

JIM QUEST

Journal of Management and Technology

A Bi-annual Referred Research Journal of Jaipuria Institute of Management, Indirapuram, Ghaziabad

Macroeconomic Variables on Indian Stock Market Interactions: An Analytical Approach

Dr. Anubha Srivastava & Komal Behl

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Jaipuria Institute of Management
Indirapuram, Ghaziabad

(Formerly Located at Vasundhara, Ghaziabad)

(Approved by All India Council for Technical Education and
Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow)

JIM QUEST

Journal of Management and Technology

Volume 11, No. 2, July - Dec. 2015

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Printed by: Fortune India Printers, C-5, Sector 8, Noida. (UP) India.

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From the Desk of the Chief Editor

In the recent years the management education has undergone radical changes in order to keep pace with challenges on national and international level. As the changes got internationalized so the research in these areas of study needs to be highlighted among the academicians and practitioners at appropriate levels.

It gives me great pleasure to welcome you to the latest issue of the JIM QUEST; a bi-annual referred research journal for disseminating the knowledge between academics and management practitioners regarding theories, methods and applications related with new perspectives in the field of management and technology.

Large number of research papers was received from various disciplines for publication and we thank each one of the authors personally for soliciting the journal. We also extend our heartfelt thanks to the reviewers who so carefully perused the papers and carried out justified evaluation. Based on their evaluation, we accepted nine research papers for this issue across the disciplines. We are certain that these papers will provide qualitative information and thoughtful ideas to our accomplished readers.

We thank all the readers profusely who conveyed their appreciation on the quality and content of the JIM QUEST and expressed their best wishes for future issues.

Prof. (Dr) Daviender Narang
Chief Editor



Macroeconomic Variables on Indian Stock Market Interactions: An Analytical Approach

Dr. Anubha Srivastava*
Komal Behl**

Abstract

In the recent scenario, which can be described by increasing integration of the financial markets and implementation of various stock market reform measures in India, the activities in the stock markets and their relationships with the macro economy have led to significant importance. The present paper is an attempt to examine for India the causal relationships between the share price index and macro economic variables i.e. Industrial Production, FII, Crude prices etc. by applying factor analysis approach. The purpose is to find out extent of significance in such relationship between economic growth and stock market. The present study thus proceeds with an investigative agenda to examine the relationship between the health of the real economy and the health of the stock market, as the capital market highly responsive to macro economic events.

Keywords: BSE, correlation, descriptive analysis, factoranalysis, macro economic factors.

Introduction

The financial system in many western countries has undergone a remarkable change. One change of this development is disintermediation. A portion of the funds involved in saving and financing now flows directly to the financial markets instead of being routed via the traditional bank. The general public interest for investing in the stock market, either directly or via mutual funds, is an important component of this process. The capital markets have always been an area of serious concern for researchers, policy makers and economists. These are often defined as barometer of any economy as they reflect the changes and direction of pressure on the economy. The volatility in stock markets often reflects the direction of any economy. The Macroeconomic variables, both real and financial indeed have a considerable influence, positive as well as negative, on the performance of the economy. The movement of stock prices, apart from the firms' fundamentals, depends upon the level of development achieved in the

economy and its integration towards the world economy. Numerous models have been developed by scholars so far for establishing the relationship between stock market and macroeconomic factors such as the discounted cash flows model (DCF), the arbitrage-pricing model (APM) and the capital asset pricing model (CAPM). But there are many limitations in these models based on the concept of market equilibrium and the existence of a perfect market. The stock market is said to be a critical cog in the wheel that smoothens the transfer of funds for economic growth. Broadly speaking, stock exchanges are expected to speed up economic growth by increasing liquidity in financial assets, making risk diversification easier for investors by promoting wiser investment decisions based on the available information, forcing corporate managers to work harder for shareholders' interests and channeling more savings to corporations, usually to the more efficient ones.

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Macro Economic variables affecting stock market: The conditions that exist in the economy as a whole, rather than in a particular sector or region, forms a part of the macro environment. The macro environment is closely linked to the general business cycle, as opposed to the performance of an individual business sector. The macroeconomic variables considered in the study are Index of Industrial production (IIP), Dollar Price (DP), Foreign Institutional Investment (FII), Crude Oil Prices (CO), Balance of Trade (BOT) and Bombay Stock Exchanges indices in the form of S&P BSE SENSEX.

- (a) **FII-** Positive fundamentals combined with fast growing markets is one of the reasons why India has become an attractive destination for foreign institutional investors (FIIs). Portfolio investments brought in by FIIs had been the most dynamic source of capital to emerging markets in 1990s. Apart from the impact they create on the market, their holdings influences firm performance.
- (b) **Crude Oil-** Though it is hard to imagine but it is fact that a rise in the oil price has a negative impact on the stock prices at the stock exchanges all over the world.
- (c) **Impact of Dollar Prices-** Fluctuation in exchange rate has a significant impact on the overall economy of a country. Rupee appreciation against US dollar indicates strengthening of the Indian economy with respect to US economy.
- (d) **IIP-** Indian IIP will focus on sectors like mining, electricity and manufacturing. Also a base year required to be decided on the basis of which the index figures would be arrived at. In India, the base year was initially fixed as 1993-94 hence the same would be equivalent to 100 Points but currently the base year is changed to 2004-2005. If industrial production & capital spending increases then it is likely to have a positive impact on the banking sector. A lower IIP data on the other hand can affect banking industry adversely.
- (e) **Impact of Gold Prices-** High gold imports is one of main reasons of high Current Account Deficit (CAD), which touched a record high of 6.7 per cent of GDP in December quarter of last fiscal. A high CAD in turn affects rupee value.
- (f) **Balance of Trade-** A country has a trade deficit if it imports more than it exports; the opposite scenario is a trade surplus. If a country has been importing more goods than it is exporting for a sustained period of time, it is essentially going into debt. Over time, investors will notice the decline in spending on domestically produced goods, which will hurt domestic producers and their stock prices. Given enough time, investors will realize fewer investment opportunities domestically and begin to invest in foreign stock markets, as prospects in these markets will be much better. This will lower demand in the domestic stock market

and cause that market to decline. Therefore, a positive relation is expected between stock price and balance of trade

Literature Review

Darat and Mukherjee (1987) applied a Vector Auto Regression (VAR) model and found that a significant causal relationship exists between stock returns and selected macroeconomic variables of China, India, Brazil and Russia which are emerging economies of the world using oil price, exchange rate, and moving average lags values as explanatory variables employed MA (Moving Average) method with OLS (Ordinary Least Square) and found insignificant results which postulate inefficiency in market. Finally they concluded that in emerging economies the domestic factors influence more than external factors, i.e., exchange rate and oil prices. **Bahmani and Sohrabian (1992)** studied the causal relationship between U.S. stock market (S&P 500 index) and effective exchange rate of dollar in the short period of time. Their theory established bidirectional causality between the two for the time period taken. **Abdalla and Murinde (1997)** investigated the intersections between exchange rates and stock prices in the emerging financial markets of India, Korea, Pakistan and the Philippines. They found that results show unidirectional granger causality from exchange rates to stock prices in all the sample countries, except the Philippines, where they found that the stock price lead the exchange rate. **Shah and Thomas (1997)** argue that because of the enabling government policies stock market in India is more efficient than the Indian banking system both in terms of quality of information processing and imposition of transaction cost. Their research support the idea that stock prices are a mirror which reflect the real economy, and are relatively insensitive to factors internal to the financial system such as market mechanisms. However the arguments require more explanation. **Stanley (2002)** has examined that FIIs have played a very important role in building up India's forex reserves, which have enabled a host of economic reforms. Secondly, FIIs are now important investors in the country's economic growth despite sluggish domestic sentiment. The Morgan Stanley report notes that FII strongly influence short-term market movements during bear markets. However, the correlation between returns and flows reduces during bull markets as other market participants raise their involvement reducing the influence of FIIs. Research by Morgan Stanley shows that the correlation between foreign inflows and market returns is high during bear and weakens with strengthening equity prices due to increased participation by other players. **Kwon and Shin (1999)** applied Engle-Granger co integration and the Granger causality tests from the VECM and found that the Korean stock market was co integrated with a set of

macroeconomic variables. However, using the Granger-causality test on macro-economic variables and the Korean stock index, the authors found that the Korean stock index was not a leading indicator for economic variables. **Pethe and Karnik (2000)** using Indian data for April, 1992 to December, 1997, attempted to find the way in which stock price indices were affected by and had affected other crucial macroeconomic variables in India. But, this study had run causality tests in an error correction framework on non-co integrated variables, which is inappropriate and not econometrically sound and correct. The study reported weak causality running from IIP to share price indices. **Naka, Mukherjee and Tufte (2001)** analyses long-term equilibrium relationship among selected macroeconomic variables and the Bombay Stock Exchange index. The study uses data for the period 1960:1 to 1995:4 for India on the following macroeconomic variables; namely, the Industrial production index, the consumer price index, a narrow measure of money supply, and the money market rate in the Bombay interbank market. It employs a vector error correction model to avoid potential misspecification biases that might result from the use of a more conventional VAR modeling technique. **Bhattacharya and Mukherjee (2002)** investigated the nature of the causal relationship between BSE Sensitive Index and the five macroeconomic aggregates in India (i.e., IIP, money supply, national income, interest rate and inflation rate) using monthly data for the period 1992- 93 to 2000. By applying the techniques of unit-root tests, co-integration and the long-run Granger non-causality test recently proposed by Toda and Yamamoto (1995), their major findings suggested that there was no causal linkage between stock prices and money supply, national income and interest rate while IIP lead the stock price, and there was two-way causation between stock price and inflation rate. **Gan, Lee, Yong and Zhang (2006)** have examined the macroeconomics variables and stock market interaction: New Zealand Evidence. Their studied had a set of seven macroeconomic variables and used co-integration tests, johansen maximum likelihood and granger-causality tests. In addition, their paper also investigated the short run dynamic linkages between NZSE40 and macroeconomic variables using innovation accounting analyses. **Chen (2008)** investigated whether macroeconomic variables can predict recessions in the stock market. Series such as interest rate spreads inflation rates, money stocks, aggregate output, and unemployment rates are evaluated individually. Empirical evidence from monthly data on the Standard and Poor's S&P 500 price index suggests that among the macroeconomic variables that are considered, yield curve spreads and inflation rates are the most useful predictors of recessions in the U.S. stock market according to in-sample and out-of sample forecasting performance. **Ahmed (2008)** studied and found the nature of the causal relationships between stock prices (i.e., Nifty and Sensex) and the key macroeconomic variables (i.e., IIP, FDI, exports, money supply,

exchange rate, interest rate) representing real and financial sectors of India. Using quarterly data, Johansen's approach of co-integration and Toda and Yamamoto (1995) Granger causality test have been applied to explore the long-run relationships while BVAR modeling for variance decomposition.

Research Methodology

Purpose of Study- The purpose of the study is to examine for India the causal relationships between the share price index and Industrial Production ,money, FII, Crude prices, Dollar Prices, Balance of Trade, Gold Prices. The importance of this study comes from the vital role of the Indian stock market in the economy for the following two reasons:

1. Indian stock market plays an important role in collecting money and encouraging investments, so this study was designed to explore the influences of some factors on stock market prices in BSE.
2. This study will be useful for the investors who might be able to identify some basic economic variables that they should focus on while investing in stock market and will have an advantage to make their own suitable investment decisions.

Scope of Study- The current study unravels the linkage between stock market & macroeconomic variables in the Indian context using techniques like correlation, KMO and Bartlett's Test using SPSS. The present study thus proceeds with an investigative agenda-what is the relationship between the health of the real economy and the health of the stock market? It may therefore be stated that the state of the economy has a bearing on the share prices but the health of the stock market in the sense of a rising share price index is not reflective of an improvement in the health of the economy.

Objective of the Study

1. To examine the existence of significant correlation between stock price & macroeconomic variables & the extent to which they are correlated.
2. To analyze the significant effect of each factor using Factor Analysis approach.

Research Design- The study covers the period from January 2010 to December 2013. S&P BSE SENSEX has been selected as the stock market index and monthly average data has been culled from the Bombay stock exchange (BSE) website which covers 48 monthly observations. This empirical analysis has been done using SPSS. The investigation is done using monthly data from January, 2010 to December, 2013

- i) **Correlation matrix analysis-** Karl Pearsonr, type of correlation coefficient has been used in this study, which is

also referred to as linear or product-moment correlation. This analysis assumes that the two variables being analyzed are measured on at least interval scales. The coefficient is calculated by taking the covariance of the two variables and dividing it by the product of their standard deviations. It is used to show the strength and the relationship between Bombay stock exchange indices and macroeconomic variables.

ii) **Factor Analysis-** Factor analysis is a statistical method used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. It searches for such joint variations in response to unobserved latent factors. The observed variables are modeled as linear combinations of the potential factors. Before applying the technique of factor analysis, The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy test and Bartlett Test of Sphericity are applied to find the applicability of factor analysis. KMO test is an index for comparing the magnitude of the observed correlation coefficients to the magnitude of the partial correlation coefficient. Its value .5 or more is considered as a sizeable sampling adequacy. Small KMO value indicates that a factor analysis of the variables may not be a good idea. Bartlett Test of Sphericity is used to test the correlation matrix is an identity matrix. If the value of the test statistic for sphericity is large and the associated significance level is small, it is unlikely that the correlation matrix is an identity, hence, the factor analysis is recommended. In this research, Principal Component Analysis (PCA) method is used for factor extraction, which is the first phase of EFA. Factor weights are computed in order to extract the maximum possible variance, with successive factoring continuing until there is no further meaningful variance left. The number of factors extracted is determined by the Kaiser Criterion and Screen Plot. The Kaiser rule is to drop all components with Eigen value less than 1.0. The Cattell screen test plots the components on the X axis and the corresponding Eigen values on the Y-axis. As one moves to the right, toward later components, the Eigen values drop. When the drop ceases and the curve makes an elbow toward less steep decline. To carry out the objectives 6 Variables have been chosen and their significant impact on stock market is conducted through KMO test. These variables include the following:

SYMBOL	VARIABLE	UNITS
BSE	S&P BSE SENSEX	Crores
FII	Foreign Institutional Investors	Crores
IIP	Index of Industrial Production	Percentage
USD	Dollar Price	Rupees Per unit unit of Foreign Currency
COP	Crude Oil Prices	US Dollar Per Barrel
BOT	Balance of Trade	US Millions
GP	Gold Prices	Rupee per 10 gm

Variable Selection and Data Source- The Bombay Stock Exchange has been considered as a proxy of the Indian Stock Market and used to obtain a measure of market price movement of Indian securities. Bombay stock exchange or BSE is the largest stock exchange in India in terms of number of listed companies in the exchange and the market capitalization of the listed companies. The prime index of the Bombay Stock Exchange is the BSE 30 that is popularly known as the Sensex. First compiled in 1986, Bombay Stock Exchange Sensitive (SENSEX) is a basket of 30 constituent stocks representing a sample of large, liquid and representative companies. The base year of SENSEX is 1978-79 and the base value is 100. The index is widely reported in both domestic and international markets. By including the prestigious companies & due to its wide acceptance amongst the Indian investors; SENSEX is regarded to be the pulse of the Indian stock market. As the oldest index in the country, it provides the time series data over a fairly long period of time (From 1979 onwards). So, BSE-SENSEX has been selected for this study as the representative of Indian stock markets. To test the common perception that Foreign Institutional Investment has been a driver to stock market in India FII has been included as another crucial variable. Also any slight fluctuation in crude oil and gold prices can have both indirect & direct influence on the economy of the country. Thus these 2 variables have also been included to analyze their effect on stock market.

Results & Discussion

Descriptive Statistics Analysis

Table 4.1: Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation
Sensex	48	5715.76	15454.92	21170.68	881926.44	18373.4675	1389.85257
FII	48	35307.50	-12071.12	23236.38	223186.04	4649.7092	9124.29278
IIP	48	13.395	87.964	101.359	4569.796	95.20408	3.591239
BOT	48	1898.30	-2420.00	-521.70	-63298.80	-1318.7250	473.54102
Crude	48	35.90	66.25	102.15	4014.64	83.6383	9.64093
Dollar	48	19.35	44.30	63.65	2449.74	51.0363	5.89937
Gold	48	745.50	1083.00	1828.50	70617.25	1471.1927	206.56103

The above table represents a summary of descriptive statistics of all the variables. Range, Minimum, Maximum, Sum, Sample Mean, Standard Deviation have been extracted. These variables are Bombay Stock Exchange SENSEX, FII, Index of Industrial Production and its sectors, Balance of Trade, Crude Oil prices, gold price and Dollar prices. A small standard deviation means that the values in a statistical data set are close to the mean of the data set, on average, and a large standard deviation means that the values in the data set are farther away from the mean, on average.

- In the group of 48 observations, the mean of share price (SENSEX) is 18373.47, while its maximum price is 21170.68 for our data series and the standard deviation is 1389.85 which are considered to be very high. It reflects significant variability in stock prices (SENSEX).
- Similarly, for IIP, the mean and standard deviation are 95.20 and 3.59 respectively which shows IIP have moderate variability from their respective means.
- Dollar price mean is 51.04 and standard deviation is 5.9. So, there is again moderate variability in dollar price from its mean. The maximum and minimum values of dollar price are 63.65 and 44.30 respectively.
- FII mean is 4649.71 and its standard deviation is 9124.29 which mean that there is a greater degree of variability of standard deviation from FII mean.
- Crude oil and gold price mean are 83.63 and 1471.1927 respectively whereas their standard deviations are 9.64 and 206.56 respectively. There is moderate variability in oil prices whereas high moderate variability in gold prices. The maximum price of gold is 1828.50 and the minimum is 1083.00.

- The mean of BOT (Balance of Trade) is -1318.72 whereas the standard deviation is 473.54 which show greater degree of variability of the standard deviation from its mean. The maximum and minimum values are -521.7 and -2420.00 respectively.

Inferential statistical Analysis- Karl Pearson's correlation coefficient measures the extent to which two variables X and Y are correlated. The correlation coefficient ranges from -1 to 1. A value of 1 implies that a linear equation describes the relationship between X and Y perfectly, with all data points lying on a line for which Y increases as X increases. A value of -1 implies negative correlation, with all data points lying on a line for which Y decreases as X increases. A value of 0 implies that there is no linear correlation between the variables. The results reveal that Correlation coefficient between Bombay Stock Exchanges indices (S&P BSE SENSEX) and some macroeconomic variables showed weak relationship i.e. they are negatively correlated to each other. Balance of Trade (-0.127), and gold Prices (-0.2) are negatively correlated with SENSEX whereas FII (0.483), Dollar Price (0.346), IIP (0.423), and Crude Oil (0.218) are positively correlated. FII and IIP have moderate positive correlation with SENSEX. Balance of Trade and Gold Prices are negatively correlated with Bombay stock Exchange (BSE-SENSEX). The correlation among the entire macroeconomic variable can be seen from the following table:

Table 4.2: Correlation among all the Variables

Variables	Sensex	Gold	FII	IIP	BOT	Crude	Dollar
Sensex	1.00	-0.2	0.483	0.423	-0.127	0.218	0.346
Gold		1.00	0.086	0.378	-0.318	0.421	0.076
FII			1.00	0.253	-0.168	0.056	0.198
IIP				1.00	-0.582	0.603	0.897
BOT					1.00	-0.436	-0.472
Crude						1.00	0.445
Dollar							1.00

The above table shows that several variables are significantly correlated and if direct regression has been applied by using these macroeconomic variables as explanatory variables, we may encounter severe multicollinearity problem in the fitting of the model. Hence, to overcome this problem and have effective results, factor analysis approach of data reduction has been applied by using the econometric software SPSS.

Factor Analysis- The correlation matrix results in strong correlation among many of the variables. It provides an introspective view regarding the inter relationship among the variables. The matrix explains that the linear relationship between the variables can be explained in terms of three-four factors. The value of determinant of correlation matrix close to zero confirms high correlation between independent variables. Further, there are some tests that results into multicollinearity. And to find out that we have conducted the KMO test. The results of Factor Analysis are as under:

KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy. .594

Bartlett's Test of Sphericity Approx. Chi-Square 150.775 Df15

Sig..000

The KMO measure varies between 0 and 1, and values closer to 1 are better. A value of .5 is a suggested minimum. Since the

KMO is more than 0.5 i.e. 0.594. This shows that the given factors have significant impact on the stock market. If the value is less than 0.50, the results of the factor analysis probably won't be very useful. On the other hand, Bartlett's test of sphericity tests the hypothesis that the correlation matrix is an identity matrix, which would indicate that the chosen variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that factor analysis may be useful for the data.

So, as per the above KMO and Barlett test we can conclude that Factor Analysis can be carried out.

	Initial	Extraction
FII	1.000	.440
IIP	1.000	.906
BOT	1.000	.545
Crude	1.000	.667
Dollar	1.000	.803
Gold	1.000	.671

Extraction Method: Principal Component Analysis

Smaller values in the above Communalities table indicate variables that do not fit well with the factor solution, and should not be taken into consideration for the analysis.

Table 4.3: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.990	49.835	49.835	2.990	49.835	49.835
2	1.042	17.366	67.200	1.042	17.366	67.200
3	.911	15.178	82.378			
4	.562	9.368	91.746			
5	.449	7.488	99.234			
6	.046	.766	100.000			

Extraction Method: Principal Component Analysis.

The Eigen values in the above table are the variances of the factors. Because we conducted our factor analysis on the correlation matrix, the variables are standardized, which means that the each variable has a variance of 1, and the total variance is equal to the number of variables used in the analysis, i.e. 6, in this case. The first factor will always account for the most variance (and hence have the highest Eigenvalue), and the next factor will account for as much of the left over variance as it can, and so on. Hence, each successive factor will account for less and less variance. In the above table, only two factors in the initial solution have Eigen values greater than 1, i.e. FII and IIP. Together they account for almost 67% of impact on the stock market (SENSEX).

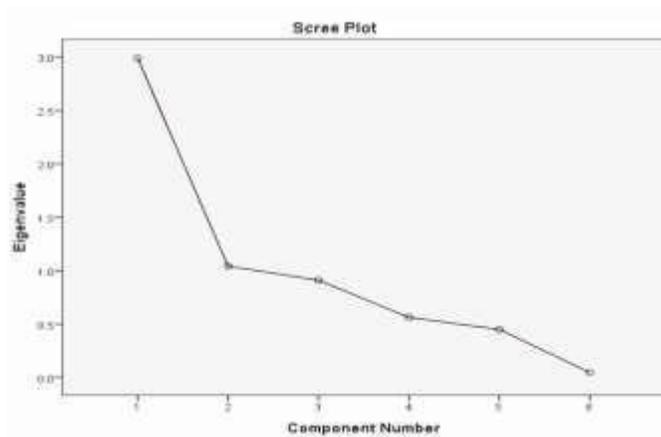


Fig 4.1: Screen Plot

The screen plot represents the Eigenvalue against the factor number. All those factors above 1 are considered to impact significantly. As per the study total 67% of the significant impact is made by two factors i.e. FII & IIP with Eigen value more than 1. It can be noted that the values in the first two factor can be seen having a higher value. From the third factor onwards, the line starts decreasing, this means that each successive factor is

Table 4.4

Component Matrix ^a		
	Component	
	1	2
FII	.306	.589
IIP	.942	.134
BOT	-.737	.045
Crude	.743	-.339
Dollar	.815	.372
Gold	.499	-.650

Extraction Method: Principal Component Analysis.

2 components extracted.

accounting for smaller and smaller amounts of the total variance. And therefore, the screen plot confirms the choice of the two components.

The rotated component matrix helps to determine what the components represent. In the above table the First component is highly correlated to IIP (0.942) or Dollar (0.815) whereas the second component is highly correlated with FII (0.589). This suggests that focus can be put on FII, IIP, and Dollar for further analyses as they have significant impact on SENSEX, which can be concluded from Factor Analysis. Since in Factor Analysis, Component Matrix data redundancy can be used, so we can separate broadly in:

Factor	Macro Variable
1	FII Dollar Price, Crude oil Price, BOT
2	IIP Gold Price

Limitations of The Study

There are four limitations that need to be acknowledged and addressed regarding the present study. And these limitations are as follows:

- The result & conclusion of the study might not be accurate due to reliability of the secondary data and limitation on the variables selected & the time span considered.
- A time span of only 4 years has been considered for examining the relationship between macroeconomic variables and Indian stock market (BSE SENSEX), as the data from the 2010 was only available on BSE's official website.
- This study mainly focuses on selected six independent macro economic variables which may not completely represent the macroeconomic variables.

Conclusion

Macro economic variable have an strong impact on Indian capital market, not only national but international events too affect the movement of capital market which is hence proved by the study, where all major macro factor significantly affect the capital market movements. The study performed necessary analyses to answer the research question of whether some of the identified macroeconomic factors can influence the Indian stock market or not. The macroeconomic variables are represented by the industrial production (IIP), Balance of Trade (BOT), Dollar Price (DP), Foreign Institutional Investment (FII), Crude Oil Prices (CO), and Gold Price (GP). Indian stock market is represented by BSE SENSEX. Correlation analysis, Descriptive Analysis, Factor Analysis was performed to examine such relationships. The relationship and interaction between macro factor and Indian capital market can be concluded as given below :-

- As per the overall analysis it can be concluded that two out of six variables are relatively more significant and likely to influence Indian stock market. These FII, IIP.
- There is a positive relationship between FII and Sensex, Dollar Price and Sensex, IIP and Sensex, Crude and Sensex whereas Gold Price, BOT and Sensex show a negative relation.
- The result has been concluded on the bases of the Factor Analysis (KMO and Principal Component Analysis) in which FII and IIP has been seen as affecting BSE Sensex.
- This simply concludes that in long term the Indian stock market is more driven by domestic macroeconomic factors rather than global factors.

Indian stock market is highly reactive to responsive to the macro economic factors. Faith in the system is more required & responsible for new and huge investments as compared to the policy rates which are perceived more important from the surface. Apart from the macroeconomic factors, stock market is strongly affected by the overall performance of the industry and firms as well as the unforeseen events and happenings. Following few policy suggestions can be made based on the study:-

- The government should make all the efforts to maintain the macroeconomic stability in the Indian economy for the smoothness of the stock market as well as the nation.
- Financial policy and regulation changes should be in designed and implemented in such a way so that it facilitate positive impact on macro variables.
- Policy rates should not always be the only method to strengthen the investment rather the favorable market may support better.

Text & References

Works Cited

Research Papers and Journals

1. Abdalla, I. S. A. and Murinde, V. (1997). "Exchange rate and stock price interactions in emerging financial markets: Evidence on India, Korea, Pakistan, and Philippines". *Applied Financial Economics*, 7:, 25-35.
2. Ahmed S. (2008). "Aggregate Economic Variables and Stock Markets In India". *International Research Journal of Finance and Economics*, 14.

3. Bahmani-Oskooee, M. and Sohrabian, A. (1992). "Stock prices and the effective exchange rate of the dollar". *Applied Economics*, 24 (4):, 459-64.
4. Bhattacharya, B, Mukherjee, J. (2002). "The Nature of The Casual Relationship between Stock Market and Macroeconomic Aggregates in India: An Empirical Analysis". Paper presented in the 4th Annual Conference on Money and Finance, Mumbai, India.
5. Chen. (2008). *Economic Forces and the Stock Market. Journal of Business*, 59, pp, 383-403.
6. Darat, A.F. and Mukherjee. T.K. (1987). "The Behaviour of a Stock Market in a Developing Economy". *Economic Letters*, 22,, 273-278.
7. Gan, C., Lee, M., Au Yong, H. H., & and Zhang, J. (2006). *Macroeconomic Variables And Stock Market Interactions: New Zealand Evidence. Investment Management and Financial Innovations*, Vol. 3, Issue 4: , 89.
8. Kwon and Tai S. Shin. (1999). "Cointegration and Causality between Macroeconomic Variables and Stock Market Returns". *Global Finance Journal*, 10:, 71-81.
9. Naka, Mukherjee and Tuft. (2001). *Microeconomic Variables and the Performance of the Indian Stock Market*, University of New Orleans, USA.
10. Pethe and Ajit Karnik. (2000). *Do Indian Stock Markets matter? Stock Market. Economic and Political Weekly*, 35(5), 349-356.
11. Shah A, Thomas A. (1997). *Securities Market towards Greater Efficiency, in KS Parikh. Indian Development Report 1997, OUP.*
12. Stanley Morgan. (2002). "FII's influence on Stock Market". *Journal of impact of Institutional Investors on ism. Vol 17.*
13. Yahyazadehfar M, Babaie A. (2012). *Macroeconomic Variables and Stock Price: New Evidence from Iran. Middle-East Journal of Scientific Research*, 11 (4):, 408-415.

Websites

- www.bseindia.com
- www.investing.com/www.rbi.org.in
- www.census.gov.in
- www.tradingeconomics.com
- www.moneycontrol.com
- www.allbankingsolutions.com
- www.tradingeconomics.com
- www.X-rates.com

The Moderating Effect of Marital Status of Investors on The Relationship between Heuristics and Personality of Investors: A Study on Indian Equity Market

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Abstract

This study examines the moderating effects of marital status of investors on the relationship path between heuristics and personality bias factors of investors. The framework is tested using structural equation modeling and the data are from 742 retail investors from Indian equity market. The hypothesized relationships are tested using AMOS 17.0 through path analysis. The result of the Path analysis indicates that heuristics and personality bias factors play a major role in determining the investment decisions of investors. It is also found that marital status of the investors moderates the relationship between heuristics and personality bias factors of investors. Discussion and implications of the findings are delineated at the end of the article.

Keywords: Bias factors, Decision making, Equity investors, Marital status, Moderation effect.

