

Investigating the Effect of Brand Knowledge and Brand Relationships On Purchase Behavior of Customers

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Abstract: The purpose of this paper is to develop a comprehensive model that combines brand knowledge and brand relationship perspectives on brands and demonstrate how knowledge and relationships affect current and future purchases. These researchers used structural equation modeling to test the significance of the overall model and the specified paths. Findings indicate that current purchases are affected by directly by brand awareness and indirectly by brand image. In contrast, future purchases are not affected by either dimension of brand knowledge directly; rather, brand knowledge affects future purchases via a brand relationship. Thus, brand knowledge alone is not sufficient for building strong brands in the long term; brand relationship factors must be considered as well. The present study did not examine feedback effects and only included consumer categories, no individual differences variables. As such, these researchers recommend that future research examine feedback effects and include additional consumer categories, B2B categories and individual-differences variables such as variety seeking and innovativeness. Brand managers spend considerable resources on measuring brand awareness and brand image. These researchers recommend that practitioners also use brand relationship measures and develop strategic and tactical initiatives that ensure consumers are satisfied with brand trust and feel attached to a brand. This is a cross-paradigm paper and it is the first that combines two separate broad-based perspectives on brands in a simple comprehensive model for researchers and brand managers.

Key words: Brand awareness · Brand image · Brand satisfaction · Brand trust · Current purchase · Future purchase

INTRODUCTION

Considering increases in competition among organizations and slow of growth new consumers, companies seek new ways to raise their selling abilities. The most popular trend is concentration on increasing purchases of existing customers through brand awareness and brand image. In this way, companies must learn about customer performance as this is important for in persuading customers to purchase companies brands, which leads to purchase repetition. Unfortunately, there have been little reciprocal effects between these brand awareness and brand image and few efforts have been made to integrate these aspects. In fact, conceptual aspects and brand relationships has been investigated in only two research samples [1]. While brand knowledge is usually achieved using empirical modeling and tests,

brand relationships are typically directed by explanatory samples consisting of sociological, anthropological and cultural theories in addition to qualitative data.

Brand relationships focus on three aspects including brand trust, brand satisfaction and brand attachment [2].

The present study reports results based on a model of brand knowledge and the effect of brand relationships on customer purchase behaviors in the mineral water market. In this study, overall effectiveness of brand knowledge and brand relationships were investigated among customers of Polor, Damash, Damavand, Kohrang and Vata mineral water brands. Two important factors in repurchase, brand knowledge, brand relationships and image of customers, is an increase in competition and quality of different brands.

Additionally, customer -based values occur when consumers are familiar with a brand and have knowledge

about that brand, resulting in positive associations about the brand in customers mind. Thus, there are two types of brand knowledge, brand awareness and brand image [3].

Brand awareness refers to the survival of a the brand in the consumer's mind. In others words, how easy is it for a consumer to recall a brand? Keller (1993) expressed that the reminder of a brand is the most common way of measuring brand awareness. On the other hand, brand effect on consumers is not based on brand awareness of the consumers, rather because the brand is a part of mental, social and cultural environments. Thus, consumers associate with brands relationships that are similar to their internal and personal relationships with other people. This relationship process can create positive affects and an understandable advantage relationship [4].

Brand Knowledge and Purchase Behavior: Concerning brand and purchase research based on Keller, brand awareness is a precondition of creating a brand image. As such, when brand recall occurs in the mind, the association and stabilization of the brand become easier. As Kapferer (2004) showed, real awareness depends on image [5]. Moreover, conceptual models indicate that brand knowledge (brand image), reactions of consumers toward a brand, defined as a brand awareness and perception, effect on preference and performance. This originates from marketing different activates and to investigate this effect, these researchers we suggested differences among two aspects of consumers behavior: current and future. These researchers defined current behaviors as brand purchase and future behaviors as the intention to purchase. To follow a model of consumer - based brand, these researchers also proposed that brand knowledge (awareness and brand image) would affect purchase and use of a specific brand. Based on this, these references proposed the following.

- H1:** Brand awareness effects brand image.
- H2:** Brand awareness has a direct effect on current purchases.
- H3:** Brand image has a direct effect on current purchase.

