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Investigating the Effect of Brand Equity and Brand Preference on Purchase Intention

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Abstract: This study is examined the impact of brand equity on brand preference and purchase intentions. Sporting goods consumer population of this study is in Tehran. Sampling was done randomly. The data were collected using a questionnaire. The present study is based on the methodology used and the method of implementation and is data collection descriptive survey. The sample included 390 people in this study, four types of validity (Face Validity, Content Validity, Convergent Validity, Discriminate Validity) and two types of reliability (internal consistency reliability and test-retest reliability) in the Description of the study were compared with a similar study has gone a step ahead. The study of these three variables (brand equity, brand preference and purchase intent) together on sporting goods in the world for the first time and new aspects of the innovation. For test data analysis and confirmative factor analysis using path analysis software of LISREL. Research results show that the significant relationship between brand associations, brand loyalty and perceived quality and brand equity. Significant relationship between brand equity and brand preference and purchase intentions can be seen, but no relationship significant brand awareness and brand equity in sports products do not see in Iran.

Key words: Average variance extracted, composite reliability, convergent validity, discriminate validity, path analysis, Structural Equation Modeling (SEM)

INTRODUCTION

The active sportswear and athletic footwear product group is one of the most heavily branded areas in the global apparel market. Estimates hold that over three-quarters of the total active sportswear market, and nearly 80% of authentic footwear, are branded. According to just-style, three global sportswear brands, Nike, Adidas, and Reebok, had 33% of the global active sportswear and athletic footwear market in 2007 (Newbery, 2008). Branding remains the industry's largest source of competitive advantage. This is an area of clothing in which customers' purchasing choices are frequently determined by the sports figures they admire, or the teams they follow, and the brands they aspire to wear (Newbery, 2008). Therefore, brand equity plays a strategic role in helping sportswear brand managers gain competitive advantage and make wise management decisions. When correctly measured, it is the appropriate metric for evaluating the long-term impact of marketing decisions (Simon and Sullivan, 1993).

Although the literature identifies several dimensions of brand equity from other industries, existing research on brand equity in the sportswear industry is still spare. Despite the growing importance of the Iranian market in sportswear products, the topic of how a sportswear firm builds brand equity there appears to be under-researched. By retesting the most popularly adopted brand equity dimensions, this study aims to empirically test and operationalize the customer-based brand equity and brand preference components and how the effect on purchase intention within the context of sportswear brands in a Iranian sample. The end results of this research also lead to a deeper understanding of a sportswear brand equity concept as well as some implications for practitioners working in the sportswear industry.

To accomplish the above stated goals, this paper offers a brief introduction to Iranian sportswear market, followed by a review of relevant theoretical literature and a description of the hypotheses of the study. Next, it describes the methodology and rationale for measuring customer-based brand equity and brand preference on purchase intention.

Since the term "brand equity" emerged in the 1980s, there has been a growing interest in the subject among marketing academicians and practitioners (Cobb-Walgren *et al*., 1995). The meaning of the term brand equity has been debated in a number of different ways and for a

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number of different purposes (Keller, 2002). Brand equity is the added value endowed by the brand name (Farquhar *et al*., 1991); it is the difference between overall brand preference and multi-attributed preference based on objectively measured attribute levels (Park and Srinivasan, 1994); and overall quality and choice intention (Agarwal and Rao, 1996). Based on the value of brand equity, a set of assets (and liabilities) linked to a brand's name and symbol that add to (or subtract from) the value provided by a product or service to a firm and/or that firm's customers (Aaker, 1991).

Compared to the definition of brand equity from a financial perspective as the total value of the brand that is a separable asset when it is sold or included in a balance sheet (Feldwick, 1996), customer-based brand equity is defined from the perspective of the customer and is based on consumer knowledge, familiarity, and associations with respect to the brand (Washburn and Plank, 2002). Proponents contend that for a brand to have value, it must be valued by the customer. If the brand has no meaning to the customer, none of the other definitions is meaningful (Cobb-Walgren *et al*., 1995; Keller, 1993).

A thorough understanding of brand equity from the customer's point of view is essential for successful brand management. As Keller explains, positive customer-based brand equity "can lead to greater revenue, lower cost, and higher profit; it has direct implications for the firm's ability to command higher prices, a customer's willingness to seek out new distribution channels, the effectiveness of marketing communications, and the success of brand extensions and licensing opportunities" (Keller, 1993).

