

Understanding the Top of the Mind Awareness/Brand Preference Congruence in Prospective Hospital Patients through Discriminant Analysis of Aaker's Brand Equity Model

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Abstract

This study was carried on to understand the influence of the assets of brand equity which are brand awareness, perceived quality, brand association and brand loyalty on the Top of the Mind Awareness/Brand Preference (TOMA/BP) congruence of a multi-speciality hospital. According to Aaker's theory these assets are linked to the brand and add value to the product or service offered. The TOMA/BP congruence refers to a relationship which exists between the Top of the Mind Awareness and Brand Preference and tries to answer the question: Is the hospital which comes first to a patient's mind the one they prefer to attend. For this study TOMA refers to the first hospital that comes to a patient's mind due to his/her exposure to some branding activity of the hospital. Brand Preference referred to the hospital the patient would attend in case a need arises. Having TOMA doesn't necessarily require the patient to have BP and hence this study was crucial. Three hypotheses tested whether the assets of brand equity had a relationship with a prospective patient's TOMA/BP congruence. They were after conducting a primary research in Coimbatore city. Statistical analysis using SPSS indicated that incorporation of Aaker's brand equity model would be significant in predicting the prospective patient's brand choice of attending hospitals.

Keywords: Top of the Mind Awareness (TOMA); Brand Preference (BP); Brand equity; Brand loyalty; Perceived quality; Brand awareness; Brand association; Brand congruence

Introduction

Healthcare is a human centered service due to which every section of healthcare experience must embody and convey the message that the hospital is the centre of health and wellness in the community. In the early years, healthcare professionals did not like the amalgamation of the marketing and hospital worlds. Marketing was equated to advertising and advertising healthcare services was considered inappropriate. However this scenario changed with the focus shifting from healthcare being a service oriented industry to a user oriented industry. The connection between the healthcare provider and the patient needs to be developed to improve delivery. However with the rise of healthcare costs, increasing knowledgeable consumers, hospital need to rework on their branding strategies.

Research suggests that the best way to attain competitive advantage was through the theory and concept of brand equity. According to Aaker [1] brand equity is a set of assets linked to a brand. These included brand loyalty, brand association, perceived quality and brand awareness. For this study a brand equity strategy for a hospital would involve understanding the relationship between the four assets to the value added or subtracted from the prospective patient's perception of the hospital brand.

Literature Review

TOMA/BP congruence

There is a range of awareness from aided recall to Top of the Mind Awareness. Recalling a brand when a name is presented to them is known as aided recall [2]. When consumers mention a specific brand name at the first place when they are asked about the type of retailer, merchandise category or a type of service is known as TOMA [3]. When a brand is included in a consumer's evoked set or considered during purchase evaluation, then the goal of advertising is met [4]. Habitual purchasing may lead to TOMA but healthcare is not such a service.

Certain aspects like the length of stay need for a specialist etc. has made decision making in the healthcare sector very complicated [5]. Moreover hospitals may get limited chances to influence a prospective patient's preference and thus need to establish a means by which to increase the knowledge and TOMA of the brand in the mind of the prospective patients [6]. TOMA is equated to Brand Preference too often. Consumers with higher TOMA level towards a brand showed a stronger Brand Preference.

For this study TOMA is defined as the first hospital that comes to the patient's mind and BP refers to the prospective patient's preferred brand.

Brand equity

One of the most widely acknowledged definition states that brand equity is the added value endowed by the brand to the product [7]. Defenition by Keller [8] focussed more on marketing and he defined brand equity as the differential effect of brand knowledge on the response of the consumer to the marketing of the brand. Brand equity was also defined as a set of characteristics which make a brand unique in the marketplace [9]. Researchers suggest that brand equity management will emerge as the primary source of competitive advantage in the healthcare industry [10]. Most hospitals equate implementation of an advertising campaign as successful marketing [11]. But Johnson's research [12] shows that only 26% of the people chose advertising as

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their means to brand awareness of a particular hospital. This contributes to the discussion surrounding the implementation of a comprehensive brand equity strategy for a healthcare organisation.