Introduction

India has the highest saving rate of households than the rest of nations in the world. Around 50 percent of all savings locked in real estate and gold and the remaining 50 percent in financial assets, which includes only 4 percent of the total household savings in the equity market. According to the survey of SEBI sponsored household report (2011), only 11 percent of Indian households invest in equity, mutual funds, debt, derivatives and the other financial instruments in the market. Remaining 89 percent of household savings diversified into non-risky investments of banks, insurance, post office deposits, etc. Out of 11 percent of total household investors, 20 percent of investors belong to urban and 6 percent belong to rural India. In rural India, only 2 percent of investors are accessing the secondary market. Most of the investors perceive the equity investing as risky and similar to gambling. The preference of investors towards mutual funds is 43 per cent and secondary market is 22 per cent. In urban areas, 41 per cent of investors

invest in mutual funds and 21 percent in secondary markets, whereas, 46 percent of the rural population chooses mutual funds and 22 percent prefer secondary markets. Equity market plays a major role for companies to leverage and raise the debts for their projects. Hence, an efficient equity market forms a foundation of economic growth of the nation. Investors can get a maximum tax free return of 15-18 percent from the equity market. Investors of around 41 percent felt that they are getting inadequate information about the financial market and lacked investment skills, (SEBI survey report, 2011). Retail investors' participation in the equity cash market is very low, with more and more savings finding their way to properties, gold, risk-free avenues like bank deposits and high-yield debt instruments. The daily average volume of retail turnover is down to Rs 6,690 in 2011 - the lowest since 2005 and a 51% drop from the peak of Rs 13,709 crore in 2009. The daily average volume generated by retail investors was Rs 10,882 crore in 2010 and Rs 6,690 crore in 2011. As a percentage of the total population, the retail investor participation is just 1.3%, whereas in the US and China, it is

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27.7% and 10.5% respectively, (SEBI report 2011). SEBI has targeted an optimistic figure of 8% for retail participation in India. Retail investors have different backgrounds, experience and also varied motives. Some retail investors invest in the long-run, whereas others wish for short term investments. India has a very low percent of retail investor participation in the capital market. It needs to be increased. In order to achieve this, more awareness of capital market should be inculcated. The recent evidence suggests that investors should learn to control their behavioural biases in order to explore the rational market behaviour. Lo et al. (2005) suggest that any investor, who have given proper instruction and training, can achieve in the stock market. Institutional investors have superior market awareness and experience. Therefore, this study focuses on retail investors' behavioural biases and their decisions making process. More specifically, the study examines the relationship between heuristics and personality bias factors and also finds out whether the moderator variables (marital status of investors) moderates the relationship path between heuristics and personality of investors or not.

Review of Literature

Kahneman and Tversky (1974) are the pioneers in the area of behavioural finance have explored the various biases which affect investors' rational decisions. One such bias is heuristics. From the Greek dictionary, Heuristic means discover. Heuristics man is not capable to process all the information. Based on his experience only, he could act. This process creates rules of thumb. This can be applied, when the situation becomes uncertain and complex. This phenomenon is called as heuristics (Shefrin, 2000). Gilovich and Griffin (2002) identify six general purpose heuristics (affect, availability, causality, fluency, similarity and surprise) and six special purpose heuristics (attribution, substitution, outrage, prototype, recognition, choosing by liking and choosing by default). Later, Attribution and substitution was replaced by representativeness and anchoring- adjustment. According to affect heuristic theory, affective impression is used to make quicker decisions than judging probability, when the decisions are complex or uncertainty (Macgregor et al., 2000). Forgas (1995) indicated that decision characteristics like risk and uncertainty determine the importance of feelings. Traditional finance lacks the exclusion of heuristics, and takes all decisions based on rational statistical tools (Shefrin, 2000). But behavioural finance argued that heuristic is helpful for better and quick decision making. Heuristics means "rule of thumb" formed by individuals in making investment decisions. They categorize investors' heuristics as Representativeness, Availability, Anchoring and Adjustment. Ganzach and Krantz (1990, 1991), Czaczkes and Ganzach (1996), Amir and Ganzach (1998) and Pompian (2006)

have made a reasonable contribution to the development of these heuristic factors. Later Hersh Shefrin (2000) consolidated heuristics as Representativeness, availability, Anchoring and Adjustment, Overconfidence and Conservatism. Simultaneously, Kahneman and Tversky (1981) framed 'prospect theory' in which they explain individual frames to affect their decisions. Afterwards, researchers from behavioural finance have finalized the individual's framings as loss aversion, concurrent decisions, hedonic editing, money illusion and ego mastery. Since heuristics and framings are major behavioural bias factors, therefore it would be claimed as facts to notice out its influence on individual's investment decisions. These factors were taken to study the deeper understanding of how these variables, particularly influence retail investors' investment decisions.

During the past several decades, researchers across the world have analyzed the behaviour of investors and their decision making process. Several research works have sought to raise the understanding of how people make investment decisions in different ways. After emerging of behavioural finance, these research works have given importance. Today an extensive body of literature exists that tries to explain how individual characteristics influence the behaviour of investors. Just saying how personality influences their investment decisions. According to Phares (1991), 'Personality is that form of characteristic views, opinions, and behaviour that differentiates one person from another and that persists over time and situation'. It is the core of biological based and learnt behaviour which makes the person's unique responses to environmental stimuli (Ryckman, 1982:4-5). Investors' investment decisions are extremely determined by certain factors like environment, humor, emotion and knowledge. Personality is the sum of all these variables. The big five personality traits explain, inter individual variation in behavioural propensities. The major contribution of single personality (BIG-FIVE MODEL) given by P.T. Costa and R.R. McCrae, (1992). They are categorizing investor's personality as Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. Many researchers use this theory is the fundamental to analyze individual's personality with regard to decisions making process.

Previously, personality has been described and evaluated by a range of theories and models. Freud, (1996) and Jung, (1986) seek to explain the dynamics of personality as a whole. Different levels of consciousness are one such work of Freud, which was appreciable by the psychologist. The dispositional theory of personality depicts that physiological traits are the basic components needed for personality development. Among the personality theories, trait theory becomes more and more

popular. The root word of personality is related to genetics and neurological processes. Traits can be described as tendencies to behave and react in a specific way (Phares, 1991: 254). Some argue that traits and situation define the individual's personality. A high emotional person becomes more calm and stable persons to feel anxiety in a threatening evaluation situation. Traits can thus be described as dispositions to states (Humphreys & Revelle, 1984). According to Sadi, Ghalibaf, Rostami, Gholipour, & Gholipour, (2011), personality plays a significant role in determining the behaviour of investors. Marilyn MacGruder, Barnewall categorized investors into two types: active and passive investors. Active investors are creating the wealth, whereas passive investors are safeguarding their ancestors' wealth. Bailard, Biehl and Kaiser (BB&K) developed Five-Way Model to replace the Barnewall concept of personality. They classified investors in two dimensions: Level of confidence and Method of action. Level of confidence refers to the investor confident state and method of action refers to the approach towards a decision making. Based on these two dimensions, Bailard, Biehl, & Kaiser, (1986) classified investors as Adventure, Celebrity, Individualistic, Guardian and Straight Arrow. Psychographic model of Myers-Briggs Type Indicator (MBTI) test the investor's personality by using certain personality questionnaires. Filbeck, Hatfield and Horvath (2005) use the Myers-Briggs Type Indicator to assess risk tolerance of different personality characteristics. Their findings confirm that personality type does explain some aspects of investment behaviour. Although some studies use specific measures of personality in explaining investor behaviour. Costa and McCrae, (1992a, 1995, 1997); Digman, (1997); Goldberg, (1992); McAdams, (1992) framed the big five model of personality. The personality taxonomy of the Big Five is generally considered the most inclusive and accepted, particularly for applied research (Barrick and Mount, 1991; Hogan and Hogan, 1991). The five dimensions (extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience) were derived from years of statistical analysis and considered stable across situations and cross-culturally applicable. Almost all of the personality tests existing today measure one or more of the five factors (McCrae & John, 1992). Neuroticism measures affect and emotional control. Low levels of neuroticism indicate emotional stability, whereas high levels of neuroticism represent the possibility of experiencing negative emotions. Persons with high levels of neuroticism are reactive, unstable, worried, unpredictable and sad. Resistant persons on the other hand need strong stimuli to be provoked (Howard & Howard, 1995). The term neuroticism does not necessarily refer to any psychiatric defect. A more proper term could be negative affectivity or nervousness (McCrae & John, 1992). Extraversion measures adventurous, assertive, frank, sociable and talkative. Introverts are described as quiet, reserved, shy and unsociable (Costa & McCrae, 1992: 49).

Openness to experience is a measure of depth, breadth and variability in a person's imagination and urge for experiences. The factor relates to the intellect, openness to new ideas and cognitive experiences. People with a high openness to experience have broad interests, are liberal and innovative. The preservers with low openness to experience are conventional, conservative and prefer familiarity (Howard & Howard, 1995). The agreeableness scale is linked to altruism, nurturance, caring and emotional support versus competitiveness, hostility, indifference, self-centeredness, spitefulness and jealousy (Howard & Howard, 1995). Agreeable people can be described as altruistic, gentle, kind, sympathetic and warm (Costa & McCrae, 1992: 49). Conscientiousness is a measure of goal-directed behaviour and amount of control over impulses. Conscientiousness has been linked to awareness and carefulness. The focused person concentrates on a limited number of goals, but strives hard to reach them, while the flexible person is more impulsive and easier to persuade from one task to another (Howard & Howard, 1995). The more conscientious a person is, the more competent, dutiful, orderly, responsible and thorough (Costa & McCrae, 1992: 49).

Research Methodology

Sample design is a technique or the procedure the researcher would adopt in selecting items for the sample. The sample design to be used must be decided by the researcher taking into consideration the nature of the inquiry and other related factors (Kothari C.R., 2004). Retail investors who are accessing the Indian equity market from the Tamilnadu are taken as the sample unit. Details of broking firms are collected through SEBI and BSE/NSE websites. Based on the information collected from these sources, a consolidated list of broking firms is prepared, which is considered to be the sample frame of this study. As the study calls for analysis and rendering of data without any subjective action, this can be viewed as a descriptive survey. The size of populations of this study is very high. In order to simplify the sample selection process, Multi stage sampling technique is employed. Under multi stage sampling method, the following steps are adopted to select the samples for this study. Initially, 32 districts in Tamilnadu state are segmented into five zones as North, South, East, West and the Central part of Tamilnadu. For each zone, one place or city is selected based on the criteria of investors are highly accessing the capital market from that place. Places randomly selected for this study are Chennai, Coimbatore, Trichy, Madurai, and Tirunelveli. After selecting the place, leading broking offices are identified in each place to collect a target data. Five broking offices are randomly selected to collect the target data. They are Aditya Birla money limited, Reliance money, Sharekhan, India info-line and HDFC Securities. Investors who access the equity market from these places are taken as a sample population for this study. Each

broking firm was targeted at 32 questionnaires. Questionnaires were given to respondents directly to collect the data, when they visit the broking offices. From the 800 questionnaires, 780 responses were received, out of which 38 were excluded because of incomplete data or response bias of extreme values. The remaining usable questionnaires were 742. This stands for an effective response rate of above 90 percent of the entire sample. Hence the sample size for this study is 742.

Relationship between Heuristics and Personality

Heuristic factors are studied by using the six variables. They are and aversion to ambiguity (H1), representativeness (H2), overconfidence (H3), anchoring (H4), adjustments (H5) and conservatisms (H6). Investors' different personality variables are taken as Agreeableness, Conscientiousness, Openness, Extraversion and Neuroticisms. For the use of simplicity, these variables are taken as P1, P2, P3, P4 and P5. Relationship between investors' Heuristics and their investment personality are explored through the following SEM model 1.

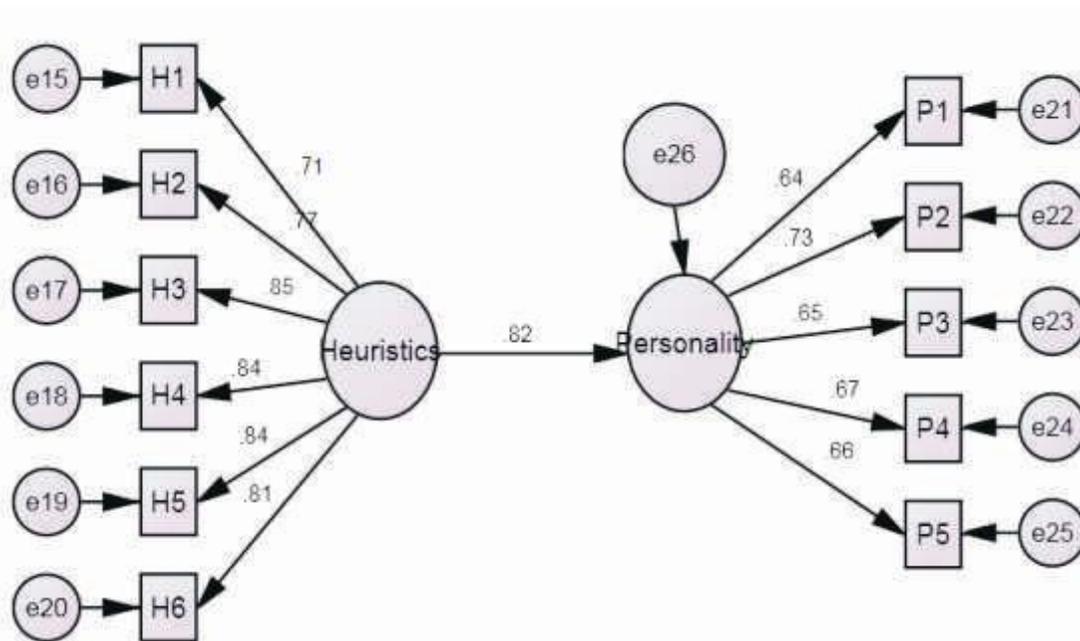


Figure 1: Relationship Model of Investors' Heuristics and Personalities

Table 1: Result of Model

Independent variable	Dependent variable	Path coefficient	Standard error	t- value	P- value
Heuristics	Personality	0.82	.053	15.47	.000

The table 1 shows the value of path coefficient as 0.82, standard error as 0.053 and t-value as 15.47. The p-value is 0.000, which

explores the relationship is significant. It indicates that there is a positive causal relationship between Heuristics and Personality.

Table 2: Result of Goodness of Fit

Model	Normed Chi-square	P-value	GFI	AGFI	NFI	CFI	RMSEA
Study model	5.063	0.000	.94	.91	.94	.95	.078
Recommended value	5	.05	0.90	0.90	0.90	0.90	1

The table 2 shows the value of various goodness-of-fit indices. The normed chi-square is 5.063, RMSEA is 0.078, GFI is 0.94, AGFI is 0.91, NFI is 0.94 and CFI is 0.95. These values fall within its threshold limit. This confirms that the available data set perfectly fits into the model.

Moderation Effect

The SEM analysis, Zhao and Cavusgil (2006) technique of evaluating moderator effect was adopted in this research. According to Zhao and Cavusgil (2006), a two-group model is used because it could determine whether a moderator moderates the correlation between two factors. The sample was split into 2 groups as heuristics and personality bias factors.

Marital status of investors are defined as unmarried and married. A two group AMOS model was used subsequently so that it could be determined whether or not there was any significant difference in structural parameters between the unmarried group and the married group behaviour group. The following hypothesis is framed to test the moderating effect of marital status on Heuristics and Personality relationships.

Hypothesis: Investors’ marital status moderates the relationship path between Heuristics and Personality factors.

Relationship between Heuristics and Personality of investors with the help of moderator marital status are displayed in the following figure 2.

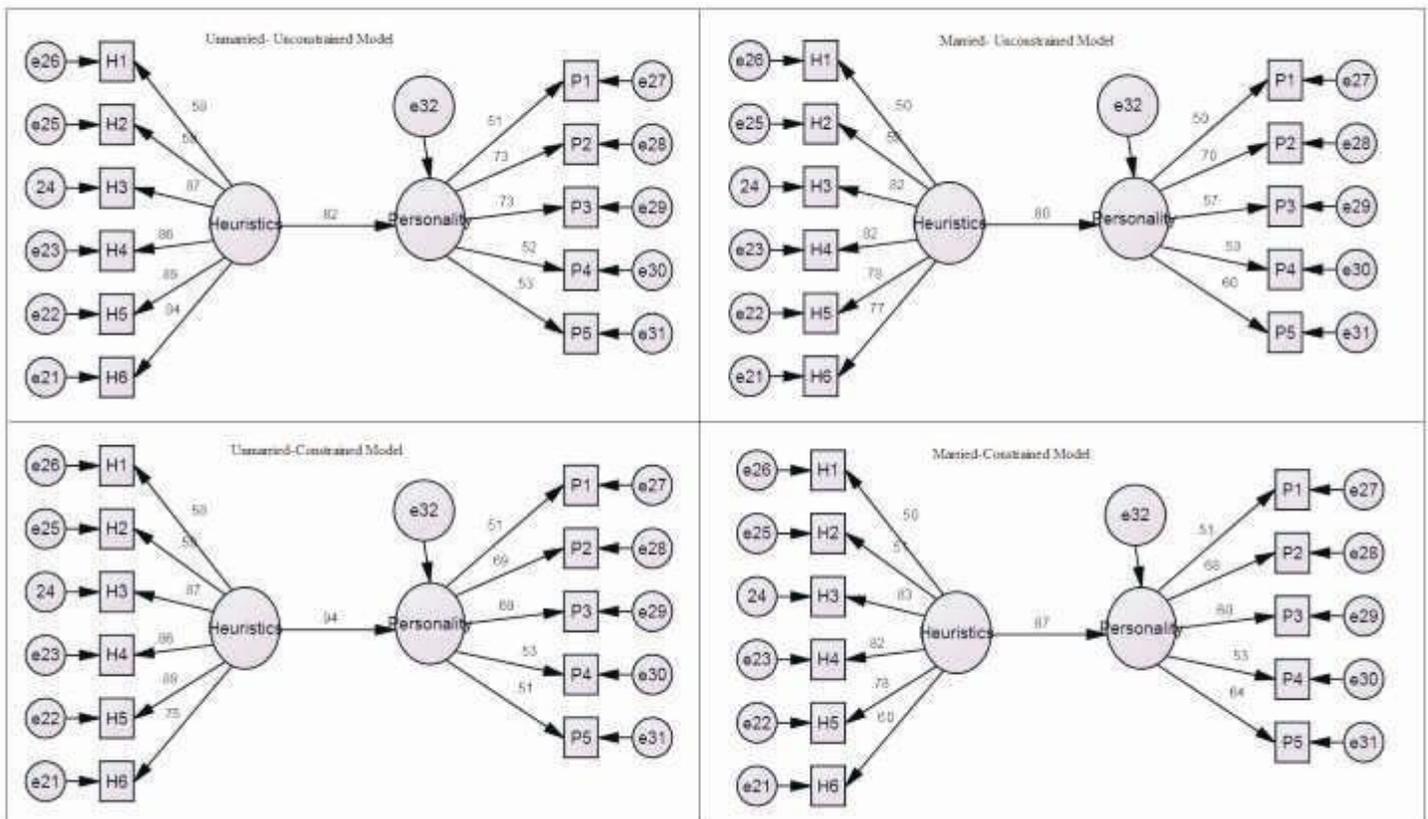


Figure 2: Moderating Effect of Path between Heuristics and Personality

Table 3: Results of Moderating Effect of Unmarried Group data

	Constrained model	Un Constrained model	Chi-square Difference	P value	Result on Moderation	Result on Hypothesis
Chi-square	180.376	150.398	29.978	0.000	Significant	Supported
Df	42	41	1			
GFI	.871	.917	Investors' unmarried marital status variable is significant on constrained and unconstrained model			
AGFI	.814	.867				
CFI	.90	.94				
RMSEA	.096	.075				
CMIN/DF	4.294	3.668				

The difference in chi square value is 29.978, while the difference in degree of freedom is 1. For the test to be significant, the difference in chi square value must be higher than the value of chi-square with 1 degree of freedom, which is 3.84. Table 3

explores that the chi-square difference (29.978) is higher than 3.84 and p value is significant. Further all the fit indices meet its threshold limit. From these findings, it concludes that the moderation test for unmarried group is significant.

Table 4: Results of Moderating Effect of Married Group Data

	Constrained model	Un Constrained model	Chi-square Difference	P value	Result on Moderation	Result on Hypothesis
Chi-square	187.425	130.024	57.401	0.000	Significant	Supported
Df	42	41	1			
GFI	.888	.945	Investors' married marital status variable is significant on constrained and unconstrained model			
AGFI	.850	.911				
CFI	.893	.859				
RMSEA	.090	.071				
CMIN/DF	4.463	3.269				

The difference in chi square value is 57.401, while the difference in degree of freedom is 1. Table 4 reveals that the chi-square difference (57.401) is higher than 3.84 and p value is significant. Besides, all the fit indices criteria meet its recommended limit. From these findings, it concludes that the moderation test for married group is significant.

level. Hence it concludes that marital status variable moderates the relationship path between Heuristics and Personality of investors.

Comparing The Group Effects for A Moderator Variable

Table 4 explores that the chi-square difference between constrained and unconstrained model of both the married and unmarried group is larger than the recommended limit of 3.84. Further, the significant value is less than 0.05. These findings suggest that the marital status groups are different at the model

The standardized estimate of the two groups are compared to find out which group contributes high as a role of moderator to determine the relationship path between Heuristics and Personality of investors.

Table 5: Standardized Coefficient of Relationship between Heuristics and Personality of investors

Groups	Standardized beta estimates	Sig value (p)	Result of Moderation
Married	.82	.000	Supported
Unmarried	.76	.000	Supported

The standardized beta estimate for married group is 0.82, while the same estimate for unmarried group is 0.76. Further the p values of two groups are statistically significant. From these findings, it can conclude that the effect of Heuristics on personality is more pronounced in married group compared to unmarried group. Here, both the estimates of marital status groups are significant. This signifies that partial moderation exist the path between Heuristics and Personality of investors.

Conclusion

The present study examined the moderating effects of marital status of investors on relationship between heuristics and personality bias factors. The study results demonstrate that investors' heuristics and personality bias factors have shown a positive relationship of determining the investment decisions of investors. The current study also explored that marital status of the investors moderates the relationship path between heuristics and personality of investors. The major outcome of the research is the data used in this study have strongly supported the theorized model and the hypotheses well. This study encourages the academic practitioners for healthy arguments on the theory and proposition, measurement scale, way of approaching the research works and managerial implication. The major implications of this study will be useful to retail investors to understand the behavioural bias factors and its influence on their investment decisions. This study attempts to find out the causal relationship between the behavioural bias variables with the help of structural equation models. The pictorial relationship model enriches the knowledge of retail investors to rectify the errors and biases in making investment decisions.

Scope of Future Research

This study focused only two behavioural biases and its relationships on the decisions making process of the investors. There is more number of behavioural bias factors influencing equity investors' investment decisions. Future studies can include other behavioural biases and its impact on equity investor investment decisions. Further, this study can be extended to include other categorical variables to find out the moderation effect of categorical variables on relationship between behavioural bias factors are the promising area of future research related to this study.

References

1. Ami, E., & Ganzach, Y. (1998). *Overreaction and under reaction in analysts' forecasts*. *Journal of Economic Behavior & Organization* 37, 333-347.

2. Bailard, Biehli, & Kaiser. (1986), "Personal Money Management", *Science Research Associates Journal*, Vol. 1, pp. 25-25.
3. Barnewall, M. M. (1987), *Psychological Characteristics of the Individual Investor*. In W. Droms, *Asset Allocation for the Individual Investor*, (pp.16-24). Charlottesville: *The Institute of Chartered Financial Analyst*.
4. Barrick, M. R., & Mount, M. K. (1991), *The Big Five personality dimensions and job performance: A meta-analysis*. *Personnel Psychology*, Vol. 44, pp. 1-26.
5. Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: *Psychological Assessment Resource*.
6. Czaczes, B., Ganzach, Y., (1996). *The natural selection of prediction heuristics: Anchoring and adjustment versus representativeness*. *Journal of Behavioral Decision Making* 9, 125-140.
7. Digman, J. M. (1990), *Personality structure: Emergence of the five-factor model*. *Annual Review of Psychology*, Vol.41, pp. 417-440.
8. Gilovich, T., Griffin, D., & Kahneman, D. (2002), *Heuristics and Biases*, (pp. 16-19). New York: *Cambridge University Press*.
9. Goldberg, L. R. (1992), *The development of markers for the Big-Five factor structure*. *Psychological Assessment*, Vol. 4(1), pp. 26-42.
10. Hogan, R., & Hogan, J. (1991), *Personality and status*. In D. G. Gilbert & J. J. Connolly (Eds.), *Personality, Social Skills, and Psychopathology: An Individual Differences Approach* (pp. 137-154), New York: *Plenum Press*
11. Humphreys, M.S., & Revelle, W. (1984), *Personality, motivation, and performance: a theory of the relationship between individual differences and information processing*. *Psychological Review*, Vol. 91, pp. 153-184.
12. Kahneman, D.; Tversky, A. (1972). *Subjective probability: A judgment of representativeness*. *Cognitive Psychology* 3 (3): 430-454.
13. Tversky, A. (1979). *Prospect theory: An analysis of decisions under risk*. *Econometrica* 47 (2): 263-291.
14. Forgas, J. P. (1995), *Mood and judgment: the Affect Infusion Model (AIM)*, *Psychological Bulletin*, Vol. 117, pp.39-66.
15. Kahneman, Slovic, & Tversky, (1981) Kahneman, D., Slovic, P., & Tversky, A. (1982), *Judgment under Uncertainty: Heuristics and Biases*. New York: *Cambridge University Press*.
16. Freud, S. (1996). *Samlade skrifter. 1. Forelasningar: orientering i psykoanalysen*. In D. Titelman, (Ed.). Stockholm: *Natur och kultur*.
17. Jung, C. G. (1986). *Jaget och det omedvetna*. (2nd. ed.) Stockholm: *Wahlström & Widstrand*.

18. MacGregor, Donald G., Paul Slovic, David Dreman, and Michael Berry. (2000), *Imagery, affect, and financial judgment*. *Journal of Psychology and Financial Markets* 1, no. 2:104-10.
19. McCrae, R. R., & Costa, P. T. (1985b). *Openness to experience*. In R. Hogan & W. H. Jones, *Perspectives in personality* (Vol. 1, pp. 145-172). Greenwich, CT: JAI Press.
20. McCrae, R. R., & Costa, P. T. (1987). *Validation of the five-factor model of personality across instruments and observers*. *Journal of Personality and Social Psychology*, 52, 81-90.
21. Phares, J. E. (1991). *Introduction to Personality* (3rd Ed.) New York: Harper Collins.
22. Ryckman, R. (1982). *Theories of personality*. (2nd/ ed.) Monterey, CA: Brooks/Cole.
23. Sadi, R., Ghalibaf, H. A., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). *Behavioural Finance: The Explanation of Investors' Personality and Perceptual Biases Effects on Financial Decisions*. *International Journal of Economics and Finance*, Vol3, No 5.
24. Shefrin, H., (2000). *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing*. Boston: Harvard Business School Press.
25. Tversky, A., & Kahneman, D. (1974). *Judgement under uncertainty: Heuristics and biases*. *Journal of behavioral Science*, 185, 1124-1131.

Understanding Emotional Intelligence and It's Impact on Job Satisfaction in IT Sector in India

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Abstract

In the past leaders used to neglect emotions in the workplace but today they realize that emotions are very much a part of workplace success. How individuals react to real situations every day and what organizations actually do to cultivate beneficial emotional responses can make wide difference between the organization that staggers and the organization that successfully survives. In this era of globalization competition in the workplace is violent and many new recruits feel a need to make use of aggressive tactics to get ahead of their peers. Many of the organizations are searching for new ways to turn negative emotions into positive that could result in productive behavior.

This research paper focuses on understanding emotional intelligence and its impact on job satisfaction through certain working conditions that facilitate organizational learning. It also emphasizes on the conditions under which EI influences job satisfaction. This research is restricted to information technology sector which is one of the most dominating high-tech sectors that aids and supports the other sectors in some or the other way. IT companies targeted includes Infosys Technologies Limited (Hyderabad), HCL Technologies (Delhi), Camgemini (Mumbai), United Health Group. Responses from NIIT technologies, Siemens, Accenture, Tech Mahindra and a few others were also taken into account. The remedy for surviving turbulent times lies in the capabilities and performance of IT people.

Keywords: Emotional intelligence, organizational learning, job satisfaction, information technology.

Introduction

Emotional Intelligence refers to the ability to perceive ones' and others emotions in the right way, to evaluate and generate emotions so as to enhance thought, to understand and manage emotions so as to promote emotional and intellectual growth.

Emotional intelligence plays a very crucial role in the development and overall success of the employees. An employee having higher side of emotional intelligence would be able to manage and maintain good social relationships. In this era of high competitiveness it is being said that EQ (Emotional Quotient) is fetching more important than IQ (Intelligence Quotient).

Emotional Intelligence for Information Technology sector or high-tech organizations

The degree of Emotional Intelligence (EI) held by an IT professional is an important indicator of his successful direction

within a team and personal effectiveness within an organization. Personal and social competencies in Emotional Intelligence (EI) can have a direct impact on the technical and functional expertise of an individual.

With the increasing dependence on IT, communication and connection of IT with various other departments in the organization becomes essential.

Emotions control thoughts and thoughts further determine the approach towards the work. In IT, EI applied, can make significant difference in how speedily a team of people create, capture and deliver relevant information and help an organization achieve its vital objectives.

Learning the smart expertise of Emotional Intelligence is essential for individuals who wish to lead or hunt for positions of greater authority in organizations.

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The organizations these days are Checking employees on the basis of their Emotional intelligence .Companies are increasingly highlighting the need for "soft" skills, such as effective interpersonal communication, in addition to technical abilities. Emotional intelligence determines more than half of the performance at the work place. Thus besides having technical knowledge it is becoming essential to control ones emotions and understand others so that one can build up effective teams, bring flexibility and enhance the productivity of the organization.

