The Relationship Between Demographic Variables and Brand Personality Dimensions: A Case in Tehran's Fashion Market

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Abstract

Traditional methods of market segmentation based on demographic variables have shown mixed results in differentiating between those who are more likely to buy brands with personalities which are more consistent with their own. Taking advantage of the emerging convergence in marketing research on the Aaker's brand personality dimensions, we focus on the potential of brand personality as a method of identifying different customer segments. A sample of 313 subjects in Tehran was selected to rate the personality traits of their preferred brand in sports clothes. Performing a series of t and ANOVA tests, this paper seeks the relationship between demographic variables and brand personality dimensions. According to the findings, while there is difference in significance of brand personality dimensions to consumers of different age groups and level of education, gender and marital status of consumers are not significantly different in terms of different brand personality dimensions. Results prove that younger people endorse sincere brands more but as consumer's age increases competent and rugged brands are preferred.

Keywords: Brand Personality, Demographic variables, Segmentation, Self Concept

Introduction

Marketers must segment and understand their markets. Only with a clear understanding of major consumer demographic characteristics marketers can appreciate the implication of the environmental and individual determinants of consumer behavior (Loudon and Bitta, 1993). Marketers should design appropriate brand positioning strategies considering the demographic characteristic of the target consumers. Further, they can identify the gaps of

positioning the brands in terms of brand dimensions and decide on appropriate appeals in positioning their brands *(*Warnakulasooriya and Chaminda , 2009).

Whether marketers like it or not brands gain a personality and reputation among consumers which will influence their buying decisions. This is why marketing and brand managers should plan for their brands' personality (Hawkins et al.,2004). Brand personality is defined as "the set of human characteristics associated with a brand" (Aaker, 1997:347). Researchers, in consumer behavior studies, have done some research into how a brand personality enables consumers to express their own self, ideal self or specific dimensions of self through a brand (Aaker, 1997).

Chiu et al. (2011) reports from past research (Wysong, Munch, and Kleiser, 2004; Zhang, 2007) that brand personality enhances consumer preference and has a positive relationship with levels of consumer trust and loyalty.

Many scholars confirm that self image influences consumers' product preferences and their purchase intentions (Mehta, 1999; Ericksen, 1996; Jamal &Goode 2001). Self image congruency consolidates positive attitude toward products and brands (Chiu et al., 2011). Staplehurst and Charoenwongse (2012), in their work paper, consider bonding the highest level of attitudinal loyalty-that is, when people are bonded to a brand, they sense the brand closer, more meaningfully different, therefore more valuable to them.

Brand Personality

Brand personality, in marketing literature, was first mentioned in the early 1950s, when Gardner and Levy (1955) proposed that brands own a series of set in traits which are conceived by consumers in complex ways.

 Consumers establish a connection with the brand via the human like characteristics found in brands. So, marketers attempt to make their brands seem like their consumers own. Brand Personality provides the brand with a face which is of great importance, since consumers make their choice not only by a differentiating, functional positioning but also by a similar personality. Strong brand equity is due to distinct brand personality (Das et al., 2012).

In history of research about brand personality, besides Aaker's definition of brand personality (1997), various definitions have been proposed by authorities. Plummer (1985) states that brand Personality is the human personality traits or characteristics to a brand in order to help communicate to consumers its physical elements or attributes. (Das et al., 2012).Keller (1998) believes that brand Personality "reflects how people feel about a brand, rather than what they think the brand is or does". Azoulay and Kapferer (2003, pp. 151) define that "Brand personality is the set of human personality traits that are both applicable to and relevant for brands". Finally, as defined by Investopedia, brand personality is a set of human characteristics that are attributed to a brand name. A brand personality is something to which the consumer can relate, and an effective brand will increase its brand equity by having a consistent set of traits. This is the added-value that a brand gains, aside from its functional benefits.

Aaker (1997) has developed a vigorous and reliable brand personality inventory, which has been assumed to be a generalized brand personality construct and tested with a number of product categories in the US. The Aaker scale was developed by isolating the distinct unidimensional construct. The final scale contains 42 personality traits, which are grouped into five major dimensions: Ruggedness (e.g., Nike tennis shoes), Sophistication (e.g., Guess jeans), Competence (e.g., The Wall Street Journal), Excitement (e.g., MTV channel) and Sincerity (e.g., Hallmark cards) and 15 facets (Figure 1).The Aaker brand personality inventory

is psychometrically rigorous as empirical tests confirmed; hence, it is a valid and reliable instrument.

