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Brand Awareness on Cosmetic Products among the Selected Customers in Kerala – An Empirical Analysis

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ABSTRACT

The main objective of the present research Paper is to measure the brand awareness of customers towards cosmetic brands. In order to fulfill the objective, a total of 1124 cosmetic customers in the state of Kerala consisting of 574 customers of domestic brand and 550 customers of foreign brand were selected with the help of pretested structured questionnaire. Theoretical constructs in brand awareness measured with the help of 7 point Likert- type questions. The collected data were used to test the hypothetical relationship in the hypothesized model. Multi group Analysis (MGA) and Structural Equation Modelling were used to test the hypothetical relationship. Here the researchers used AMOS 21 to perform structural equation modeling. It is found that there is significant difference between the customers of domestic and foreign brand with regard to brand awareness.

Keywords: Brand Awareness, Brand Loyalty, Perceived Quality.

INTRODUCTION:

Now a days, there is a trend of rising demand for natural, herbal and Ayurvedic cosmetic products. Therefore, the range of cosmetic and beauty products in India has widened tremendously. Hence, the domestic companies began to manufacture products to cater to an International need. For instance, herbal cosmetics from India have a great demand in the overseas market. Therefore, many cosmetic products are manufactured in India today are supplied to international suppliers. In the last few years, Patanjali Ayurved played very well in Indian cosmetic industry. It increased its distribution network from 200 stores in 2012 to 4000 self-stores in 2015. In addition, the company also launched its products in modern retail outlets and launched larger self-owned stores under its 'Patanjali, Mega Store' concept which is exclusively sold Patanjali products. To counter the growing threat of Patanjali Ayurved, other major players in the market such as Hindustan Unilever, Colgate-Palmolive India, Dabur India, Emami, Marico and Godrej Consumer Products also focused on strengthening their natural and herbal portfolios. PatanjaliAyurved, other major players in the market such as Hindustan Unilever, Colgate-Palmolive India, Dabur India, Emami, Marico and Godrej Consumer Products also focused on strengthening their natural and herbal portfolios.

LITERATURE REVIEW:

Nitin Gupta(2011) found that foreign brand had a significant impact on Indian consumers. Age had a significant impact on purchase behavior on the foreign brand. Oliver Parts and Irena Vida (2011) investigated the effects of consumer cosmopolitanism on foreign product purchase behavior. Oscar Marin and Matrin and Julio Cervino (2011) developed a framework for integrating the types and levels of the determinants of the brand. The study suggested that marketers should consider product category and country aspects of their high involvement products. Policy makers should promote high involvement products.

Patrick Poon (2010) studied the role of brand awareness and ethnocentrism in determining intention to purchase local brand products or foreign brand products. Paurav Shukla, Madhumita Banerjee and Phani Tej Adidam (2013) studied the moderate effect of socio-economic variables on consumer attitude towards private label brands. Prasad A. Naik, Ashutosh Prasad and Suresh P. Sethi (2008) propounded N- brand awareness formation model. Companies usually investing heavy on to build and maintain brand awareness. S.Y.Hui (2004) conducted an empirical study on consumer decision making and choice among foreign and domestic branded products. Sengupta, Anikket (2014) analyzed the acceptance of international and national brand among the consumers in India. Thus, it is clear that no attempt has been made so far on review of brand awareness of cosmetics among the customers in Kerala. Hence, the present paper is an attempt to fill the gap.

SIGNIFICANCE OF THE STUDY:

The present study is very particular to assist managers and academics who are interested in strategic aspects of consumer behavior. Brand awareness is conceptualized from customer's point of view. So it will help the marketers to understand what consumers know about brands and what such knowledge implies for marketing strategies. It is hoped that the outcome of the present study will be useful to policymakers, managerial people to tackle the issues related with this.

OBJECTIVES OF THE PAPER:

The main objective of the present research is to conduct a comparative investigation and to measure the brand awareness between the customers of domestic and foreign brands of cosmetics in the State of Kerala.

HYPOTHESES:

H01: There is no significant difference in the path coefficient between the customers of domestic and foreign brands in respect to brand loyalty to brand awareness.
H02: There is no significant difference in the path coefficient between the customers of domestic and foreign brands in respect to perceived quality to brand awareness.
H03: There is no significant difference in the path coefficient between the customers of domestic and foreign brands in respect of brand loyalty to brand awareness and perceived quality to brand awareness.