According to Keller, there is both an indirect and a direct approach to measuring customer-based brand equity (Keller, 1993). The indirect approach tries to identify potential sources of such equity, whereas the direct approach focuses on consumer responses to different elements of the firm's marketing program. The implications of customer-based research suggest that measures of customers' brand perceptions are accurate reflections of brand performance in the marketplace. Strong, positive customer-based brand equity has a significant influence on the financial performance of the firms (Kim and Kim, 2004).

Brand equity is a multidimensional concept and a complex phenomenon. Keller (2002) separated it into two components: awareness and association. Aaker grouped it into five categories: perceived quality, brand loyalty, brand awareness, brand association, and other proprietary brand assets such as patents, trademarks, and channel relationships (Aaker, 1991, 1996). Among these five brand equity dimensions, the first four represent customers' evaluations and reactions to the brand that can be readily understood by consumers (Barwise, 1993; Yoo and Donthu, 2001), so they have been widely adapted to measure customer-based brand equity in previous studies. In summary, strong brand equity means that customers have high brand-name awareness, maintain a favorable brand image, perceive that the brand is of high quality, and are loyal to the brand.

Among several brand equity models in the literature, this study uses the one constructed by Aaker, which is the most commonly cited (Aaker, 1991). It has been empirically tested in a number of previous studies (Atilgan *et al*., 2005; Kim and Kim, 2004; Yoo *et al*., 2000). With Aaker's brand equity model, this study sets out to retest the measurement of customer-based brand equity with sportswear brands in the Iranian market.

The relationship between brand equity and brand equity dimensions: Brand awareness: Brand awareness is an important component of brand equity. It refers to the ability of a potential buyer to recognize or recall a brand as a member of a certain product category (Aaker, 1991). According to Keller, brand awareness consists of two sub-dimensions: brand recall and recognition. Brand recognition is the basic first step in the task of brand communication, whereby a firm communicates the product's attributes until a brand name is established with which to associate them (Keller, 1993). Brand awareness can be a sign of quality and commitment, letting consumers become familiar with a brand and helping them consider it at the point of purchase (Aaker, 1991). Thus, the following hypothesis is posited:

H1: Brand awareness has a significant positive direct effect on brand equity.

Brand association: Brand association is anything "linked" in memory to a brand (Aaker, 1991). It is believed to contain the meaning of the brand for consumers. Brand association can be seen in all forms and reflects features of the product or aspects independent of the product itself (Chen, 2001). A set of associations, usually organized in some meaningful way, forms a brand image. Brand associations create value for the firm and its customers by helping to process/retrieve information, differentiate the brand, create positive attitudes or feelings provide a reason to buy, and provide a basis for extensions (Aaker, 1991). Customer-based brand equity occurs when consumers have a high level of awareness and hold some strong, favorable, and unique brand associations in their memories. Based on this, then, the following hypothesis is posited:

H2: Brand association has a significant positive direct effect on brand equity.

Brand loyalty: Brand loyalty is at the heart of brand equity. It is the major component (Aaker, 1991).

Researchers have been challenged to define and measure brand loyalty. From a behavioral perspective, it is defined as the degree to which a buying unit, such as a household, concentrates its purchases over time on a particular brand within a product category (Schoell and Guiltinan, 1990). From an attitudinal perspective, brand loyalty is defined as "the tendency to be loyal to a focal brand as demonstrated by the intention to buy it as a primary choice" (Oliver, 1997). This study conceptualizes brand loyalty not on the basis of consumer behavior but rather on the basis of consumer perception. According to Aaker, brand loyalty adds considerable value to a brand and/or its firm because it provides a set of habitual buyers for a long period of time (Aaker, 1991). Loyal customers are less likely to switch to a competitor solely because of price; they also make more frequent purchases than comparable non-loyal customers (Bowen and Shoemaker, 1998). Hence, the following hypothesis of the relationship between brand loyalty and brand equity is proposed:

H3: Brand loyalty has a significant positive direct effect on brand equity.