Traits for the different brand personality dimensions are as it follows:

Sincerity: Down-to-earth, family-oriented, small-town, honest, sincere, realistic, wholesome, original, cheerful, sentimental and friendly.

Excitement: Contemporary, independent, up-to-date, unique, imaginative, young, cool, spirited, exciting, trendy and daring.

Competency: Reliable, hardworking, sincere, intelligent, technical, corporate, successful, leader and confident.

Sophistication: Upper class, glamorous, good-looking, charming, feminine and smooth.

Ruggedness: Outdoorsy, masculine, western, tough and rugged.

Human-type personality traits provide consumer, who uses the personality as a prompt and applies the positive aspects to present a given image, with self-expressive or symbolic functions. A brand with the right personality can result in the consumer feeling that the brand is relevant and that they should remain loyal to it. Thus, consumers often choose brands that have a personality that is consistent with their own/ self-concept (Donahay and Rosenberger III, 2007)
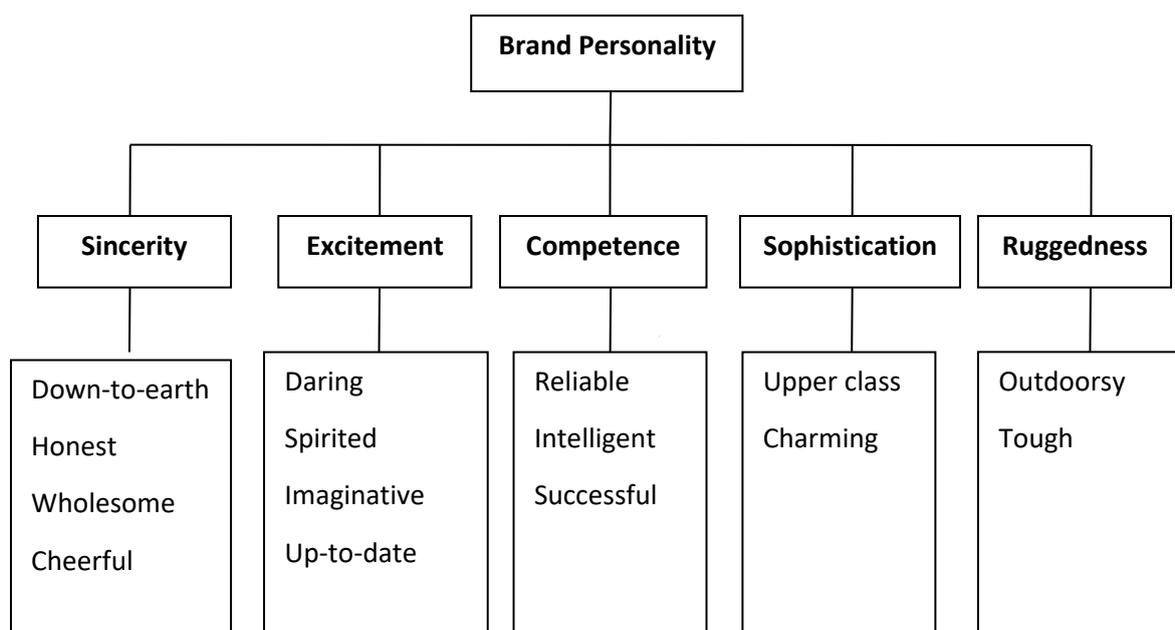

Fig. 1: Brand Personality Framework (Aaker, 1997, p.352)

Demographics

Demographics describe a population in terms of its size, distribution, and structure(Hawkins & Mathersbaugh, 2010:67). Demographics influence consumption behaviors both directly and by affecting other attributes of individuals, such as their personal values and decision styles. Not surprisingly, marketers frequently segment and describe their markets on the basis of demographics and use that information to select appropriate media and develop effective promotional themes (Hawkins & Mathersbaugh, 2010:116).

Gender has historically been a good basis for market segmentation. Many traditional gender based boundaries are changing, and marketers must be aware of these changes. The

emergence of the working woman, for instance, has made determining how the family income is spent more difficult.

Proper age positioning is critical for many products. Age carries with it culturally defined behavioral and attitudinal norms. It affects our self-concept and lifestyles. Our age shapes which media we use, where we shop, how we use products, and how we think and feel about marketing activities. Age groups can be useful as a mean of understanding and segmenting a market (Hawkins & Mathersbaugh, 2010:122 ,124).

