived by a representative sample of Turkish university students. It aims to explore the factors that make up the specific store personality determinants in a consumer electronics chain store context. The reason for this is the critical need for the most popular electronics product chain stores to differentiate and gain competitive advantage, especially for young consumers such as university students, who represent an important section of this market (Accenture, 2012, p. 15).

In the literature, there are few studies relating to store personality. This concept was firstly introduced by Martineau (1958), who mainly focused on store image attributes in defining store personality, while d'Astous and Levesque (2003) developed a "*general*" store personality scale based on Aaker's (1997) brand personality dimensions. Additionally, Brengman and Willems (2008) developed a scale using retailing mix, aimed specifically at "fashion stores". As the scales developed in these studies are generalized and context based, they are not appropriate for consumer electronics chain stores. Accordingly, these studies have been utilized as the basis for a new scale specifically designed to gain an understanding of university student perceptions of chain stores in the electronics sector.

The findings of the present study contributes to the literature by developing and validating a store personality scale specifically for consumer electronics retailers based on university students' perceptions of store personality determinants. In the Turkish market, Teknosa, MediaMarkt and Vatan Computer were selected as the most preferred chain stores. In the study, in order to identify specific factors of store personality, EFA was conducted and three factors were identified: "reliability", "pleasantness" and "welcomeness". Following this, CFA was performed on these factors and a confirmatory factor analytic model was generated. First-order models with correlated factors were performed to examine the construct more closely, while second-order factor analysis was used to define the most important factors and determine the relative importance of each factor to the overall, for each

chain store (Correia, *et al.*, 2008, p. 173). The results indicate that "reliability" is perceived to be the most important factor in all three stores. In contrast, factors that are perceived to be least important by university students were "pleasantness" for Vatan Computer and Teknosa, "welcomeness" for MediaMarkt. One of the most important items perceived was "Value for money", which explains "reliability" factor in all three store. This is due to the fact that purchasing electronic products requires high involvement which means that consumers put a greater emphasis on finding information about brands and products when making purchases. Moreover, in Teknosa and MediaMarkt, "accurate information in the advertisements" of the stores and in Vatan Computer "price-quality fit" best explains the "reliability" factor.

The second store personality factor, "pleasantness" is found to be best explained by "layout" and "interior design" in all three stores. "Window display" is very much related with the "welcomeness' factor in Teknosa and Vatan, while "interior design" is the most important item in explaining this factor in MediaMarkt.

These findings emphasize the need for accurate information in the purchasing decision making process for high-involvement products, such as consumer electronics (Ahmed, *et al.*, 2004). Young consumers prefer a reliable store that gives accurate information, value for money and has price-quality fit. In addition, the store atmosphere and merchandise are perceived as the most important determinants of store personality by university students. This may be due to the need for young consumers e.g. university students, to be able to touch, hear and even smell products, as well as see them, which contributes to a pleasant shopping experience and a feeling of being welcome in the store.

Considering these findings, in order to increase the reliability of such stores it may be appropriate to recommend that managers ensure that sales personnel are provided with information relative to the products, as well as the price. This is considered to promote sales. In addition, stores should avoid misleading advertising and sales promotions as this can cause store avoidance. In order to prevent this problem and assist in monitoring students' buying habits, loyalty cards can be given to contracted universities. Also, detailed explanations regarding the usage of products can be given on their web sites in the form of videos. Another vital measure is to improve after-sales service, such as maintenance, installation, and repair and even offer replacement with another product where necessary. Considering of the importance of the university market, it would be very useful for chain stores to promote their most popular products at university festivals, organize a variety of events and give special incentives to students, in order to capture these potential long term customers of the future.

As argued by Brengman and Willems (2009), it may be appropriate to propose that the managers of store chains should reduce the perception of overcrowding by rearranging the layout to facilitate shopping and in store traffic flow, to create a more pleasant store atmosphere. Managers may be encouraged to develop strategies for relieving congestion in crowded areas such as entrance, halls, cash register locations, customer services and shopping areas. This study shows the potential for a store-personality scale developed for consumer electronics chain stores in helping retailers understand the perception of young customers. This understanding can enable stores to reposition themselves in a competitive market by implementing an integrated communication strategy.

The main academic contribution of this study is that it can be seen as a preliminary effort to identify the most distinctive personality factors and determinants of consumer electronics chain stores perceived by university students in Turkey. As consumer electronics stores and their personality characteristics have received a limited amount of research attention in the marketing literature, this study is expected to be useful for potential domestic and foreign consumer electronics retailers investing in this sector.

Limitations and Future Research

This study has a number of limitations. In sampling design in particular, due to budget limitations, the use of convenience sampling method in only one metropolitan city, Izmir, and one university may not represent the general perceptions of Turkish university students. However, despite its limitations, this study can be seen as a preliminary effort in analyzing the perceptions of Turkish university students, a highly profitable segment of the market (Accenture, 2012, p. 15).

In his study, Martineau (1958) mostly focused on store image attributes to define store personality, while d'Astous and Levesque (2003) utilized Aaker's (1997) brand personality dimensions to develop a *"general"* store personality scale. Additionally, Brengman and Willems' (2008) developed a scale only for "fashion stores", which is therefore unsuited to consumer electronics. The scale developed in this study can only be applied to consumer electronics chain stores, because it includes specific determinants. Additionally, this scale can be used to measure the effect of store personality determinants on store loyalty, store image and alternative methodologies,

including the usage of both qualitative and quantitative techniques. This process would be able to provide a deeper understanding of consumer perceptions and attitudes.

Further studies can be made into different types of retailers, as well as customer segments from other countries in order to explore the effects of cultural differences. In addition, further research conducted on a wider sample size involving other universities in Izmir and other metropolitan cities would allow a stronger representative view.

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