Additionally, research has suggested that brand value not only has immediate value, but also has long - term value through the association of future earnings. Thus, these researchers expected brand effect in relation to future behavior. As such, the following were proposed.

H4: Brand awareness has a direct effect on future purchases.

H5: Brand image has a direct effect on future purchase.

Brand Relationships and Purchase Behavior: There is a key question missing from the literature: What are key conceptions that can be used as empirical variable in models? Specially, the literature does not indicate any relationship between brand and brand image. Research concerning these brand relationship can conducted using exploratory analysis and qualitative methods that highlight the importance of the topic of an investigation in relation to standardized concepts and measuring scales.

There is a controllable effective framework in social research that differentiates between two behaviors (exchange and communal relations) and, in current study, this difference can be applied to consumer performance. Agarwal (2004) showed that 15 relations of fermier were exchange and communal relations. Specifically, in trade complexes and whole hearted friendship, it is useful to examine these relationships not only as mutual, but also as aspects and facts of basic relations.

Exchange aspects are operational relations that consist of economical factors and present advantageous functional and useful mutual and exchange relations. These relations are equal to: People care about what they receive in return for what they pay. If people do not receive considerable reward, there are fewer tendencies to respond others. The first positive effect of a mutual relation is satisfaction. For this purpose, in trade, brand satisfaction can be a conceptual and cognitive assessment of reward existence or non existence of a mutual brand exchange relation. In comparison, communal aspects consist of affective relations of other, which are more important than personal interests. For example, trust is one an important result of such relations [6-8]. In previous research, trust introduced a basis and close relation between psychology and marketing. Based on the above discussion, these researchers hypothesized the following.

- H6:** Brand awareness has a direct effect on brand satisfaction.
- H7:** Brand awareness has a direct effect on brand trust.
- H8:** Brand image has a direct effect on brand satisfaction.
- H9:** Brand image has a direct effect on brand trust.

Regarding relations between connected structures, these researchers also expected brand satisfaction and brand trust to be the result of mutual and exchange

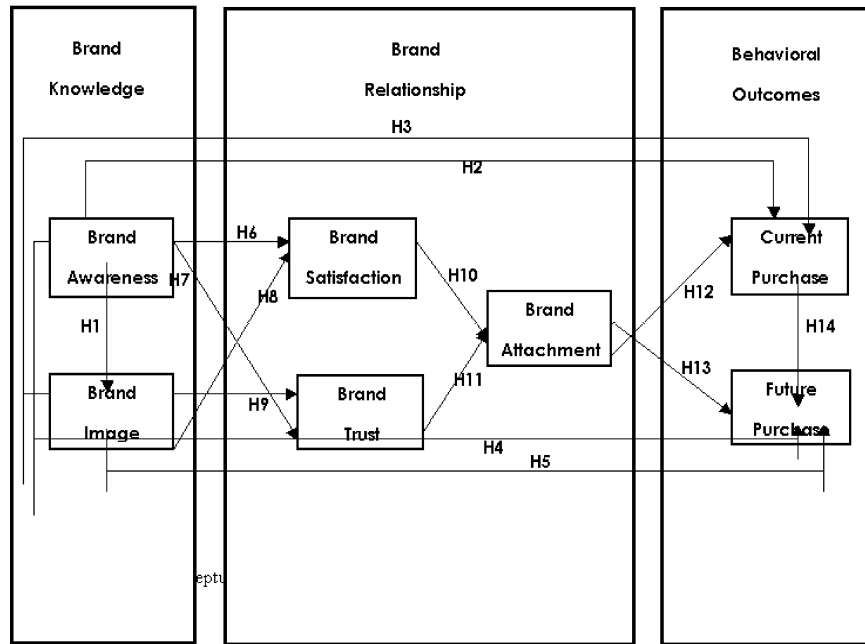


Fig.1: Conceptual models

relations and brand attachment. Thus, while we did not predict any relation between brand satisfaction and brand trust, we did expect that brand satisfaction and brand trust would cause brand attachment. For this purpose, only when brand satisfaction and brand trust occurred would it result in brand attachment. Therefore, the following were proposed.

H10: Brand satisfaction has a direct effect on brand attachment.