Education influences what one can purchase by partially determining one's income and occupation. It also influences how one thinks, makes decisions, and relates to others. Not surprisingly, education has a strong influence on one's preferences (Hawkins & Mathersbaugh, 2010).

Occupation is strongly associated with education. One's occupation provides status and income. In addition, the type of work one does and the types of individuals one works with over time also directly influence one's values, lifestyle, and all aspects of the consumption process (Hawkins & Mathersbaugh, 2010).

Research Objective

The objective of this study is to examine whether brand personality of sports clothes varies in terms of demographic differences of the sports clothes customers. Hence, this paper tries to seek answer to the following question:

- What is the relationship between the demographic variables of gender, marital status, age, level of education, and occupation and the brand personality endorsement of sports clothes' consumers?

Methodology

Sample and Data Collection

Both primary and secondary data collection methods were employed. Primary data were obtained through questionnaires given to respondents while the secondary data were gathered through books, journals, articles, internet and other published materials. The population study was chosen to be customers of two foreign brands in sports clothes, Adidas and Nike, and one well-known local brand, Holiday. 350 questionnaires were distributed among customers of all branches of the three above mentioned brands in Tehran. 313 questionnaires were collected and analyzed.

The questionnaire in this study consisted of 2 sections. In section A subjects were asked for their demographic data such as gender, marital status, age group, level of education and occupation and in section B, they were asked to choose one brand they preferred to the other two and to indicate the extent to which of the personality traits, as proposed by Aaker (1997), to describe the brand personality of the brand of their choice. Using a six-point Likert scale (1 = Does Not Agree to 6 = Fully Agree), respondents were asked to rate the brand on 42 different brand personality traits.

54% of respondents were aged between 20 and 30 who were mostly female and single. Most of them had a master's or a higher degree. Adidas with 47.3% was the most preferred brand for sports clothes.

Reliability and validity of measures

The validity of the primary data was ascertained by using validated questionnaire. Aaker's BPS is widely known and used. Principle Component Factor analysis was used to analyze 42 variables of brand personality. The first step of evaluation assesses whether the overall model fit satisfies the criteria of CFI (comparative fit index) >0.90, RMSEA< 0.08, and AGFI >0.85. The results indicate that the measurement model for Brand Personality has acceptable model fitting (X2/df = 2.05, AGFI = 0.86, CFI = 0.92, RMSEA = 0.024). . Dimensions with factor loadings that are equal to or greater than 0.40 were retained. Based on the results, only 35 out of 42 variables of brand BPS were loaded.

To ensure the reliability of constructs, Cronbach's alpha coefficients were calculated for each of the five constructs of brand personality. For Cronbach's α an acceptable threshold of 0.70 is recommended (Nunally, 1978). Table 1 shows a summary of the reliability analysis results. The results demonstrate that the minimum acceptable values are achieved for all constructs, indicating the scale of this study has high and sufficient reliability.

Table 1: Reliability Statistics

Dimensions	No. of Items	Cronbach's Alpha
Sincerity	12	.705
Competence	9	.754
Sophistication	6	.726
Excitement	12	.813
Ruggedness	6	.703
Brand Personality	45	.928

Data Analysis

As shown in Table 2, independent t-test was used to make a comparison of means between male and female respondents in terms of how they attach themselves to the five dimensions of brand personality. The results show that the mean scores between male and female respondents did not have significant differences for any of the dimensions except for sophistication (t= -2.392; Sig. = 0.017).

Table 2: Independent t-test result based on respondents' gender

	Gender	N	Mean	Std. Deviation	t	Sig.
Sincerity	Male	129	49.5659	9.32557	-1.392	.165
	Female	178	51.1461	10.15590	-1.411	.159
Excitement	Male	120	53.0417	10.94708	-1.364	.174
	Female	160	54.8375	10.87313	-1.362	.174
Competence	Male	123	40.8618	9.25975	-.777	.438
	Female	175	41.6914	8.94791	-.772	.441
Sophistication	Male	126	23.4286	6.62411	-2.392	.017
	Female	178	25.2978	6.77367	-2.401	.017
Ruggedness	Male	129	24.2403	5.57586	1.173	.242
	Female	181	23.4641	5.86184	1.183	.238

The same test for a comparison of means between married and single subjects showed no significant difference for any dimensions (Table 3).