Brand association

Brand association plays an important role in consumer purchase decision making. Brand association would help consumers search and deal with information [13]. When it comes to customer based brand equity, brand association seems to be core important [14]. It is assumed that the knowledge of a brand is stored in the consumer's memory as individual pieces of brand information which are linked together to form a complex associative network of the brand [15]. In other words, it deals with how patients develop the sort of mental image a brand stimulates-whether the brand is seen as positive or negative. Positive brand image is created through building a strong, favourable and unique association to the brand in memory [8].

Brand awareness

Brand awareness represents the strength of a consumer's memory record for a particular brand [16]. It can also be defined as fostering people's ability to recall or recognise the brand in sufficient detail to make a purchase [17]. Awareness is mostly correlated with aspects such as trust, reliability, high quality, closeness to people, accessibility and traditional styling [18].

Perceived quality

According to Aker [1] high quality gives consumers a good reason to buy the brand and allows the brand to differentiate itself from its competitors. Perceived quality is defined as the customer's perception of the overall quality of a product/service with respect to its intended purposes [19]. Perceived quality is said to have an influence on the pricing in that organisation i.e., the organisation may be able to charge a higher price if the customers are able to equate price with quality [20].

Brand loyalty

The concept of brand loyalty has been recognised as an important construct in the marketing literature [21]. The literature has revealed that there was a lack of agreement among scholars both concerning brand loyalty definitions and measures [22,23]. Brand loyalty can be defined as the customer's unconditional commitment and a strong relationship with the brand, which is not likely to be affected under normal circumstances [23]. Perhaps the most common driver of brand loyalty is customer satisfaction. Loyalty will lead to customer's repurchasing behaviour which will improve brand equity and increase profitability. A purchase intention of a customer depends on brand awareness and brand loyalty of a particular brand [24].

Objectives of the Study

- To understand if congruence exists between Top of the Mind Awareness and Brand Preference.
- To study the statistical relationship existing between the assets of brand equity and TOMA/BP congruence.
- To study the external factors that influences the prospective patient's choice of a hospital.

Research Question

- Is there congruence between the TOMA and BP?
- Does the marketing theory of brand equity explain or predict a

prospective patient's awareness and possible preference of that hospital?

Scope of the Study

The study deals with the TOMA/BP congruence in the field of hospitals. Hundred respondents participated in the survey where 9 prominent multispecialty hospitals were chosen and the study was limited to Coimbatore.

Theoretical Model

TOMA/BP congruence influenced by the assets of brand equity depicted in the model (Figure 1).

Research Methodology

Research approach

A quantitative design using the survey method was used in the study. In this research data are quantified to apply statistical techniques in order to understand the relationships existing between the variables. A quantitative approach was used as it was deemed suitable to test for relationships using hypotheses. The survey method was chosen as it facilitates easy collection of data from large group of respondents

Respondents

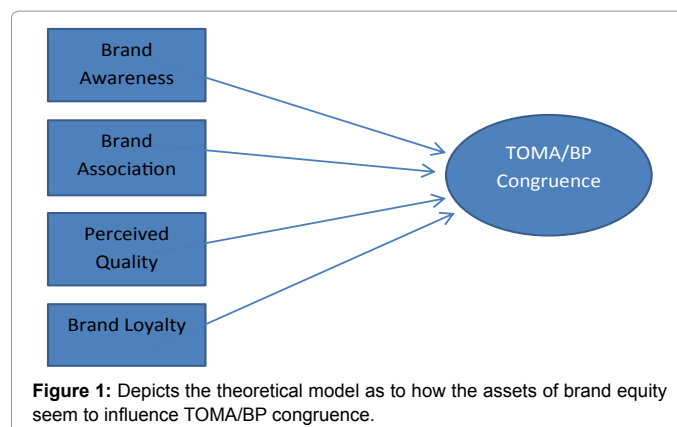
The target population comprised of prospective patients who have visited hospitals in Coimbatore. Convenience sampling was used for the study. Hundred respondents participated in the survey.

Data collection

Data was collected with the help of a structured questionnaire. The questionnaire was divided into two sections. In first section, respondents were asked for general information. In second section of the questionnaire, respondents were asked about their perception on brand awareness, brand association, perceived quality and brand loyalty. First section of questionnaire used the nominal scale and the other section used the combination of nominal and interval scale. The dependent variable was in nominal scale and the independent scale was in interval scale.