Perceived quality: Perceived quality is the "core/primary" facet across the CBBE framework (Aaker, 1996; Farquhar, 1989). It is not the real quality of the product but the customer's perception of the overall quality or superiority of the product (or service) with respect to its intended purpose, relative to alternatives (Zeithaml, 1988). Perceived quality lends value to a brand in several ways: high quality gives consumers a good reason to buy the brand and allows the brand to differentiate itself from its competitors, to charge a premium price, and to have a strong basis for the brand extension (Aaker, 1991). Marketers across all product and service categories have increasingly recognized the importance of perceived quality in brand decisions (Morton, 1994). Kotler notes the intimate connection among product and service quality, customer satisfaction, and company profitability (Kotler, 1991). Based on the above definition and the suggested relationship of perceived quality and brand equity in the literature, the following hypothesis is formulated:

H4: Perceived quality has a significant positive direct effect on brand equity: Brand equity has been deemed as primary capital for many industries. Strong brands can increase customers' trust in the produce or service purchased and enabling them to better visualize and understand intangible factors. According to Yoo and Donthu (2001), brand image can influence a company's future profits and long-term cash flow, a consumer's willingness to pay premium prices, merger and acquisition decision making, stock prices, sustainable competitive advantage, and marketing success.

Three main aspects of brand equity are usually considered: i.e. the financial perspective, the customer-based perspective, and the combined perspective (Keller, 1993). Here we focus on the customer-based perspective (Morgan, 2000). The operationalizations of customer-based brand equity can be divided into consumer perception (e.g. brand awareness, brand associations, perceived quality) and customer behavior (e.g., brand loyalty, willingness to pay a high price). Cobb-Walgren develop a framework for studying various antecedents and consequences of brand equity from the customer perspective and suggest that consumers' brand perceptions contribute to the meaning or value of a brand (Cobb-Walgren *et al*., 1995). Brand equity then influences consumer preferences and purchase intentions, and ultimately brand choice. Hence, the causal relationship is identified: brand equity brand preferences purchase intentions.

Switching costs between different product and service can act as moderating variable by significantly influence customer loyalty through loyalty determinants such as customer satisfaction and perceived value. From the brand management perspective, brand equity can be largely deemed as a customer's perceived value. Hence, the following hypotheses of the relationship between brand equity, brand preference and purchase intention is proposed:

H5: Brand equity has a significant positive direct effect on brand preference.

H6: Brand equity has a significant positive direct effect on purchase intention.

H7: Brand preference has a significant positive direct effect on purchase intention.

MATERIALS AND METHODS

This research based on applied goals and collecting information is a correlation research. In this research, statistical description and descriptive subject were used. Statistical population-according to many researchers-including all real or presumptive members that we are interested in extent their research findings (Delaware, 2006); collection of individuals is called Society which they have one or more traits in common and this trait or traits is researchers favorite.

The statistical population can be finite or infinite. In both cases, study of one by one persons of population, due to high cost and short time or lake of adequate facilities, is often impossible. Therefore we consider a part of society instead of all part of it. This part of society which has been selected according to certain and acceptable criteria, and study of it is possible instead of whole society, is called an Example of the society. Sampling in

this study is stratified random sampling. We use the Kerjsy and Morgan table to determine volume of the samples. Number of samples in this study is 196 students.

Statistical population: Using students as samples decreases risk of error and causes exact anticipation. Since samples were students from an Islamic Azad University (IAU), cultural variables were considered.

Sampling based on criteria sampling (including sampling error, variance and the statistical confidence level) is done. The statistical confidence level in this study, at least 95% (maximum error 5%) and a maximum sampling error of 7% has been considered in this study. In the present study there was no record and a sense of community is not a variance. Therefore, the maximum amount of variance for the statistical community is considered. The variance of the 25% is considered. Thus, with respect to the following formula to estimate the minimum sample size of 119 (Azar and Mansour, 1998):

$$n = \frac{\sigma^2 \times z^2}{d^2}$$

$$n = \frac{0.25 \times 1.96^2}{0.07^2} = 196$$

It should be noted that questionnaires had been distributed by his questioner. The final questionnaire collected 240 completed questionnaires have been completed. It will provide the accuracy needed.

Data collection tolls: In this research, questionnaire used to collect information and questionnaires is the same for all the respondents. This questionnaire includes 25 questions are used to determine brand awareness 3 questions, brand association 4 questions, brand loyalty 5 questions, perceived quality 3 questions, brand equity 4 questions, brand preference 3 questions, purchase intention 3 questions (Table 1). Scale of Likert's 5 points is used to measure them and finally 5 statistical questions which are separately regarding to the studied society's features.