Organizational learning becomes more effectual if it is done by emotionally intelligent employees.

Literature Review

Goleman (1998) said that Emotional Intelligence has proven to be twice as important as any other competency in any job role.

McClelland (1999) found that when senior managers had a critical mass of emotional intelligence capabilities, their divisions out performed yearly earnings goals by 20%.

George, J.M. (2000) reported that in Working with Emotional Intelligence, 80-90% of the competencies that differentiate top performers are in the domain of emotional intelligence.

John Wiley & Sons, Ltd. (2000) investigates in his study the relationship between the gender composition of an employee's work group and the employee's job satisfaction, using a random sample over 1600 U.S. workers.

Boyatzis (2002) found in research conducted in Deming Center for Quality Management that 50% of time wasted in business is due to lack of trust. In other words, emotional intelligence has a profound impact on productivity and individual success.

Lorenzo FariselH (2002) found that the power of EQ, or emotional intelligence, was even greater for the most senior team members. While on average EQ explains over 66% of the variation in performance scores, for the most senior team a member that increases to nearly 80%.

Dainy.N.garrison (2003) found in his study, "The Impact of Employee Attitudes on Market Response and Financial Performance" that how employee satisfaction and engagement drive an organization's bottom-line success, even if those employees have no direct contact with customers.

James R (2003) explored the emotion work of leadership, which was defined, as the need to manage ones owns emotions and to influence the emotions of others.

Semra Ayden (2005) explained the effect of emotional intelligence and its dimensions on job satisfaction and organizational commitment of nurses had been investigated in this study.

“Emotional competence and work performance: The mediating effect of proactivity and the moderating effect of job autonomy”; **Tae-Yeol Kim, Daniel M. Cable, Sang-Pyo Kim, Jie Wang**, Journal of Organizational Behavior Volume 30, Issue 7, pages 983-1000, October 2009. This paper proposes and tests a model where emotional competence influences work performance through employees' proactive behaviors toward their supervisors.

Objectives

This research would enable to generate results which would address the following:

- To understand the level of emotional intelligence of employees.
- To study the impact of emotional intelligence on job satisfaction of employees.
- To understand the impact of organizational learning capability on job satisfaction of employees.

Research Methodology

- **Research design:** Descriptive research, **Sample size:** 115 IT sector employees covering 4 IT companies, **Sampling technique:** Convenience sampling.
- **Data source: Primary data:** Collected major through online survey and personal survey. Personal responses in written were also considered. **Secondary data:** Research papers, newspaper, journals, internet.
- **Contact method:** In-depth interviews, **Interview:** Personal and telephonic, **Interviewee groups:** IT sector employee, **Questionnaire:** Mixed
- **Tools used:** MS Excel, SPSS 17.0.

- **To identify the level of emotional intelligence of employees**

Mean and standard deviation were computed for the data gathered through questions included in the questionnaire to quantify the emotional intelligence of employees. Mean (or weighted average) value for this data was considered as the average EI score of IT professionals. The standard deviation value indicates how tightly the individuals' EI scores are clustered around the mean.

- **To study the impact of emotional intelligence on job satisfaction of employees**

The response of the question specific for analyzing job satisfaction, “how much do you like your job” was taken into consideration. The mean of this value was taken as the average level of job satisfaction.

- **To identify the impact of organizational learning capability on job satisfaction of employees**

The set of questions included to identify the impact of organizational learning capability on job satisfaction of IT professionals were analyzed. Mean and standard deviation were computed to get the average value of job satisfaction derived from organizational learning capabilities and the distribution of the individuals’ standard deviation about the mean.

Analysis of Data

Testing The Questionnaire

Reliability Statistics	
Chronbach’s !lpha	N of Items
.884	37

The reliability score should be 0.70 or higher in order to use a psychometric instrument. The Chronbach alpha coefficient was found to be 0.884. As, 0.884 > 0.70, the questions included in the survey are reliable and fit to be used for the research.

Level of Emotional Intelligence of Employees

Descriptive Statistics			
	N	Mean	Std. Deviation
Negative feelings help me address what I need to change in my life.	115	3.75	1.025
I use both positive and negative emotions as a source of wisdom about how to navigate my life.	115	4.19	.700
I am able to motivate myself to try and try again in phase of setbacks.	115	3.91	.823
I am calm under pressure.	115	3.53	1.134
I am effective at listening to other people's problems.	115	4.10	.772
I can help people calm down in difficult situation.	115	3.94	.851
Some people make me feel bad about myself no matter what I do.	115	2.82	1.211
I am sensitive towards the emotional needs of others.	115	4.12	.818
People view me as an effective coach for others emotions.	115	3.90	.821
I try to be creative while facing the challenges in life.	115	4.21	.853
I respond appropriately to other people's moods, motivation and desires	115	4.03	.800
I cannot stop thinking about my problems.	115	2.80	1.272
I am capable of soothing myself after upsetting moments.	115	3.68	.923
I worry about things that other people don't even think about.	115	2.59	1.146
I need someone's push in order to get going.	115	2.87	1.136
Sometimes I feel my life is full of dead ends.	115	3.04	1.252
I am not satisfied with my work unless someone else praises it.	115	3.01	1.196
People who are aware of their negative feelings are better pilots of life.	115	3.78	.916
Valid N (list wise)	115		

Average of mean = Sum of means/18 = 64.27/18 = 3.57

Average standard deviation = Sum of standard deviation/18 = 17.649 = 0.9

Range of Emotional Intelligence Score or EI score:

Minimum EI score of an individual = (the minimum score for each variable) * (number of variables) = 1* 18 = 18

Maximum EI score of an individual = (the maximum score for each variable) * (number of variables) = 5* 18 = 90

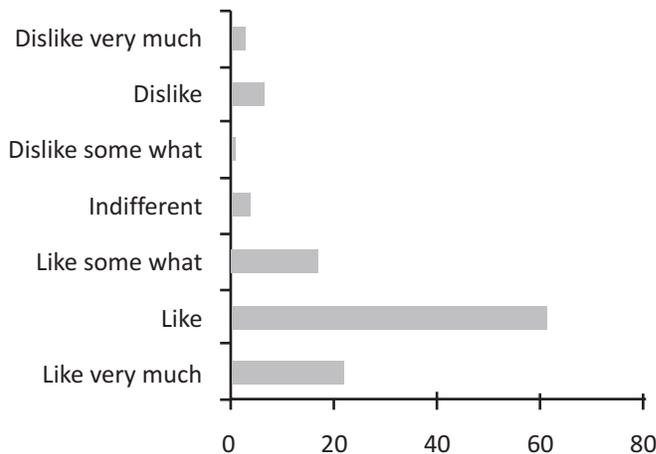
Thus, EI Score may range from 18 to 90 (higher scores indicate greater EI).

Average EI Score of an IT employee = (average of individual means) * (number of questions taken into consideration)
 = (sum of individual means) * 18/18 = sum of individual means = 64.27

Level of EI = 64.27/90 * 100 = 71.42% (approx)

Interpretation: The average EI score of the respondents was found to be 64.27. The EI score for this questionnaire was computed to range from 18 to 90. Thus, the level of emotional intelligence among IT employees is 71.42% as per the responses from the research sample. Comparing the average mean (=3.57) and average standard deviation (0.98), the value mean is greater than 3.5. As we have given “strongly agree” as the highest ranking among the possible values the Likert 5-point scale, the mean should be greater than 3.5 only then it would be considered that the employees are emotionally sensitive and their response would be considered as positive. The smaller value of standard deviation indicates the responses of the employees are closely bunched together and majority of them have a similar opinion towards each of the statements taken into account.

How much do you like your job?



Like very much	22	19%
Like	61	53%
Like some what	17	15%
Indifferent	4	3%
Dislike some what	1	1%
Dislike	7	6%
Dislike very much	3	3%

Descriptive Statistics			
	N	Mean	Std. Deviation
How much do you like your job?	115	5.57	1.421
Valid N (list wise)	115		

Most of the respondents are considered to have an above average liking for their job. The value of standard deviation came out to be 1.421. Lesser value of standard deviation

indicates that the responses are closely related and many of the respondents are having similar opinion on this statement.

Impact of Emotional Intelligence on Job Satisfaction of Employees

Descriptive Statistics			
	N	Mean	Std. Deviation
Salary	115	3.93	.953
Benefits	115	4.06	.930
Frequency and amount of bonuses	115	3.96	.892
Connection between pay and performance	115	3.79	1.047
Security and administration of your pension plans	115	3.62	.960
Workload	115	3.66	1.034
Flexibility of working hours	115	3.83	.954
Physical working conditions	115	4.21	.755
Opportunity of advancement	115	4.14	.972
Job security	115	3.93	.886
Ability to influence decisions those affect you	115	3.82	1.022
Opportunity to work on interesting projects	115	3.93	.934
Access to company sponsored training and seminars	115	3.98	.795
Transparency in company's policies	115	3.90	.982
Communication with your supervisor	115	4.15	.881
Your overall relation with your supervisor	115	4.17	.819
Your relationship with your peers	115	4.33	.631
Your overall satisfaction with your company	115	4.08	.880
Valid N (list wise)	115		

Average of mean = Sum of means/18 = 71.46/18 = 3.97
Average standard deviation = Sum of standard deviation/18 = 16.327/18 = 0.907

Findings

- The Chronbach's alpha coefficient for the 37 items is .884, suggesting that the items have relatively high internal consistency as a reliability coefficient of .70 or higher is considered "acceptable" in most psychometric tests.
- Majority of respondents were males who were young and working as trainees or were in the initial phase of their career having little or no work experience.
- Employees are satisfied to greater extent with the intrinsic benefits provided by the company like salary, benefits, amount and frequency of bonuses.
- Employees are satisfied with the extrinsic benefits provided by the company like participative management, flexibility of working hours, etc. but they expect better projects and career advancement opportunities which are very essential for growth of the employees on the basis of their potential as well as their interest.
- The level of emotional intelligence among IT employees was found to be 71.42% as per the responses from the research sample.

- 87% of the respondents had an above average liking for their job.
- The majority respondents are satisfied with what their organization is providing to them and the efforts they are taking to improve their job satisfaction.

Conclusion

Focusing on understanding Emotional Intelligence and its impact on the job satisfaction of the employees, this research mathematically computes the Emotional Intelligence Score prevailing in the IT sector. The level of emotional intelligence among IT employees was found to be 71.42% as per the responses collected. It was also found that 87% of the employees among the sample are happy with their job and like their work. Most of the respondents are even satisfied with their organization and the contribution of the organizations in satisfying its employees. Both intrinsic (e.g. salary, benefits, bonuses) and extrinsic factors (e.g. training, participation in decision making, workload) contributed positively to the job satisfaction of the employees still there is a scope of improvement.

Direction for Future Research

In the light of the results of this study, an increasing amount of work can be redesigned. It would be of academic and practical value to carry out similar studies in various other organizations using EI measure and performance appraisal instrument of a high technical standard. An interesting study would include the analysis of the ratings of EI competencies by family and friends. It is possible that the study would yield different significant correlations from the "others" feedback.

To better understand the relationship between EI, OLC and job satisfaction, new studies should be undertaken in other industrial sectors and cultures and with a variety of respondents. It would also be interesting to undertake qualitative research to interview those survey participants that clearly did not fit into the proposed relationships for EI, OLC and job satisfaction.

Bibliography

Research papers:

- <http://www.vikalpa.com/pdf/articles/2010/vol-35-1jan-mar-53-61.pdf>
- <http://www.maxwellsci.com/print/crjss/v3-22-27.pdf>

- <http://repositori.uji.es/xmlui/bitstream/handle/10234/18435/30739.pdf?sequence>
- <http://www.newdirectionsconsulting.com/pdfs/EmotionallIntelligence.pdf>

Books and Journals:

- Goleman, D. (2006) *Emotional Intelligence*. New York: Bantam Books
- Goleman, D. (1998) *Working with Emotional Intelligence*. New York: Bantam Books
- Malhotra Naresh, *Marketing Research*, Prentice Hall of India Private Limited, New Delhi, 5th edition.
- Emmerling, Robert J., Shanwal, Vinod K., Mandal, Manas K. (2008). *Emotional Intelligence: theoretical and cultural perspectives*. Nova Science Publishers Inc.
- Cranny, C. J., Smith, P., Stone, F. (1992) *Job satisfaction: how people feel about their jobs and how it affects their performance*. Lexington Books
- Cherniss, C. (2000a). *Emotional intelligence and organizational effectiveness*. In C. Cherniss & D. Goleman (Eds.), *the emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations (Vol. 1, pp. 3-12)*. San Francisco: Jossey-Bass.
- Tae-Yeol Kim, Daniel M. Cable, Sang-Pyo Kim, Jie Wang. (Oct 2009). *Emotional competence and work performance: The mediating effect of proactivity and the moderating effect of job autonomy*. *Organizational Behavior (Vol 30, Issue 7, pp. 983-1000)*

Websites:

- <http://www.emeraldinsight.com/journals.htm?articleid=1789521&show=abstract>
- <http://psycnet.apa.org/journals/apl/95/1/54/>
- <http://onlinelibrary.wiley.com/doi/10.1111/j.1751-9004.2010.00334.x/full>
- <http://www.newdirectionsconsulting.com/pdfs/EmotionallIntelligence.pdf>
- <http://en.wikipedia.org/wiki/Emotion>
- http://www.uncommon-knowledge.co.uk/psychology_articles/emotional_intelligence.pdf
- <http://giftedkids.about.com/od/glossary/g/intelligence.htm>

Seven is Greater than Eleven: The Strategic Game of Kurukshetra

K. Anbumani*

Abstract

Mahabharata, one of the most important Hindu epics, is an account of the life and deeds of several generations of a ruling dynasty called the Kuru clan. Central to this epic is the Kurukshetra War fought between two rival groups of this clan Pandavas and Kauravas over the succession conflict for the throne of Hastinapura and Indraprastha. The war was fought for 18 days. During the war, the Pandavas managed to raise a large army of seven divisions while their rivals, the Kauravas could raise an even larger army of eleven divisions. But finally only the Pandavas could win the war. Taking the managerial point of view, this article examines the strategy adopted by the Pandava's seven divisions army to triumph over the Kaurava's eleven division army.

Keywords: Strategy, Strategic management, Mahabharata, Kurukshetra war, Pandavas, Kauravas, SWOT analysis.

Introduction

Mahabharata, one of the most important Hindu epics, is an account of the life and deeds of several generations of a ruling dynasty called the Kuru clan. Central to this epic is the Kurukshetra War fought between two rival groups of this clan Pandavas and Kauravas over the succession conflict for the throne of Hastinapura and Indraprastha.

It is being estimated that the war was fought somewhere between 6000 BC and 500 BC based on the astronomical and literary information given in the book Jaya alias Mahabharata by its author Vyasa. The history of the Kurukshetra War is also traced to the Battle of the 10 Kings mentioned in Rigveda.

Kurukshetra, the battle field was identified to be situated in the modern state of Haryana. Mahabharata tells us that this site was chosen for the war as it was believed that a sin committed on this land would be forgiven on account of the sanctity of this

land. The war was fought for 18 days, the number of army divisions participated in the war was 18 and incidentally the chapters in Mahabharata are also 18.

The epic in general deals with diverse subjects such as economics, politics, history, geography, sociology etc. This article examines the work from its management perspective, especially the strategic management adopted during the war days.

Seven is greater than eleven?

During the war, the Pandavas managed to raise a large army of seven divisions. Contingents arrived from all parts of the country. The allies of the Pandavas army comprised the kings of Dwaraka, Kasi, Kekaya, Magadha, Chedi, Matsya, Pandya, and the Yadus of Mathura.

The Kauravas managed to raise an even larger army of eleven divisions. The allies of the Kauravas army comprised the kings of

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Pragjyotisha, Kalinga, Anga, Sindhudesa, Mahishmati, Avanti, Gandharas, Bahlikas, Kambojas and many others.

(The kingdom of Vidarbha, with its King Rukmi, Vidura, the ex-prime minister of Hastinapur and younger brother to Dhritarashtra, and Balarama were the only neutrals in this war). Each of their Akshohinis (army divisions) consisted chariots, elephants, horses and foot soldiers in a ratio of 1:1:3:5. Thus, each of these divisions were having

21870 chariots with riders,
21870 elephants with riders,
65610 horses with riders and
109350 foot soldiers

which resulted the combined number of warriors and soldiers in both armies approximately 3.94 million in all. Each Akshohini was under a commander, apart from the Supreme Commander who was the head of the entire army. Bhishma and Dhristadyumna were the Supreme Commanders of Kauravas and Pandavas army respectively.

Rules of Dharmayuddha

In the outset of the war, the two supreme commanders met and framed the following rules for the conduct of ethical war, Dharmayuddha;

- Fighting must begin no earlier than sunrise and end exactly at sunset.
- More than one warrior may not attack a single warrior.
- Two warriors may 'duel', or engage in prolonged personal combat, only if they carry the same weapons and they are on the same type of mount (on foot, on a horse, on an elephant, or in a chariot).
- No warrior may kill or injure a warrior who has surrendered.
- One who surrenders becomes a prisoner of war and will then be subject to the protections of a prisoner of war.
- No warrior may kill or injure an unarmed warrior.
- No warrior may kill or injure an unconscious warrior.
- No warrior may kill or injure a person or animal not taking part in the war.
- No warrior may kill or injure a warrior whose back is turned away.
- No warrior may attack a woman.
- No warrior may strike an animal not considered a direct threat.
- The rules specific to each weapon must be followed. For example, it is prohibited to strike below the waist in mace warfare.
- Warriors may not engage in any unfair warfare.

Formations used in the war

At various times during battle, the supreme commander of either army ordered special formations - vyuhas. Each formation had a specific purpose; some were defensive while others were offensive. Each formation had its specific strengths and weaknesses. The Mahabharata lists the following:

1. *Krauncha vyuha* (heron formation)
2. *Makara vyuha* (crocodile formation)
3. *Kurma vyuha* (tortoise or turtle formation)
4. *Trishula vyuha* (trident formation)
5. *Chakra vyuha* (wheel or discus formation)
6. *Kamala vyuha or Padma vyuha* (lotus formation)
7. *Garud vyuha* (eagle formation)
8. *Oormi vyuha* (ocean formation)
9. *Mandala vyuha* (galaxy formation)
10. *Vajra vyuha* (diamond or thunderbolt formation)
11. *Shakata vyuha* (box or cart formation)
12. *Asura vyuha* (demon formation)
13. *Deva vyuha* (divine formation)
14. *Soochi vyuha* (needle formation)
15. *Sringataka vyuha* (horned formation)
16. *Chandrakala vyuha* (crescent or curved blade formation)
17. *Mala vyuha* (garland formation)

During the war, different fighters had chosen different weapons of their choices. For example the bow was used by Arjuna, Bhishma, Drona, Karna and Abhimanyu, the mace was used by Bhima and Duryodhana, the spear was chosen by Yudhistira and Shalya and the swords were used by Nakula, Sahadeva, and Uluka.

Now the big question before us is how the Pandavas with just seven Akshouhins (divisions of army) could overpower and succeed the Kauravas army which comprised eleven Akshouhins? **The answer lies in the strategy adopted by Arjuna** as per the wise counseling of Krishna.

What is a Strategy?

"The process by which objectives of an organization are formulated and achieved is known as strategy."

The term strategy was derived from the Greek word 'Strategos' which means 'the art of generalship to fight in a war'. Top management of organizations are mainly concerned with the selection of a course of action from among different alternatives to meet their organizational objectives where their **strategy would serve as the means to achieve the objectives**. Given below are their SWOT analysis and the description of the strategies followed by both the armies in the Kurukshetra war to achieve their own objectives.

SWOT Analysis of Pandavas

<p>Name of the Organization: Pandavas Inc. Registered Office at: Indraprastha Chief Executive Officer: Arjuna Akshauhinis (Army Divisions): Seven</p>	<p style="text-align: right;">Head Quarters & President: Yudhishthira alias Dharma Strategist: Krishna Supreme Commander: Dhristadyumna</p>
No. of	
Strengths	
<ol style="list-style-type: none"> 1. Krishna, the master of crisis management was the prime counselor and strategist. 2. All the allies in the war were close relatives and friends with personal attachment. (Drupad and Dhristadyumna were the father-in-law and brother-in-law of Pandavas, respectively). 3. Brought up in a matriarchal environment by Kunti and Draupadi, which made Pandavas more controlled, truthful and gentle. 	
Weaknesses	
<ol style="list-style-type: none"> 1. Not in political power for the past 13 years, just then they had completed 12 years of Vanvas and 1 Year Agyatvas. 2. No financial strength as they were on exile for a long period now. 3. Could not mobilize sufficient army. The enemies had managed 11 akshauhinis of army while the Pandavas could arrange only 7, hence it would be a war between armies of unequal strength. 	
Opportunities	
<ol style="list-style-type: none"> 1. Many small kingdoms subdued by Karna and Dhuryodhana were readily supported the Pandavas team. 2. Shikhandi had taken birth only to kill Bhishma and Pandavas could use him in the warfront. 3. Dhristadyumna had been waiting for the opportunity to kill Drona due to personal revenge whom the Pandavas could use in the war. 	
Threats	
<ol style="list-style-type: none"> 1. Mighty warriors Bhishma (Grand person of the clan), Drona (Teacher) Karna (Brother) were with Kauravas. It was physically doubtful to overpower them. Also it was mentally painful to fight with these respectful personalities. 2. It was a life or death fight for self respect. If they were defeated in the war, then their entire patience would go waste and they would again become homeless. 	

SWOT Analysis of Kauravas

<p>Name of the Organization: Kauravas Inc. Registered Office at: Hastinapur Chief Executive Officer: Duryodhana No. of Akshauhinis (Army Divisions): Eleven</p>	<p style="text-align: right;">Head Quarters & President: Dhritarashtra Strategist: Shakuni Supreme Commander: Bhishma</p>
No. of	
Strengths	
<ol style="list-style-type: none"> 1. Bhishma, the respectful elder of the clan was their prime counselor and strategist. 2. They were in power for the past 13 years and were therefore strong both politically and economically. 3. Kauravas could manage to mobilize 11 akshauhinis of armies (including the 2 divisions of Narayani Sena provided by Krishna) with which they could easily annihilate the enemies. 	
Weaknesses	
<ol style="list-style-type: none"> 1. Though they were in power for the past 13 years ruling both Hastinapura and Indraprastha, they hardly had any war experience. Nor they could mingle with common people. Their sophisticated luxury life might not be helpful in war front. 2. Brought up in a patriarchal environment by Dhritarashtra and Shakuni (Gandhari had very little to say in their growth and behavior) which made them uncontrolled, adamant and rough in behavior which brought many haters for them. 3. There was a lack of cooperation, coordination between the team members which made the collective decision making or execution impossible (for example Bhishma and Karna did not like each other) 	

Opportunities
<ol style="list-style-type: none"> 1. Karna was waiting for a long time to kill !rjuna the main contender and he had obtained a special 'shakti weapon' from Indra just for this purpose only which the Kauravas could utilize. 2. The Indraprastha had been under the control of Kauravas for the past 13 years. Now if they could defeat the Pandavas, it would permanently come under their control. So, they must defeat the Pandavas either hook or by crook.
Threats
<ol style="list-style-type: none"> 1. Krishna, the most unpredictable person was with Pandavas. He was a real threat to the Kauravas whose strategic guidance could be a real threat. 2. All the allies in the war were friends and kings from far off places. It might create unexpected logistics problem during the war. If it happens, it would be a tough task.

Vision of the Top Management

Pandava: Yudhisthira was the President of the Pandava Inc. He was a man of great vision, values and integrity and was always respected by others for his impeccable adherence to truth and Dharma. The poisonous pond incident where he had requested Yamadharma to give life to Madri's son is one popular example. Yudhisthira used his image in a great manner as on the first day of war he applied a great strategy. He went over to Kaurava's to take blessing from Elders and in return he got the secret of defeating them. (Remember the case of Bhishma). This helped them to gain strategic advantage over Kaurava Inc.

He was a strong leader who had full control on his brothers who were ready to follow him in each step. He anticipated the war at an early stage and had started preparations for the same, well in advance.

Kaurava: Dhritarashtra was the President of the Kaurava Inc. He was a man of poor vision and values and was unable to override his weakness for his sons. He was a weak leader who had no control over the activities of his sons Duryodhana et al. He remained silent during the dice game in which Yudhisthira lost everything and Draupadi got insulted in public. Nor he had anticipated the outcomes of these humiliations which eventually paved the background for the war.

Converting Weakness into Strength

Pandava: The members of Pandava Inc. had utilized their exile period wisely and converted their weakness into strength. Arjuna had acquired 'divya astras', Bhima met with his brother Hanuman and took his blessings thus enhanced his powers and Yudhisthira formed the strategy of war by taking teaching from different Rishis. He had also learned the art of dice game from Gandharva Chetrasena during these days so that he would not be defeated by any one in dice game again.

Kaurava: The members of Kaurava Inc. had wasted their period of reign in inadvertently converting their strengths into

weaknesses. For example, during this period Karna had made a nationwide conquering of several countries on behalf of Duryodhana which caused greater wastage of human resources and money on the one hand and more importantly it had created a number of new enemies on the other hand.

Peace Dialogue Strategy

Pandava: When the Pandava Inc. received sufficient signals for the commencement of the war from the opponents, they had not readily started war declaration until a full and complete chance was given to the enemies for amicable solution. As advised by Balarama an ambassador was sent to Hastinapuram for peace dialogue with the Kaurava Inc. authorities, but Arjuna without waiting for their reply, simultaneously started mobilizing allies and weapon for the war.

This is not strange that countries go for both the peace dialogue and strategic war preparations simultaneously. We have seen that on December 7, 1941, the ambassadors of Japan were making peace dialogue with America and no sooner the dialogue was over the Japanese attacked the Pearl Harbour of America. Thus, peace dialogues may be taken as the time gaining technique by the war parties to make necessary preparations. In case of Kurukshetra war also this dialogue stage was helpful to Arjuna for making necessary war planning and logistics preparations.

Strategic thinking

A good strategist is one who knows the strengths and weaknesses of the competitors and exploits them in appropriate time. He should also help the organization to avoid any potential risk in its operations and should find ways to recover if it is in risk.

Pandava: Krishna was the chief strategist of the Pandava Inc. He had always made strategies to benefit the whole organization in the long run rather than the short run. For instance, he offered 2

Akshouhinis of his Narayani Sena to Kaurava Inc. as desired by Duryodhana to make them content and comfortable in the short run, only to give success to Pandava Inc. in the end.

Had he given his 2 Akshouhinis Pandava side, size of the armies of both sides would have been equal as it would have made;

Kaurava Army = 11-2 = 9 Akshouhinis

Pandava Army = 7+2 = 9 Akshouhinis

This he had deliberately avoided but in the end his strategies helped the Pandava Inc. commanders to kill Bhishma, Dronacharya, Karna and Duryodhana in the war and to reap the success.

Kaurava: Shakuni was the chief strategist of the Kaurava Inc. He was always biased, relying unfair practices and used to think about the welfare of Duryodhana (the CEO) only not the organization as a whole. He was short sighted and unable to focus on the long term results. He was responsible for the failure of the strategy due to which all the top leaders of Kaurava Inc. had travelled in the path of death in the war.

Effective Decision Making

Pandava: Decision making is the art of taking right decision at the right time. One should be wise enough to grab the opportunity at the right time to gain advantage over the competitors. Arjuna was a wise and mighty commander in the Pandava Inc. He had chosen Lord Krishna over his Narayani Sena which was given to Duryodhana. This came to be a masterstroke in the entire process of Kurukshetra war.

Kaurava: Good decisions in organizations would be taken only when the decision maker is wise, having great level of concentration and low level of anxiety whereas Duryodhana, the CEO of Kaurava Inc. was completely opposite to these characteristics. He was a man of low concentration, high level of anxiety, adamant and resort to unfair practices. He had chosen the 2 Akshouhinis of Krishna's army over the Lord Krishna himself which proved to be too costly to miss.

Powerfull Supporters

Pandava: The Pandavas were not in power for so many years but still they could mobilize the support of powerful allies who ensured the success of Pandava army in the war. Most of their allies were closely related by marriage and thus these allies had taken their war responsibilities personally and seriously. For example;

Country / Groups

1. Panchala
2. Kekaya
3. Dwaraka
4. Nagas
5. Kasi
6. Rakshashas
7. Chedi
8. Magadha
9. Matsya

Relationship with Pandavas

- Marriage of Pandavas and Draupadi
- Marriage of Yudhishtira and Devika
- Marriage of Arjuna and Shubadra
- Marriage of Arjuna and Uloopi
- Marriage of Bhima and Balandhara
- Marriage of Bhima and Hidimba
- Marriage of Nakula and Karen Mayi
- Marriage of Sahadeva and Vijaya
- Marriage of Abhimanyu and Uttara

Kaurava: Most of the Allies of Kauravas were supporting them from far off regions. Ghandhara (Shakuni); Sindhu (Jayatratha); Camboja (Baghadutta). These supporters were faced with logistics problems as they had to come from distant areas. Further apart from political association there was no personal bondage between the Kauravas and their allies as shown in the case of Pandavas.

Decentralization of command

Pandava: All the 7 Akshouhinis of Pandava Inc. army were put under 7 individual commanders viz., Drupada, Virata, Dhristadyumna, Shikhandi, Satyaki, Chekitana and Bhima. Arjuna made his brother in law, Dhristadyumna as the supreme commander of the army. i.e., there was no concentration of power instead decentralization of power and authority was the watchword in their camp. Everyone in the team was assigned with individual responsibility to attain and all members of the army were working towards the attainment of common goal of the organization i.e., 'Defeat Kauravas' by putting the team interest above their personal achievements.