Discussions

Amongst the respondents, 54% were female and 46% were male. A majority of the population were between the age group of 20-50 (82%). Majority of the population were in Coimbatore for more than 2 years (74%).



Results and Findings

H01: There exists congruence between TOMA and BP.

Chi square test was implemented and significant association was found between TOMA and BP (Table 1). The significance value $P=0.000<0.05$ at 5% level of significance. Therefore we accept the hypothesis. And hence there is significant relation between TOMA and BP.

H02: There is predicted influence of assets of brand equity on informed decision and selection of hospital brands.

Discriminant analysis was used to obtain a predictive model for the study (Table 2). Statistical significance is found when Wilk's lambda is small ($p<0.05$). The method is statistically significant ($p=0.011$).

Analysis of discriminant coefficients revealed that the independent variables of perceived quality ($w=0.240$), brand loyalty ($w=1.000$), brand association ($w=0.281$) and brand awareness ($w=0.462$) were significant and contributed to the TOMA/BP congruence. Brand loyalty seemed to be the most significant and perceived quality was comparatively the least significant:

$$Dbe=0.240(PQ)+0.281(BA)+0.462(BAW)+1.00(BL)$$

Where PQ: perceived quality; BA: Brand Association; BAW: Brand Awareness; BL: Brand Loyalty

Results indicate (Table 3) that the data accurately predicted and classified 61.9% of the cases for the group with TOMA/BP congruence and 68.9% accurately predicted for those with no congruence. In addition data from the table indicated percentage of cases correctly classified was 64%. Thus there is predicted influence of assets of brand equity on informed decision and selection of hospital brands.

H03: External factors influence a patient's choice of hospitals.

Test statistics	
	TOMA
Chi-Square	15.059 ^a
df	1
Asymp. Sig.	0.000

^a0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.5.

Table 1: Shows the significance value using Chi-square independence test.

		Wilks' lambda				Exact F		
Step	Number of variables	Lambda	df1	df2	df3	Statistic	df1	df2
1	1	0.936	1	1	98	6.700	1	98.000
								Sig.
								0.011

Table 2: Depicts the value of Wilk's lambda and a low value indicates better discriminating power of the model.

Structure matrix	
	Function
	1
Brand loyalty	1.000
Brand awareness ^a	0.462
Brand association ^a	0.281
Perceived quality ^a	0.240

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions. Variables ordered by absolute size of correlation within function.

^aVariable not used in the analysis.

Table 3: Depicts the level of influence of the factors on TOMA/BP congruence.

One way ANOVA was used to study the influence (Tables 4 and 5).

Meyers-Levy [25] argues that male and female brains work differently and therefore the way in which they process information is different. Males tend to be selective processors of information whereas female tend to be comprehensive processors of information and pays attention to all information and hence their response to advertisements ought to be different (Figure 2).

From a psychological stand point, previous research has shown that repetitions of a message tend to induce beliefs more strongly in older individuals than younger ones [26] (Figure 3).

Older people tend to be brand loyal than the younger people. Older

Class of decision maker		Predicted Group Membership		Total
		Informed decision maker	Non-informed decision maker	
Original Count	Informed decision maker	44	27	71
	Non-informed decision maker	9	20	29

64.0% of original grouped cases correctly classified.

Table 4: This is the prediction matrix which gives the percentage of cases correctly classified.

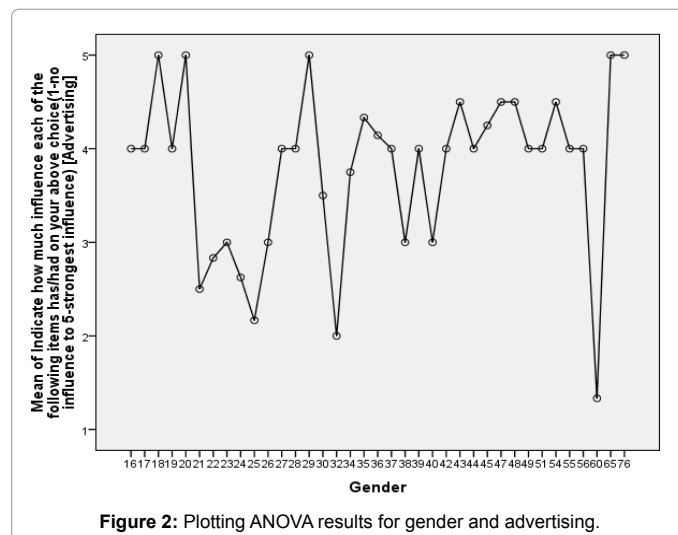


Figure 2: Plotting ANOVA results for gender and advertising.