Validity: In this study, four validity (face validity, content validity, convergent validity and discriminate validity) were evaluated to assess the accuracy of the results of these four funds is detailed below.

Face validity: In this study face validity by the test subjects were studied in and after the reform, the face validity of the tool was confirmed.

Content validity: A widely used method to measure the content validity of C.H Lawshe coined. This level of agreement among the assessors or jury "or a fundamental right to be" one of the items specific measures. Lawshe (1975) suggested that all buoy or a series of questions the assessors or jury will be asked whether they intended to measure the buoy structure of "essential or useful" or not? According Lawshe, if more than half of the evaluators or judges stated that it "is essential or beneficial, At least some of the items have content validity. The evaluators agree with the amount of certain items or benefits of a higher level of content validity are also higher. Lawshe using this formula is devised to measure the content validity of the Content Validity Ratio (CVR) is called (Mirzaei, 2010):

Table 1: Variables and questions in research

Variables	Number of questions	Questions
Brand awareness	3	1-7-14
Brand association	4	2-8-13-22
Brand loyalty	5	3-6-9-15-19
Perceived quality	3	16-18-23
Brand equity	4	4-10-11-21
Brand preference	3	5-17-24
Purchase intention	3	12-20-25

Table 2: Questions and CVR calculate

Questions	CVR calculate (%)	Questions	CVR calculate (%)	Questions	CVR calculate (%)
1	100	14	50	27	60
2	100	15	40	28	100
3	50	16	80	29	40
4	80	17	30	30	100
5	80	18	60	31	70
6	80	19	90	32	30
7	40	20	80	33	40
8	80	21	70		
9	80	22	40		
10	100	23	60		
11	70	24	20		
12	80	25	100		
13	90	26	60		

Content validity of the formula: $\mathbf{CVR} = \frac{(ne - \frac{N}{2})}{\frac{N}{2}}$

It should be noted that the questionnaire was given to 20 experienced the least amount acceptable to the 0/42 is. The following table is summarizes the content validity:

We were given a questionnaire of 25 questions that the CVR in the Table 2 the questionnaire was distributed to the separation of variables and assumptions to be examined separately.

Convergent validity: In this study to examine the convergent validity of the method using the average variance extracted and composite reliability the results of these two methods are used in the Table 3 is shown.

Given the composite reliability of all combinations of 0/7 and average variance extracted by the top 0/5 convergent validity can be confirmed.

Table 3: AVE and CR calculate

Number	Variable	Questions	AVE	CR
1	Brand awareness	3	0/705	0/823
2	Brand association	4	0/644	0/811
3	Brand loyalty	5	0/707	0/814
4	Perceived quality	3	0/791	0/879
5	Brand equity	4	0/675	0/763
6	Brand preference	3	0/724	0/845
7	Purchase intention	3	0/667	0/780

Table 4: Discriminate validity calculate

Purchase intention	Brand preferen	Brand equity	Perceived	Brand loyalty	Brand associati	Brand awarene	Variable
						0/71	Brand awareness
					0/70	0/24	Brand association
				0/70	0/16	0/39	Brand loyalty
			0/70	0/39	0/30	0/34	Perceived quality
		0/72	0/24	0/21	0/31	0/13	Brand equity
	0/71	0/35	0/25	0/30	0/28	0/26	Brand preference
0/71	0/36	0/24	0/35	0/13	0/20	0/32	Purchase intention

Table 5: Cronbach's alpha calculate

Number	Variables	Questions	Cronbach's alpha
1	Brand awareness	3	0/77
2	Brand association	4	0/85
3	Brand loyalty	5	0/82
4	Perceived quality	3	0/85
5	Brand equity	4	0/66
6	Brand preference	3	0/77
7	Purchase intention	3	0/66

Table 6: Test of normal distribution of research variables with curran test

Variables	Skewness and kurtosis	Significance level
Brand awa reness	3/720	0/065
Brand association	3/577	0/170
Brand loyalty	4/622	0/068
Perc eived quality	0/656	0/726
Brand equity	3/172	0/212
Brand preference	1/674	0/432
Purchase intention	3/674	0/078

Discriminate validity: To calculate the discriminate validity of using this method, the shared variance between factors compared with single factor is the square root of the average variance extracted (Table 4). If the variance between the common factors, the lower is the square root of AVE, discriminate validity is confirmed (Fornell and Larcker, 1981).