Kaurava: All the 11 Akshouhinis of Kaurava Inc. army were put under the centralized command of Bhishma in the first 10 days of Kurukshetra War, Drona led it for next 3 days, Karna for 1 ½ days, No general for ½ day, Shalya for 1 day and Ashwathama slaughtered the army of Pandavas in sleep on the last day. There was no team work instead it was a unidirectional centrally controlled endeavour. Further there was lack of coordination between the members of the organization which had derailed their common mission and resulted in their ultimate defeat. For example, Bhishma didn't like Karna and Karna declared that he would not enter the Warfield until Bhisma is alive. Bhisma and Karna both did hate strategist Shakuni and his tactics. It means they didn't have faith in their key strategist.

Motivation of team members

Pandava: Motivation acts as a catalyst in achieving a company's mission, vision, goal and objectives. The members of Pandava Inc. were great velors but not war mongering. We can see the

painful comment of Yudhisthira, **“We fight over a kingdom, as dogs over a piece of meat”**. They were humiliated a lot, got their wife Draupadi insulted in public, lost their kingdom and were driven to forest to spend 13 long years in exile. But still they were ready to go for compromise even if the Kaurava Inc. would be ready to give 5 villages to live in. However, finally they were left with no choice than to fight. They fought for their self-respect which is the greatest motivation in the world.

Kaurava: The members of Kaurava Inc. were also great velors but more importantly, they all were in compulsion to display their loyalty / liability to the war mongering CEO Duryodhana. Duryodhana declared, **“Without war, will concede not even a needle prick of earth”**. He was very much focused on fighting the war and thereby annihilates the Pandavas to nil. Earlier he had usurped the kingdom of Pandava Inc. by cunning means and now he wanted to retain the same by hook or by crook. They had fought for the sake of Duryodhana only, without much personal involvement or much needed motivation to win a war.

Commitment of Team Members

Pandava: Every member of the Pandava Inc. displayed a high level of commitment towards the given assignment. Abhimanyu, a 16 years old son of Arjuna had ventured beyond the enemy lines by breaking the ‘Chakravyug’ and fought with 7 Maharathis single handedly till his end and Ghatotkatch, the rakshasa son of Bhima took away half of Kaurava’s army with him. Krishna joined Pandava Inc. after making an oath that he would not take any weapon during the war. But we could see that in the end of the 3rd day war even he jumps down from the chariot telling, “I cannot bear it anymore, I myself would kill Bhishma’ and started moving towards Bhishma, carrying his ‘Chakrayuta’. It is shocking to see even Yudhisthira, known for his truthfulness throughout his life had twisted the truth and told Drona “Aswathama is dead” which paralyzed Drona and paved way for his death. This indicates his commitment to the team’s objective and to display that *‘team welfare is greater than personal integrity’*.

Kaurava: Most of the members of the Kaurava Inc. displayed lack of commitment towards the given assignment. Even their Supreme Commander Bhishma was not really interested in the war. He refused to fight with Shikhandi and thereby leaked the secret ‘How he could be killed?’ which the Pandava Inc. had rightly encashed. Acharya Drona also promised not to kill any of the Pandava, instead he had only agreed to capture Yudhisthira alive and to handover him to Duryodhana which was also not successful. Karna had promised Kunti that he would not kill any one of the Pandava except Arjuna. Similarly, Shalya the maternal uncle of Nakula & Sahadeva was keep on insulting Karna, his own ally on many occasions and thereby humiliated

Karna which affected the commitment level of the latter to a great extent. All these instances show us that there was complete failure of commitment and coordination in the army of Kaurava Inc. which ultimately resulted in their fatal defeat.

Right man for the right job: To increase synergy

Pandava: The interaction of elements that when combined together produce a total effect that is greater than the sum of the individual elements, contributions, etc. is called synergy. Team Pandavas had rightly understood this idea and individually assigned right jobs to the right persons only to attain the more than proportionate end result.

There was only one team and only one goal for all. Decision making was a collective responsibility which made each one of them individually responsible for the success. The individual targets of the team members together had resulted in the better synergy that helped them to achieve their common goal. It was a team of synergy.

Team member	Individual target
Shikhandi :	Waiting to kill Bhishma, which Pandavas had used strategically
Dhristadyumna :	Taken oath to revenge Drona
Arjuna :	Decided to punish Karna
Bhima :	Declared to revenge Dhuryodhana et al
Nakula :	Wanted to revenge Karna’s sons
Sahadeva :	Wanted to kill Shakuni and his sons
Satyaki :	Waiting for the opportunity to revenge Bhurisravas

Kaurava: Except Dhuryodhana, nobody wanted to fight in the real sense. It was not a collective decision making instead it was only forced choice of task. Most of the members have their own reservations towards the given task and thereby there was a complete mismatch of interests and no synergy at all. It was a team of traitors.

Team members and their reservations

Bhishma: Pandavas were his grandchildren. He really didn’t want to fight with them. By hating Karna he could prevent Karna to enter the battlefield for the first 10 days. Had he acknowledged Karna and took his help from the beginning the strength of Kaurava army could have been increased more. When Shikhandi came as a charioteer to Arjuna, stating the previous birth secrets of Shikhandi (earlier she was Amba, the eldest daughter of the king of Kasi. Bhishma won the swayamvara and brought the Princesses Amba, Ambika and Ambalika to marry Vichitravirya. But but Amba had already

given her heart to Salva; therefore Ambika and Ambalika were married to Vichitravirya but Amba could neither marry Salva nor Vichitravirya nor Bhishma, so she wanted to take revenge on Bhishma, he refused to attack and willingly allowed Arjuna and Shikhandi to attack him.

Drona: Like Kauravas, Pandavas were also the students of Drona. From the beginning he was also reluctant to fight with them. He missed many opportunities that was available to kill Arjuna and agreed only to capture Yudhishtira alive to handover to Dhuryodhana which was also foiled. When he heard Yudhishtira telling 'Aswathama is dead' he succumbed to personal feelings and lost his warrior capacity only to be miserably killed by Drasthayumna.

Karna: Dhuryodhana made him king of Anga. For this thankfulness he stood with Dhuryodhana till the end. But he had made promise to Kunti that he would not kill any one of the Pandavas except Arjuna. Karna's 'Shakti Weapon' was granted by Indra in appreciation for his gift of the divine armor and earrings. Karna knew that the shakti would strike with the death of the enemy but could be used only once. Unable to refuse the request of Duryodhana who's cause he had pledged himself to serve, he hurled the missile at Ghatotkacha. Thus, Ghatotkacha died on the fourteenth day of battle in what is considered to be the turning point of the war. After his death, Krishna smiled, as he considered the war to have been won for the Pandavas. It can be strongly argued that the purpose of Ghatotkacha in the Kurukshetra war was to deprive Karna of the shakti in the upcoming inevitable conflict with Arjuna. It was one of the core resources of Karna which he had kept reserve only to use against Arjuna and now that power was lost. Similarly he had donated the 'Kavach' and 'Kundalas' given by 'Surya' as his protection and made himself vulnerable to the deadly attacks.

Shalya: He was originally the maternal uncle of Madri's children Nakula and Sahadeva. However Dhuryodhana tactfully taken his support for Kauravas in the war. However Shalya could not shed away the natural affinity he had in heart towards Pandavas. We could see in the epic, through out the war time, he used to insult Karna and humiliate him repeatedly only to disturb his internal strength that prevented Karna's better performance in the war.

By-Passing technique

Pandava: To take revenge for the killing of Abhimanyu, Arjuna was looking for Jayadratha the King of Sindhu, in the war ground. Thereafter Yudhishtira had sent Bhima and Satyaki to support Arjuna. In the field, Satyaki and Bhurisravas were fighting on one side, Karna and Bhima were fighting on the

other side. Arjuna without wasting time in fighting with Dronacharya or other warriors of Kaurava Inc. focused his search only to find out Jayadratha and fought with him.

This is again not new to see in the modern day military strategy of 'By-passing'. In the 1939 II World War world had seen that armies of the axis countries had displayed this behavior when they deliberately ignored the less powered enemies encountered in the war path and just focused on finding and annihilating the main targets only. The strategy is 'Don't waste your precious power in fighting with insignificant enemies rather accumulate it and use it only on the mighty and the most lethal enemy'.

Conclusion

Small things good or bad can be very powerful when they are planted in your heart. Like a seed, which goes into the ground as a small thing, attitudes when planted in the heart can produce good or bad results accordingly. It is a true saying that what you sow is exactly what you will reap even if it is small when you plant it. Good thing whatever small it may be, will bring good results to you and bad things whatever small it may be would destroy however strong you may be. The emerald ash borer is so small insect that most people will never see one. Yet it can devastate forests.

Organizations with little resources could overthrow business giants in the market just because of their business strategy. For attaining organizational goals strategy is more important than the resources. The Kauravas were very much resourceful but were wickered by nature especially when it comes to desire for throne. This was made still worse when Shakuni's ill mind was combined which ultimately resulted in their complete peril. Thus, by their virtue of truthfulness, righteousness, strong will to fight for self respect and more importantly due to the wise strategy they adopted, the Pandavas who had held only seven akshouhini sena could overcome Kauravas who held even larger sena of eleven akshouhins. Truth always triumphs, though it takes its own time.

Impact of Consumers' Impulse Buying Behaviour on FMCG Retailing: A Study Based on Indian Retail Sector

Aparajita Roy*

Abstract

Retailing in India has been one of the oldest occupations, which was initialized as family business, run by different members of the family for generations, engaged in mainly grocery, FMCG or apparel retailing. It was only after liberalization that organized retailing started spreading its wings and currently it is one of the most lucrative businesses contributing significantly to the country's GDP. It was during the 2008 - 2011 recessionary phase that this industry underwent mild difficulties but since India was not majorly affected as the western world, the retail industry continued its growth trajectory. This study was conducted with the objective of understanding consumers' responses to specific visual stimuli as presented by retailers from time to time within the store and also to find out the various factors that influence consumers' monthly requirements of FMCG buying behavior from different organized and unorganized formats of retailing. Primary data was collected from 200 respondents across the city of Kolkata. Regression analysis, to establish relationship between variables and Factor Analysis, to identify various shopping factors were done by means of SPSS 20.

Keywords: FMCG, Impulse Purchase, Store Attributes, Product Attributes

Introduction

In today's 'Post Modern Era', shopping has become more of a social and leisure activity, reducing the total number of cognitively planned purchases made by consumers (Banerjee & Saha, 2012). This has to a great extent, led marketers to concentrate more and more on individuals' changing buying pattern, which has further helped them in identifying that such hedonic and pleasure driven shopping endeavors have enhanced impulse buying among consumers making it socially acceptable and very often a common practice.

Impulse buying is generally referred to as "unplanned buying", where purchase is made without much thinking, that is purchases made by shoppers without advanced planning. In fact it has been found out that unplanned purchases account for 27% - 62% of purchase in a department store context (Bellenger et al, 1978). Broadly, impulse buying is influenced by several personal, social, economic and cultural backgrounds; varying

not only among customers buying similar products but also under different buying situations. Thus, Impulse buying may be defined as a purchase decision made in-store with no explicit recognition of a need for such a purchase, prior to entry into the store (Kollet & Willett, 1967; Kollet, 1966; Bellenger et al, 1978). Occurrence of impulse buying could be attributed to exposure to in-store stimuli, the latter acting as reminders of shopping needs (Kollet & Willett, 1969) and, in part, to incomplete measure of purchase plans (Kollet & Willett, 1969).

Having identified the strength of impulse purchase, retailers have designed and redesigned their marketing strategies so as to induce shoppers to make more and more unplanned purchases. Both manufacturers and retailers therefore are always in the lookout for opportunities that they might explore in order to determine the efficiency of resources designed to stimulate additional sales and as such increase the basket size of the buyers.

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Evolution of Retailing in India

The emergence of organized retail in India dates back to the pre-independence era when the country's established business houses, mostly textile majors ventured into the retail arena through company owned outlets. Apart from textiles, a number of organized food and grocery businesses also started in the beginning of the early 1900s.

With liberalization, after 1990 and growth of the economy, the Indian consumers witnessed an increasing exposure to new domestic and foreign products through various media. Social changes such as increase in the number of nuclear families and growing number of working couples, resulting in a change in the buying pattern and increased spending power, have also significantly contributed to the increase in Indian consumers' personal consumption. High income opportunities, changing attitude towards saving, international exposure and necessities of lifestyle have been identified as the key drivers for fast evolving Indian consumers' buying behavior **(KSA, Technopak, 2006)**.

This rapid growth has attracted not only the convenience sector but also the luxury product segment in an environment of economic liberalization and rising Purchasing Power Parity (PPP) index until the global turmoil, which swayed the total economic scenario of countries around the globe. But despite the widespread effects of the Great Recession of 2007 - 11, India's economy was resilient during the first half of the five-year meltdown. But, towards the end of 2008, the Indian retail segment experienced significant pressure marked by negative revenue growth and high rental costs, which led many retailers to resize stores, renegotiate rentals and even exit from locations where operations had become unviable.

Currently, India's retail market is expected to touch a whopping Rs 47 trillion (US\$ 782.23 billion) by 2016-17, expanding at a compounded annual growth rate (CAGR) of 15 per cent, according to a study by a leading industrial body. The total organized retail supply in 2013 stood at approximately 4.7 million square feet (sq ft), witnessing a strong year-on-year (y-o-y) growth of about 78 per cent over the total mall supply of 2.5 million sq ft in 2012. (IEBF, May 2014)

As India changes and reinvents itself at an accelerated pace, the private consumption patterns of its population have also been transformed. This shift in consumer buying patterns has far reaching implications, not only for manufacturers, marketers and retailers, but also consumers and the society at large. In fact, the focus of late, has been shifted to developing business intelligence, vendor management, product development and of course stores management.

Growth of FMCG Sector in India

Fast Moving Consumer goods, also known as packaged goods, are often termed as Consumer packaged goods, consisting of consumable items (except grocery and pulses) that people buy at regular intervals. The most common items are detergents, toilet soaps, shampoos, hair oils, toothpaste, household accessories, etc. These items are generally meant for daily or frequent consumption and have a high return.

The Indian FMCG sector is the fourth largest sector in the economy with a total market size in excess of US\$ 13.1 billion. It has a strong MNC presence and is characterized by a well established distribution network, intense competition between the organized and unorganized segments and low operational cost. Availability of key raw materials, cheaper labour costs and presence across the entire value chain gives India a competitive advantage.

The FMCG market is set to treble from US\$ 11.6 billion in 2003 to US\$ 33.4 billion in 2015. Penetration level as well as per capita consumption in most product categories like jams, toothpaste, skin care, hair wash etc in India is low indicating the untapped market potential. Burgeoning Indian population, particularly the middle class and the rural segments, presents an opportunity to makers of branded products to convert consumers to branded products. Growth is also likely to come from consumer 'upgrading' in the matured product categories.

According to statistics published by the Population Reference Bureau in 2011 India has more than 50% of its population below the age of 25 and more than 65% below the age of 35. It is expected that, in 2020, the average age of an Indian will be 29 years. According to a report by AC Nielsen, customers spend almost 42% of their monthly expenditure on products in the grocery category **(Peter, 2007)**. **Sinha (2003)** has argued that Indian Customers are orientated towards shopping because of the entertainment that can be derived out of it. According to him, the majority of the Indian population can be characterized as young, working class, with higher purchasing power. They seek more of the emotional value from shopping than the rational value and they value convenience and variety.

Therefore, a better shopping experience has become the major focus of Indian shoppers today **(Hemalatha et al, 2009)**. According to **Bajaj et al, (2005)** more than 60 % of purchases in an organized retail outlet are usually unplanned. Thus, it can be concluded that most Indian consumers are impulsive buyers who purchase products either on a whim or when they are emotionally driven to that product. This has led retailers to take on various marketing strategies for attracting and converting

customers such as promotional schemes and attractive displays.

Literature Review

With changing lifestyle and hovering demands of customer, retailers in India, similar to their counterparts around the globe are putting in their best to formulate and reformulate their marketing strategies such that no stone is left unturned. For many years, marketing researchers have considered issues relating to consumers' store choice across various purchasing situations (Moore and Carpenter, 2006). Starting from apparels to footwear, from jewelry to even FMCG and grocery items, both organized and unorganized retailers are trying to reach out to more and more customers in order to satisfy them and in turn increase their own profitability and goodwill in the market. Thus, a Retailer's marketing objectives can be classified into three broad categories: **attraction** that focuses on consumers store entry decision; **conversion** that relates to consumers decisions about whether or not to make a purchase at a store; and **spending** that represents both monetary value and the composition of their transactions (Tauschiff & Gupta, 2013).

Ramanathan & Hari (2011) observed from their study that due to the recent changes in the demographic system of consumers, and the awareness of quality conscious consumption, consumers preferred to buy different products both from the organized and unorganized retailers. Sinha & Banerjee, (2004) in their study concluded that store convenience and customer services positively influenced consumers store selection, while Gupta, (2012) concluded in her study that store attributes like convenient operating hours and accessibility were the factors which lead to customer loyalty and not store appearance.

Thus, a customer's store choice decision and buying behavior, is to a great extent influenced by several internal and external stimulus, of which, the current research aims at analyzing the impact of visual merchandising within the store, on impulse buying behavior. Recent studies have stated that atmospheric cues in the retail environment (i.e., sights, sounds, and smells) are important triggers that can influence a desire to purchase impulsively (Eroglu and Machleit 1993; Mitchell 1994). Also it has been suggested that marketing innovations such as credit cards, cash machines, instant credit, 24-hour retailing, and telemarketing make it easier than ever before for consumers to buy things on impulse (Rook 1987; Rook and Fisher 1995). Additionally, marketing mix cues such as point-of-purchase, displays, promotions, and advertisements also can affect the desire to buy something on impulse.

Mehta & Chugan (2012), in their study on impact of visual merchandising on impulse buying behavior have identified that

there is no relation between forum display and impulse buying but floor merchandising shows a direct relationship. Sujata, et. al (2012) on the other hand, have found that there is a strong correlation between window display, impulse buying and forum display. Tauseff (2011) in his study on consumers' FMCG buying behavior, found out that impulse purchase behavior and customers' age group, gender and education level, were significantly different. Youn & Faber (2000) have identified that there are different types of internal states and environmental or sensory stimuli that serve as cues for triggering impulse buying behavior. According to the researchers, internal cues include customer's state of mind, positive and negative feeling. Environmental or sensory stimuli include atmospheric cues in retail settings, display cues, marketer-controlled cues and marketing mix stimuli.

This paper therefore aims at understanding aspects of consumers' FMCG purchase behaviour and identifying the various factors that contribute to the growth and development of organized retailing in India.

Research Objectives

Considering the above literature, it has been identified that there are several factors which influence the buying pattern of individual consumers with respect to their format choice for purchasing products of their daily needs. Further, it has been observed in the survey that most respondents, shopping in the organized retail environment, tend to be impulsive in buying items for which there was no immediate need, in spite of having a fixed list of products to be bought per month. The following objectives therefore have been identified in order to analyze consumers' FMCG buying pattern in Kolkata:

1. To find out whether a store's visual display of items has an effect on consumers' impulse purchase behavior in buying monthly requirements of FMCG.
2. To identify the various factors which influence consumers' buying pattern and store format choice.

After analyzing the available literature and related practical observations during the research, the following hypothesis was formulated to assess the relationship between variables:

H₀: There is no significant relationship between a store's visual display of products and consumer's impulse purchase behavior.

H₁: There is a significant relationship between a store's visual display of products and consumer's impulse purchase behavior.

Research Methodology

The present study is descriptive in nature, with the sampling frame consisting of adult retail customers capable of taking independent decision regarding purchasing monthly requirement of FMCG for themselves as well as their families, across different retail formats available in the city. Data was collected from 200 respondents covering 10 unorganized kirana stores, 5 convenience stores (Spencer's Daily and In & Out), 3 Supermarkets (Food Bazaar, Reliance Fresh and More), in and around Salt Lake and 1 hypermarket (Spencer – South City Mall), by means of a structured questionnaire with a list of questions in a prearranged order.

Survey Instrument and Measurement of Variables:

The self administered questionnaire consisted of mostly closed ended questions which were either dichotomous or multiple choice. The questionnaire was divided into two parts: **Part A** consisted of seven questions related to the respondents' demographic characteristics and socio economic backgrounds. The responses were measured using nominal scale. **Part B** consisted of twenty questions related to respondents' FMCG buying behaviour and the responses were recorded using **Five point Likert Scale** (5: Strongly Agree to 1: Strongly Disagree), where respondents were asked to denote their choice over five degrees of responses.

Methods of Analysis:

In order to assess the relationship between variables and thus test the hypothesis, Regression Analysis was performed on two variables under study: **Independent Variable** - Store's visual display of products and **Dependent Variable** - Impulse purchase behavior.

The factors that were identified by means of responses based on Likert Scale for understanding consumers' FMCG buying behavior, were analyzed and grouped through Factor Analysis method using SPSS 20.0.

Data Analysis

A total of 235 retail customers were surveyed who walked into either an organized or unorganized grocery store to purchase their monthly requirement of FMCG. After analyzing all the responses, about 200 responses were usable, as the others had to be discarded because of incomplete data. The internal consistency of the data thus collected was tested through reliability analysis using Cronbach's Alpha, which was found to be 0.854, revealing a high degree of reliability, as reliability results exceeded 0.70 lower limit of acceptability (Hair, et. al, 1998).

All the respondents were adult male (58%) and female (42%) members with an average age of 33 years (range 21 - 50 and above) and income ranging from Rs. 20, 001 - Rs. 30, 000. The respondents were either single (56%) or married (44%), with mostly graduation (62%) as their educational qualification engaged in either service (54%) or business (25%) as their occupation. Most of the respondents showed cross shopping behavior with a major chunk purchasing their monthly requirement of FMCG from organized retail outlets. (Table 1)

Regression Analysis:

Regression Analysis is done in order to understand the significant impact of Independent Variable on Dependent Variable (Ndubisi, 2006). In this study, the Visual Display of products in the store is considered as an independent variable and Impulse Buying Behaviour of customers as dependent variable.

According to the Regression table (Table 2), Adjusted R square is 0.518, which indicates that there is a 51.8% impact of **Visual Display** (Independent Variable) on **Impulse Purchase** (Dependent Variable). From the ANOVA Table (Table 3) in the Regression Analysis, Significant P Value is .000, which is less than the significant level .05, indicating that the impact of 51.8% is significant.

Thus, from the calculations we can conclude that the Null Hypothesis (H₀) has been rejected, indicating a significant relationship between visual display and impulse purchase.

Factor Analysis

In order to understand the various factors which affect an individual customer's FMCG purchase behaviour and hence fulfill the second objective of the dissertation, Factor Analysis was performed using SPSS 20.

The Descriptive Statistics of the Consumers' FMCG buying Behaviour is represented in Table 4, which highlights **Pricing** factor having the highest Mean Score (4.21) and **Demonstration** factor having the lowest Mean Score (3.01). As it is generally known that Indian consumers are extremely price conscious, they will always look for products from which they get enough value for the money they spend in procuring products of their choice. Likewise, since purchasing FMCG products is generally a low involvement practice, demonstration in this context is least applicable.

In analyzing the various factors influencing buying behavior, the first step is to find out the adequacy of the sample through KMO and Bartlett's Test, the result of which was found to be 0.794 and Sig.000, indicating that the sample under study was quite accurate. (Table 5)

The second step would be to calculate the total variance and hence Eigen Values of all the factors. Only those factors were considered whose Eigen Values were more than 1 and in this study, five components were identified. **(Table 6)**

The third step consisted of grouping different factors under the five identified components through Rotated Component Matrix and calculating their respective communalities **(Table 7)**. In this case, all the twenty factors were grouped under different components each of which has been identified as having different aspects of customers' preferences regarding their store format decisions.

The Rotated Component Matrix indicates that there are five components under which all the factors have been grouped. In this study, five components have been identified as:

1. Promotional Factors
2. Product Attributes
3. Store Attributes
4. Psychographic Factors
5. Customer Delight

Discussions and Implications

The study demonstrates shoppers' purchase behavior with respect to FMCG products, which indicates that although this segment is considered as one showing low involvement, yet there are several factors which have a significant impact on the purchase pattern. It was found in the study that although the retail industry is currently showing an up gradation in various aspects, yet consumers prefer cross format shopping in purchasing consumer goods for the month. It is evident that impulse purchase plays an important role and as such marketers consciously display their products at POP (Point of Purchase) points so that visual display may lead to such purchase. The results also to some extent implied that format choice decisions are altered when consumers need something urgent to purchase and they are unwilling to face the constraints of time and convenience **(C. Jayashankaraprasad, 2010)**, as found in earlier studies. Above all, with increasing competition and changing retail formats, this study will enable marketers to understand shoppers' store choice behavior for purchasing FMCG requirements.

Conclusion

Study of consumer behavior denotes that there are mainly two different types of involvement as far as purchasing products are concerned, which again to a great extent is dependent on the price, availability, usage and quality of the product purchased. Fast Moving Consumer Goods are generally those classified under Low Involvement products as they are purchased

without spending too much of time and money and generally on a more regular basis. Most of such products are bought on a weekly, fortnightly or monthly basis indicating that these products have a constant and continuous demand throughout the year.

This paper has highlighted that such goods are often bought on impulse because of the influence of visual displays in the stores from where they are bought. Secondly, most retailers selling such goods are always in the lookout for satisfying customers through various promotional methods, providing additional incentives in the form of free home delivery, credit payment facilities, etc. Previously such services were generally rendered by organized retailers, but with the turning of the Wheel of Retail, several neighbourhood kirana stores which are in the continuous process of up grading themselves are also keen on fulfilling the growing demands of consumers in tune with their changing lifestyle. The various factors responsible for such stores to flourish have also been identified in this study, which if retailers can incorporate in their marketing strategy, they will be able to acquire, satisfy and retain more and more customers.

Limitations and Future Scope for Study

This study has been restricted to only a very limited area of the city Kolkata, which is the cultural capital of our country. The city consists of people from various cultural and educational backgrounds having varied tastes and preferences, food habits, usage patterns, family structure, etc. all of which could not be considered in the study. Moreover data was collected from a limited number of organized and unorganized stores across the city.

Future research can be carried out keeping the above parameters in mind along with other situational and demographical. A study can also be done to distinguish between the purchase pattern of male and female members of the city, between nuclear families and joint families and also at different stages of family life cycle.

Acknowledgement

The author would like to express sincere gratitude to Dr. Santanu Mazumder for his valuable guidance in completing the paper. A special word of thanks goes to my colleagues, Prof. Moumita Saha, Prof. Surajit Das and Prof. Snigdha Basu, for their immense support and continuous encouragement.

References

1. Banerjee, S., Saha, S. (2012). Impulse buying behavior in retail stores triggering the senses. *Asia Pacific Journal of Marketing & Management Review*, Vol. 1 No.2, October 2012, ISSN 2319-2836.
2. Bellenger, D.N., Robertson, D.H. and Hirschman, E.C. (1978), "Impulse buying varies by product", *Journal of Advertising Research*, Vol. 18, pp. 15-18.
3. Carpenter, J.M. and Moore, M. (2006), "Consumer demographics, store attributes, and retail format choice in the US grocery market", *International Journal of Retail and Distribution Management*, Vol. 34 No. 6, pp. 434-52.
4. Eroglu, S. A. and Machleit, K. A. (1993), "Atmospheric Factors in the Retail Environment: Sights, Sounds and Smells," *Advances in Consumer Research*, 20, 34.
5. Gupta, U. (2012). Customer Loyalty towards Kiranas in Competitive Environment; A Case study. *International Journal of Marketing and Technology*, II (8), 249-268.
6. Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (2003), *Multivariate Data Analysis*, Pearson Education, Delhi, pp. 119-20.
7. Kollat, D.T. and Willett, R.P. (1967), "Customer impulse purchasing behaviour", *Journal of Marketing Research*, Vol.6, pp. 21-31.
8. Mehta, N.P., Chugan, P.K. (2012). Visual merchandising: Impact on consumer behavior. *Global Business and Technology Association*, pp.607-614, New York USA.
9. Mitchell, V-W. (1998), "A role of consumer risk perceptions in grocery retailing," *British Food Journal*, 100 (4), pp.171-183.
10. Park, W.C., Iyer, E.S. and Smith, D.C. (1989), "The effects of situational factors on in store grocery shopping behaviour: the role of store environment and time available for shopping," *Journal of Consumer Research*, 15 (4), pp. 154-168.
11. Prasad, C.J.S. and Babu, S.S. (2009), "A study on role of consumerism in modern retailing in India", *GITAM Journal of Management*, Vol. 7 No. 1, pp. 227-47.
12. Rook, D. W. (1987). *The buying impulse*. *Journal of Consumer Research*, 14, 189-199
13. Rook, D.W., & Fisher, R.J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22 (3), 305-313.
14. Sinha, P., & Banerjee, A. (2004). Store Choice Behaviour in an Evolving Market. *Journal of Retail and Distribution Management*, 32 (10), 482-494.
15. Sinha, P.K. and Kar, S.K. (2007), "An insight into the growth of new retail formats in India", Working Paper No. 2007-03-04, IIMA.
16. Sinha, Piyush Kumar; Krishnaswamy Gopi (2009), "The Path to Purchase during Shopping", W.P. No. 2009-11-05, Indian Institute of Management, Ahmedabad.
17. Sridhar, G. (2007), "Consumer involvement in product choice: role of perceived risk," *Decision*, 34 (2), pp.51-66.
18. Teller, C., Kotzab, H. and Grant, D.B. (2006), "The consumer direct services revolution in grocery retailing: an exploratory investigation", *Managing Service Quality*, Vol. 16 No. 1, pp. 78-96
19. Youn, S. and Faber, R. J. (2000), "Impulse Buying: Its Relation to Personality Traits and Cues", *Advances in Consumer Research*, Vol. 27, pp. 179-185.