Table 3: Independent t-test result based on respondents' marital status

	Marital Status	N	Mean	Std. Deviation	t	Sig.
Sincerity	Single	187	50.6898	8.28070	.452	.651
	Married	117	50.1624	12.03440	.416	.678
Excitement	Single	169	55.0828	9.87627	1.810	.071
	Married	108	52.6481	12.37673	1.724	.086
Competence	Single	187	41.6257	8.22395	.683	.495
	Married	111	40.8829	10.36755	.644	.520
Sophistication	Single	184	25.1087	7.01903	1.898	.059
	Married	117	23.5897	6.35332	1.940	.053
Ruggedness	Single	187	23.3743	5.57056	-1.559	.120
	Married	120	24.4250	6.05113	-1.531	.127

A one-way between subjects ANOVA was conducted to compare the effect of education level on brand personality dimensions. There was a significant effect of education level on all dimensions of brand personality at the $p<.05$ level for the junior college diploma-bachelor's, diploma and below, master's and upper conditions. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the junior college diploma-bachelor's condition was significantly different than the diploma and below condition. However, the master's and upper condition did not significantly differ from the junior college diploma-bachelor's and the diploma and below conditions for any dimensions. Table 4 summarizes the results. Taken together, these results suggest that each dimension of brand personality is more significant to people with academic degrees.

Table 4: One-Way ANOVA result based on respondents' level of education

Level of Education		N	Mean	Std. Deviation	F- Value	Sig.
Sincerity	Diploma or Below	65	45.2308	8.76386		
	Junior College-Bachelor's.	102	53.2255	8.17858	14.572	.000
	Master's or Upper	140	50.9214	10.49705		
	Total	307	50.4821	9.83103		
Excitement	Diploma or Below	47	49.9787	10.63319		
	Junior College-Bachelor's.	96	56.9688	10.56653	7.216	.001
	Master's or Upper	137	53.4380	10.78661		
	Total	280	54.0679	10.92164		
Competence	Diploma or Below	59	37.6610	7.68252		
	Junior College-Bachelor's.	102	43.0980	8.27918	7.121	.001
	Master's or Upper	137	41.6350	9.76554		
	Total	298	41.3490	9.07168		
Sophistication	Diploma or Below	59	22.2034	6.90772		
	Junior College-Bachelor's.	102	26.3235	6.18552	7.564	.001
	Master's or Upper	143	24.1958	6.80126		
	Total	304	24.5230	6.76426		
Ruggedness	Diploma or Below	65	22.6615	5.72079		
	Junior College-Bachelor's.	102	26.4412	5.07483	18.041	.000
	Master's or Upper	143	22.4056	5.59204		
	Total	310	23.7871	5.74821		

ANOVA between group results (Table 5) for the effect of age range on each dimension didn't show any significant differences in terms of excitement (Sig. = 0.29) and sophistication (Sig.=0.06). However, significant means differences were observed in the aspect of sincerity (F = 5.302. Sig. = 0.000), ruggedness (F = 5.123; Sig. = 0.001) and Competence (F = 4.327; Sig. = 0.002) of the brand personality. While sincerity was most significantly important to the group age 20-30 and 30-40, competence and ruggedness were important to the group age 30-40 and the group age 40-50 respectively.

Table 5: One-Way ANOVA result based on respondents' age group

	Age Group	N	Mean	Std. Deviation	F-Value	Sig.
Sincerity	20 & below	34	45.0000	6.43381		
	20-30	164	51.7439	9.59782		
	30-40	90	51.3889	9.86959	5.302	.000
	40-50	16	45.6875	13.12361		
	50 & upper	3	42.0000	.00000		
	Total	307	50.4821	9.83103		
Excitement	20 & below	25	50.3600	10.69611		
	20-30	158	54.7468	10.09442		
	30-40	81	54.1728	12.28189	1.263	.287
	40-50	16	52.6250	11.59813		
	50 & upper	0	.	.		
	Total	280	54.0679	10.92164		
Competence	20 & below	31	35.9032	8.66162		
	20-30	164	41.7378	8.36650		
	30-40	84	42.9286	10.12665	4.327	.002
	40-50	16	41.1875	7.77362		
	50 & upper	3	33.0000	.00000		
	Total	298	41.3490	9.07168		
Sophistication	20 & below	31	21.8065	6.85283		
	20-30	167	24.8982	7.34489		
	30-40	87	25.0575	5.04020	2.258	.063
	40-50	16	24.1875	7.78219		
	50 & upper	3	18.0000	.00000		
	Total	304	24.5230	6.76426		
Ruggedness	20 & below	34	21.0588	6.47111		
	20-30	167	23.2575	5.71087		
	30-40	90	25.3222	5.27838	5.123	.001
	40-50	16	26.6250	4.41022		
	50 & upper	3	23.0000	.00000		
	Total	310	23.7871	5.74821		