Reliability: In this study to examine the reliability of two methods of internal consistency reliability and test-retest reliability have benefited from the results in detail below.

Internal consistency reliability: One way to measure reliability internal consistency, Cronbach's alpha is used. Between individual items in the tool or test the correlation with the total score is used. In the study of this method is used to calculate the internal consistency reliability. The minimum acceptable reliability for research surveys 0/6 is. The results show that the variables for each of the variables in this study, internal consistency are required. The Cronbach's alpha results in Table 5 are described.

Test-retest reliability: Tools for test-retest reliability, a test for the second time, with the previous week on the subject (50) have performed. Pearson's correlation coefficient obtained from the two tests with 0/87 the test-retest reliability of the test will be confirmed.

Findings: Inferential statistical issues in analysis of this questionnaire are used. Included in inferential factor analysis confirmed the structural equation model and path analysis were used. Software used for data analysis software package LISREL 8.54 is version of windows.

Check the status of normalize: In this phase of research is necessary to the normal distribution model can be specified as variables. To show that these variables are studied in terms of normal distribution of the test Skewness and Kurtosis that Curran test is known, using the results of a normal distribution. The test is based on the normal distribution is zero. If the significance level of less than 0/05 of the variables studied is not normal (Table 6).

Note that all levels significantly above the 0/05 are assumed to be zero based on the normal distribution is accepted. The variables studied in normal conditions to estimate the unknown parameters are reliable.

Confirmative Factor Analysis (CFA) model: In the present study to examine the structures investigated to what extent each indicator selected to measure they were out of measurement model was used to confirmative factor analysis. The initial model is characterized by the t value indicates a greater than 1/96. The structure or structures of sufficient accuracy to measure the latent trait is investigated. In other words the results show a selective marker for measuring this concept, each researcher the importance of this factor measures are an important part.

T- values were calculated for each of the operating times vary per show or hide the structure of its 1/96 is (Table 7). So you can align your questionnaire to measure the concepts in this prestigious show. The Table 7 shows the results achieved by questions intended to measure what they have been achieved by this means. The relationship between structures or latent variables is reliable. Indicators should be fitted to be studied.

Research structural model (Path analysis model): After the verification process of model validity and diagnostic measurements and calculations in this study can be used to test the relationships between structures pay. For this

Table 7: Measurement model result

Construction or factor	Sign	Factor loading	t-value	p-value
Brand awareness	Q1	0/86	10/66	0/01
	Q7	0/95	12/17	0/01
	Q14	0/76	10/60	0/01
Brand association	Q2	1/06	14/13	0/01
	Q8	0/68	7/80	0/01
	Q13	0/79	9/28	0/01
	Q22	0/73	8/96	0/01
	Q3	0/65	9/93	0/01
	Q6	0/57	8/49	0/01
Brand loyalty	Q9	0/56	8/35	0/01
	Q15	0/58	8/52	0/01
	Q19	0/67	10/28	0/01
Perceived quality	Q16	0/59	8/77	0/01
	Q18	0/50	7/16	0/01
	Q23	0/65	9/98	0/01
Brand equity	Q4	0/42	5/91	0/01
	Q10	0/61	9/13	0/01
	Q11	0/65	9/97	0/01
	Q21	0/52	7/52	0/01
Brand preference	Q5	0/42	5/83	0/01
	Q17	0/70	11/00	0/01
	Q24	0/48	6/94	0/01
Purchase Intention	Q12	0/65	10/29	0/01
	Q20	0/60	8/78	0/01
	Q25	0/85	10/36	0/01

purpose the model was implemented in software LISREL. Note that the square root of variance estimation error of approximation RMSEA for the structural study of 0/1 is reported for the accurate estimation of path coefficients for hypothesis testing; there is the need for reform. In the modified model is shown in Table 8. As in structural equation modeling methodology is proposed to be

Table 8: Chi-square value's differences, in determination of effectiveness of the structural model

Fitness model	χ^2	$\chi^2\Delta$	df	RMSEA	χ^2decrease meaningful
First model	660/78	----	269	0/127	0/000
Second model	643/78	2/75 up	268	0/114	0/000
Third model	622/17	2/75 up	267	0/102	0/000
Fourth model	597/13	2/75 up	266	0/095	0/000
Fifth model	586/78	2/75 up	265	0/078	0/000
Sixth model	571/06	2/75 up	264	0/059	0/000
Seventh model	560/78	2/75 up	263	0/049	0/000
Eighth model	550/40	2/75 up	262	0/043	0/000
Ninth model	550/17	2/75 down	261	0/042	Not meaningful

achieved by using Chi-square statistic significant difference between the model and further steps to improve its action. In this regard, the D2 test, chi-square and significant reduction of the amount it would have been judged. Detection limits and adding additional parameters to correct the real solution is LISREL models.