Appendix

Table 1: Respondents' demographic profile

Variable	Description	Frequency	Percent	Mean
Gender	Male	116	58	
	Female	84	42	
Age	25 - 30	40	20	
	31 - 35	131	65.5	
	36 - 40	18	9	33
	41 - 45	5	2.5	
	46 - 50	2	1	
	Above 50	4	2	
Marital Status	Married	89	44.5	
	Unmarried	111	55.5	
Monthly Household Income	10,001 - 20,000	59	29.5	
	20,001 - 30,000	83	41.5	25,000
	30,001 - 40,000	27	13.5	
	40,001 - 50,000	20	10	
	50,001 and above	11	5.5	
Frequency of FMCG purchase	Daily	7	3.5	
	Weekly	56	28	
	Fortnightly	62	31	
	Monthly	75	37.5	
Average one time purchase	< 3,000	89	44.5	
	3,001 - 4,000	95	47.5	3,500
	4,001 - 5,000	15	7.5	
	> 5,000	1	0.5	

Table 2: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.722 ^a	0.522	0.518	0.829	0.522	56.368	1	198	0
a. Predictors: (Constant), visual display									

Table 3: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.731	1	38.731	56.368	.000 ^b
	Residual	136.049	198	0.687		
	Total	174.78	199			
a. Dependent Variable: Impulse purchase						
b. Predictors: (Constant), visual display						

Table 4: Descriptive Statistics

Factors	Mean	S. D.	Skewness	Kurtosis
Price	4.21	0.98	-1.13	0.74
Quality	4.07	0.86	-0.98	0.59
Discount	4.06	0.85	-1.4	2.57
Variety	4.09	0.88	-1.52	3.04
Advertisement	4.12	1.07	-1.43	1.59
Impulse Purchase	3.69	0.93	-1.24	1.94
Store Format	3.85	0.89	-1.2	1.96
Brand	3.95	0.91	-1.21	1.77
Visual Display	3.97	0.87	-1.08	1.23
Demonstration	3.01	0.86	-1.14	1.76
Environment	4.16	0.79	-1.38	2.77
Time Saving	4.19	0.76	-1.21	1.63
Location	4.15	0.72	-1.06	1.37
Payment Mode	4.18	0.74	-1.56	4.06
Value Addition	4.12	0.79	-1.05	1.08
Status Conscience	4.03	1.01	-1.29	1.46
Loyalty	3.86	0.84	-1.35	2.68
Free Customer Service	3.87	1.04	-0.97	0.48
Home Delivery	3.73	1.08	-0.8	0.03
Personal Relationship	3.89	1.26	-0.98	0.21

Table 5: KMO Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.794
Bartlett's Test of Sphericity	Approx. Chi-Square	1641.153
	df	190
	Sig.	.000

Table 6: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cum %	Total	% of Variance	Cum %	Total	% of Variance	Cum%
1	5.698	28.492	28.492	5.698	28.492	28.492	3.371	16.856	16.856
2	2.401	12.006	40.498	2.401	12.006	40.498	2.781	13.906	30.762
3	1.897	9.486	49.984	1.897	9.486	49.984	2.382	11.908	42.671
4	1.374	6.869	56.854	1.374	6.869	56.854	2.255	11.274	53.945
5	1.262	6.310	63.163	1.262	6.310	63.163	1.844	9.219	63.163

Extraction Method: Principal Component Analysis.

Table 7: Rotated Component Matrix

	Component				
	1	2	3	4	5
Pricing		.776			
Quality		.847			
Discount		.843			
Variety		.644			
Advertisement	.554				
Impulse purchase	.682				
Store format	.766				
Brand	.768				
Visual Display	.780				
Demonstration	.555				
Pleasant environment			.693		
Time saving			.716		
Location			.586		
Value Addition				.616	
Status Consciousness				.688	
Loyalty				.834	

Free Customer service					.611
Home delivery					.834
Personal relationship					.860
Payment Mode					.683
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 7 iterations.					

Role of Employee Behavior in Managing Brand Consistency

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Abstract

From the last few years the condition of the market and the requirement of the customer change the brand image and role in the market. The brand is not only a label in the present scenario but it is much more than that which provides a base for the company to convey the information to the customer and enhance the market share. Branding plays a important role in the market. Various factors play an important role in managing brand consistency. This research study tries to cover one of the important factors that is the employees behavior in the brand success. Large number of research are conducted on brand management but very few research studies talk about the behavior of employees and their role in the enhancement of brand performance. This research paper tries to cover the gap between the company and the employees approach in brand promotion. The purpose of this paper is to talk about the brand consistency and try to study the role of employees and their behavior in improving the brand promise in the market.

Keywords: Employee behavior, brand consistency, brand management, brand success, brand performance, brand promotion, brand promise.

Introduction

From the last decade the importance of branding changes due to customer awareness and market competition. In the present scenario customer are having the holistic experience for different brand because of their increasing number in the market (Berry, 2000). The brand is not only a label in the present scenario but it is much more than that which provides a base for the company to convey the information to the customer and enhance the market share. (Aaker, 1996). Brand convey the message regarding the different attributes of products and services and define the company USP with which the company try to attract the customers and stake holders. Number of companies is using the strategy like Microsoft to enhance their brand image and explain the objective of the organization. Most of the companies cover the market in such a way that they are present everywhere in the world in order to serve the customer and find out the solution to every problem of their existing customer. The main motto of these companies in the present

scenario is to make relevant brand image in the eyes of the customer. To achieve this motto these companies are involving their employees in the expansion of their according to their set market strategy. Their strategy motivates the employees and guides them to promote their brand in the market.

The purpose of this research study is to promote employee communication with customer and motivate the group of employee to improve the performance of the brand. In this research study we try to find out the role of employee in brand consistency. This concept is also called employee behavioral branding.

Literature Review

As we know that the communication plays an important role in branding and this plays an important role in brand consistency and brand positioning (Chin, 1998). Brand formation is much better if the employees of the organization interact with the

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customer and positioned the brand in the customer mind. (Parasuraman et al., 1985). Customer also experiences the same with depth impression in their brain and changes their perception for that particular product and service. This employee effort satisfactorily changes the customer attitude of the customer for that particular brand and company. (Swartz and Brown, 1989). If the interaction between the customer and the employee is effective then the customer feels satisfied and they became highly dependent on the employees in every way. This condition helps the company to maintain their brand survival in long term (Suman and Suparna, 2010). Some of the organizational research studies state that the different employees are having the different behavior these behaviors are utilized specifically and strategically at different places according to the organizational need (Hartline and Jones, 1996). There is no use of focusing on mass media until and unless the employee of the organization is not focusing on the company brand setting statements. Some of the mass media communication may not fit the customer experience then this condition leads to loss of image by the particular brand from the market (Berry, 2000). For consistence brand value of high quality the companies should not only interact with the customer but also encourage brand value through their behavior. Companionability is important from the company employee towards the customer but it should be linked with the promotion of brand value. (Aurand and Bishop, 2005) Continuous personal interaction regarding the brand value and brand quality by the employee set the standard for the company in the eyes of the customer. BMW customers are expecting the warmth and competent, cultivated and dynamic behavior from the company to fulfill this employees of BMW also interact with the customer to encourage the brand value and uplift the performance of the company in the eyes of the customer. (Aurand and Bishop, 2005). Brand oriented employee performance of the BMW develop the behavioral branding concept for other in the market. This employee behavior may be both verbal and non-verbal, direct and indirect which determine the brand value and brand experience (Aurand and Bishop, 2005).

Number of research studies was conducted on brand on the basis of media without paying attention towards the employee interaction and its importance in brand performance (Schulz, 1997). One of the important questions is that how to motivate the company employee to act positively for the brand in a consistent way. In this research paper we try to discuss the importance of employee and their role in brand performance. We try to bridge out the gap between behavioral branding and traditional brand management.

Conceptual model and hypotheses

In this research study a model is developed and we try to notice the importance of behavioral branding and its related factors. The effect of interaction of employee on branding is noticed by studying behavior, media association and interaction of employee. According to marketing control theory (Jaworski, 1988) this study develop the conception for employee empowerment and the role of the employees in functional and behavioral branding quality. In this research paper we study the effect of various other factors which affect the behavioral branding quality.

Structure of Paper

STEP	ACTION
I	Conceptual foundation
II	Derive the hypothesis.
III	Empirical result of management survey.
IV	Scientific implications
V	Managerial implications
VI	Future research.

It is believed that if the employees promote the brand by their own efforts with full energy and power and kept brand promising at every level in the market then the companies can achieve superior brand performance in the eyes of the customer. Only imparting education to the customer is not sufficient but the employee should provide direct and indirect support to the customer in order to provide highly distinguish image in the market. So that why companies need to promote more and more interactive session with the employees to act socially and satisfy the customer. Several changes in the working mechanism of the company are required in order to promote employee initiated brand management. Company must align all the affairs in a proper way in order to implement employee behavior brand management. According to marketing control theory it is explained that more employee and customer interaction is required for brand consistency and more management and employee initiatives are required for this act. Marketing control is mainly concerned with more and more interaction of the employee of the company and the customer in order to influence the behavior of the customer and to promote the brand consistency. Formal control is something which is a written mechanism of the management in order to guide the employees to achieve the marketing objective (Jaworski, 1988). Informal control is direct informal interaction between the management and the employees and they plan for the market for consistent brand image (Jaworski, 1988). In the present scenario employee empowerment is used

as another tool used by the management of the companies for managing brand consistency. In order to handle the market condition the employees are empowered the management act according to the situation what is needed at particular point of time.

Research Model and Hypotheses

To form a consistent brand image in the market some flexibility is required in decision making and employees have to develop personal skill to perform in different situation. In this study we use formal and informal control mechanism to achieve brand consistency and we develop the hypothesis on the basis of these two (H1a/H1b) for formal control mechanism, (H2a/H2b) for informal control mechanism and we develop the hypothesis for employee empowerment (H3a/H3b) according to the requirement.

Formal and Informal control Mechanism

Under the formal control mechanism we handle the routine problems in a consistent way by written rules and regulation in a prescribed format. These written rules provide support to the individual personally and professionally (Peccei and Rosenthal, 2012). Formal control is something which is a written mechanism of the management in order to guide the employees to achieve the marketing objective (Jaworski, 1988). In formal control some time what is noticed that the people are bounded by standardized task and they cannot compromise with the situation and face losses due to this act (Hartline et al., 2013). Some of the research studies stated that the formal control some reduce the innovative skills of the employees and bring losses in non- routine task. (Kelley et al. 1996). Informal control is direct informal interaction between the management and the employees and they plan for the market for consistent brand image (Jaworski, 1988). In the present scenario employee empowerment is used as another tool used by the management of the companies for managing brand consistency. In order to handle the market condition the employees are empowered the management act according to the situation what is needed at particular point of time. Some of the research studies state that the employees who are doing behavioral branding are committing more mistakes while dealing with the customer as compared to the company value. Some of the research state that the involvement of the employees in the management of the company motivates them and enhance their employability and commitment towards the organization in every sphere (Bowen and Schneider, 1985). Some of the research studies recommend both the control mechanism equally important and adequate in improving the quality of employee performance in brand management. Both formal and informal methods make the employee more and

more competent and enhance the productivity On the basis of the above data we develop the following hypothesis.

H1a. More formal control, more satisfactory the company employee performance.

H1b. More formal control, the more satisfactory company employee behavioral branding.

H2a. More informal control, the more satisfactory the employee performance.

H2b. More informal control, the more satisfactory employee behavioral branding.

Empowerment of Employee

In order to satisfy the customer, customer oriented behavior is required by the firm and the employees with more flexible and novel behavior. The employees should give the individual attention to the customer after all constraints for customer satisfaction (Jaworski, 1988). To do this the employee should be more satisfied and confident and they should be empowered with free decisions making approach by the management. In this condition the company more enthusiastically serves their customer and achieves success .All these exercise related to the employee empowerment give initiate to better decision making, team work motivation and satisfaction. On the basis of above discussion we develop the following hypothesis.

H3a. More employee empowerment, the more satisfactory the employee performance.

H3b. More employee empowerment, the more satisfactory the quality of behavioral branding.

Media Association

Mass media association plays a very important role in the branding of product and services. Mass media brand association contributes to the behavioral branding too. Some of the research studies state that the communication by the external bodies contributes a lot in the brand success. Positive external communication provides the base for the employees to perform well in the market and shape the employee thinking according to their convenience (Davies and Chun, 2013). External communication not only create good image but it change the complete perception of the individual for that particular brand. It is noticed that the employees working with high brand their performance is better than those employees who are working with lower brand in the market. On the basis of above discussion we develop the following hypothesis.

H4a. The higher brand association with the media, the more satisfactory the employee performance.

H4b. The higher brand association with media communication, the more satisfactory behavioral branding.

H4c. The higher brand association with the mass media, the more satisfactory the brand contribution.

Behavioral Branding and Employee Performance

Brand consistency depend upon number of factors out of these employee performance plays an important role. Behavioral branding also plays an important role in brand consistency according to certain research studies. Brand performance is affected by the brand consistent employee behavior. Customer satisfaction for a particular brand is mainly depend upon the interaction between the company and the customer. Employee attitude is one of the main factors which affect the customer judgments for the brands of product and services in a particular market (Bitner, 1990). If the employees of the organization handle the problem of the customer with care, then this condition satisfied the customer and put very good impression on their brain for long term. Behavioral branding improves the brand loyalty and brand consistency. The conclusion of various research relate to this field indicate that the in the market mass media campaigns for the promotion of branding is not so successful as compared to the brand developed through the employee efforts (Lee and Labroo, 2014). On the basis of above discussion we develop the following hypothesis.

H5a. The more satisfactory the employee performance, the higher behavioral branding.

H5b. The more satisfactory the employee performance, the higher brand success.

H6. The more satisfactory the behavioral branding, the higher the brand contribution.

Data collection and subjects

For complete this study our conduct survey in Indian companies and contact Managing Directors, CEOs, Marketing Managers, and Assistant Marketing Managers, Area Managers, and active employees of the Indian companies which are working in the NCR region. Over all we try to cover 250 companies but we get response from 117 companies only. The response rate is 46.8% only. Out of this response rate 17% response received from the retailing industry, 19% from industrial goods industry, 22% from consumer goods industry, and 42% from the service industry.

Measure

For this research study we use different scale for the design of questionnaire and collection of data. For three formal control variable we use Pelham and Wilson (1996) research work, then we take three informal control variable from Decarlo and Leigh (1996) research paper, and three employee empowerment variable from the Hartline and Farrell (1996) research work. Employee performance is watched with the help of the Oliver and Anderson (1994) research paper and we took sixteen variables from there. We took five items from the scale of Purvey and Lord (1994) for measuring the employee performance. For measuring the behavioral branding we use the dimension of Parasuraman from service context. We use two verbal and two non-verbal items from communication literature to study brand consistent behavior. We develop a fifteen item scale to measure the impact on behavioral branding. We also discuss our questionnaire with business person of top companies for proper check. All the items which we use in our study is summarized in the list given below.

Method and results

In the present study we use structural equation modeling for evaluating the study.

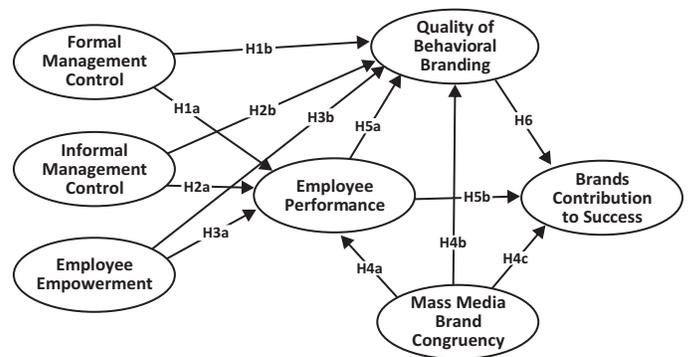


Figure 1: Research model and hypotheses

Table I: Cronbach Alpha Statistics

Variable No.	Variables taken for the study	Cronbach Alpha Statistics
1	Formal control	0.72
2	Informal control	0.72
3	Employee empowerment	0.65
4	Employee Performance	0.85
5	Behavioral Branding:-	
6	Media Brand	0.82

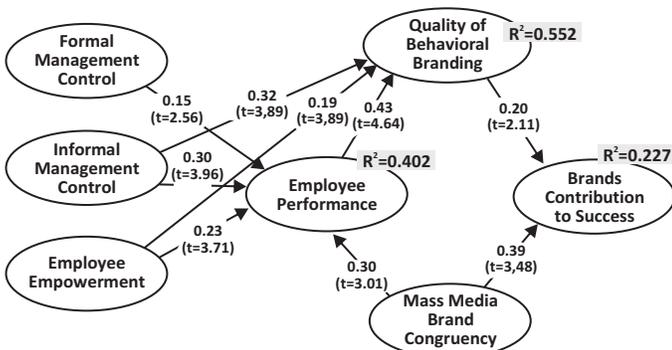
Only employee empowerment has the low reliability with AVE of 49 percent. No reliability measure for the formative indicator because they constitute the construct meaning. In this research we conduct test for the multi collinearity. Due to correlated formative indicators behavioral branding and brand association construct indicate no potential biases and it show low variance factor for both.

Table I: AVE Statistics

Variable No.	Variables taken for the study	Average variance extracted
1	Formal control	0.41
2	Informal control	0.49
3	Employee empowerment	0.39
4	Employee Performance	0.53
5	Behavioral Branding:-	0.45
6	Media Brand	0.49

According to predictive approach of PLS (Wold, 1982), R-square is used to evaluate the structural model and Q-square is used to test the predictive relevance (Stone, 1974; Geisser 1974). In this research study we use t-statistics using bootstrap resampling and 100 sample are generated. Further analysis show that three out of 12 hypothesis are non significant. H1b hypothesis suppose that behavioural branding is directly impacted by the behavioural branding. H4b hypothesis show the relation between brand association and behavioral branding, but our analysis show a non significant impact. (b. 0:08, t. 1:21).

Performance of employees did not have significant impact on the brand contribution.(H5b:b . 0:03 t. 0:23). We analyses that all the remaining are coefficient are significant this all indicate the validity and reliability of our construct. In the new model more than 55 percent of the variance explained the quality of behavioral branding and 40 percent of the variance of employee performance can be explained with our model. The more interesting thing is that informal control mechanisms determine brand association (b, 0:23, t. 3:71).



The most common reason behind the non - significant path in the case is indirect and intervening impact. The evidence of mediation is found between the formal control and behavioral branding. However the formal control mechanism is not suitable to improve the brand promise of the employees. The employee performance and brand association is significant due to the intervene role of behavioral branding. When we test the direct link between the employee performance and the brand association then we didn't find the significant link between the two constructs.

Similarly formal management control didn't help the employee in communicating the brand.(b. 0:14). Well know brand in the market increase the motivation of the employee and they react in a better way to keep the brand promise in the market. Strong media campaign has a strong positive effect on the brand consistency.

Conclusion and Implication

According to the management point one thing is clear that the employees play an important role in the brand consistency. According to our main hypothesis one thing is clear that the brand success depend upon the level up to which the employees of the company fulfill the need of the customer through the mass media campaign. Over all we try to cover 250 companies but we get response from 117 companies only. In order to complete our study our conduct survey in Indian companies and contact Managing Directors, CEOs, Marketing Managers, and Assistant Marketing Managers, Area Managers, and active employees of the Indian companies which are working in the NCR region. The companies who are paying attention toward the brand promotion then this category of customer respond more quickly to satisfy the customer need and want because for them the customer is the king (Hartline et al., 2000). Employees of the company should understand the need of the need of their company and accordingly they should behave in the market. The employees of the companies should pay more and more attention to the activities and behavior of the customer and try to build the good image of the company in the customer mind. Brand oriented employee behavior find the solution to the above challenges. Finding of our research show that the formal and informal control system shows a high degree of employee empowerment and which support the employee performance. Managers should give freedom to the employees and the employees should design the market plan in such a way that they provide support to the employees in the brand communication. From management point of view the employee performance is not significant in the brand performance. Media brand association also fails to put direct significant on the behavioral branding. One of the facts we that the mass media communication provides support to the

employee performance in improving the behavioral branding. After the research work is over we talk and discuss the various outcomes of the study with the senior manager of the company in the field of brand management.

But for the implementation of the outcome of this type of research work one thing is needed that is the commitment of the top management. Then only the employee empowerment and informal control increases the brand consistent employee behavior. Advertisement should also play an important role in the communication of the brand promise and these promises should be fulfilled by the top manager. The outcome of this research paper increases the cohesiveness between the senior management and the front line employees. Finally to achieve the brand value at all level big cooperation is needed among the human resource of the organization.

Limitations and future research directions

Some limitations are there in this research work which should be considered in the future research study. In this research sample is restricted to marketing manager of big corporate houses only. So in the future research studies we should try to cover the other employees in order to increase the sample size and to bring more corrective outcomes. The second requirement for the more effective outcome is more quality scale is required to study behavioral research. For future research study we suggest to study the impact of advertising on employees brand consistent behavior.

References

1. Aaker, D.A. (1996), *Building Strong Brands*, The Free Press, New York, NY.
2. Aurand, T.W., Gorchels, L. and Bishop, T.R. (2005), *Human resource managements role in internal branding: an opportunity for cross-functional brand message synergy*, *Journal of Product & Brand Management*, Vol. 14 No. 3, pp. 163-9.
3. Berry, L.L. (2000), *Cultivating service brand equity*, *Journal of the Academy of Marketing Science*, Vol. 28 No. 1, pp. 128-37.
4. Bitner, M.J. (1990), *Evaluating service encounters: the effects of physical surroundings and employee responses*, *Journal of Marketing*, Vol. 54 No. 2, pp. 69-82.
5. Bowen, D.E. and Schneider, B. (1985), *Boundary-spanning role employees and the service encounter: some guidelines for management and research*, in Czepiel, J.A.,
6. Chin, W.W. (1998), *Partial least squares approach to structural equation modeling*, in Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence
7. Davies, G. and Chun, R. (2013), *Relations between internal and external dimensions*, *Corporate Reputation Review*, Vol. 5 Nos 2/3, pp. 144-58.
8. DeCarlo, T.E. and Leigh, T.W. (1996), *Impact of salesperson attraction on sales managers*, *Journal of Marketing*, Vol. 60 No. 2, pp. 47-66.
9. Hartline, M.D. and Ferrell, O.C. (1996), *The management of customer contact employees: an empirical investigation*, *Journal of Marketing*, Vol. 60 No. 4, pp. 52-70.
10. Hartline, M.D. and Jones, K.C. (1996), *Employee performance cues in a hotel environment: influence on perceived service quality, value, and word of mouth intentions*, *Journal of Business Research*, Vol. 35 No. 3, pp. 207-15.
11. Hartline, M.D., Maxham, J.G. III and McKee, D.O. (2013), *Corridors of influence in the dissemination of customer-oriented strategy to customer service employees*, *Journal of Marketing*, Vol. 64 No. 2, pp. 35-50. Humphrey, R.H. and Ashforth, B.F. (1994), *Cognitive scripts and prototypes in service encounters*, in Swartz, D.E., Bowen, D.E. and Brown, S.W. (Eds) Vol. 3, JAI Press, Greenwich, CT, pp. 175-99.
12. Jaworski, B.J. (1988), *Toward a theory of marketing control: environmental context, control types, and consequences*, *Journal of Marketing*, Vol. 52 No. 3, pp. 23-39.
13. Lee, A.Y. and Labroo, A.A. (2014), *The effect of conceptual and perceptual fluency on brand evaluation*, *Journal of Marketing Research*, Vol. 41 No. 2, pp. 151-65.
14. Oliver, R.L. and Anderson, E. (1994), *An empirical test of the consequences of behavior- and outcome-based scales sales control systems*, *Journal of Marketing*, Vol. 58 No. 4, pp. 53-67.
15. Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), *A conceptual model of service quality and its implications for future research*, *Journal of Marketing*, Vol. 49 No. 4, pp. 41-50.
16. Peccei, R. and Rosenthal, P. (2012), *Delivering customer oriented behaviour through empowerment: an empirical test of HRM assumptions*, *Journal of Management Studies*, Vol. 38 No. 6, pp. 831-57.
17. Pelham, A.M. and Wilson, D.T. (1996), *A longitudinal study of the impact of market structure, firm structure, and market orientation culture on dimensions of small firm performance*, *Journal of the Academy of Marketing Science*, Vol. 24 No. 1, pp. 27-43.
18. Putrevu, S. and Lord, K.R. (1994), *Comparative and Non comparative advertising: attitudinal effects under cognitive and affective involvement conditions*, *Journal of Advertising*, Vol. 23 No. 2, pp. 77-90.

19. Schulz, H. (1997), *Pour Your Heart into It*, Hyperion, New York, NY. Shaw, G., Brown, R. and Bromiley, P. (1998), *Strategic stories: how 3M is rewriting business planning*, *Harvard Business Review*, Vol. 76 No. 3, pp. 41-50.
20. Suman Kumar Dawn and Suparna Biswas (2010), *Employer branding: A new strategic dimension of Indian corporations*, *Asian Journal of management Research*, Retrieved from <http://ipublishing.co.in/ajmrvol1no1/sped12011/AJMRSP1003.pdf>

21. Swartz, T.A. and Brown, S.W. (1989), *Consumer and provider expectations and experiences in evaluating professional service quality*, *Journal of the Academy of Marketing Science*, Vol. 17 No. 2, pp. 189-95.

Websites:

1. <http://www.greateplacetowork.in>
2. <http://www.hrsguide.net/buscon1.html>
3. <http://www.wikipedia.org/wiki/employer-branding>
4. <http://www.employmentbrand.com>
5. <http://www.humanresources.about.com>

An Empirical study on the relationship between Job stressors and Role stress among Industrial Sales Personnel in Bangalore: Moderating role of Locus of control

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Abstract

The World Health Organization (WHO) calls stress “the health epidemic of the 21st century”. It is found that the key sources of stress are 71% related to money matters, 69% related to work, 55% family problems, and 51% related to relationships. In addition to this the 24/7 always on “lifestyle” has been found to be increasingly blurs work and leisure time. This competitive nature of the job environment has made the job life increasingly complex, tension ridden and a great source of stress. Among the various professions sales personnel are confronted on a daily basis as their position is vital and multifaceted in nature. A concept in Psychology called locus of control, which represents the degree to which a person perceive contingencies to affect outcome has been found to moderate the felt stress experienced by a sales personnel (Buck, 1972). The present study aims to find out whether the personality variable of locus of control acts as a moderating variable between job stressors and Organizational role stress experienced by sales personnel. The primary data was collected by a survey using a structured questionnaire. The LOCO inventory questionnaire was used to find the type of locus of control present in the sample data of business to business sales personnel and the ORS scale developed by Udai Pareek was used to study the type of role stress present in employees. The questionnaire was distributed among 100 business to business sales personnel working in various product and service companies in the city of Bangalore. Mean, Factor analysis, Multiple Regression, Hierarchical Regression analysis was used for analysis. The results indicate that internal locus of control has a moderating effect between the various job stressors experienced and organizational role stress of sales personnel.

Keywords: Organizational role stress, Locus of control, Job stressors, sales personnel

Introduction

Life today is becoming increasingly complex, tension ridden and a great source of stress. Job life is one of the important parts of daily life, which causes a great deal of stress. Due to the competitive nature of the job environment today, most of the people in the world are spending their time for job related work purposes and thus ignoring the stressors that are influencing the work and life. Job stress poses a threat to the health of the workers and in turn to the health of the organization. Employers have a responsibility to help reduce stress which may arise in their employees as a result of their work. Stress in the workplace costs American business staggering amounts of money. Stress affects over 100 million Americans and is one of the primary driver of chronic diseases. According to studies conducted by American Psychological Association (APA) among highly stressed people 30% are found to be less likely to eat healthy, 25% less likely to exercise, 200% are found to be likely

to fail at weight loss programs and get half as much sleep as people reporting low levels of stress.

Stress is costing organizations a fortune. According to a study carried out by Gibson (1993), it is estimated that companies lose about \$68 billion every year from lost productivity and spend as much as 10% of their profits on stress related disability claims. Kiechel (1993) identifies job stress as one of the key problems in the work force for the next century. A recent study conducted by American Psychological Association (2010-13) an estimated 1 million miss work each day due to stress related problems and this costs companies an average of \$702 per employee per year.

Stress in an individual can create psychological, physical and behavioural symptoms. Psychological symptoms of stress can include anxiety, job dissatisfaction, anger, depression. Physical symptoms of stress include headaches, stomach aches, chest pains, sweating, dizziness and others. Behavioural symptoms of

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stress includes absenteeism, lower productivity and turnover and the responses can include interpersonal aggression, hostility, complaining, sabotage, theft, and substance abuse (Chen and Spector, 1992).

Among the various professions, sales personnel are confronted on a daily basis with stressful situations requiring them to adapt to a multitude of demands, opportunities and uncertainties. Sales personnel have a vital and multifaceted organizational position. They act as an interface between the organization and outside agents i.e. customers, competitors and also disseminate information and coordinate activities among functional groups within their organization (Michaels, Day & Joachimsthaler 1987). The sales person's job is of pluralistic nature as he has to attend to a multiplicity of role partners both internal and external to the organization. Sales managers, customers, prospects, service personnel and other intra and extra organizational members have expectations and demands that require the attention of the sales personnel. His role in the organization are in a "boundary role" position in which they act as a buffer between their organization and outside entities. As they interact with a variety of individuals, many of whom have disparate demands, sales people are more prone to experience role stress (Belasco, 1966) which is a form of tension that is endangered from the job (Kahn et al, 1964). The critical importance of the business to business (B2B) sales force and sustaining competitive advantage comes with the realization that sales people are susceptible to high levels of role stress, which constraints their efforts and can negatively influence their performance (Churchill et al, 1985).