ANOVA between group results (Table 5) for the effect of occupation on each dimension didn't show any significant differences in terms of sincerity (Sig. = 0.504), competence (Sig. =0.867) and ruggedness (Sig. = 0.103). Though, significant means differences were observed in terms of excitement (F = 3.813. Sig. = 0.011) and sophistication (F = 3.126; Sig. = 0.026). While excitement was most significantly important to the office workers, sophistication was more important to both office employees and students (Table 6).

Table 6: One-Way ANOVA result based on respondents' occupation

	Occupation	N	Mean	Std. Deviation	F-Value	Sig.
Sincerity	Office Employee	89	51.4157	9.41084		
	Housewife	12	48.0000	5.47723		
	Student	83	49.6265	12.07771	.784	.504
	Other	121	50.8512	8.61071		
	Total	305	50.5705	9.80211		
Excitement	Office Employee	89	55.7416	11.58911		
	Housewife	9	43.3333	11.03404		
	Student	74	54.2162	10.74776	3.813	.011
	Other	106	53.4151	10.09655		
	Total	278	54.0468	10.95814		
Competence	Office Employee	89	40.7303	9.97242		
	Housewife	12	41.0000	5.16984		
	Student	83	41.8434	9.78735	.241	.867
	Other	112	41.5536	8.20332		
	Total	296	41.3649	9.10031		
Sophistication	Office Employee	89	25.4607	6.00768		
	Housewife	12	22.5000	3.34392		
	Student	86	25.4186	7.74212	3.126	.026
	Other	115	23.1391	6.48194		
	Total	302	24.4470	6.72148		
Ruggedness	Office Employee	89	24.1798	5.73776		
	Housewife	12	26.5000	4.21038		
	Student	86	24.2442	5.18808	2.076	.103
	Other	121	22.9504	6.19792		

Total	308	23.8052	5.76248		

Conclusion

The results of this study are vital for a segmentation based on brand personality preferences of different demographic groups. It is also applicable in choosing promotional and advertising strategies and campaigns of brands. Regarding the results of the inspection of the relationship between demographic variables and brand personality dimensions, in terms of gender, women tend to endorse sophistication more than men. This could imply that although there is not much sensitivity to the brand personality dimensions between women and men, men are less interested in sophisticated brand personalities for sports clothes. The differences among consumers with different levels of education can further be explained by the fact that individuals with a junior college diploma or bachelor's degree are more concerned with each of the brand personality dimensions than others. It is also suggested that for people between 20 and 30 the brand personality, sincere, be selected by sports clothes marketing mangers. The sincere personality has been pursued by both smaller companies seeking to establish themselves as warmer and more caring and considerate than larger, unwelcoming rivals and by larger companies seeking a more down-to-earth face in consumer- brand interactions. Research suggests that sincere brands will garner relationship advantages. Traits of nurturance, warmth, family-orientation, and traditionalism, which have been positively related to relationship strength, are characteristic of sincere personalities. Sincerity can also spark inferences of partner trustworthiness and dependability, which temper feelings of vulnerability and support relationship growth (Aaker et al., 2004:2). Concerning people between 30 and 40 competent personality for brand is advisable. Reliability, intelligence, and success are the traits associated with these brands. For consumers aged between 40 and 50 rugged brand personality would be of more interest. Interestingly, consumers pick up on this personality dimension quite well. Rugged brands are seen as outdoorsy and tough. Occupation wise, exciting brand personality is more important to office employees. According to Aaker (1997) and Aaker et al.(2004) exciting brand is built around qualities of energy and youthfulness. Altschiller (2000) quotes that, although exciting brands are attractive and attention getting and thus highly capable of generating interest and trial, they are seen as somehow less legitimate long-term partners(Aaker et al.,2004). Sophisticated brand is not only endorsed by office employees but also by students more than other occupations.

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