Approach to identify the limitations, if the model is not specific, some specific limitations that need to be imposed on the model. The main strategy used in this connection in the humanities, restriction-zero. However, the modified model LISREL study approach is used to add additional parameters (Fig. 1). This indicates that existing between the model and the output of the error covariance LISREL among some of them free from the control values recovered. To check whether the reform has made significant changes in the model if the chi-square test is used. Since the model is better than ninth in the previous models are smaller because of the difference chi-square and reduced chi-square (chi-square) between the two models from 2/75, is meaningless, so as the eighth and final model the fit is acceptable.

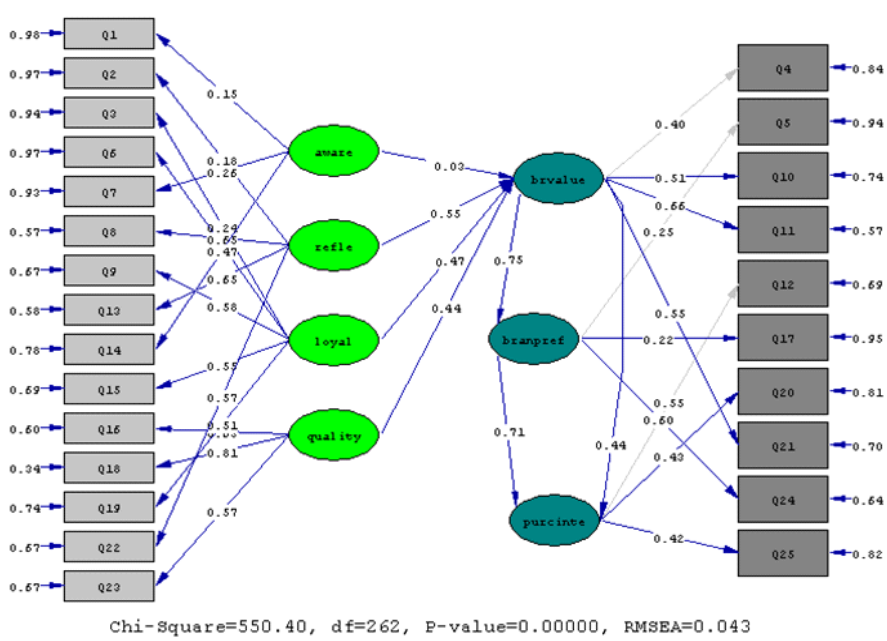

Fig. 1: LISREL structural (path analysis) model

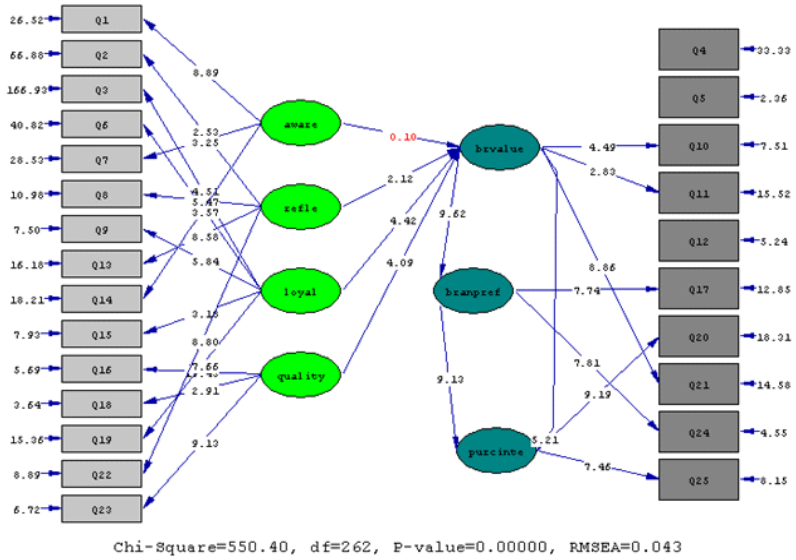

Fig. 2: T-value for estimate path coefficient meaningful in model

A Table 8 show the basic model is based on the seven-step model and the eight values is appropriate. After this step, the ninth model to a statistically significant reduction in the chi-square not be and it decreases below a critical value of 2/75, so the resumption of operations to achieve the best matrix covariance was carried out in the eighth to acceptable levels of compliance with the underpinning factor has and with very high accuracy can be estimated that the coefficients on the path to the eighth model to test the hypothesis.

The square root of the variance error of approximation RMSEA, in the eighth as much good has come and so the correction is finished and the parameters estimated in the model to statistically100% reliable, he said, and then to test the hypothesis used. The theoretical model to investigate the effects of causal relationship was analyzed.

RESULTS AND DISCUSSION

First hypothesis: The increase of brand awareness, brand equity also increased. According to Table 9, the coefficient of the variable of brand awareness and brand equity equivalent to 0/03 is estimated. T-value for this parameter (as a percentage of error in the rule base is zero for values above 1/96 for each parameter in the model), under 1/96 is calculated (t = 0/10) is zero, so there is no sufficient reason for rejection and the effect of brand awareness on brand equity is not large enough to be statistically significant this study shows an increased awareness of the brand equity variables are significant changes in response to does not show. The research findings show that to achieve brand equity, focusing on brand awareness, brand equity has no direct role in the formation. We investigate this hypothesis can be rejected.

Table 9: Path coefficients and significant structures depend on the model structure