METHODOLOGY:

The present study is both descriptive and analytical in nature mainly based on survey method. Both the secondary and primary data have been collected and used for the study. Secondary data were collected from Annual report of cosmetic companies, Published reports and records of cosmetic companies, websites etc. The primary data for the present research work have been collected from the selected cosmetic customers in the State of Kerala.

FINDINGS AND DISCUSSIONS:

Here the researchers have been used brand awareness model propounded by Keller (1993) for measuring brand awareness. From the literature review it is clear that brand loyalty and perceived quality were the common constructs used to measure brand awareness.

Measurement Models:

Here, three constructs namely brand loyalty, perceived quality and brand awareness used for measuring brand awareness. The estimates of structural relationships are likely to be biased unless the measurement instrument is reliable and valid. Here, the measurement model is specified in a way that three factors are allowed to be correlate with each other items. It is shown in Table 1. From the table 1 it is clear that each item have significant correlation with the designated three items but not with other items.

Confirmatory Factor Analysis:

A three factor measurement model was set up to validate the scales, and a confirmatory factor analysis is conducted to test the measurement model. The fit of the model was evaluated on three different fit indices: CFA, GFI & RMSEA. Apart from this following fit indices also considered like, AGFI, NFI, TLI, RMR, and CFI. The results of the model indicated that the model fit the data adequate well and it is shown in Table 2. The table 2 shows that all the fit indices are adequate with recommended level (χ^2- 43.461, df-13, χ^2/ df-3.43 p>0.001).

Specifically, Comparative Fit Index (CFI) has been found to be 0.995, Goodness of Fit Index is 0.990 and Root Mean Square of Error Approximation is 0.031.

Assessment of Model Reliability and Validity:
Reliability of the model assessed through Cronbach's Alpha (α), and composite reliability. Validity of the model assessed through convergent validity and discriminant validity.

1. Construct Reliability:
Construct reliability refers to the extent to which a scale produces consistent results if repeated measures made. Internal consistency reliability is used to measure the reliability of the constructs. Cronbach's Alpha (α) and composite reliability is the commonly used measuring internal consistency reliability.

a. Cronbach's Alpha Reliability:
"Cronbach's Alpha (α) is a mean reliability coefficient for all the different ways of splitting the items included in the measurement instrument. The internal consistency of the model is assed Cronbach's Alpha. Rule of thumb in case of Cronbach's Alpha value is greater than 0.7 enjoyed high internal consistency. The Table No.3 shows the Cronbach's Alpha (α) value of the variables.
Table No.3 shows Cronbach's Alpha (α) value of the each variable of brand awareness model. Cronbach's Alpha (α) for the model, brand awareness is 0.89, Perceived quality is 0.84 and brand loyalty is 0.832. Rule of thumb in case of Cronbach's Alpha value is greater than 0.7 enjoyed high internal consistency. Hence we can ensure the model has high internal consistency.

b. Composite Reliability:
In addition to that we computed Composite Reliability (CR). Composite Reliability is defined as the total amount of true score variance in relation to the total score variance. As general guidelines, composite reliability greater than 0.7 is considered as good. Table No.4 depicts the composite reliability of each constructs. Table No 4 shows the composite reliability of the model of domestic brand and foreign brand separately. Composite reliability of the model, brand awareness is 0.83, Perceived Quality is 0.792 and brand Loyalty is 0.824. As general guidelines, composite reliability value greater than 0.7 is considered as good. Hence we can ensure the model has good composite reliability.

2. Validity:
Validity of the model was assessed through convergent validity and discriminant validity.

a. Convergent Validity:
The convergent validity of the constructs was assed factor loading estimates (λ) (standardized regression weights) for each item of the constructs. In case of high factor loading which indicates it has high convergent validity. Factor loadings, Average Variance Extracted (AVE) were the common method used to asses' convergent validity.

i) Factor Loading:
Convergent validity was examined through the t- static for each factor loadings (λ). The value of standardized factor loadings (λ) ranges between 0-1. A good rule of thumb in case of standardized factor loading (λ) estimates value greater than 0.5 is acceptable or higher than 0.7 is excellent. (Hair et al, 2008). The table picturize the standardized factor loading (λ) of the construct items in the measurement model.It is given in Table No.5.
The Table No. 5 clearly depicts that all the statements under three constructs namely, brand awareness, brand loyalty and perceived quality have significant factor loadings. A good rule of thumb in case of standardized factor loading (λ) estimates value greater than 0.5 is acceptable or higher than 0.7 is excellent. (Hair et al, 2008). The factor loading values are lay above the 0.7.

ii) Average Variance Extracted (AVE):
Factor loading provides a useful start for assessing convergent validity. Here, the result proved that all items should have loading estimates higher than 0.7 which emphasis good convergent validity. Next we move on to analyze Average Variance Extracted (AVE) of each constructs. It is defined as the variance in the indicators or observed variables that is explained by the latent construct (Jones,2000) .