H11: Brand trust has a direct effect on brand attachment.

Finally, these researchers predicted that long-term results of brand relationship and brand attachment would be a determinant of current and future customer behavior. As previous research has shown, attachments result in close relationships and, in marketing research, the tendency for current and future purchases. Specifically, in brand attachment literature, attachment to one brand may result in saving money [9].

Additionally, brand attachment, relationships and familiarity with a brand predict a way of approximate selling in the past and future [10,11]. Thus, these researchers proposed the following.

H12: Brand attachment has a direct effect on current purchases.

H13: Brand attachment has a direct effect on future purchases.

The final hypothesis focused on two internal variables: current and future purchase.

H14: Current purchases have a direct effect on future purchases.

Methods: These researchers used a descriptive survey method. This method has additional practicality for future exploration of customers' information concerning the market. In addition, in order to analyze all data, descriptive and comprehensive statistics were used. The diagrams and abundance methods were used to describe statistics and the structural model for a confirmative factorial analysis and variance analysis were used in analyzing these statistics.

In this research, these researchers examined the hypotheses outline above for customers of mineral water producers in Tehran. Students were recruited to participate from Tehran Azad Islamic University who were enrolled in four separate units including Management and Social Sciences College of Azad Islamic University (Tehran-North), Management College of Azad Islamic University (Tehran-Center), Management and Account College of Azad Islamic University (Tehran-South), Management and Economy College of Azad Islamic University (Sciences and research).

Brand Knowledge Measures: Brand awareness was measured by unaided recall [12]. Participants were asked an open-ended question: “Which brands do you know in the product category of X?” Only those responses of participants who could recall the pre-selected brands were included in subsequent analyses. The position of the brand on the recalled list was coded on a ten-point scale (10 for first brand in the category, 9 for the second brand, etc). Brand image included three measures; overall attitude toward the brand, perceived quality of the brand and the brand’s overall affect. These measures were rated on a five point scale [13].

Brand Relationship Measures: Brand trust was measured on two 5-point scales with the following items: “I rely on the brand” and “I trust the brand” (1= *I disagree*, 5= *I agree*). Brand satisfaction was measured following Mittal and Kamakura (2001) and Bloemer and Lemmink (1992) on a 5-point scale, with the question “Based on your own experience, how would you rate your satisfaction with this brand?” This scale ranged from (1= *very dissatisfied* to 5= *very satisfied*) [14,15]. Brand attachment was operationalized via the item “I feel strongly connected to the brand” and “I would strongly regret it if the brand was withdrawn from the market.” Of note, the second statement was intended to measure the separation anxiety construct of attachment. Both statement were rated a scale ranging from (1= *disagree* to 5= *fully agree*).

Validity: To design a questionnaire for the current research, 7 variables is investigated which consists of (brand awareness, brand image, brand Attachment, brand satisfaction, brand trust, current and future purchase). In addition to the main article of Schmitt and Geus, which was reverse translated in order to doing necessary amendments in variables such as (brand awareness, brand trust, brand satisfaction, brand attachment). Other articles in table 3, was used in gathering information, which was confirmed by advisor professor. Thus, according to what is mentioned above, questionnaire as the tools for gathering information has required validity.

Reliability: I this method, internal compatibility was used to measure the reliability. The most important index of internal compatibility of Cronbach’s Alpha Test which shows that how can question of test measure a special feature.

Nunnally stated that more than 7 percent is acceptable for reliability but less than it was accepted in some articles. This test was used for those questions which measure a single concept. Thus, is appropriate to measure reliability of Likert spectrum which is used to remove improper Variable. It should be mentioned that Cronbach’s Alpha coefficient doesn’t show the error by external factors in test and difference among respondents and only measure internal compatibility of items.