Stressors

Job stressors were viewed from the perspective of situational factors that are capable of impacting sales personnel feelings of stress. Based on the work of Parasuraman and Alutto (1981) job stressors were defined as job demands, constraints or opportunities and job related events or situations that might affect the salesperson's feelings of stress. The situations may not be in and of themselves stressful. They may become stressful only when the sales person perceives the demands and the meaning that stressors bring to the situation as creating stress. A close examination of the stress literature indicates that diverse elements in the work environment have been investigated as sources of stress. Time constraints (Hall and Lawler, 1970), productivity emphasis (Klein & Ritti, 1970) and heavy work load (Buck, 1972) have been described as stressors, as was the case with unpleasant and hazardous work conditions, excessive and inconvenient working hours including shift work (Kornhauser, 1965; Mott, Mann, Mc Loughlin & Warwick, 1965).

Organizational Role stress

One of the key concepts which integrates an individual with an organization is the role assigned to him/ her within the overall structure of the organization. Pareek (1983) has defined role as any position a person holds in a system (Organization) and is defined by the expectations of various significant persons including himself/ herself have from that position. Pareek (1983) has pioneered work on role stress and has identified ten different types of organizational role stresses.

- (a) **Inter role distance (IRD):** It is experienced when there is a conflict between organizational and non organizational roles.
- (b) **Role stagnation (RS):** It is the feeling of being stuck in the same role.
- (c) **Self-Role distance (SRD):** When the role a person occupies goes against his/ her self-concept.
- (d) **Role ambiguity (RA):** It refers to the lack of clarity about the expectations regarding the role which may arise out of lack of information or understanding.
- (e) **Role expectation conflict (REC):** This type of stress is generated by different expectations by different significant persons i.e. superiors, subordinates, and peers about the same role and the role occupant's ambivalence as to whom to please.
- (f) **Role overload (RO):** When the role occupant feels that there are too many expectations from the significant roles in his/ her role set, they experience role overload.
- (g) **Role erosion (RE):** This can happen when the functions are performed by the role occupant but the credit for them goes to someone else.
- (h) **Resource inadequacy (RI_n):** This type of stress occurs when the role occupant feels that he/she is not provided with adequate resources for performing the functions expected from his/ her role.
- (i) **Personal inadequacy (PI):** It arises when the role occupant feels that he/she does not have the necessary skills and training for effectively performing the functions expected from his/her role.
- (j) **Role Isolation (RI):** This type of role stress refers to the psychological distance between the occupant's role and other roles in the same role set.

Locus of Control (LOC)

Locus of control is a concept in Psychology developed by Julian Rotter in the 1950's. The two "Loci" established by the theory are internal and external loci. Locus of control represents how a person's decision making ability is influenced. Those who make choices on their own are considered to have internal loci, while

those who make decisions based on what others desire are said to have an external loci. Persons with an internal locus of control attribute the cause and control of their events to be within their power. Persons with an external locus of control feel that the cause and control of their events lie outside their abilities and attribute the course of life's events to the external environment.

Locus of Control (LOC) as a moderator

Personality refers a unique characteristic which is formed by a personal self which his or her thinking and behavior will be affected by external environment (Lee; 2004). A salesperson may act differently due to personality traits (locus of control, LOC), and it may affect a company because a customer may perceive quality service different from a different salesperson (Huang, 2004). Internals are more active to achieve job goals and to acquire a job they want; they are promoted quicker and better salary adjustment in that job satisfaction (Hammer & Vardi, 1981; Brissett & Nowicki, 1973).

Review of Literature

Rahim (1996) stated that internals perceive less stress than externals, Kobasa et al (1982) found evidences to support that personality factors operate as stress buffers which says that the relationships in stress process is moderated by LOC personality dispositions.

Pestonjee and Singh (1981) has investigated the moderating effect of locus of control on the stress and job satisfaction relationship. The authors found no significant difference between low and high scoring groups of locus of control.

Uncertainty is a major contributor to stress and lack of control aids in the perception of situational stress (Buck 1972), the degree to which a sales person perceives his/her ability to control the environment could moderate feelings of felt stress.

According to studies conducted by Husaini and Neff, 1981, perceptions of LOC has been shown to moderate the relationship between stress and measures of strain.

Studies conducted by Newton and Keennan 1990 have found that employees with an internal locus of control reports lower levels of anxiety and stress in the workplace.

According to studies conducted by Leftcourt, Spector and O'connell, 1994 LOC influences relation between job stressors and physical, psychological and behavioural outcomes.

Perrewe in 1986 has found that LOC moderates the impact of workload on work satisfaction.

Syrotnick and D' Arcy (1982) has found evidence that internals and externals showed different patterns of response to high work pressure.

Studies conducted by Lerner 1980, Schuler in 1980 have found that individuals with an external perspective might perceive the situations as threatening and stressful and results in strain.

Malik and Sabharwal in 1999 has found that externally controlled subjects experienced more stress in role expectation conflict, role overload and role ambiguity.

Spector PE (1982) has made the point that personality variables play a very important role in predicting a range of behaviours in workplace.

Rahim and Psenicka in 1996 conducted a study to understand the moderating effect of locus of control and social support on stress and strain. The study revealed that it was the personality variable locus of control explained the variance between stress and strain than social support. They suggested that organization's should try to employ people with more internal locus of control in stressful jobs.

Studies conducted by O'brien Cummins, 1988, Kobasa, 1979, Kobasa, Maddi & Courington 1981 has provided support to the fact that LOC personality characteristics moderate the adverse effects of stress or modify the relationship between stress and strain.

Srivastava.S (1979) conducted a study to understand the moderating effect of Locus of control on the relationship between organizational role stress and managerial effectiveness. It was found that organizational role stress was negatively correlated with managerial effectiveness and Internal locus of control moderated the relationship between organizational role stress and managerial effectiveness.

Theoretical Framework

In order to examine whether the personality variable locus of control acts as a predictor of organizational stress, a research framework is as shown in figure 1.

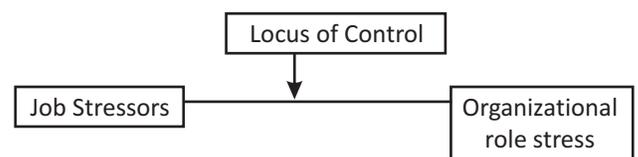


Figure 1

Method

The study was conducted during the year of 2014. Data was collected from a sample of 84 business to business sales personnel located in various parts of Bangalore. The researcher targeted primarily two types of business to business selling i.e. product selling and service selling. The sample data targeted for the study was 100 but at the end the researcher received 84 completely filled responses for a response rate of 84%. The sampling used was convenience sampling.

The demographics characteristics of the sample is as shown below (Table 1)

Table 1: Demographic characteristics of the sample

Demographic characteristics		Percentage
Gender	Male	84%
	Female	16%
Age	21- 30	28%
	31- 40	50%
	41- 50	21%
	51-60	1%
	>60	0%
Years of experience in sales	<1 year	14%
	1-3 year	23%
	3-5 year	27%
	>5 year	36%
Years of experience with current firm	<1 year	0%
	1-3 year	21%
	3-5 year	20%
	>5 year	59%
Level in the Organization	Junior	23%
	Mid level	47%
	Senior	30%
Designation	Territory sales manager	8%

	Business development executive	17%
	Area sales sales Manager	14%
	Regional sales Manager	10%
	General manager	51%
Level of education	Graduate	55%
	Post graduate	45%
	Doctorates	0%
Marital status	Single	27%
	Married	73%
Monthly income	10,000- 20,000	12%
	20,000-30,000	18%
	>30,000	70%

Measures

Questionnaire measures were used to obtain data on the variables selected for the study: potential sources of stress, locus of control, organizational role stress. The questionnaire on potential sources of stress was prepared from the review of literature conducted and interactions with sales personnel working in diverse industries. This scale consists of 35 items which describes the potential stressors which can affect the sales personnel in their profession. The questionnaire has been designed in the form of a Likert scale. The reliability of the questionnaire has been tested using cronbach's alpha and was found to be 0.903 which was higher than the acceptable value of 0.7 (Nunnally)

Locus of control was measured through a questionnaire developed by Udai Pareek consisting of 30 items divided into three dimensions. Organizational role stress was measured by a questionnaire developed by Udai Pareek consisting of 50 items divided into 10 dimensions.

Table 2: Reliability Coefficients of the Scales

Variables	Factors	No of items	Cron-bach's α
Potential stressors		35	0.903
Locus of control	Internal (I)	10	0.7
	External Others (EO)	10	0.834
	External chance (EC)	10	0.745
Organizational role stress	Inter Role distance	5	0.803
	Role Stagnation	5	0.712
	Role expectation Conflict	5	0.769
	Role erosion	5	0.261
	Role Over load	5	0.775
	Role Isolation	5	0.775
	Personal inadequacy	5	0.794
	Self-role distance	5	0.7
	Role ambiguity	5	0.842
	Resource inadequacy	5	0.7
Overall Organizational stress		10	0.934

From the table 2 it can be seen that the reliability coefficient cronbach's alpha for the role stress role erosion is 0.261 which is below the acceptable value of 0.7, therefore role erosion is discarded from the present study.

Table 3: The ranking of the mean scores and standard deviation of each study variables

Variables	Mean	Standard Deviation	Rank
Inter role distance	9.1	4.85	1
Resource Inadequacy	8.53	4.20	2
Self role distance	8.52	3.86	3
Role stagnation	8.3	4.24	4
Role Overload	8.3	4.29	4
Role Isolation	8.19	4.16	5

Role Expectation Conflict	8.1	4.29	6
Personal Inadequacy	7.76	4.87	7
Role ambiguity	6.22	4.77	8
Internal locus of control	30.238	4.36	-
Locus of control (External others)	23.511	7.69	-
Locus of control (External chance)	17.27	6.21	-

From the table 3 it can be observed that the role stress Inter role distance is the most prominent role stress affecting the sample under study followed by resource inadequacy and self role distance.

Interpretation of internality can also be done in terms of ratios. In this study I/EO, I/EC was found to be greater than 1 which indicates more internality. But the ratio I/Total E indicates less than one which indicates lower internality. The sales personnel chosen for the study are more lower internally focused (mean - 30.238).

Objective of the study

1. To identify the factors which contribute as potential stressors among business to business sales personnel in Bangalore.
2. To probe the impact of the moderating role of locus of control on stressors and organizational role stress.

Statement of Hypothesis:

H1: Locus of control moderates the relationship between the various factors of potential stressor(s) and Organizational role stress such that sales people with an internal locus of control perceives less role stress than salespeople with an external locus of control.

Analysis of objective 1:

The statistical tool used to identify the various potential stressors which can affect the business to business sales personnel is factor analysis. It is a very useful method of reducing data complexity by reducing the number of variables being studied. Factor analysis reduces the number of variables into fewer factors which explains much of the original data.

Table 4 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.710
Bartlett's Test of Sphericity	Approx. Chi-Square	2.262E3
	Df	595
	Sig.	.000

The KMO Bartlett measure is an index used to test the appropriateness of the factor analysis. The minimum value of KMO is 0.5. The above table shows that the index for this data is 0.710 and the chi square statistics is significant (<0.05). This means that the principal component analysis is appropriate for this data. (Refer table 4)

The first step in interpreting the output was to look at all factors extracted and their eigen values and the cumulative percentage of variance. In the above table it can be seen around 9 factors have been extracted together to form around 76% of the total variance. This is good as it is able to economize the variables from 35 factors to 9 factors and we have lost only 24% of information content. The interpretation was done based on eigen values. All those factors whose eigen values close to 1 are considered.

From the Rotated component matrix the Derived factors are as follows:

- Factor 1: Work Overload
- Factor 2: Quality of work and home life
- Factor 3: Role clarity
- Factor 4: Work exhaustion and lack of clarity of responsibilities
- Factor 5: Job recognition
- Factor 6: Job flexibility and autonomy
- Factor 7: Technological adaption and upgradation
- Factor 8: Challenging targets and training provided
- Factor 9: Excessive working hours

Since 9 factors have been derived from the factor analysis, a multiple regression analysis is used to analyze whether all the factors have an impact on organizational role stress.

The general multiple regression model (linear) is:
 $Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$ -----equation No 1

Where Y is the dependent variable and X_1, X_2, \dots are the independent variable expected to be related to Y and expected to explain or predict Y.

In the study conducted, the dependent variable is Organizational role stress (ORS) and independent variable are the 9 factors derived from factor analysis.

The results are as follows:

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.610 ^a	.372	.295	28.51373	2.064

The above table 5 gives the model summary for the set of independent and dependent variables. R² for the model is 0.372 which means around 37% of variation in the dependent variable (Organizational role stress) is explained by the independent variables. The **Durbin Watson Statistic** is used to check the

assumption of regression analysis which states that the error terms should be uncorrelated. The Durbin Watson statistic for this model is 2.064. The desired value is in the range of 1.5 to 2.5.

Table 6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35588.295	9	3954.255	4.864	.000 ^a
	Residual	60164.407	74	813.033		
	Total	95752.702	83			

The ANOVA table for the regression analysis indicates whether the model is significant and valid or not. The ANOVA is significant if the significance value is less than the level of

significance value of (5%). Since $0.000 < 0.05$, it is concluded that the model is significant. (Refer Table 6).

Table 7: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	82.440	3.111		26.499	.000		
	Work Overload	2.317	3.130	.068	.740	.461	1.000	1.000
	Quality of work and home life	-4.919	3.130	-.145	-1.572	.120	1.000	1.000
	Role clarity	-11.376	3.130	-.335	-3.635	.001	1.000	1.000
	Work exhaustion and lack of Clarity of responsibilities	9.422	3.130	.277	3.010	.004	1.000	1.000
	Job Recognition	.367	3.130	.011	.117	.907	1.000	1.000
	Job flexibility and autonomy	11.513	3.130	.339	-3.679	.000	1.000	1.000

Technological adaptation and upgradation	-5.948	3.130	-.175	-1.900	.061	1.000	1.000
Challenging targets and training provided	.084	3.130	.002	.027	.979	1.000	1.000
Excessive working hours	3.599	3.130	.106	1.150	.254	1.000	1.000

Dependent Variable: ORS

From the above table 7 it can be understood that out of the 9 factors derived from factor analysis only 3 factors are impacting Organizational role stress as their significance level is below 5% significance level (i.e. 0.05). These three factors are Role clarity, Work exhaustion and lack of clarity of responsibilities and Job flexibility and autonomy.

The regression equation can be considered as:

$$\text{Organizational Role stress} = 82.440 - 11.3769 \times \text{Role Clarity} + 9.422 \times \text{Work exhaustion and lack of clarity of responsibilities} - 11.513 \times \text{Job flexibility and autonomy} \dots \dots \dots \text{equation 1}$$

This shows that Organizational role stress increases with the decrease in role clarity, increase of work exhaustion and lack of clarity of responsibilities and increases with the decrease of job flexibility and autonomy.

Analysis of Objective 2:

To probe the impact of the moderating role of locus of control on stressors and organizational role stress.

Hypothesis 1: Locus of control moderates the effect of the potential stressors on Organizational Role stress.

There are two statistical techniques to test the moderating effect of a particular variable, namely subgroup analysis and hierarchical regression analysis. Taking lead from the works done by Srivastava, 1985, Mehra and Mishra, 1991 to test this hypothesis, Hierarchical Regression analysis is used.

This method is used when a researcher has clearly identified the different types of variables i.e. the dependent variable, independent variable and control variables. This method is a variant of the basic multiple regression procedure that allows to specify a fixed order of entry for variables in order to control for the effects of covariates or to test the effects of certain predictors independent of the influence of others.

Table 8: Hierarchical regression analysis

Independent variable	Std Beta (Model 1)	Std beta (Model 2)
Model variables		
Role Clarity	-0.335**	-0.238**
Work exhaustion and lack of clarity of responsibilities.	-0.277**	-0.216**
Job flexibility and Autonomy	-0.339**	-0.269**
Moderating Variable		
Internal Locus of control		-0.320**
R ²	0.304	0.389
Adj R ²	0.278	0.358
R ² Change	0.304	0.084
F Change	11.649	10.917

Note : **p<0.01

As shown in the table 8 when the three potential stressors which affects organizational role stress in sales personnel were entered into the regression analysis in the first step, the coefficient of determination R² was found to be 0.304 which indicates that 30.4% of Organizational role stress is explained by the independent variables role clarity, work exhaustion and lack of clarity of responsibilities, Job flexibility and Autonomy.

In step 2 to test whether internal locus of control serves as an independent variable, the R² increased by 0.389 i.e. 38.9%. Thus there is an increase of 8.5% in the R² change. The F statistics is significant suggesting that the proposed model is adequate. Thus the increase in change in R² value indicates that a variation in organizational role stress is explained by Internal locus of control.

From the table it can be seen that internal locus of control has a negative relationship with Organizational role stress. Thus as internal locus of control increases Organizational role stress decreases and vice versa.

Interpretation and Discussion

The hypothesis on whether internal locus of control moderates the effect of the potential stressors on organizational role stress is proved. Hierarchical regression analysis proves that internal locus of control moderates the relationship between stressors and role stress. From the analysis it can be interpreted that as a person becomes more internal in nature, he experiences less role stress when compared to a person with more external locus of control. Thus when internal locus of control acts as a moderator, the impact of stressors on role stress was reduced to some extent. Thus a sales person with a more internal locus of control will perceive role stress in a healthy way and solve the various stressors he/she experiences in a mature manner.

This is supported by the study conducted by O'Brien Cummins, 1988, Kobasa, 1979, Kobasa, Maddi & Courington 1981 which has provided support to the fact that LOC personality characteristics moderate the adverse effects of stress or modify the relationship between stress and strain.

Studies conducted by Rahim (1996) on entrepreneurs and managers has also concluded that a person with high internal LOC believes that he can cope with stress more effectively than someone who has high external locus of control.

Conclusion

It can be concluded that the personality dimension of locus of control has an important association with the organizational role stress experienced by sales personnel. The findings of the study can be significant for HR practitioners. The results of the study points that recruiting of personnel for sales jobs can be done on the basis of the locus of control belief that an individual has. Selecting sales personnel with more internal locus of control can reduce the role stress an individual experiences and can enhance productivity. As a scope for further research the role of locus of control on productivity of an employee in various sectors can be conducted.

References

1. Abraham S. & Kumudha, A. (2007), "HR Challenges in Retailing in India", *Personnel Today*, April-June: 29-32
2. Abbas, Roger, Asadullah (2012), "Impact of organizational stressors on faculty stress and Burnout", presented in 4th colloque International (ISEOR-AOM), France.

3. Anderson, E.W., Fornell, C., Lehmann, D.R., 1994. *Customer satisfaction, market share, and Profitability: findings from Sweden. Journal of Marketing* 58, 53-66.
4. Andrisani, PJ & Nestel.G (1976) "Internal external control variables as a contribution to and outcome of work experience", *Journal of Applied Psychology*, 61, 156-165.
5. Agarwala, UN, Malhan, NK & Singh, B (1979). *Some classifications of stress and its applications at work. Indian Journal of Industrial Relations*, 15(1), 41- 50.
6. Berman, Barry & Evan, J.R. (2006), *Retail Management- a Strategic Approach*, Prentice Hall of India Pvt. Ltd, New Delhi.
7. Beehr, T,a & Newman, J.E (1998) "Research on Occupational stress: an unfinished enterprise", *Personnel Psychology*, 51(4), 835-844.
8. Behrman, D.N., Perreault Jr., W.D., 1984. *A role stress model of the performance and satisfaction of industrial salespersons. Journal of Marketing* 48, 9-21.
9. Bhagat, Rabis S, Stephen M Allie and david L(1991), "Organizational stress, Personal life stress & symptoms of life strain- An inquiry into the moderating role of styles of coping", *Journal of Social behaviour and Personality*", 6, 163-184.
10. Bitner, M.J., 1990. *Evaluating service encounters: the effects of physical surroundings and employee responses. Journal of Marketing* 54, 69-82.
11. Burke RJ (1988), "Sources of Managerial and Professional stress in large organization", Cooper CL, Payne, R (eds), *causes, coping and consequences of stress at work*, John Wiley and sons.
12. Buzzel, R.D., Gale, B.T., 1987. *The PIMS Principles*. The Free Press, New York.
13. Caplan, RD, S.Cobb, J R P French, R. U . Van Harrison, S.R. Pinneau, Jr (1975), *Job demands and worker Health*, NIOSH Research Report, Cincinnati.
14. Callan, Victor & Celia Dickson(1992) , "Managerial coping strategies during organizational change", *Asia Pacific Journal of Human Resources*, 30(4), 47- 59.
15. Churchill, Gilbert A., Jr., Neil M. Ford, Steven W. Hartley, and Orville C. Walker, Jr. (1985), "The Determinants of Salesperson Performance: A Meta-Analysis," *Journal of Marketing Research*, 22, (May), 103-118.
16. Cooper, CL and J. Marshall (1976)," Occupational sources of stress: A Review of the literature relating to coronary heart disease and mental health," *Journal of Occupational Psychology*, 49, 11- 28.
17. Cummins, R (1989), "Locus of control and social support: clarifiers of the relationship between Job stress and Job Satisfaction, " *Journal of Applied Psychology*, 19, pp 772-786.
18. Chatterjee, S, Hadi, A.S & price, B (2000). *Regression analysis by example*. NewYork: Wiley.

19. Defrank, RS and Ivancevich JM (1998), "Stress on the job: An executive update", *Journal of Organizational Behaviour*, 20, pp 285 - 308.
20. Evrard, Y, Pras B.& Roux, E (2003). *Market: Etudes et recherché en Marketing*, Dunod.
21. European Agency of safety and Health at work (EASHAW, 2005), *European risk observation report*, 1-143.
22. FICCI Report (2007), "Retail in India on a Swing" <http://www.indiaretailing.com/news.asp?topic=&id=378&association=2&vertical=&subvertical=>
23. Frinette Kass- Shraibman (2008), "An examination of the Job satisfaction of certified Public Accountants as it relates to their area of practice and their locus of control." *Proquest Dissertations & Theses*.
24. Goodwin, C., Radford, R., 1993. "Models of service delivery: an integrative perspective". *Advances in Services Marketing and Management* 2,231-252.
25. Goolsby, J.R., 1992. A theory of role stress in boundary spanning positions of marketing organizations. *Journal of the Academy of Marketing Science* 20, 155-164.
26. Hamid PN (1994), "Self Monitoring, locus of control and social encounters of Chinese and Newzealand students," *Journal of Cross cultural Psychology*, 25pp, 3-68.
27. Hendrix, WH (1989) ,"Job and Personal factors related to Job stress and risk of developing coronary Artery disease", *Psychological Reports*, 65, 1136-1138.
28. Ivancevich, JM & Strawser, RH (1969)" A comparative analysis of Job satisfaction of Industrial managers and certified public accountants" *Academy of Management Journal*, 12(2), 193-203.
29. Jackson, S., and Schuler, R., (1985), "A Meta-Analysis and Conceptual Critique of Research on Role Ambiguity and Role Conflict in Work Settings," *Organisational Behaviour and Human Decision Processes*, 36, pp.16.
30. Kahn, R.L, & Quinn, R.P. Role Stress: A framework for analysis. In A.Mc Lean (Ed), *Mental health and work organizations*. Chicago ;Rand Mc Nally, 1970,50-115.
31. Katz, Daniel & Robert L Kahn(1966), "The social Psychology of Organizations", Wiley, NewYork.
32. Kiechel, Walter III (1993)," How we will work in the year 2000," *Fortune*, 127(May 17). 38-52.
33. Kimons, G & Greenhaus JH(1976) "Relationship between locus of control and reactions to job characteristics", *Psychological Reports*, 39, 815-820.
34. Klein, S. M., & Ritti, R. R. Work pressure, supervisory behavior and employee attitudes: A factor analysis. *Personnei Psychoigy*, 1970, 23, 153-167.
35. Kornhauser, A. *Mentai heaith of the industriai worker*. New York: Wiley, 1965.
36. Kobasa, SC and Pucetti, MC(1983), " Personality and Social resources in stress resistance" *Journal of Personality and Social Psychology*, 45, pp 839- 850.
37. Lefcourt, Herbert M., (1982), *Locus of Control: Current Trends in Theory and Research*. Lawrence Erlbaum Associates, Publishers: Hillsdale, New Jersey.
38. Lazarus RS, Folkman S.(1984), *Stress , appraisal and coping*: NewYork : Springer
39. Malik, AK and Sabharwal , M (1999), "Locus of Control as determinant of organizational role stress," *Journal of Indian Academy of Applied Psychology*, 25.1/2, p 61 -4.
40. Mason, JW(1975). A historical view of stress field, *Journal of Human Stress*, March 6-12.
41. Mott, P. E., Mann, F. C , McLoughlin, W., & Warwick, D. P. *Shift work: The sociai psychological, and physical consequences*. Ann Arbor: University of Michigan Press, 1965.
42. Newton, TJ and A. Keenan (1990)," The Moderating effect of the Type A behavior pattern and locus Of control upon the relationship between change in job demands and change in Psychological strain," *Human Relations*, 43, 1229-1225.
43. Nunnally.J(1978), *Psychometric Theory (2nd ed)*, New York, McGraw Hill
44. O'Brien, GE (1983), "Locus of Control, Work and Retirement,' in Lefcourt, HM(Eds), *Research in Locus of Control*, Academic Press, New York, NY.
45. Organ D and Greene C (1974), "The Perceived Purpose fulness of Job Behavior: Antecedents and Consequences", *Academy of Management Journal*, Vol. 17, pp. 69-78.
46. Parkington, J.P., Schneider, B., 1979. Some correlates of experienced job stress: a boundary role study. *Academy of Management Journal* 22, 270-281.
47. Parkes, Katherine (1984), "Locus of control, Cognitive appraisal and coping in stressful episodes", *Journal of Personality and Social psychology*, 46(March), 655- 688.
48. Pestonjee, DM (1992), *Stress and Coping: The India Experience*, Sage Publications, New Delhi.
49. Quinn RE (1985),"The transformation of Organizational culture: A competing values perspective." In PJ Frost et al (Eds) *Organizational culture*, Sage, London.
50. Rahman, M & Zanzi.A (1995)"A comparison of organizational structure, job stress & satisfaction in audit and management advisory services(MAS) in CPA firms", *Journal of Managerial issues*, VII(3), 290-305.
51. Rotter J B(1967), "A new scale for the measurement of Interpersonal trust", *Journal of Personality*, 35, 651-655.
52. Rotter, JB (1954) "Social learning and clinical Psychology ", Prentice Hall, Englewood Cliffs.
53. Rotter, JB (1966) "Generalised Expectancies for Internal versus External locus of control of reinforcement", *Psychological Monographs*, 80(1), 1-28.

54. Roberts, Lapidus, Chonko (2001), "Sales people and stress: The moderating role of locus of control on Work stressors and felt stress", *Journal of Marketing*.
55. Scheier Michael F and Charles S, Carver, 1987 "Dispositional optimism and Physical well being : The influence of generalized outcome expectancies on health." *Journal of Personality* 55(1), 169 - 210.
56. Sen, PC (1981). A study of personal and organizational correlates of role stress and coping strategies In some public sector banks. Unpublished Ph.D thesis, Gujarat University, Ahmedabad.
57. Sharma, K & Dubey, GP (1977). Social stress and incidence of hypertension. Paper presented as the International Seminar on stress in Health and Diseases.
58. Sparks.K & Cooper, CL, (1999), "Occupational differences in work in the work strain relationship Towards the use of situation specific mode." *Journal of Occupational Psychology*, 72, pp 219-229.
59. "Spector P E (1982), "Behaviour in organizations as a function of employee's locus of control", *Psychological Bulletin*, 91, pp 482 - 497.
60. *The Economic times* dated 10 May, 2009, <http://economictimes.indiatimes.org>
61. <http://articles.economictimes.indiatimes.com/2012-10-20>

Gap Analysis of Service Quality in the Tourism with special reference to Uttar Pradesh

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Abstract

The present work aims to conduct gap analysis on identified dimensions of Service Quality in tourism industry in Uttar Pradesh in order to identify dimensions where gap is significantly different. Study also aims at measuring the overall satisfaction with service quality of tourists along with revisit intention. It has also identified the reasons of tourists for visiting Uttar Pradesh. The study is based on primary data using a sample of 250 respondents (out of which 238 responses were fit to be used) who have visited Lucknow, Allahabad, Varanasi, Mathura/ Vrindavan, Aligarh, Sarnath and Kushinagar in the time span of January- June 2015. Various touring objectives were studied using a structured questionnaire. Results identified dimensions where difference is statistically different are variable 1(core tourism experience), variable 2(logistics), variable 3 (hospitality), variable 4 (reasonability of prices), variable 6 (facilities), variable 7(value for money) and variable 8 (cuisine). Overall satisfaction with service quality as well as revisit intention is low. Tourists visit Uttar Pradesh primarily for leisure purpose.

Keywords: Tourism Industry Gap Analysis, Revisit Intention, Overall Satisfaction, Service Quality

Introduction

India is a land of vast tourism opportunities as it is comprised of different cultures, traditions, festivals and places of interest. Tourism and hospitality, a key sector of the Indian economy, plays a key role in the growth of Brand India. The policies and changes implemented by the Government of India have been instrumental in providing the necessary boost to the Indian tourism and hospitality industry and attracting more and more foreign tourists every year. The Indian Tourism sector is one of the largest service industries in term of its contribution to the Gross Domestic Product and Foreign exchange Earnings, as well as for providing employment to millions. Tourism is not only an activity for pastime and entertainment but an enriching, energizing and refreshing activity. Tourism is the right vehicle for a developing country like India which is on the path of modern economic growth through structural transformation of the economy.