Average Variance Extracted (AVE) is ranges from 0 to 1. According to (Malhotra and Dash, 2011), AVE score 0.5 or above indicate high convergent validity. Table No.6 depicts the Average variance extracted of each constructs.

The Table No. 6 clearly demonstrates theAverage Variance Extracted (AVE) by each construct for domestic brand and foreign brand. The following were the Average Variance Extracted (AVE) for all the constructs: 0.645 for brand awareness, 0.584 for Perceived Quality and 0.615 for brand Loyalty. Here we can say that 65% of the variance is explained by brand awareness and 35 % is due to error variance. As such, 58% in case of perceived quality and 61 % in case of brand loyalty. Hair et al (2010) suggest that Average Variance Extracted (AVE) value 0.5 or greater indicates good convergent validity. Here all the Average Variance Extracted (AVE) scores lay above 0.5.Hence we can confirm the convergent validity of the model is good

b) Discriminant Validity:

Discriminant validity is the extent to which a construct is truly distinct from other constructs. (Malhotra and Dash, 2011) suggest that the square root of the average variance extracted should be greater than correlation coefficient in order to achieve satisfactory discriminant validity. Table No 7 illustrates discriminant validity of the each constructs in the model.

The table clearly illustrate square root of average variance extracted is greater than correlation coefficient for both domestic brand and foreign brand. Hence it has significant discriminant validity.

a) Structural Model:

From the literature review it is understood that brand loyalty and perceived quality were the common constructs used to measure brand awareness. The structural model of brand awareness based on theory as shown in Figure No. 2. Figure No. 2 depicts the resulting measurement model. Here three constructs has been used namely brand awareness, perceived quality and brand loyalty.

b) Structural Modeling and Hypotheses Testing

The entire hypothesized research model satisfies all the model measurement criteria. This section deals with the structural relationship of the hypothesized model. It is shown in Fig.3.

From the figure No.3 it is clear that perceived quality and brand loyalty are the significant predictors of brand awareness. Perceived quality is the significant determinant in predicting brand awareness of customers (path estimate = 0.32, $p<0.001$). Similarly brand loyalty is found to have a significant effect on intention to use (path estimate = 0.56, $p<0.001$). The squared multiple correlations (SMC) or coefficient of determination (R^2) of brand awareness is 70. It indicates that the two predictors ie, perceived quality and brand awareness together explained 70 per cent of the variance in brand awareness.

The Table 8 shows the coefficient of determination (R^2) of the model. Usually coefficient of determination is used to explain at what extent a variable is explained by the model. It is clear from the table R^2 coefficient is higher for foreign brand than domestic brand.

c) Hypothesis Testing:

Multi group analysis has been used for testing the hypothetical relationship between brand loyalty and perceived quality with brand awareness of domestic and foreign cosmetics brands. The bootstrapping analysis has been employed to determine the confidence intervals of path confidents and statistical inferences. The researcher has chosen 2000 bootstrap samples and adopted Percentile confidence interval at 95 and Maximum like hood estimation method.

In order to compare the model, three different models were developed from the collected data (total (n=1124), domestic brand (n=574, foreign brand (n=550)) and these models were compared with model fit indices. Initially, unconstrained model showed relatively poor model fit and those are less than required for a good model fit. Then the model was modified based on indicators suggested by Hair .et. al (2011) such as standardized residual covariance matrix scores, standardized regression weights (r) and squared multiple correlations (R^2) as well as theoretical justification. In order to test hypothesis 1 Model 1 has been developed on the assumption that regression weight of path of brand loyalty to brand awareness is same for both domestic brand and foreign brand (bl_baw_regwgt_db= bl_baw_regwgt_fb). Model 1 is compared with unconstrained model to test the difference between the path coefficients of brand loyalty to brand awareness. Model 2 has been developed to test hypothesis 2, on the assumption that regression weight of path of perceived quality to brand awareness is considered as equal (pq_ baw_regwgt_db= pq_baw_regwgt_fb). Model 3 has been formed to test hypothesis 3 by assuming

regression weight of path of brand loyalty to brand awareness and perceived quality to brand awareness of both domestic brand and foreign brand are equal (bl_baw_regwgt_db= bl_baw_regwgt_fb&pq_ baw_regwgt_db= pq_baw_regwgt_fb). That has been given in Table 9.