Table 1: Classifying Related Index With Each Variable

Resource	Variable	Number of index	Question
•Esch etal, 2006 •Rossiter, J.R and Bellman,S.2005 □Emma, K.mc Donal, 2000	Brand Awareness	3	5-8-16
•Lowand Lamb,2000 •Esch etal, 2006	Brand Image	5	4-6-7-9-10
•Mittaland Kamakura,2001 •Bloemer and Lemmink, 1992 •Esch etal, 2006	Brand Satisfaction	2	11-12
•Delgado-Ballester,E.2004 •Esch etal, 2006 •Lowand Lamb,2000	Brand Trust	6	13-15-19-20-23-21
•Thomson,M.MacInnis,D.J.and Park, C.W, 2005 •Esch etal, 2006	Brand Attachment	4	14-17-18-22
•Mittal,V.and Kamakura,W.A, 2001 • Esch etal, 2006	Current Purchase	2	2-24
□Esch etal, 2006	Future Purchase	2	25-26
□Mittal, V.and Kamakura,W.A,2001	Number of question in questionnaire	24	

Table 2: Cronbach's Alpha, The Time and Place of Each Test

First Pretest	Cronbach's Alpha 76 percents	Date: 23.06.2009	Place: Management faculty of Research and Science Azad University No.40	Existing Questionnaire In A enclosed
Second Pretest	Cronbach's Alpha 88 percents	Date: 19.07.2009	Place: Management Faculty of Azad Tehran University (North Branch)	Existing Questionnaire No. 40

In this research, Cronbach's Alpha was calculated based on SPSS software. In the first pretest, 76 percents and in the second pretest, 88 percents promoted. In the main distribution, among 390 questionnaire which give back, Cronbach's Alpha was calculated 91 percent.

In this research, the tools of investigating documents, was used as secondary data. In this method, to define variables and concepts, we used foreign and local articles. For this purpose, we summarized the current resources and in final stage, proper subject were selected and used in current research.

Behavioral Outcome Measures: Current purchase behavior was measured using two items that focused on current purchase and usage patterns: "How often have you bought the brand in the past?" and "How often do you consume or use the brand?". Future purchase intentions were measured by "Do you intend to buy the brand in the future?" These items were rated on a scale ranging from 1=*not at all* to 5=*very frequently* [16,17].

Table 3: Measuring Model with Significant Level of Factorial Load.

Construction or factor	Sign	Path index	Standard deviation	Standard error	Significant level
Brand Awareness	Q5	94/0	08/0	75/11	01/0
	Q10	64/0	04/0	16	01/0
	Q18	41/0	05/0	2/8	01/0
Brand Image	Q4	75/0	2/0	75/3	01/0
	Q6	40/0	03/0	33/13	01/0
	Q7	09/1	08/0	62/13	01/0
	Q8	93/0	07/0	28/13	01/0
	Q9	95/0	05/0	19	01/0
	Q11	57/0	04/0	25/14	01/0
	Q12	2/1	07/0	14/17	01/0
Brand Satisfaction	Q13	64/0	03/0	33/21	01/0
	Q14	09/1	08/0	62/13	01/0
Brand Trust	Q15	18/1	07/0	85/16	01/0
	Q17	66/0	04/0	5/16	01/0
	Q21	84/0	07/0	12	01/0
	Q22	9/0	06/0	15	01/0
	Q23	65/0	05/0	13	01/0
	Q25	74/0	05/0	8/14	01/0
Brand Attachment	Q16	59/0	04/0	75/14	01/0
	Q19	8/0	04/0	20	01/0
	Q20	5/0	06/0	33/8	01/0
	Q24	57/0	04/0	25/14	01/0
Current Purchase	Q2	65/0	08/0	12/8	01/0
	Q26	84/0	07/0	12	01/0
Future Purchase	Q27	53/1	11/0	90/13	01/0
	Q28	79/2	18/0	50/15	01/0

RESULTS

The results indicated that there are no meaningful differences between end users' interpretation regarding the five brands, Polor, Damash, Damavand, Koohrang and Vata, concerning the following seven variants: Brand awareness, brand image, brand trust, brand satisfaction, brand attachment, current purchase and future purchase.

As such, these researchers came to the following conclusions:

- Regarding brand awareness, customers had same awareness about the five brands at the time of purchase.
- Regarding brand image, customers has some notion of brand image for the five brands at the time of purchase.
- Regarding brand trust, customers had different levels of trust concerning the five brands at time of purchase.