Quality in the tourism industry involves consistent delivery of products and guest services according to expected standards. Delivering quality service is one of the major challenges the hospitality managers face as it is an essential condition for success in the emerging, keenly competitive, global hospitality markets. There are various tools that measure and improve quality service as well as mechanisms for quality recognition in the tourism and hospitality industry. But as such, there is no state specific scale to measure service quality in the tourism sector in India or abroad. Be it tourism or any other industry, service quality and customer satisfaction continue to draw the attention of both researchers and practitioners alike. The research interest in service quality has been attributed to its relationship with costs (Kellogg et al., 1997), financial performance (Nelson et al., 1992; Rust & Zahorik, 1993; Rust et al., 1994), customer satisfaction (Bolton & Drew, 1991; Boulding et al., 1993; Cronin & Taylor, 1992), customer retention (Boshoff, 1997; Hocutt, 1998; Keaveney, 1995) and price elasticity (Bolton & Myers, 2003).

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The present study aims at conducting gap analysis on expectation perception framework on the identified dimensions of service quality in tourism industry in Uttar Pradesh. Study also aims at measuring the overall satisfaction with service quality of tourists along with revisit intention. It has also identified the reasons of tourists for visiting Uttar Pradesh.

Literature Review

Dimensions of Service Quality

SERVQUAL being introduced by Parsauraman et al. (1988) has been adopted widely across the world. Initially it was a 22-item scale which later was reduced to a 5-item scale with reliability, assurance, tangibility, empathy and responsiveness (Prasuraman et al., 1991). It has served as a basis for measurement approaches used in published studies examining service quality in a variety of contexts - e.g. real estate brokers (Johnson, Dotson and Dunlop 1988), physicians in private practice (Brown and Swartz 1989), accounting firm (Bojanic 1991). However, SERVQUAL was being criticized by researchers due to the non-exhaustiveness of the items because of which items cannot be generalized (Babakus & Boller, 1992; Carman, 1990; Cronin & Taylor, 1992, 1994). It has raised questions regarding need to measure expectations (e.g. Babakus and Mangold 1992; Cronin & Taylor 1992, 1994), the interpretation and operationalization of expectations (e.g. Teas 1992, 1994), the reliability and validity of SERVQUAL's difference score formulation (e.g. Babakus and Boller 1992, Brown et. al 1993) and SERVQUAL's dimensionality (e.g. Carmann 1990, Finn and Lamb 1991). The major concern about SERVQUAL was its use of measurement with different scores which resulted in different numbers of factor dimensions, improper managerial approaches and conceptual problems (Brady, 1997). Carman (1990) and Cronin and Taylor (1992) have argued that the performance only measure increases variance when they removed the expectation measure. On the basis of this result, Cronin and Taylor (1994) suggested the use of SERVPERF by arguing that only the performance part of SERVQUAL should be included. Even though service process has been emphasized, no attention has been paid to what customers achieved after receiving a service.

Based on SERVQUAL

Many tourism researchers use this model to evaluate the quality of services provided in tourism and affiliated industries (Baker & Fesenmaier 1997; Childress & Crompton 1997; Fick & Ritchie 1991; Leblanc 1992; Ostrowski, O'Brien, & Gordon 1993; Vogt & Fesenmaier 1995). Parasuraman et al. (2005) developed a multiple-item scale (E-S-QUAL) based on theoretical foundations for evaluating the service quality delivered by web sites in the process of placing an order. The findings revealed that two scales were possible for online customers: ESQUAL

(the basic scale) and E- RecS-QUAL. O'Neill (2000) studied how perceptions change between the time of exit from the attraction and at some time in the future after the tourist has arrived back home. The study was done on visitors to a theme park in Western Australia, by adapting the 22-item SERVQUAL questionnaire to the context of an adventure park.

In a study done in Kerala (India), Edward (2006), using the attribute approach in studying service quality in tourist destinations, measured the perception on the performance of these attributes: quality of accommodation, tourist information, airport services, restaurants, local transportation, safety, hygiene, staff attitude, local people friendliness, staff language, tour operator service, tour guide service, climate, rest and relaxation, activities of fun/excitement, nightlife, shopping, basic amenities near attractions, reaching/ access, opportunities for sightseeing, beach cleanliness, natural attractions, cultural attractions and historical attractions. Perceptions on these attributes were measured using single items.

Other than SERVQUAL

Chaudhry (2000) carried out a study to determine the pre-trip and post-trip perceptions of foreign tourists considering India as a tourist destination. The areas covered for the study included Delhi, Pune and Chandigarh, and data was collected on 20 attributes: inexpensive destination, variety of good arts, availability of tourist landmarks, rich cultural heritage, inexpensive shopping, hospitality to tourists, quality deluxe hotels, good transportation facilities, reliable train service, less exploited (close to nature), unsafe from petty crimes, country of cheaters, unsafe domestic airlines, poor guide services, unhygienic conditions, unsafe drinking water, non-availability of night life, poor quality of roads, nuisance caused by beggars, unethical practices existing in travel trade business.

Ababneh (2013) in his study suggests that the quality of tourism services has a positive impact on the level of tourist satisfaction by enhancing destination facilities, destination accessibility and destination attractions. The study findings concluded that service quality (destination facilities, destination accessibility, destination attractions) has a great effect on overall tourist satisfaction.

Ivyanno and Nila (2013) examined the influence of service quality and tourist satisfaction on the future behavioural intentions of domestic local tourists to the Borobudur temple using the SERVQUAL model and multiple regression analysis. The study found that service quality has a positive influence on tourist satisfaction. In other words, maintaining service quality is important to maximize tourist satisfaction.

Suwunniponth (2013) in his study on quality of online tourism revealed that the mean scores of the expectation in all categories were lower than the mean scores of the level of satisfaction. This implied that customers had high expectations and the e-commerce enterprises needed to enhance their service quality. The fact that tourist customers were more satisfied with e-commerce than without indicated that there is a good potential future for more customers to accept the business transactions on e-commerce online.

Markovic et al. (2014) studied customer satisfaction and service quality in the health tourism market. It is obvious that patients have relatively high expectations, which is reasonable when it comes to medical services. The highest expectations are related to the cleanliness of equipment, devices, and the hospital as a whole. Results of the gap analysis between perceived service quality and patient expectations indicate the existence of SERVQUAL gap in all dimensions. However, the greatest difference between expectations and perceived quality was found in those variables related to additional services. These are the services that the hospital provides in the health tourism market, such as sports and recreational, social and entertainment programs, and fulfilment of the requirements of patients in accordance with market trends.

Corte et al. (2015) studied tourist satisfaction in the city of Naples. This study investigated the effects of some destination attributes on the generation of customer satisfaction. According to a great deal of scientific literature, tourist satisfaction can influence some behaviours such as customer retention as well as word-of-mouth or word-of-mouth processes. Naples is denoted by a very conflicting image: on one side, it is associated with excellent food, tradition and natural and artistic beauty but, on the other side, it is perceived as a dirty place and characterized by criminality and disorganization. From this study, it emerges that tourist satisfaction depends on a complex process where the role of each actor is fundamental and it must be in tune with all the other ones.

Moid et al. (2015) conducted study to identify dimensions of service quality in Uttar Pradesh using a scale consisting of ten dimensions that was tested validated on 250 respondents who have visited few specified cities of Uttar Pradesh. Results of factor analysis extracted the following ten dimensions that are used as base for the present study.

The first factor **Core Tourism Experience** consist of nine items namely natural beauty, landmark, cultural heritage, sightseeing, closeness to nature, scope for excitement, privacy and peaceful atmosphere.

Second factor **Logistics** consist of three factors Convenient accessibility of tourist spots, Proper infrastructure and Proper traffic.

Third factor **Hospitality** consist of six items namely Courtesy of immigration staff at airport, Courtesy of staff at the place of stay, Trustworthiness of staff, Responsiveness of staff, Attitude of staff towards female tourist, Safety concern for female tourist

Fourth Factor **Reasonability of Prices** consist of four items Fairness of cost at place of stay, Fairness of cost at tourist spots, Fairness of cost of goods in shops and Fairness of fares of local transportation.

Fifth factor **Health and Hygiene** consist of four items; Cleanliness and hygiene at airports/ railway stations, Cleanliness and hygiene at the place of stay, Cleanliness and hygiene of restaurants outside the place of stay and Disturbance created by beggars/ hawkers.

Sixth factor **facilities** consist of six items; Internet connectivity at the place of stay, Telecom connectivity at the place of stay, Money exchange facilities, ATMs facilities, Access to medical help and Availability of pubs and parlors.

Seventh factor is **Value for Money** consist of five factors namely Price worthiness of tour package, Price worthiness of accommodation, Price worthiness of transportation facilities(train/ flights), Price worthiness of local conveyance facility and Price worthiness of goods in shops.

Eight factor **Cuisine** consist of two factors Taste of local food served at the place of stay and Taste of local food at restaurants outside the place of stay.

Ninth factor **Availability of Timely and Accurate Information** consist of five items Availability of tourist information centre at airports/ railway stations, Availability of tourist information centre at place of stay, Availability of tourist information centre at tourist spots, Personal guidance in the tourist bus and tourist spot and Ease of communication in a common language comfortable to both tourist and local people.

Tenth factor **Security** consist of three factors namely Security at the place of stay, Security at tourist spots/ place of visit and Safety of domestic travel (e.g. airlines, trains, buses, taxis, auto rickshaws).

Objectives:

- To conduct gap analysis on various dimensions of Service Quality in Tourism Industry in Uttar Pradesh and to identify the dimensions where gap is significantly different.

- To identify the specific reasons for tourists to visit Uttar Pradesh.
- To calculate the overall satisfaction with Service Quality of tourists in Uttar Pradesh.
- To calculate the revisit intention of tourists to Uttar Pradesh.

Research Methodology

Study Population

People who have visited the following cities of Uttar Pradesh in the span of last six months (January 2015- June 2015) for different reasons form the study population.

A) Religious Sites/Circuit

1. Varanasi
2. Mathura-Vrindavan
3. Allahabaad

B) Buddhist religious sites/Circuit

1. Sarnath
2. Kushinagar

C) Agra Braj Circuit

1. Agra
2. Fatehpur Sikri

D) Handicraft Circuit

1. Lucknow
2. Aligarh

The Sampling Frame

In order to locate the sampling entities, visit to the above mentioned sample cities of Uttar Pradesh were made in person and an effort was made to cover maximum number of hotels and guest houses within the nearby vicinity of city Railway Stations

Sample Size

Sample size is 250 out of which 238 responses were found fit to be used. Sample size was chosen based on qualitative factors

like budget, resource availability, time availability, ease of data collection as well as the review of previous studies done on similar subject.

Data Collection

Data collection was started in the month of January 2015 and completed in the month of June 2015. The entire process took a time of six months as Nine Cities (Agra, Fatehpur Sikri, Varanasi, Mathura, Lucknow, Allahabad, Sarnath, Kushinagar and Aligarh) were covered by the researcher for collecting data from the visitors from different nearby and renowned hotels of the mentioned cities. Only those visitors who have visited the cities in past six months (January 2015- June 2015) were included in the list of potential respondents. The total sample size was 350 out of which 238 responses were found fit to be used.

Hypotheses of Study

Hypothesis 1: There is no significant difference on the perception expectation scores for various dimensions of service quality in tourism industry in Uttar Pradesh.

Hypothesis 2: There is no significant reason among the tourists as they make a choice of Uttar Pradesh as a tourist destination against the alternate hypothesis that most people visit Uttar Pradesh primarily because of a specific reason.

Hypothesis 3: The overall satisfaction of the tourists with respect to the service quality of tourism in Uttar Pradesh is high.

Hypothesis 4: The intention to make a visit to Uttar Pradesh as an alternative destination choice for their qualitative destination is high.

Result and Data Analysis

On the basis of above identified ten dimensions, following analysis was done:

Hypothesis 1

Results for ascertaining if there is any difference in the perception-expectation scores

Table 1: Perception- Expectation Scores

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	variable_10	3.7935	226	.93367	.06211
	variable10	3.7876	226	1.08781	.07236
Pair 2	variable_9	3.3473	238	1.00154	.06492
	variable9	3.5294	238	1.04643	.06783
Pair 3	variable_8	4.1639	238	1.07053	.06939
	variable8	4.4412	238	.92931	.06024

Pair 4	variable_7	3.9017	238	.51435	.03334
	variable7	4.2017	238	.72076	.04672
Pair 5	variable_6	4.0126	238	.87623	.05680
	variable6	4.2480	238	.99096	.06423
Pair 6	variable_5	3.5042	238	.91286	.05917
	variable5	3.6345	238	1.01117	.06554
Pair 7	variable_4	4.0462	238	.75819	.04915
	variable4	4.2847	238	.74849	.04852
Pair 8	variable_3	3.6289	238	.89115	.05776
	variable3	4.1835	238	.90795	.05885
Pair 9	variable_2	3.8630	238	.60843	.03944
	variable2	4.2218	238	.68537	.04443
Pair 10	variable_1	3.5761	238	.73362	.04755
	variable1	3.8739	238	.87118	.05647

Table 2: Paired Sample Statistics

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	variable_10 variable10	.00590	1.60891	.10702	-.20500	.21680	.055	225	.956
Pair 2	variable_9 variable9	-.18207	1.65112	.10703	-.39292	.02877	-1.701	237	.090
Pair 3	variable_8 variable8	-.27731	1.07365	.06959	-.41441	-.14021	-3.985	237	.000
Pair 4	variable_7 variable7	-.30000	.95144	.06167	-.42150	-.17850	-4.864	237	.000
Pair 5	variable_6 variable6	-.23543	1.12346	.07282	-.37890	-.09197	-3.233	237	.001
Pair 6	variable_5 variable5	-.13025	1.52176	.09864	-.32458	.06407	-1.320	237	.188
Pair 7	variable_4 variable4	-.23845	1.09690	.07110	-.37852	-.09837	-3.354	237	.001
Pair 8	variable_3 variable3	-.55462	1.06408	.06897	-.69050	-.41874	-8.041	237	.000
Pair 9	variable_2 variable2	-.35882	.93112	.06036	-.47773	-.23992	-5.945	237	.000
Pair 10	variable_1 variable1	-.29785	.99202	.06430	-.42453	-.17117	-4.632	237	.000

From the above analysis, it can be rightly said that gap is significant for variable 1 (core tourism experience), variable 2 (logistics), variable 3 (hospitality), variable 4 (reasonability of

prices), variable 6 (facilities), variable 7 (value for money) and variable 8 (cuisine).

Hypothesis 2:

Table 3: Visit Objective

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	110	46.0	46.0	46.0
	2	40	17.0	17.0	63.0
	3	61	26.0	26.0	89.0
	4	27	11.0	11.0	100.0
	Total	238	100.0	100.0	

From the above table it can be concluded that tourists visit Uttar Pradesh primarily because of leisure followed by hobby, business/ work and shopping purpose.

Hypothesis 3:**Table 4: Overall Satisfaction of tourists visiting Uttar Pradesh**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	126	50.2	52.9	52.9
	3	84	33.5	35.3	88.2
	4	28	11.2	11.8	100.0
	Total	238	94.8	100.0	
Missing	System	12	5.2		
Total		250	100.0		

(2= Disagree, 3= Neutral, 4= Agree)

Table 5: One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Overall Satisfaction	238	2.59	.692	.045
Revisit	238	2.39	.725	.047

From the given data it is exhibited that overall satisfaction of tourist with respect to service quality of tourism in Uttar Pradesh is low with mean value of 2.59 indicating dissatisfaction with services.

Hypothesis 4:**Table 6: Visit Intention of Uttar Pradesh as alternative destination choice**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	180	71.7	75.6	75.6
	3	24	9.6	10.1	85.7
	4	34	13.5	14.3	100.0
	Total	238	94.8	100.0	
Missing	System	12	5.2		
Total		250	100.0		

(2= No, 3= Neutral, 4= Yes)

Table 7: One-Sample Test

	Test Value = 3					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Overall Satisfaction	-9.173	237	.000	-.412	-.50	-.32
Revisit	-13.061	237	.000	-.613	-.71	-.52

Table 8: One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Overall Satisfaction	238	2.59	.692	.045
Revisit	238	2.39	.725	.047

The intention to make a visit to Uttar Pradesh as alternative destination choice for qualitative vacation in future is low with a mean value of 2.39 on a five point scale (mean= 2.39; p value= 0.00)

Conclusion and Scope for Future Research

Hence it can be concluded that the scale for measuring service quality in tourism industry in Uttar Pradesh consist of the dimensions: Factor 1 - Core Tourism Experience, Factor 2 - Availability of Timely and Accurate Information, Factor 3 - Hospitality, Factor 4 - Reasonability of Prices, Factor 5 - Health & Hygiene, Factor 6 - Facilities, Factor 7-Value for Money, Factor 8- Cuisine, Factor 9 - Logistics and Factor 10-Security. Study The present study aimed at finding out the expectation- perception gap of the identified dimensions and found that gap is significant for variable 1 (core tourism experience), variable 2 (logistics), variable 3 (hospitality), variable 4 (reasonability of prices), variable 6 (facilities), variable 7 (value for money) and variable 8 (cuisine). Analyzing the reason of tourist for visiting Uttar Pradesh, leisure factor emerges as the most pertinent factor. The overall satisfaction of tourists with service quality in Uttar Pradesh is low. Due to low overall satisfaction with service quality, the revisit intention of tourists to Uttar Pradesh is low.

The identified dimensions are taken from literature review based on previous research work done earlier hence scale validation is required for future research. Also the present study has represented the consumers’ point of view. Similar study can be done from service providers’ point of view. The present study is conducted with Uttar Pradesh as the study area. Similar studies can be for other states too.

References

1. Akama, J.S., & Kieti, D.M. (2003). *Measuring tourist satisfaction with Kenya’s wildlife safari: A case study of Tsavo West National Park. Tourism Management, 24, 73–81.*
2. Akbar, M. M, and Parvez, N. (2009), "Impact of service quality, trust, and customer satisfaction on customer loyalty", *ABAC Journal, 29(1), 24-38.*
3. Alampay, R.B.A. (2003). *Visitors to Guam: Modeling satisfaction. Quality and Intentions Dissertation, Michigan State University.*
4. Alexandris, K., Zahariadis, P., Tsohatzoudis, Ch., & Grouios, G. (2004). *An empirical investigation into the role of the outcome dimension in measuring perceived service quality in a health club context. International Journal of Sport Management, 5, 281-294.*
5. Ali A.J., Howaidee M. (2012). *The Impact of Service Quality on Tourist Satisfaction in Jerash, Interdisciplinary Journal of Contemporary Research In Business, 3(12), 164-187*
6. Anderson, E.W. (1996). *Customer satisfaction and price tolerance. Marketing Letters, 7, 19-30.*
7. Anderson, E.W. (1998). *Customer satisfaction and word-of-mouth. Journal of Service Research, 1, 1–14.*
8. Anderson, E.W., & Fornell, C. (2000). *Foundations of the American Customer Satisfaction Index. Total Quality Management, 11(7), 869-882.*
9. Anderson, E.W., & Sullivan, M. (1993). *The antecedents and consequences of customer satisfaction for firms. Marketing Science, 12, 125–143.*
10. Antilgan, E., Akinci, S., & Aksoy, S. (2003). *Mapping service quality in the tourism industry. Managing Service Quality, 13(5), 412-423.*
11. Anwar, S.A., & Sohail, M.S. (2004). *Festival tourism in the United Arab Emirates: First-time versus repeat visitors. Journal of Vacation Marketing, 10(2), 161-171.*

12. Babakus, E., & Boller, G.W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research*, 24, 253–268.
13. Bailey, D. (1994). *Secret service: Making customer service work – training guide*. British Broadcasting Corporation for Business.
14. Bardgett, L. (2000). *The tourism industry, economic policy and statistics*, House of Commons Library research paper 00/66, June 23.
15. Bedi, M. (2010), "An Integrated Framework for Service Quality, Customer Satisfaction and Behavioral Responses in Indian Banking Industry: A Comparison of Public and Private Sector Banks", *Journal of Service Research*, 10(1), 38-47.
16. Bitner, M.J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, 54, 69–82.
17. Blanke, Jennifer, and Thea Chiesa, eds. 2009. *Travel & Tourism Competitiveness Report 2009: Managing in a Time of Turbulence*. Geneva: World Economic Forum.
18. Bolton, R.N. (1998). A dynamic model of the duration of the customers' relationship with a continuous service provider: The role of customer satisfaction. *Marketing Science*, 17, 45-65.
19. Bolton, R.N., & Drew, J.H. (1991). A longitudinal analysis of the impact of service changes on customer attitudes. *Journal of Marketing*, 55 (January), 1–9.
20. Bolton, R.N., & Myers, M.B. (2003). Price-based global market segmentation for services. *Journal of Marketing*, 67(3), 108–128.
21. Cabrini, L. (2002). *Trends and challenges for the tourism industry in Europe* speech, CERTS Annual Conference for the Hospitality and Tourism Industry in Ireland, November 27, Dublin, Ireland.
22. Callan, R.J., & Kyndt, G. (2001). Business travelers' perception of service quality: A prefatory study of two European city centre hotels. *International Journal of Tourism Research*, 2, 313–323.
23. Carman, J.M. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions *Journal of Retailing*, 66, 33–55.
24. Chadee, D.D., & Mattson, J. (1996). An empirical assessment of customer satisfaction in tourism. *The Services Industries Journal*, 16(3), 305–320.
25. Chaudhary, M. (2000). India's image as a tourist destination - a perspective of foreign tourists. *Tourism Management*, 21, 293–297.
26. *CII Report and Recommendations on Tourism Sector*, April 2003.
27. Crosby, A. L. (1993), *Measuring customer satisfaction*. In E. E. Scheuing, & W. F. Christopher (End.), *The service quality handbook*. New York: AMACOM.
28. Costa, G., Glinia, E., Goudas, M., & Antoniou, P. (2004). Recreational services in resort hotels: Customer satisfaction aspects. *Journal of Sport Tourism*, 9(2), 117–126.
29. Coyle, M.P., & Dale, B.G. (1993). Quality in the hospitality industry: A study. *International Journal of Hospitality Management*, 12(2), 141–153.
30. Cronin, J.J., & Taylor, S.A. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, 56, 55–68.
31. Dabholkar, P.A., Shepherd, C.D., & Thorpe, D.I. (2000). A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing*, 76(2), 139–173.
32. Ekinci, Y., Prokopaki, P., & Cobanoglu, C. (2003). Service quality in Cretan accommodations: Marketing strategies for the UK holiday market. *Hospitality Management*, 22, 47–66.
33. Ekinci, Y., Riley, M., & Fife-Schaw, C.F. (1998). Which school of thought? The dimensions of resort hotel quality. *International Journal of Contemporary Hospitality Management*, 10(2), 63–67.
34. Fyall, A. and Leask, A. (2007) 'Destination Marketing: Future issues - Strategic challenges', *Tourism and Hospitality Research*, 7, 50 - 63.
35. Grönroos, C. (2001). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
36. Gunarathne U (2014) *Relationship Between Service Quality And Customer Satisfaction In Sri Lankan Hotel Industry* *International Journal of Scientific and Research Publications* PP 1-8.
37. Gruca, T.S., & Rego, L.L. (2005). Customer satisfaction, cash flow, and shareholder value. *Journal of Marketing*, 69(3), 115–130.
38. Gustaffson, A., & Johnson, M.D. (2004). Determining attribute importance in a service satisfaction model. *Journal of Service Research*, 7(2), 124–141.
39. Hackl, P., Scharitzer, D., & Zuba, R. (2000). Customer satisfaction in the Austrian food retail market. *Total Quality Management*, 11(7), 999–1006.
40. Hansen, H., Sandvick, K. and Seines, F. (2003) 'Direct and Indirect Effects of Commitment to a Service Employee on the Intention to Stay', *Journal of Service Research*, 5 (4), 356–368.
41. Hayes, K. D., Ninemeier, D. J., Miller, A. A. (2011), *Foundations of Lodging Management*, Pearson Education, UK.
42. Ivyanno Canny and Nila Hidayat (2012). *The Influence of Service Quality and Tourist Satisfaction on Future Behavioral Intentions: The Case Study of Borobudur Temple*

- as a UNESCO World Culture Heritage Destination. *IPEDR*, 50(19): 89-97.
43. Juwaheer, T.D., & Ross, D.L. (2003). A study of hotel guest perceptions in Mauritius. *International Journal of Contemporary Hospitality Management*, 15(2), 105–115.
 44. Kandampully, J. (1998). Service quality to service loyalty: A relationship which goes beyond customer services. *Total Quality Management*, 9(6), 431-443.
 45. Kano, N. (1984). Attractive quality and must-be quality. *The Journal of the Japanese Society for Quality Control*, April, 39–48.
 46. Kariru A N, Aloo C (2014), Customers' perceptions and expectations of service quality in hotels in western tourism circuit, Kenya, *Journal of Research in Hospitality, Tourism and Culture*, 1-12
 47. Kellogg, D.L., Youngdahl, W.E., & Bowen, D.E. (1997). On the relationship between customer participation and satisfaction: Two frameworks. *International Journal of Service Industry Management* 8 (3), 206–219.
 48. Larsen, S. (2007) 'The Psychology of the Tourist Experience', *Scandinavian Journal of Hospitality and Tourism*, 7, 1, 7–18.
 49. Lee, Y.-H., & Chen, T.-L. (2006). A Kano two-dimensional quality model in Taiwan's hot spring hotels service quality evaluations. *Journal of American Academy of Business, Cambridge*, 8(2), 301–306.
 50. Liao, H. (2007) 'Do It Right This Time: The role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures', *Journal of Applied Psychology*, 92(2), 475–489.
 51. Markovic S, Loncaric D and Loncaric D(2014), Service Quality And Customer Satisfaction In The Health Care Industry -Towards Health Tourism Market, *Tourism and Hospitality Management*, pp. 155-170
 52. Moid S & Mehmood A. (2013). Dimensions of Service Quality in Tourism: The Customer's Perspective in Indian Scenario. *VSRD International Journal of Business and Management Research*, 3(11).
 53. Moid S & Alam A.(2015). Measuring Service Quality in the Tourism Industry with Special Reference to Uttar Pradesh (India). *NMIMS Management Review*, XXVII,
 54. Mukhles Al-Ababneh (2013). Service Quality and its impact on Tourist Satisfaction. *Interdisciplinary Journal of Contemporary Research in Business*, 4(12); 164-177.
 55. Munir Salleh, Khatijah Omar, Azizul Yadi Yaakop and Ahmad Ramli Mahmmod (2013). Tourist Satisfaction in Malaysia. *International Journal of Business and Social Science*, 4(5): 221-226.
 56. Nadiri, H., & Hussain, K. (2005). Perceptions of service quality in North Cyprus hotels. *International Journal of Contemporary Hospitality Management*, 17(6), 469–480.
 57. Narayan B., Rajendran C., Sai P.L. & Gopalan R.(2009). Dimensions of Service Quality in Tourism-an Indian Perspective, *Total Quality Management*, 20(1), 61-89
 58. Nash, R., Thyne, M., & Davies, S. (2006). An investigation into customer satisfaction levels in the budget accommodation sector in Scotland: A case study of backpacker tourists and the Scottish Youth Hostels Association. *Tourism Management*, 27, 525–532.
 59. Nelson, E., Rust, R.T., Zahorik, A.J., Rose, R.L., & Siemanski, B.A. (1992). Do patient perceptions of quality relate to hospital financial performance? *Journal of Health Care Marketing*, 3(4), 1–13
 60. Nightingale, M. (1985). The hospitality industry: Defining quality for a quality assurance programme – a study of perceptions. *Service Industries Journal*, 5(1), 9–22.
 61. O'Neill, M.A., Williams, P., Mac Carthy, M., & Groves, R. (2000). Diving into service quality – the dive tour operator perspective. *Managing Service Quality*, 10(3), 131.
 62. Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
 63. Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41–50.
 64. Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1994). Alternating scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70, 201–230.
 65. Pont, M. and Mcquilken, L. (2005), "An empirical investigation of customer satisfaction and loyalty across two divergent bank segments", *Journal of Financial Services Marketing*, 9(4), pp.344-359.
 66. Reichel, A., Lowengart, O., & Milman, A. (2000). Rural tourism in Israel: Service quality and orientation. *Tourism Management*, 21, 451–459.
 67. Reichheld, F.F., & Sasser, W.E. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, 68, 105–111
 68. Reyad, A. (2005), Service Quality in Hospitality Industry. Paper presented in WTO-OMT seminars on quality systems and management in tourism (Cairo, Egypt), <http://www.world-tourism.org/quality/E/pres.htm>,
 69. Ryzin, V., Muzzio, D., Immerwahr, S., Gulick, L., & Martinez, E. (2004). Drivers and consequences of citizen satisfaction: An application of the American Customer Satisfaction Index Model to New York City. *Public Administration Review*, 64(3), 331–341.
 70. Saleh, F., & Ryan, C. (1991). Analyzing service quality in the hospitality industry using the SERVQUAL model. *The Service Industries Journal*, 11(3), 324–343.