Hypothesis	Path	Standard parameter	T	Result
H1	Brand awareness Brand equity	0/03	0/10	Rejected
H2	Brand association Brand equity	0/55	2/12	Supported
H3	Brand loyalty Brand equity	0/47	4/42	Supported
H4	Perceived quality Brand equity	0/44	4/09	Supported
H5	Brand equity Brand preference	0/75	9/62	Supported
H6	Brand equity Purchase intention	0/44	5/21	Supported
H7	Brand preference Purchase intention	0/71	9/13	Supported

Table 10: Indices of model fitness

Indices	Standard amount	Reported amount
RMR	Near to zero	0/11
SRMR	0›SRMR‹1	0/09
GFI	0/9 up	0/91
NFI	0/85 up	0/96
NNFI	0/80 up	0/97
IFI	0/9 up	0/96
CFI	0/9 up	0/96
RMSEA	0/08 up	0/043

Second hypothesis: The association with the brand, brand equity also increased. According to Table 9, the coefficients of the variables associated with increased brand equity are the equivalent of 0/55 is estimated. T-value for this parameter (as a percentage of error in the rule base is zero for values above 1/96 in each model parameter), the 1/96 is calculated (t = 2/12) is zero, so that it can be stated with 99% confidence, and dismisses the significance of this coefficient can be associated with increased use of equity will have a significant effect.

Third hypothesis: Increased loyalty, brand equity also increased. According to Table 9, the coefficient of the variable increase brand loyalty and brand equity equivalent to 0/47 is estimated. Brand equity is a significant effect on the transition. T-value for this parameter (as a percentage of error in the rule base is zero for values above 1/96 in each model parameter), the 1/96 is calculated (t = 4/42) is zero, so that it can be stated with 99% confidence, and dismisses the significance of this coefficient can be associated with increased use of equity will have a significant effect. The research findings indicate that brand equity is a function of increasing brand loyalty and fidelity to any factor that increase in long-term brand equity will bring increased attention to the significance of these findings and positive relationship between these two variables. The research hypothesis is accepted.

The fourth hypothesis: The increase in perceived quality, brand equity also increased. According to Table 9, the coefficient of the variable of perceived quality on brand equity equivalent to 0/44 is estimated. T value for this parameter, the 1/96 is calculated (t = 4/09) is zero, so that it can be stated with 99% confidence, and dismisses the significance of this coefficient can be expressed in perceived quality significant effect on brand equity offers. The research findings indicate that brand equity is a function of perceived quality and the quality factor given the significant and positive relationship between these two variables.