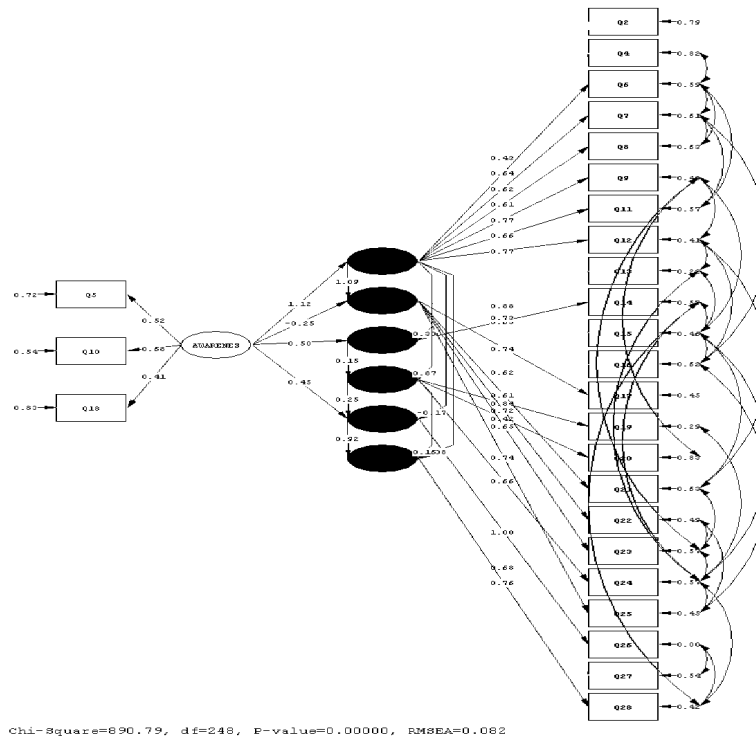


Fig. 2: Conceptual Model in LISREL

- Regarding brand satisfaction, customers were at least somewhat satisfied with the five brands at time of purchase.
- Regarding brand attachment, customers had different attachments concerning the five brands at time of purchase.

The results of individual comparison of the brands under study connection to the seven variables indicate the following:

Regarding brand awareness, participants were more aware of the Damavand brand compared to the other brands. In terms of brand image, there was a significant difference between Damavand and Vata, while the other groups did not show any meaningful differences regarding brand image. Therefore, in the customer's view, Damavand has a more memorable brand image than does Vata. Additionally, participants reported higher levels of satisfaction for Damavand compared Koohrang and there were no difference in satisfaction among Damash, Polor and Vata.

As indicated in Table 1, all factors were properly examined by related standards. In other words, the nominated standards of researcher for examining the considered factors, which were latent in this model of

structural equations, had high accuracy. In order to examine whether the sample size was large enough according to estimated parameters and estimate the explaining power of the model, these researchers employed confirmative factorial analysis for the model. In considering an error limit of 1%, degrees of freedom=240, a sample size of 390 and RMSEA = 0/082, the analysis resulted in 1, thus indicating that the estimated model corresponded to the sample size. Therefore, the current findings are reliable because the considered size was proportionate with the study's substructure. Additionally, in this stage, it was necessary to analyze the index of evaluation of fit for the confirmative factorial analysis model or measuring model.

CONCLUSION

The path index and construction model in comparison to dependency construction is shown in the below table.

Based on the above analysis, these researchers concluded the following.

- By increasing one unit of brand awareness, brand image increased 1.12 units. Therefore, the results support Hypothesis 1; brand awareness had a direct effect on brand image.

Table 4: Construction Model in Comparison to Dependency Construction

From Construction	To Construction	Standard Parameter	T	Standard Error	Significant Level
Brand Image	Brand Trust	09/1	18/5	21/0	01/0
Brand Image	Brand Satisfaction	3/0	37/2	13/0	01/0
Brand Image	Current Purchase	17/0-	14/0	19/1-	No Significant
Brand Image	Future Purchase	08/0	67/0	12/0	No Significant
Brand Trust	Brand Attachment	87/0	09/0	22/9	01/0
Brand Satisfaction	Brand Attachment	15/0	06/0	61/2	01/0
Brand Attachment	Current Purchase	25/0	12/0	17/2	01/0
Brand Attachment	Future Purchase	16/0	13/0	21/1	No Significant
Current Purchase	Future Purchase	92/0	23/0	93/3	01/0

