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Research Paper

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DOCTORS PERSPECTIVE ON THE POSITIONING STRATEGIES ADOPTED BY THE PHARMACEUTICAL COMPANIES

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ABSTRACT

The Indian pharmaceuticals market is the third largest in terms of volume and thirteenth largest in terms of value, as per a report by Equity Master. Branded generics dominate the pharmaceuticals market, consisting nearly 70 to 80 percent of the market. India enjoys an important position in the global pharmaceuticals sector. According to India ratings, a Fitch company, the Indian pharmaceutical industry is estimated to grow at 20 percent Compound Annual Growth Rate (CAGR) over the next five years. As on march 2014, the market size of the pharmaceutical industry in India stands at US $ 20 billion.

KEYWORDS: *Pharmaceuticals, market size, Doctors, branded medicine*

INTRODUCTION

The Indian pharmaceuticals market will undergo a major transformation in the next decade. The market will triple by US $20 billion by 2020 and move into the world top 10 pharmaceuticals markets. The absolute growth of US $ 14 billion will be next to the growth potential of the US and China, and in the same league as the growth in Japan, Canada and the United Kingdom. Leveraging the strong distribution infrastructure in the tier 1 markets (i.e.) metros, class 1 and class 1A towns, these markets will account for half on the growth potential. Tier 2 markets, remaining urban markets and rural areas, will grow in importance and account for the remaining half (*IMS world Review-2015*)

In terms of scale, the Indian pharmaceutical market is ranked 14th in the world, overtaking Brazil, Mexico, South Korea and Turkey. More importantly, the incremental market growth of US$ 14 billion over the next decade is likely to be the third largest amongst all markets.

REVIEW OF LITERATURE

Lal, (2001) observes that the pharma companies do not adhere to the ethical principles while the promotional methods have become very sophisticated and effective. It was further stated that the government is required to formulate some guidelines in addition to developing their own code and that the doctors and consumers are required to be educated on the promotional practices and abuses committed by the pharma industry.

Kalantri, (2004) stated that simple quality educational conferences can be held without the industry's involvement, provided there is some institutional support and delegates agree to pay for their own education. Doctors of India can surely afford to pay modest fees for a conference from their own wallets. By doing so, they can help the medical profession safeguard its academic independence and reinforce the integrity of science.

OBJECTIVES OF THE STUDY

To examine the doctors perspective on the positioning strategies adopted by the pharmaceutical companies.

METHODOLOGY

A survey was conducted among medical practitioners through self-administered questionnaires, which were distributed according to the convenience of the researcher.

RESULTS AND DISCUSSIONS

A total of 384 usable questionnaires were gathered and analyzed

The profile of the medical practitioners includes the type of employment, practice of nursing home and attachment of pharmacy to clinic.

Table 1 - Type of Employment

Type of Employment	Frequency	Percent
Government	205	53.4
Private	179	46.6
Total	384	100.0

From table1, it can be inferred that 53.4 percent of the medical practitioners practice in Government and 46.6 percent of the respondents practice privately.

Table 2 - Nursing Home

Nursing Home	Frequency	Percent
Yes	177	46.1
No	207	53.9
Total	384	100.0

From table 2, it can be inferred that 53.9 percent of the respondents do not have their own nursing home and 46.1 percent of the medical practitioners practice in their nursing home.

Table 3 – Attachment of Pharmacy to the Clinic

Attachment of pharmacy	Frequency	Percent
Yes	189	49.2
No	195	50.8
Total	384	100.0

From table 3, it can be inferred that 50.8 percent of the clinics do not have attached pharmacy and 49.2 percent of the clinics have attached pharmacy.

Exploratory Factor Analysis – Doctors perspective on the positioning strategies adopted by the pharmaceutical companies:-

A sample of 384 respondents was taken for the study. The data collected for the study were classified, tabulated and processed for factor analysis which is the most appropriate multivariate technique to identify the group of determinants. Factor analysis identifies common dimensions of factors from the observed variables that link together the seemingly unrelated variables and provides insight into the underlying structure of the data. In this study Principal component Analysis has been used since the objective is to summarize most of the original information in a minimum number of factors for prediction purpose.

A Principal Component Analysis is a factor model in which the factors are based on the total variance. Another concept in factor analysis is the rotation of factors. Varimax rotations are one of the most popular methods used in the study of simplify the factor structure by maximizing the variance of a column of pattern matrix. Another technique called latent root criteria is used. An Eigen Value is the column sum of squares for a factor. It represents the amount of variance in data. After determination of the common factors, factor scores are estimated for each factor. The common factors themselves are expressed as linear combinations of the observed variables.

Factor Model : $Fi = Wi1X1 + Wi2X2 + \ldots\ldots\ldots\ldots\ldots WikXk$

Where Fi = Estimate of the ith factor, W1= Weight or Factor score coefficient

k = Number of variables.

Eleven factors are considered for measuring on a five point scale. Factor matrix and their corresponding factor loading after the Varimax rotation are presented in the table.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.752
Bartlett's Test of Sphericity	Approx. Chi-Square	1413.324
	df	55
	Sig.	.000

Communalities		
Doctors perspective	**Initial**	**Extraction**
The company is interest in more than just manufacturing a product and making a profit	1.000	.703
There are no limits to how far I will go to solve a problem I might have	1.000	.657
The company is genuinely committed to my satisfaction	1.000	.546
The company will do whatever it takes to make me happy	1.000	.719
The company's product brochure provides the information which is accurate	1.000	.483
The company says about its product is true	1.000	.701
I think some of the companies claims about its products are putted up to mae them seem better than they really are	1.000	.740
The company makes claim or promise about its products, it is probably true	1.000	.685
The company is very reliable	1.000	.774
I feel I know what to expect from the company	1.000	.713
It I prescribe another medicine from other companies, I feel I kow what to expect	1.000	.718
Extraction Method: Principal Component Analysis.		