It is clear from the table that the entire model shows adequate fit indices. Chi –square value for constrained model, model 1, model 2, model 3 were 239.069, 223.49, 221.968, 219.043 respectively. Goodness of Fit Index of the entire three models lay on recommended level. It is exhibited in Table 10.

H0.1.1: There is no significant difference in the path between brand loyalty to brand awareness in both domestic and foreign brands.

In order to test the hypotheses, Model 1 was developed on the assumption that regression weight of brand loyalty to brand awareness of both domestic brand and foreign brand was equal. Comparing unconstrained model with model 1 notable chi-square and degrees of freedom difference (($\Delta \chi 2$-16.025), (Δ df-3), ($p < 0.001$)) are found. This indicates there is significant difference between customers of domestic and foreign brands in respect of brand loyalty towards brand awareness .The path coefficient between brand loyalty to brand awareness is 0.77 in the case of domestic brand and 0.85 for foreign brand and perceived quality to brand awareness it is 0.80 and 0.83 for domestic and foreign brand respectively. This coefficient is statistically significant ($p<0.01$, significant at 0.01 level). As, the path coefficient is positive, there is a positive relationship between brand loyalty and brand awareness towards foreign and domestic cosmetic brands. Hence the hypothesis that there is no significant difference in the path between brand loyalty to brand awareness in the domestic and foreign brands is rejected.

H0.1.2: There is no significant difference in the path between perceived quality to brand awareness in both domestic and foreign brands.

Model 2 was developed for testing this hypothesis. Model 2 was based on the assumption that the path coefficient between perceived quality to brand awareness of both domestic and foreign brand was considered as equal. For testing of this hypothesis, model 2 is compared with model 1. Here we found significant difference in chi square value degrees of freedom (($\Delta \chi 2$-17.1), (Δ df-6), ($p < 0.001$)) which means there is significant difference between customers of domestic and foreign brands in respect of perceived quality towards brand awareness. Path coefficient between perceived quality to brand awareness is 0.72 in the case of domestic brand 0.82 for foreign brand. It is also noticed that path coefficient is 0.80 and 0.90 for brand loyalty to brand awareness for domestic and foreign brand respectively. This coefficient is statistically significant ($p<0.01$, significant at 0.01 level. As, the path coefficient is positive, there is a positive relationship between perceived quality and brand awareness towards cosmetic brands. Hence the hypothesis that there is no relationship between brand loyalty and brand awareness is rejected.

H0.1.3: There is no significant difference in the path between brand loyalty to brand awareness and perceived quality to brand awareness in the domestic and foreign brands.

Model 3 was used for test this hypothesis. Assumption based of model 4 was that the path coefficient between brand loyalty and brand awareness and perceived quality to brand awareness were considered as equal. Again unconstrained model has been compared with model 3. and notable chi square difference and degrees of freedom were found (($\Delta \chi 2$-20.025), (Δ df-6), ($p < 0.001$)). Hence it could be ensure that there is significant difference between customers of domestic and foreign brands in respect brand loyalty to brand awareness and perceived quality to brand awareness. Path coefficient between brand loyalty to brand awareness is 0.67 in the case of domestic brand 0.74 for foreign brand and perceived quality to brand awareness is 0.72 and 80 for domestic and foreign brand respectively.

CONCLUSION:

Brand awareness is related to the strength of the brand node or trace in memory, as reflected by consumers' ability to identify the brand under different conditions. In other words, how well do the brand identities serve their function? In particular, brand name awareness relates to the likelihood that a brand name will come to mind and the ease with which it does so. Brand awareness consists of brand recognition and brand recall performance. From the study it is clear that there is significant difference between the customers of domestic and foreign brand with regard to brand awareness.