The fifth hypothesis: Increasing brand equity, brand preference also increased. According to Table 9, the coefficient of the variable value are particularly preferred are the equivalent to 0/75 is estimated. T value for this parameter, the 1/96 is calculated (t = 9/62) is zero, so that it can be stated to be rejected with 99% and the significance of this coefficient can be expressed increased use of preferred equity will enjoy significant effect. The research findings show that brand preference is a function of increasing brand equity and any factor that increases the brand equity in the long term development and preferred brands will increase the significance of these: findings and a positive relationship between these two variables. The research hypothesis is accepted.

The sixth hypothesis: Increasing brand equity, purchase intent also increased. According to Table 9, the coefficients of the variables are of special value on the buying intentions of 0/44 is estimated. T value for this parameter, the 1/96 is calculated (t = 5/21) is zero, so that it can be stated to be rejected with 99% given the significance of this coefficient can be expressed as an increase in brand equity on purchase intentions means will do. The research findings show that purchase intention is a function of increasing brand equity and these findings regarding the significant and positive relationship between these two variables. The research hypothesis is accepted. The seventh hypothesis: Increasing brand preference, purchase intent also increased. According to Table 9, the coefficients of the variables are the preferred intent to purchase the equivalent of 0/71 is estimated. T value for this parameter, the 1/96 is calculated (t = 9/13) is zero, so that it can be stated with 99% confidence, and dismisses the significance of this coefficient can be preferable to increase the use of Significantly affects the purchase intentions. The research findings show that the intention of buying a brand preference is a function of increasing any factor that would increase their long-term increase in purchase intent to be this finding was the significant and positive relationship between these two variables. Thus the hypothesis research is accepted.

Fitness standards in the occasion of the data model to test the hypotheses (Table 10). GFI criterion that indicates the relative size of the variance and covariance is explained by the model is the model for the 0/91. Root mean squared difference between the amount of waste that is observed in the sample matrix elements and elements matrix estimated or predicted in this study (0/11), the covariance has a good explanation. SRMR value for the path analysis model 0/09, which indicates the amount is appropriate. Fitness values (NFI), (NNFI), (IFI) and (CFI), the suggested model was designed to fit very well in comparison with other models is possible. Very strong indicator of the square root of variance estimation error of approximation RMSEA for the model under 0/08, the value is acceptable.

As the Table 10 indicates the propriety characteristics of this study and the underlying factor structure theoretical research is a good fit, and this proves the validity of research findings from the structural model (Fig. 2). The hypothesis test of good accuracy is minimal. To verify the adequacy of sample size required to estimate the parameters of the power factor was used. Survey results show that factor models with sufficient sample size to consider the sample size equal to 0/788 is calculated the power factor is efficient because the number of matrices have been created.

Research implication: Two implications can be derived here:

- The first is that managers should concentrate their efforts primarily on brand loyalty and brand image, which have high importance in the construct of brand equity. In the highly competitive sportswear industry, the key is to create a unique, favorable, and strong brand image to provide customers with a reason to buy the brand, then work to keep their loyalty and gain their repeat business (Aaker, 1991; Tepeci, 1999). Celebrity/star endorsements, sports event sponsorships, advertising across different media, and non-price promotion are potentially effective

marketing strategies to build a strong brand image and brand loyalty (Aaker, 1991; Cobb-Walgren *et al*., 1995; Fan and Pfitzenmaier, 2002; Keller, 2002; Yoo *et al*., 2000).

- The second implication is that marketing/brand managers should consider the intercorrelations among the four dimensions of brand equity, especially the relationship of perceived quality to brand association and brand loyalty, and the relationship of brand awareness to brand association and brand loyalty. While brand awareness serves as a foundation for brand image and brand loyalty, high quality enables consumers to recognize a brand's distinctiveness and superiority and leads to consumer satisfaction and loyalty (Aaker, 1991; Oliver, 1997). As a result, we suggest that when concentrating on creating brand association and brand loyalty, managers should not undervalue the effects of perceived quality and brand awareness.

Research limitations: This study has two major limitations. First, it is limited to the sportswear market in Iran and focuses on only the one city, Tehran. Thus, future research needs to be done if the results are to be expanded into other regional Iranian markets in light of significant regional gaps in consumer attitudes and behaviors. It should also be noted that no performance measurements have been conducted in this study due to the inability to gather the required financial data. Including performance measurement and financial performance of the studied sportswear brands, e.g., sales and profit, would further strengthen this research.

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