In Table Bartlett's test of sphericity and KAISER MEYER OLKIN measures of sample adequacy were used to test the appropriateness of the factor model. Bartlett's test was used to test the null hypothesis that the variables of this study are not correlated. Since the approximate chi-square satisfaction is 1413.324 which are significant at 1% level, the test leads to the rejection of the null hypothesis.

The value of KMO statistics (0.752) was also large and it revealed that factor analysis might be considered as an appropriate technique for analysing the correlation matrix. The communality table showed the initial and extraction values.

Total Variance Explained									
Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	4.206	38.237	38.237	4.206	38.237	38.237	2.535	23.047	23.047
2	1.192	10.837	49.074	1.192	10.837	49.074	1.920	17.451	40.498
3	1.030	9.361	58.436	1.030	9.361	58.436	1.567	14.246	54.744
4	1.010	9.178	67.614	1.010	9.178	67.614	1.416	12.870	67.614
5	.819	7.450	75.063						
6	.659	5.989	81.053						
7	.607	5.522	86.575						
8	.509	4.625	91.200						
9	.406	3.690	94.891						
10	.387	3.520	98.411						
11	.175	1.589	100.000						
Extraction Method: Principal Component Analysis.									

From the table it was observed that the labelled "Initial Eigen Values" gives the EIGEN values. The EIGEN Value for a factor indicates the 'Total Variance' attributed to the factor. From the extraction sum of squared loadings, it was learnt that the I factor accounted for the variance of 4.206 which was 38.237%, the II factor accounted for the variance of 1.192 which was 10.837%, the III factor accounted for the variance of 1.030 which was 9.361% and the IV factor accounted for the variance of 1.010 which was 9.178%. The four components extracted accounted for the total cumulative variance of 67.614%

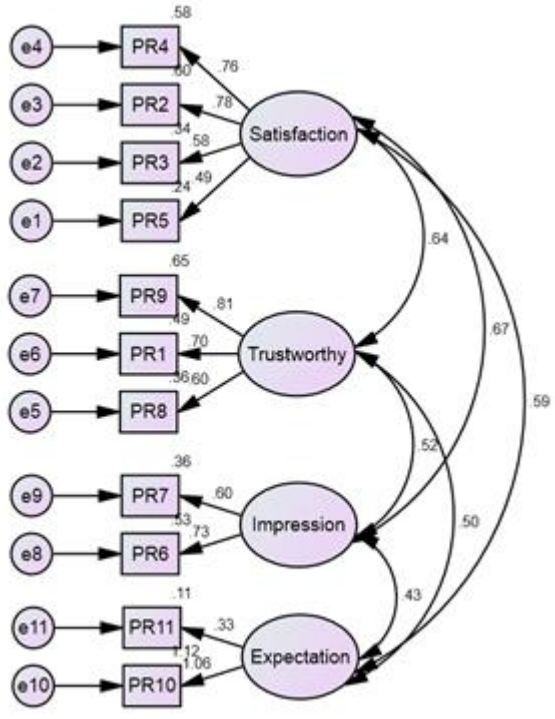
Determination of factors based on Eigen Values:-

In this approach only factors with Eigen values greater than 1.00 are retained and the other factors are not included in this model. The four components possessing the Eigen values which were greater than 1.0 were taken as the components extracted.

Rotated Component Matrix[a]					
Doctors perspective	Component				Rotated sum of squared loadings
	1	2	3	4	
The company will do whatever it takes to make me happy	.799				Satisfaction I (23.047)
There are no limits to how far I will go to solve a problem I might have	.700				
The company is genuinely committed to my satisfaction	.685				
The company's product brochure provides the information which is accurate	.622				
The company is very reliable		.832			Trustworthy II (40.498)
The company is interest in more than just manufacturing a product and making a profit		.701			
The company makes claim or promise about its products, it is probably true		.684			
I think some of the companies claims about its products are putted up to make them seem better than they really are			.815		Impression III (54.744)
The company says about its product is true			.715		
If I prescribe another medicine from other companies, I feel I know what to expect				.846	Expectation IV (67.614)
I feel I know what to expect from the company				.687	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations.					

Confirmatory Factor Analysis:-

A Confirmatory Factor Analysis (CFA) using AMOS 16 was applied to test the theoretical model and hypothesis vis-a vis to assess fitness, reliability and validity of measurement models for different constructs in the study. The various resulting measurement models are as follows :



The Confirmatory factor analysis model for branding of banks was designed to test the relationship between 11 variables and four construct viz., Satisfaction, Trustworthy, Impression and Expectation. The model presented has been found to be appropriate as the values are fit under the threshold criteria (Chi-square/df = 7.626, RMR = 0.095, GFI = 0.894, TLI = 0.735, CFI = 0.817 and RMSEA = 0.132).

CONCLUSION

The overall analysis reveals that the Doctors perspective towards the pharmaceutical companies can be grouped viz., Satisfaction, Trustworthy, Impression and Expectation. By adopting the above said marketing strategies the pharmaceutical companies could reach better and gains the confidence of the medical practitioners.

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