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Table 1: Brand awareness Model: Means, Standard Deviations and correlation

	Mean	SD	BAW_1	BAW_2	BAW_3	BAW_4	PQ_1	PQ_2	BL_1	BL_2
BAW_1	5.81	1.077	1							
BAW_2	6.01	1.08	.714**	1						
BAW_3	5.78	1.033	.793**	.706**	1					
BAW_4	6.37	0.525	.544**	.561**	.576**	1				
PQ_1	5.97	1.055	.650**	.690**	.639**	.529**	1			
PQ_2	5.77	0.752	.630**	.621**	.589**	.384**	.598**	1		
BL_1	5.95	0.948	.680**	.683**	.655**	.434**	.677**	.606**	1	
BL_2	6.03	1.007	.694**	.760**	.683**	.545**	.745**	.617**	.675**	1

Source: primary data

Table 2: Model Fit Indices of the Measurement Model

Model Fit Indices	Value Obtained	Recommended
χ^2	43.461	……
df	13	……
χ^2/ df	3.343	< 5.0
χ^2 significance	0.000	p < = 0.05
RMSEA	0.31	< 5.0
GFI	990	> 0.90
AGFI	.973	> 0.90
CFI	.995	> 0.90
NFI	.993	> 0.90
TLI	.990	> 0.90
RMR	.012	<0.02
RFI	.986	> 0.90

Source: Primary Data

Table 3: Cronbach's Alpha (α) of the Model Brand Awareness

Variables	Cronbach's Alpha (α)
Brand awareness	0.894
Perceived quality	0.842
Brand loyalty	0.832

Source: Primary Data

Table 4: Composite Reliability of the Model Bran d Awareness

Variables	Composite Reliability
Brand awareness	0.834
Perceived quality	0.792
Brand loyalty	0.824

Source: Primary Data.

Table 5: Standardized Factor Loading (λ) of the model Brand Awareness

Construct Statements	Standardized Factor Loading (λ)
Brand awareness	
BAW_1	0.84
BAW_2	0.79
BAW-3	0.81
BAW_4	0.89
Brand Loyalty	
BL_1	0.82
BL_2	0.75
Perceived Quality	
PQ_1	0.82
PQ_2	0.78

Source: Primary Data

Table 6: Average Variance Extracted (AVE) of the Model Brand Awareness

Variables	Average Variance Extracted (AVE)
Brand awareness	0.645
Perceived quality	0.584
Brand loyalty	0.615

Source: Primary Data

Table 7: Discriminant Validity of the Model Brand Awareness

	BAW	PQ	BL
BAW	0.803		
PQ	0.431	0.794	
BL	0.545	0.652	0.764

Source: Primary Data

Table 8: Coefficient of Determination (R^2) of Brand Awareness

	Estimates		
	DB	**FB**	**Total**
R^2 for Brand Awareness	0.68	0.74	0.70

Table 9: Model Comparison

	Unconstrained Model 1 (initial model)	**Model 1 (assuming path bl_baw_db= bl_baw_fb**	**Model 2 (assuming path pq_baw_db= pq_baw_fb)**	**Model 3 (assuming path bl_baw_db= bl_baw_fb&pq_baw_db= pq_baw_fb)**
χ^2	239.068	223.043	221.968	219.043
Df	42	45	48	50
χ^2/ df	5.692095	4.956511	4.629	4.38
RMSEA	0.068	0.062	0.059	.041
GFI	0.960	0.978	0.948	0.948
AGFI	0.915	0.989	0.978	0.978
CFI	0.973	0.947	0.981	0.995
Model Comparison				
		Unconstrained model vs. Model 2	**Unconstrained vs. Model 2**	**Unconstrained vs. Model 3**
$\Delta\chi^2$, (Δ df), (sig.)		16.025,(3),(p < 0.001)	17.1 (6), (p <0.001)	20.025,(8),(p <0.001)

Source: Primary Data Note: BAW- Brand Awareness, PQ- Perceived Quality, BL- Brand Loyalty, df- degree of freedom, RMSEA- Root Mean Square Error Of Approximation, GFI- Goodness of Fit Index, AGFI- Adjusted Goodness of Fit Index, CFI-Comparative Fit Index, $\Delta\chi^2$-difference in chi – square values, Δ df- difference in degrees of freedom