71. Suwunniponth (2013), "Tourist Satisfaction and Loyalty toward Service Quality of the Online Tourism Enterprises" *World Academy of Science, Engineering and Technology International Journal of Social, Education, Economics and Management Engineering*.
72. Tribe, & Snaith, T. (1998). *From SERVQUAL to HOLSAT: Holiday satisfaction in Varadero, Cuba. Tourism Management, 19(1), 25–34.*
73. United Nations Report. (2001). *Economic and Social Commission for Asia and the Pacific (ESCAP) Tourism Review No. 21. Opportunities and challenges for tourism investment: A case study of the Republic of Korea and reports from selected countries in Asia and the Pacific.* New York: United States of America.
74. Valentina Della Corte, Mauro Sciarelli, Clelia Cascella, Giovanna Del Gaudio (2015) *Customer Satisfaction in Tourist Destination: The Case of Tourism Offer in the City of Naples. Journal of Investment and Management. Special Issue: Attractiveness and Governance of Tourist Destinations*
75. Weiermair, K. (2000). *Tourists' perceptions towards and satisfaction with service quality in the cross cultural service encounter: Implications for hospitality and tourism management. Managing Service Quality, 10(6), 379–409.*
76. Witter, B.S. (1985). *Attitudes about a resort area: A comparison of tourists and local retailers. Journal of Travel Research, 24, 14–19.*
77. Wonglorsaichon and Wiriyakitjar, *J Tourism Res Hospitality 2013, 2:3 1-11* <http://dx.doi.org/10.4172/2324-8807.1000123>
78. WTO. (2004). *Press release, Monte Carlo, Monaco, October 27.*
79. Zeithaml, V., Bitner, M.J., & Gremler, D.D. (2002). *Services marketing (3rd ed.). Boston: McGraw-Hill/Irwin.*
80. Zhao, X., Changhong, B., & Hui, Y.V. (2002). *An empirical assessment and application of SERVQUAL in a Mainland Chinese department store. Total Quality Management, 13(2), 241–254.*

WEB SEARCH

- http://www.dnb.co.in/Travel_Tourism/Indian_Travel_and_Tourism_Industry.asp accessed on 20 January 2015.
- https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/10474/Landers_Matthew_Worth_ma2010_wi.pdf?sequence=1 accessed on 20 January 2015
- <http://developmentdiaries.com/supporting-tourism-as-a-tool-for-development/> accessed on 22 February 2015
- http://www.researchgate.net/publication/247523664_Dimensions_of_service_quality_in_tourism__an_Indian_perspective accessed on 28 March 2015
- http://www.fs.fed.us/ne/newtown_square/publications/technical_reports/pdfs/2006/341%20papers/341.pdf accessed on 10 April 2015.
- <http://jvm.sagepub.com/content/13/1/19.abstract> accessed on April 15, 2015
- http://www.fm-kp.si/zalozba/ISSN/1854-4231/5_195-209.pdf accessed on May 19, 2015.
- <http://www.routledge.com/books/details/9780789011411/> accessed on May 28, 2015.
- http://www.researchgate.net/publication/232237295_Service_Quality_Management_in_Hotel_Industry_A_Conceptual_Framework_for_Food_and_Beverage_Departments accessed on 2 June, 2015
- http://wscholars.com/index.php/ajtr/article/view/0201_1 accessed on 23 June, 2015
- <http://www.emeraldinsight.com/doi/abs/10.1108/09604520010307012> accessed on June 24, 2015
- http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2369737 accessed on July 8, 2015
- <http://www.routledge.com/books/details/9780415621335/> accessed on July 9, 2015
- <http://jht.sagepub.com/content/14/2/277.abstract> accessed on July 19, 2015
- http://thesis.swu.ac.th/swuthesis/Bus_Eng_Int_Com/Alin_S.pdf accessed on August 12, 2015
- http://www.ripublication.com/gjmbs_spl/gjmbsv3n2spl_13.pdf accessed on August 12, 2015

Dimensions of Brand Citizenship Behaviour in Indian Context: An Empirical Analysis

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Abstract

As per the Identity based Brand management approach, a brand - just like a person, needs to have a consistent and continuous identity in order to gain trust in the market. Focused on this approach and taking into consideration the role of employee in reflecting a strong brand identity, the concept of Brand Citizenship Behaviour in Indian context, is empirically explored in this study. The research concentrates on investigating the kind of brand strengthening prosocial behaviours that constitute brand citizenship behaviours in the Indian employees. Data generated from a sample of 420 respondents, from public and private sector Indian organizations with a turnover of more than 500 crores per annum, was subject to Principal component analysis and confirmatory analysis. The results indicate that in Indian context, Brand citizenship behaviour constitute of three dimensions; namely brand consideration, brand enthusiasm and customer helping behaviour.

Keywords: Citizenship Behaviour, Brand Identity, Brand strength

Introduction

In the present scenario, internal brand management has emerged with great prominence, given the central role that employees play in the deliverance of the brand promises which a brand stands for. Customer brand involvement is driven by all customer-brand touch points, and many of these are driven by employees - not only those in the marketing department, but all employees who contribute directly or indirectly to the brand's products, services and formal or informal communications. To achieve a strong brand identity the external, market-oriented brand management needs to be complemented by an institutionalised internal brand management. Thus the postulated robust positive impact of internal brand management is built on the perspective that the attitudinal and subsequent behavioural intentions exhibited by employees lies at the heart of any brand. In this context of employee behavioural contribution, the internal brand management

literature states that 'living the brand' denotes some prosocial and functional extra role behaviours in favour of the brand that really brings a brand to life and enhances brand identity, then termed as Brand Citizenship Behaviour (BCB) by Burmann et. al (2005). Due to the lack of consensus of what are the expected brand-consistent behaviours which lead to employee based brand equity, the investigation of concept of brand citizenship behaviour has further gained momentum in recent times. Literature has showcased considerable variation of the behaviours constituting BCB with the variation in the context of study. Besides, with clear evidence of positive impact of brand citizenship behaviour on brand strength in the past literature, this study aims to explore the dimensions of the concept in the Indian context.

Literature Review

BCB was initiated by Burmann et. al (2005) from the concept of organizational citizenship behaviour that recognized the

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internal extra role employee behaviours. While organisational citizenship behaviour is generally considered to be intra organisational, Brand citizenship behaviour goes beyond the scope of OCB as it also includes externally targeted behaviours. Brand citizenship behaviour is an aggregate construct which describes those voluntary generic employee behaviours that enhance the brand identity.

To theorize, Brand Citizenship Behaviour can be mentioned as an extension of Organization Citizenship Behaviour. Based on Podsakoff et al. (2000), seven dimensions of brand citizenship behaviour proposed by Burmann et al. (2009) include helping behaviour, brand consideration, brand enthusiasm, brand sportsmanship, brand endorsement, brand self-development, and brand advancement. Helping behaviour represents that employees have positive attitudes, friendliness, helpfulness, and empathy toward internal and external customers, thus taking responsibility for organizational tasks. Brand consideration is regarded as brand-centered guidelines that employees follow insistently. Brand enthusiasm refers to extra initiatives showed by employees while participating in brand-related activities. Brand sportsmanship is regarded as a mental state of employees who never complain about inconvenience caused by brand-centered activities. Brand endorsement represents that employees are willing to defend and endorse the brand value and pass on the brand identity to newcomers. Brand self-development is regarded as the willingness of employees to improve their brand-centered knowledge, skills, and abilities voluntarily. Brand advancement indicates customer feedbacks or innovative ideas are adopted by employees to provide suggestion contributing to changing new market needs or new organizational competencies.

Nevertheless, the research conclusions of Burmann et al. (2009) revealed that only three out of seven constructs (namely helping behaviour, brand enthusiasm and brand development) suggestively explained brand citizenship behaviour. As such, there is the need to test the construct with the new data set mainly to increase the superiority of the construct.

Research Methodology

The objective of this research was to identify the dimensions and underlying attributes that determine Brand Citizenship Behaviour in Indian context. The study explores the factors of brand citizenship behaviour based on multistage descriptive design;

Stage I - This was a qualitative research done in order to record the underlying attributes of the concept of brand citizenship behaviour through available literature. Since literature on the concept is not that exhaustive, attributes were also detailed

through the common linkages with the concept of Organizational citizenship behaviour.

Stage II - This was a quantitative study, in which the preliminary scale formed after phase I was subjected to a pilot sample response of 155 respondents.

Stage III - In phase three the scale generated in phase II was administered on a sample of 420 respondents. The data was subject to PCA and CFA. Also, the reliability and validity of the scale was assessed.

As per the, Krejcie and Morgan (1970), a population of ten lakhs or more should have a minimum sample size of 384. In this study the population under study is the public and private sector organizations of India which collectively employ 44.22 million workforces as per the Second Annual Report to the People on Employment by The Government of India Ministry of Labour and employment 2012. Thus by this estimation, a sample size of 420 was determined through Purposive Sampling. These employees have been chosen from companies with a turnover of more than 500 crore per annum.

The sample includes the managerial employees irrespective of the hierarchy. Total 467 filled responses were received and all were subjected to missing value analysis. After the purification, the targeted sample of 420 was considered. The major tool employed for analysis is SPSS (Statistical Package for Social Sciences) v20.0.

Research Findings

Stage I

58 statements following the definition of brand citizenship behaviour stated by Burmann et al. (2005) followed by logged attributed through literature review was subjected for expert judgement in form of a questionnaire, was reviewed by 25 experts. The definition adopted was

“The employees’ voluntary basis to project a number of generic employee behaviours, which would involve extra efforts beyond the basic functions, in order to enhance the brand identity”

Statements with more than 75% occurrence were retained which reduced the number of statements to 47, thereafter dropping 11 statements. Thereby, a preliminary scale of 47 items resulted in phase I which was administered in Stage II.

Stage II

47 items Scale formed in phase I was administered on 155 respondents as a part of pilot study and the data was analysed

with help of SPSS. All the scale items were subjected to item-to-total correlation and only items with corrected item-to-total correlation of more than 0.30 were retained for further analysis, as per the study by Spector, 1992, resulting in elimination of 3 items, item no. 3, 4 and 5 from the prelim 47 itemed-questionnaire (Table 1). The Cronbach's Alpha of reliability for final retained 44 items was 0.941.

Stage III

Finally, principal component analysis and confirmatory analysis was run on the data collected from the 44 item- five point likert scale.

Principal Component Analysis

An item to total correlation of these items showcased four items with less than acceptable item to total correlation coefficient (0.30 as per Spector, 1992), which resulted in dropping of item no. 17, 23, 33 and 42. Reliability analysis run on 40 items enhanced the cronbach's alpha to 0.969 (Table 2A). Factor analysis was then run on these 40 items with varimax rotation. The Kaiser-Meyer-Olkin measure was 0.961 ("Superb" according to Field 2009), which was well above the acceptable limit of 0.5. Bartlett's test of sphericity $\chi^2(780) = 11807.809$, $\chi < .001$, indicated that correlation between items was sufficiently large for PCA (Table 2B). Enough Principal Components were retained that had a cumulative variance explained by the Principal Components that is >50-70%. Items with factor loading more than 0.4 were considered as Tabachnick and Fidell (2001) cite .32 as a good rule of thumb of thumb for the minimum loading of an item, which equates to approximately 10% overlapping variance with the other items in that factor (Table 2C). All items had acceptable factor loadings and were segregated into 5 factors which explained a total variance of 61.685%.

Factor 1 had explained 24.714% of variance; Factor 2 explained 15.646% of variance; Factor 3 contributed 9.637%; Factor 4 explained 6.097 of variance and Factor 5 explained 5.591% of variance. All had Eigen Values more than one.

Confirmatory Factor Analysis I

After having identified 5 factors, confirmatory factor analysis is run with help of Amos. On calculation of factor loads, factor no. 4 was dropped due to items with loadings of 0.08 and 0.01 of item no 15 and 16 respectively. Besides calculation of estimates and standardised covariance coefficients resulted in dropping items no. 1, 6, 12, 11, 24, 31, 35, 39, 40 and 41 in subsequent steps to achieve model fit. As per Costello & Osborne, 2005, scale with the cleanest factor structure have all item loadings above 0.30, no or a few cross loadings and no factor with less than 3 items has a best fit to data. Due to elimination of item no. 35, factor 5 does not comply with this criterion.

Hence a PCA results were reconsidered to see the factor loadings of item no. 22 and 37 in other factors. Both items loaded second highest in factor 2 which resulted in a final three factor structure of BCB. These factors were then named as per the face value of the items that they constituted of. Thereafter CFA was run to investigate this 3 factor structure.

To test whether the model fits the observed data, there are number of tests. The chi-square test provides a statistical test of the null hypothesis that the model fits the data, and generally a chi square divided by degree of freedom <5 are deemed appropriate (Tabachnick and Fidell, 2007). In addition three fit indices are typically used to identify the overall goodness of fit: (i) Root Mean Residual (RMR) where a figure <.10 is advised (Diamantopoulos and Siguaw, 2000), (ii) Adjusted Goodness of Fit Index (AGFI), where a scale of >.80 is preferred (Tabachnick and Fidell, 2007), (iii) Comparative Fit Index (CFI), where >.90 is stipulated (Hu and Bentler, 1999).

In this research, the χ^2 associated with 3 factor BCB model was 987.208 (df = 344, $p < 0.01$), while CFI = 0.916, AGFI= 0.834, RMR=0.048 and $\chi^2/df = 2.870$. Hence the model confirms the 3 factor structure with 28 items of the BCB instrument with a cronbach's alfa of 0.979.

It is observed from the structure of BCB that in Indian context Brand Citizenship behaviour has three dimensions which are indicative of extra role brand strengthening behaviours in three different forms.

- 1) Brand Consideration:** The extra role behaviours employee exhibit INSIDE the organization to strengthen the brand is named as Brand Consideration. These include taking care of personal actions and behaviours that impacts brand reputation, gaining and sharing brand related knowledge internally, and lastly extracting satisfaction sentiments from engaging in brand strengthening activities
- 2) Brand Enthusiasm:** the extra role behaviours employee exhibit OUTSIDE the organization but not specifically towards the customers is named as Brand Enthusiasm. These activities include keeping updated in terms of knowledge and skills with a view of changing markets and competition, showing belongingness to the brand and endorsing the brand personally.
- 3) Customer Helping Behaviour:** The extra role behaviours employee exhibit specifically toward its customers is named as Customer Helping Behaviour.

Reliability and Validity Analysis

The cronbach's alpha for 28 itemed BCB scale is fairly high to accept, $a_{BCB} = 0.979$. The sub-constructs of BCB also show high reliability coefficients and are hence accepted; Brand Consideration (0.939), Brand Enthusiasm (0.904) and Customer Helping Behaviour (0.839).

On investigation, the constructs of BCB also reflected convergent and discriminant validity both. Convergent validity is attributed through the values representing the correlation coefficient between an item and its own construct whereas the discriminant validity symbolizes no significant correlation of an item of a construct with any other construct. Table 4 reflects that item pertaining to a certain construct has a high correlation with that construct only. Also, no high correlation of an item of a construct with any other construct seems to exist. For e.g. item of Brand consideration correlates high with Brand consideration only

Discussion

In contrast to BCB Structure proposed by the studies by Burmann et al. (2009) which reported BCB as a seven factor structure, Factor analysis of BCB in this research resulted in three factor structure. The reason behind this variation in structure from the original studies is the context in which the research has been undertaken. The concept of BCB was developed by Burmann et al. (2009) in the German milieu. Besides, the study included sample from German automobile industry only. The testament is that the research undertaken by Sharri et al. (2011) to explore BCB structure in Malaysian context, with sample from Hotel industry only, resulted in a four factor structure namely Helping Behaviour, Sportsmanship, Self-Development and Brand Endorsement.

Since the concept of BCB is in the developing phase, the emergence of its constructs in Indian context can be discussed in terms of the concept of Organization Citizenship Behaviour (OCB).

Comparing with the construct of altruism in OCB, it is observed that altruism in terms of customer orientation becomes a part of BCB in name of Customer Helping Behaviour. Alike altruism which involves going out of formal responsibility to help the colleagues, Customer Helping Behaviour involves the former to help the customers.

The construct Brand Consideration finds its grounds in the concept of Conscientiousness and sportsmanship in OCB. Where conscientiousness is majorly about self-drive towards perseverance and reliability for the organization, Brand

consideration is about perseverant self-drive to meet more than minimum task requirements in order to strengthen brand image and improve brand reputation. Also like sportsmanship of OCB, Brand Consideration also talks of person's tendency of not complaining inevitable inconveniences to do extra for brand image strengthening. Likewise the notion Brand Enthusiasm extracts its basic idea from the concept of Civic Virtue of OCB because both include showing extra role activities oriented outside the organization.

After having explored the structure of BCB, the difference of the same from OCB is also evident which is worth the mention. Organizations these days are divided into strategic business units (SBU) on various grounds. One of these classifications is on the basis of operational Brands handled by an organization. Each team working on each brand try to keep a differentiation from the other brand either at inter brand SBU level or at inter-organization level. Even employees of these teams are active at citizenship behaviours; still it is not necessary that they exhibit similar behaviour towards members of rival brand SBUs or other product and brand SBU. Therefore, it is noteworthy to study the extent to which the employees go out of their formal obligations to rear the brand through their Brand Citizenship Behaviours.

Other existing concepts with which BCB have stalks in common is the concept of organizational Spontaneity and Customer Orientation Behaviour. Organizational Spontaneity (Katz and Kahn 1978) is described as "performance beyond role requirement for accomplishment of organizational functions". It consists of five sub- categories: Informal Help Giving to co-workers, Protection of organization against damage, Suggestions for improvement or maintenance, Self-initiated learning and Spreading a favourable climate for organization in public. This clearly reflects the similarity with the concept of BCB as a whole, particularly with Brand Consideration and Brand Enthusiasm behaviours. The only specificity found in the constructs of BCB is that it is directed for accomplishment of functions for the particular brand with which the employee is associated with.

Donavan and Licata (2002) defined the Customer Orientation Behaviour as a tendency of employees to meet their customer needs. The researchers majorly define COB as extent to which the employees try to satisfy their customer's needs. Similarly, Customer Helping behaviour comprises of actions and behaviours that an employee's shows to help his customers.

It seems evident that the concept of Brand Citizenship Behaviour is relevant and can co-exist with its principal concept because it is a more specific form of Organization citizenship behaviour, Organizational Spontaneity and COB, which is

performed with a defined intention of preservation of Brand image.

The study contributes to extend the boundary of knowledge on the understanding of Brand Citizenship behaviour. It confirms the existence of such brand strengthening behaviours in form of Brand consideration, Brand Enthusiasm and customer helping behaviours in Indian context. Besides, it is evident that Indian employees exhibit such voluntary behaviours and contribute towards strengthening of brand image.

As per the model proposed by Burmann and Zeplin (2009), indicating that brand citizenship behaviour leads to higher brand strength, it is indicative that the constructs of brand citizenship behaviour also leads to strengthening brand image. Organizational-level brand citizenship behaviours also positively affect customer satisfaction (Chang, Chiang & Han, 2012) specify that BCB constructs can also positively affect Customer satisfaction. Hence, the research could prove helpful for the organizations in assessing and encouraging the Brand citizenship behaviour in the employees which could further impact their business performance. Additionally, practitioners could also identify suitable internal branding practices to motivate such behaviour among employees for enhancing brand competitive advantage and ensured survival.

Future research can consider larger sample that covers larger samples and specific industries in order to explore the concept in detail in terms of varied domains. Besides, study can lay as foundation for further exploration of the concept of Brand Citizenship Behaviour and its relationship with business performance metrics.

References

1. Burmann, C., & Zeplin, S. (2005). *Building brand commitment: A behavioural approach to internal brand management. The Journal of Brand Management, 12*(4), 279-300.
2. Burmann, C., Zeplin, S., & Riley, N. (2009). *Key determinants of internal brand management success: An exploratory empirical analysis. Journal of Brand Management, 16*(4), 264-284.
3. Brown, T. J., Mowen, J. C., Donavan, D. T., & Licata, J. W. (2002). *The customer orientation of service workers: Personality trait effects on self-and supervisor performance ratings. Journal of Marketing Research, 39*(1), 110-119.
4. Chang, A., Chiang, H. H., & Han, T. S. (2012). *A multilevel investigation of relationships among brand-centered HRM, brand psychological ownership, brand citizenship behaviors, and customer satisfaction. European Journal of Marketing, 46*(5), 626-662.
5. Costello, A. B., & Osborne, J. W. (2011). *Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. Practical Assessment of Research and Evaluation 2005; 10*.
6. Diamantopoulos, A., Siguaw, J. A., & Siguaw, J. A. (2000). *Introducing LISREL: A guide for the uninitiated. Sage*.
7. Field, A. (2009). *Discovering statistics using SPSS. Sage publications*.
8. Hu, L. T., & Bentler, P. M. (1999). *Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural equation modeling: a multidisciplinary journal, 6*(1), 1-55.
9. Katz, D., & Kahn, R. L. (1978). *Organizations and the system concept. Classics of organization theory, 161-172*.
10. Krejcie, R. V., & Morgan, D. W. (1970). *Determining sample size for research activities. Educ Psychol Meas.*
11. Ministry of Labour and Employment (2012), *Second Annual Report to the People on Employment. Government of India, India*.
12. Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). *Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. Journal of management, 26*(3), 513-563.
13. Shaari, H., Salleh, S. M., & Hussin, Z. *Exploring the Dimension of Internal Brand Citizenship Behavior in Malaysia: A Case of Northern Malaysia Hotel*.
14. Spector, P. E. (1992). *Summated rating scale construction: An introduction (No. 82). Sage*.
15. Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*.
16. Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA. Thomson/Brooks/Cole*.

List of Tables

Table 1: Prelim 47 Item Questionnaire

Item No.		Item-Total Correlation	Cronbach's α if Item Deleted
1	Keep A Helpful Attitude Towards Customers	.446	.938
2	Keep A Helpful Attitude Towards Colleagues	.304	.939
3	Keep Friendly Attitude Towards Customers*	.232	.940
4	Keep Friendly Attitude Towards Colleagues*	.165	.939
5	Going Outside Responsibility Area To Handle Customer Complaints	.176	.940
6	Helping Customers To Stay Convenient	.558	.937
7	Going Outside Responsibility Area To Entertain Customers	.509	.937
8	Voluntarily Helping Co Workers In Handling Customers	.495	.937
9	Covering Customer Mistake To Keep Them Comfortable	.395	.939
10	Covering Co Worker Mistake To Keep Them Comfortable	.346	.939
11	Lending Compassionate Ear To Customers When They Wish To Express Something	.418	.938
12	Lending Compassionate Ear To Co Workers When They Have Work Issues	.575	.937
13	Feeling Bad On Bad News Regarding The Brand	.513	.937
14	Identifying Oneself With The Brand	.483	.938
15	Completely Adhere To Behaviours That Identify With The Brand Image	.530	.937
16	Willingly Involve In Behaviours That Lead To Strong Brand Image	.612	.937
17	Considering The Brand Reputation Before Acting In Any Situation	.492	.938
18	Considering Brand Repo Before Communicating About The Brand	.408	.938
19	Take Care Of Personal Actions for It Might Not Affect Brand Negatively	.486	.938
20	Acting As Per Brand Guidelines Even Without Organizational Controls	.609	.937
21	Voluntarily Participating In Activities That Strengthen Brand Image	.554	.937
22	Voluntarily Engaging In Enhancing Customer Experience	.638	.937
23	Feeling Quite Satisfied In Engaging To Strengthen Brand Image	.648	.937
24	Feeling Quite Satisfied At Promoting The Organizational Brand	.525	.937
25	Accepting Extra Work If It Has Positive Impact On The Brand	.550	.937
26	Feeling Proud To Be Associated With The Brand	.609	.937
27	Never Complain About Organizational Brand	.539	.937
28	Never Use Other Brands Even In Private	.434	.938

29	Going Out Of Responsibility To Appreciate Organizational Brand	.400	.938
30	Never Raise Personal Issues On Cost Of CE With Brand	.546	.937
31	Engaging Beyond Personal convenience To Strengthen Brand Image	.453	.938
32	Offering Suggestions For Bringing Improvements In The Brand	.491	.938
33	Never Lamenting Annoying Duties Or Difficulties At The Job Front	.566	.937
34	Always Saying Good Things About The Brand In Front Of Others	.537	.937
35	Always Recommending Organizational Brand To Personal acquaintances	.589	.937
36	Trying To Confer Info Of The Brand from Colleagues	.466	.938
37	Grab Opportunity At Personal Social Circles To Talk About The Brand	.487	.938
38	Keep Endorsing The Brand Wherever Possible	.480	.938
39	Striving To Develop Expertise Which Strengthen Brand Related Skills	.659	.937
40	Keeping Updated About The Developments In The Brand	.627	.937
41	Volunteer Regular Participation In Brand Related Trainings	.569	.937
42	Keep Eye On Competitors To Improve Whatever Possible In Brand	.417	.938
43	Keeping Updated About Changes In Market That Could Affect Brand	.380	.938
44	Keep Asking The Customers For Feedback	.358	.938
45	Keep Reporting The Customer Feedback To Concerned Authorities	.411	.938
46	Keep Knowledge Sharing Environment With The Colleagues	.451	.938
47	Initiating To Develop Ideas For Improvements Or New Products Or services	.479	.938
Cronbach's alpha (44 items) = 0.941			
*signifies the deleted items from the 47 itemed questionnaire			

Table 2A: Reliability Statistics of 40 item questionnaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.967	.969	40

Table 2B: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.961
Bartlett's Test of Sphericity	Approx. Chi-Square	11807.809
	Df	780
	Sig.	.000

Table 2C: BCB Factor Structure with Factor Loadings

Item NO.	Construct	Items	Factor Loading
6	Factor 1	Lending Compassionate Ear To Customers	.468
7		Take Care Of Personal Actions It Might Not Affect Brand Negatively	.734
12		Accepting Extra Work	.522
18		Keep Knowledge Sharing Environment	.645
20		Willingly Involve In Behaviours That Lead To Strong Brand Image	.726
21		Considering The Brand Reputation Before Acting	.722
22		Considering Brand Repo Before Communicating	.679
25		Feeling Quite Satisfied In Engaging To Strengthen Brand Image	.647
26		Feeling Quite Satisfied At Promoting The Organizational Brand	.709
27		Feeling Proud To Be Associated With The Brand	.579
28		Voluntarily Participating In Activities That Strengthen Brand	.665
29		Never Lamenting Annoying Duties	.587
32		Keeping Updated About The Developments In The Brand	.623
36		Keep A Helpful Attitude Towards Colleagues	.616
37		Lending Compassionate Ear To Co Workers	.646
39		Engaging Beyond Personal Convenience For Brand	.654
40		Acting As Per Brand Guidelines	.633
41	Never Complain About Organizational Brand	.508	
1	Factor 2	Helping Customers stay convenient	.536
13		Develop Expertise Which Strengthen Brand Related Skills	.639
14		Keeping Updated about changes in the market	.721
24		Keep eye on competitors to improve	.653
30		Always saying good things about brand	.555
31		Volunteer regular participation in brand trainings	.467
38		Appreciate Organizational Brand	.675
44		Talk Of Brand At Personal Social Circles	.664
45		Never raise personal issues on the cost of customer experience	.535
46		Recommend Organizational Brand To Personal Acquaintances	.479

47		Keep Endorsing The Brand Wherever Possible	.682
2	Factor 3	Voluntarily handling co-workers in handling customers	.477
8		Voluntarily Engaging In Enhancing Customer Experience	.499
9		Going Outside Responsibility Area To Entertain Customers	.618
10		Covering Customer Mistake	.606
11		Covering Co Worker Mistake	.728
43		Keep helpful attitude towards customers	.487
15		Factor 4	Keep Asking customers for feedback
16	Keep reporting customer feedback		.864
19	Factor 5	Feeling bad on Bad news	.422
34		Identifying Oneself With The Brand	.619
35		Completely Adhere To Behaviours That Identify With The Brand	.805

Table 3: Resultant 3 factor structure of BCB with constituent item numbers

Factor	Factor Label	Items no.
1	Brand Consideration	7, 18,20,21,22,25,26,27,28,29,32,36 and 37
2	Brand Enthusiasm	13,14,30,38,44,45,46,47,19 and 34
3	Customer Helping Behaviour	2,8,9,10 and 43

Table 4: Convergent and discriminant validity of BCB scale

Item /Factor	Brand Consideration (BC)	Brand Enthusiasm (BE)	Customer Helping behaviour (CHB)
Take Care Of Personal Actions It Might Not Affect Brand Negatively/.. BC	.718**	.258**	.089
Going Outside Responsibility Area To Entertain Customers/. CHB	.366**	.161**	.719**
Talk Of Brand It Personal Social Circles/. BE	.257**	.728**	.079

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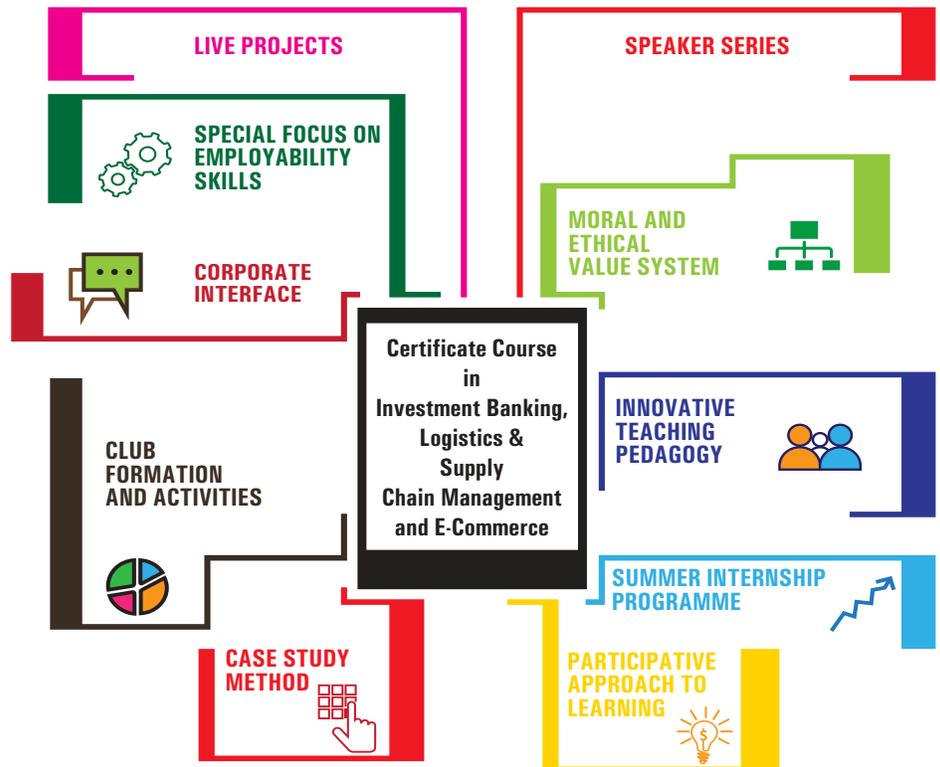
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