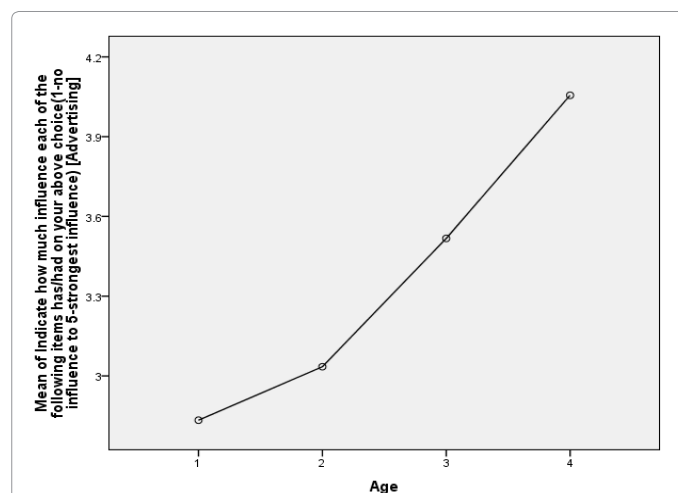
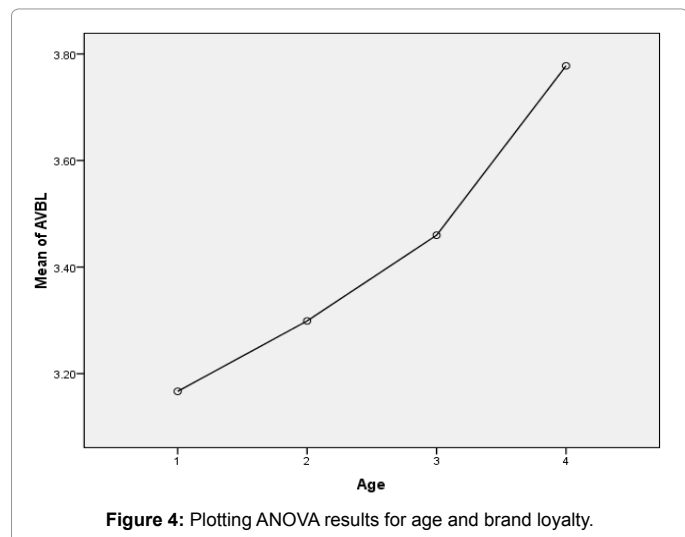


Figure 3: Plotting ANOVA results for age and advertising.

Dependent variables	Factor	F	Significance
Advertising	Gender	2.320	0.002
Advertising	Age	5.376	0.002
Brand loyalty	Age	4.910	0.003

Table 5: Depicts the significance values obtained through ANOVA test.



people are not open to changes very easily. They need a lot of coaxing and convincing and may even be in a dilemma to shift to a new hospital even if they offer better services. The young people on the other hand are more open to changes and do not always stick to the same (Figure 4).

Thus external factors were found to influence a patient's choice of hospital. Thus the hypothesis was accepted.

Recommendations

In accordance with the study performed, it is found that significant relationship exists between Top of the Mind Awareness and Brand Preference. Also those hospitals must try to reach out to their target audiences as brand loyalty seems to play a major role in the prospective patient's choice of hospitals. Also brand awareness is another major sector in which the hospitals must put their efforts and advertisements must be designed to tap the target demographic market accordingly.

Conclusion

The study was undertaken to understand if relationship existed between TOMA and BP and find the impact of the assets of brand equity on TOMA/BP congruence. The first hypothesis was accepted as significant relationship was found between TOMA and BP. Brand loyalty and brand awareness seemed to have to highest influence on TOMA/BP congruence and the results showed that both these assets seemed to positively influence TOMA/BP congruence. External factors such as advertising seemed to influence age and gender. Significant relation was found between brand loyalty and age.

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