Table 10: Hypotheses Testing

Hypotheses	**Hypotheses**	**Path Coefficient (β)**				χ^2	**df**	$\Delta\chi^2$	**Significant /not significant**
		DB (p-value)		**FB (p- Value)**					
		BL-BAW	**PQ-BAW**	**BL-BAW**	**PQ-BAW**				
H0.1.1 (BL-BAW) DB = (BL-BAW) FB	There is no significant difference in the path between brand loyalty to brand awareness across domestic and foreign brands.	0.77 (<0.01)	0.85 (<0.01)	0.80 (<0.01)	0.83 (<0.01)	223.043	45	16.025**	significant
H0.1.2 (PQ-BAW) DB = (PQ-BAW) FB	There is no significant difference in the path between perceived quality to brand awareness across domestic and foreign brands.	0.72 (<0.01)	0.80 (<0.01)	0.82 (<0.01)	0.90 (<0.01)	221.968	48	17.1**	significant
H0.1.3 (BL-BAW) DB =(BL-BAW) FB & (PQ-BAW) DB= P-BAW)-FB	There is no significant difference in the path between brand loyalty to brand awareness and perceived quality to brand awareness across domestic and foreign brands.	.67 (<0.01)	0.72 (<0.01)	74(<0.01)	0.80 (<0.01)	219.043	50	20.02**	significant

**Significance at 0.01 level

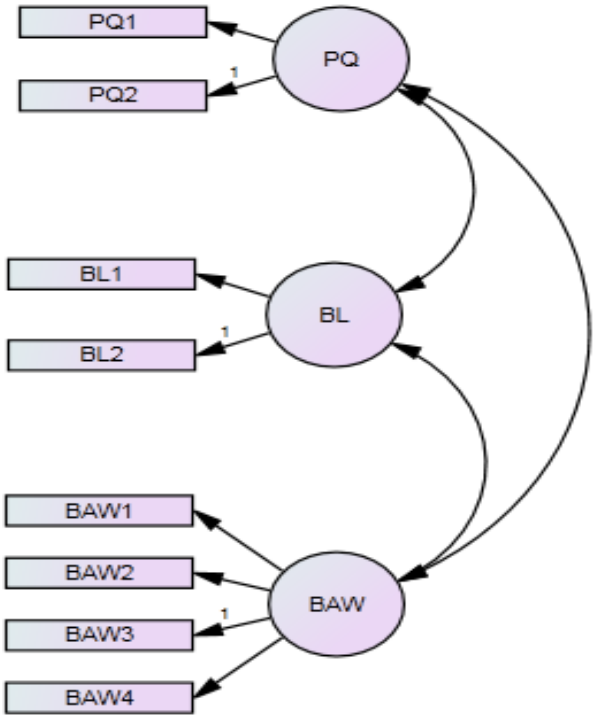

Fig. 1: Confirmatory Factor Analysis

Note: the diagonal are square root of AVE and others are the correlation coefficient.

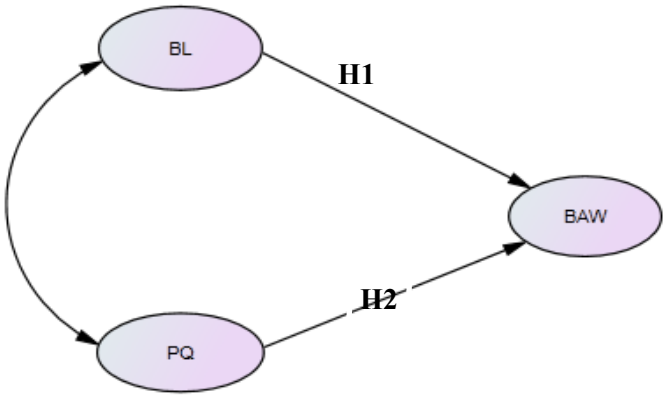

Fig. 2: Proposed Model of Brand Awareness

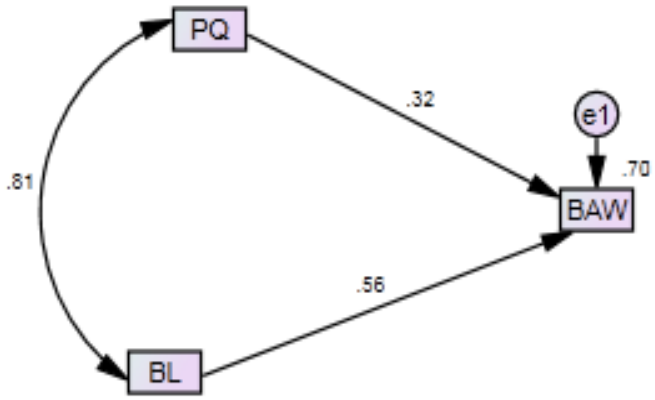

Fig. 3: Structural Model of Brand Awareness