- By increasing of one unit of brand awareness, current purchase intentions increased 0.45 units; the more brand awareness, the higher current purchase intention of that brand. Therefore, Hypothesis 2 was accepted.
- According to the information obtained from the structural model, there were no significant differences between brand image and current purchase intentions. Therefore, Hypothesis 3 was rejected. Of note, hypothesis of zero would be accepted regarding this matter that "brand image has a direct effect on the current purchase."
- Concerning Hypothesis4, by entering brand awareness into the covariance matrix structural model the concept model became imbalanced. Thus, the present path for the test of forth hypothesis was excluded from the statistical model since studying its simultaneous effect with other structures was not possible. Therefore, there was not enough evidence to adequately explore this hypothesis.
- Results suggest that the effect of brand image on future purchase intentions is meaningless; therefore, Hypothesis 5 was rejected and a zero accepted.
- According to the structural model the effect of brand awareness on brand satisfaction was meaningful. Thus, Hypothesis 6 was accepted. In other words, if brand awareness increases, satisfaction will also increase.
- Brand awareness, in terms of trust did not show a meaningful effect at the .001 level. Thus Hypothesis 7 was rejected and a zero hypothesis concerning brand awareness does not have a direct effect on brand trust was accepted
- Brand image revealed a meaningful effect on brand satisfaction. Thus, Hypothesis 8 was accepted. In other words, by increasing brand image by one unit, brand satisfaction increases by three units.
- Results indicated that brand image has a direct effect on brand trust. Thus, Hypothesis 9 was accepted; by increasing brand image by one unit, brand trust increases by ten units.
- Brand satisfaction had meaningful effect on brand attachment; Hypothesis 10 was accepted. By increasing brand satisfaction by one unit, brand attachment increases by 15 units.
- The effect of brand trust on brand attachment was significant. Therefore, Hypothesis 11 was accepted. By increasing brand trust by one unit, brand attachment increase by 87 units. Of note, this effect was also positive.
- Brand attachment had a direct effect on current purchases intentions. As such, Hypothesis 12 was accepted; by increasing attachment by one unit, current purchase intention increases by 12 units.
- The effect of brand attachment on future purchase intention was not significant at the .001 level; thus, Hypothesis 13 was rejected and a null hypothesis suggesting that brand attachment does not have direct effect on future purchase was accepted.
- Resulted indicated a significant effect for current purchase intent; therefore, Hypothesis 14 was accepted. By increasing current purchase by one unit, future purchase intent increases by 92 units. Additionally the path coefficient of this relation was very high; thus, it can be suggested that current purchase intent and effective factors may specify future purchase intent of customers.

Recommendations

Recommendations to Researchers: These researchers recommend that future research use similar method as the current study with similar variables at the national level.

Since this research was conducted in relation to goods with low mental involvement and designed a class of consumed products (i.e. mineral water), these

researchers recommend that future studies focus on classes of products with high mental involvement, as well as draw comparisons between those products of high mental involvement and those of low mental involvement.

In addition, it is possible to conduct this research in B2b markets since these markets involves interpersonal person relations and various brand factors maybe more clear.

Finally, that future research includes more survey questions present in the literature in order to conduct comprehensive discovery investigations as well as repeated test.

Managerial Implications: In brand management practice, brand image and brand awareness are considered the central variables for assuring the effectiveness of marketing campaigns. However, current results indicate that it is not sufficient to focus only on these two variables: especially when brands are intended to last forever. For long-term brand success, brand relationship variables, including brand trust, brand satisfaction and brand attachment, play an important role in buying behavior. Since the creation of these relations often results in stable values among consumers and brands, the effects of these relationships may be clarified in the future. Therefore, brand managers are well advised to use measures of brand relationships in addition to brand knowledge measures. Managers should also develop strategic and tactical initiatives that ensure consumers are satisfied trust and feel attached to the brand. This may require managers employ standard marketing and communication techniques in addition to experiential marketing techniques, which result in increased interactions and emotional connections between the customer and the brand [18-20].

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