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COMMUNICATION

BOOK REVIEWS

Shobhit University

Shobhit Institute of Engineering & Technology, Meerut

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SHOBHIT UNIVERSITY, MEERUT

Shobhit University, Meerut, was envisaged and inspired by Babu Vijendra Kumar *ji*, a progressive agriculturist and well-known social worker from Gangoh (Saharanpur) in Uttar Pradesh. It was notified as an institution deemed to be a University, under Section 3 of the University Grants Commission Act, 1956, in 2006. The University offers under-graduate, post-graduate, and Ph.D. programmes in Computer Engineering and IT, Electronics Engineering, Electronics and Instrumentation, Pharmaceutical Sciences, Business Management, Bio-technology, Bio-medical Engineering, Bio-informatics, and Agri-informatics.

SCHOOL OF BUSINESS STUDIES

School of Business Studies (SBS) is an integral part of the Shobhit University, Meerut. It has inherited the academic legacy of the NICE Management College (established in 1995), together with autonomy in curriculum-designing and flexibility for foreign collaborations, through academic exchange, and credit-transfer mechanism, and increased institution-industry interface. The SBS offers BBA and MBA programmes with several specialisations, including marketing, finance, human resource management, production and operations management, pharmaceutical marketing, and insurance and risk management. It also offers M.Phil. and Ph.D. programmes in management.

NICE JOURNAL OF BUSINESS

NICE Journal of Business is a half-yearly journal, published by NICE Management College, Meerut, and now brought out by the School of Business Studies, Shobhit University, Meerut. It provides a platform to research scholars, practising managers, and academicians in business management, commerce, economics, and allied fields, to present their research findings and share their views and experiences.

The Journal aims at disseminating research output and providing information about recent developments in the relevant field, by way of research articles, book reviews, Ph.D. thesis abstracts, case studies, and bibliographies, on topics related to business and allied areas. It is listed in *Cabell's Management Directory* (USA) and included in the Database of EBSCO Publishing, Inc. (USA) and Ulrich's *Directory of Periodicals* (USA).

Original contributions received for publication in the Journal are subjected to a blind review, by experts in the relevant fields.

From the Editor's Desk

Welcome to the thirteenth issue (Volume 7, Number 1: January-June, 2012) of *NICE Journal of Business*. The response from the contributors and readers to the earlier issues of the journal has been overwhelming.

With each issue, we bring you the latest and authoritative insights into the fascinating world of business.

In this issue of the journal, we have put together nine research papers and one conceptual article reflecting diverse interests in the wide field of business. These pertain to the impact of FDI on exports, stock market operations, customer satisfaction in retail industry, banks' financial performance, brand positioning, job stress and job involvement, motorcycle buyers' decision process, consumer perception of eco-friendly products, brand loyalty, and comparative advertising.

During the last few decades, export growth in India has been much faster than the GDP growth. One of the major factors that might have contributed to this growth is Foreign Direct Investment (FDI). Dr. Niti Sury and Ms. Aanchal Gupta examine the relationship between FDI inflows and exports. They find that there is a need for improving basic infrastructure which will not only lower the production costs, but will also enhance the competitiveness in the economy and attract more FDI.

The buy-write strategy entails the writing of a call option on an equity index against a long position in the same underlying equity index. Dr. Navdeep Aggarwal and Dr. Mohit Gupta assess the performance of the buy-write on CNX IT. They discover that the buy-write strategy outperformed the index on the absolute as well as the risk-adjusted basis.

With increasing competition and adoption of modern technology, the retail sector in India has undergone sweeping changes. Dr. G.P. Dang and Dr. Amit Adlakha seek to identify the major determinants of customer satisfaction in retail industry, and assess their relative strengths. They conclude that the government should adopt a balanced approach that provides protection to unorganised retailers and encourages the growth of the organised sector.

The banking industry in India has undergone significant changes after the onset of financial reforms. Professor R.C. Dangwal and Dr. Reetu Kapoor compare the profitability of four major banks in different sectors. They find that while the ICICI Bank had the highest profitability, the Federal Bank had the lowest. They suggest appropriate measures for curtailing the burden, and to augment the fund-based activities to increase the level of 'spread'.

Brand positioning involves communicating the brand identity to consumers to create a distinctive image of the brand in their mind. It requires certain elements of the advertising message that conform to the brand concept. Dr. Subho Chattopadhyay and Professor A.K. Sarkar identify these message elements in brand positioning and examine their effectiveness in positioning FMCG brands. They find that the emotional and functional elements of message strategy are relatively more effective in positioning the brand.

Employee stress is a common phenomenon among organisations, especially due to the changing work culture. It not only affects the psychology, but also the physiology of the employee. Professor Ritu Lehal and Ms. Nimarta Mann examine the impact of job stress on job involvement among bank executives. Through a survey of 400 executives from selected commercial banks in Punjab and Chandigarh, they demonstrate that in order to improve the job involvement among bank executives, job stress is to be minimised. They have arrived at some other interesting conclusions.

Understanding the consumers' buying behaviour is the essential task of a marketing manager. However, the study of consumer behaviour is extremely complex because of the varying consumer needs, wants, tastes, and preferences. Prof. H.J. Jani and Dr. Kerav Pandya investigate the attitudes of motorcycle users. Based on a survey of 450 motorcycle-users taken from major cities of Gujarat, they make interesting findings regarding the main source of information, major influencers, and other determinants of purchase decision for motorcycle.

Companies are under obligation to communicate their performance in respect of their corporate social responsibility to stakeholders. Environmental issues are important to be addressed and communicated through their offerings in terms of eco-friendly products. With the increase in consumer awareness of environmental issues and their impact on life, more people willingly change their consumption behaviour. Dr. H.C. Purohit identifies the consumers' buying motives and assesses their awareness about eco-friendly products. His study confirms that the consumer buying and consumption decisions are fairly eco-conscious.

Consumer's self-monitoring personality trait is an important dimension of consumer behaviour. Dr. Amit Sharma and Mr. Naveen Kumar Sharma examine the relationship between the two. They find a negative correlation between self-monitoring personality and brand loyalty, and that while the high self-monitor consumers are brand-switchers, the low self-monitors are brand-loyal.

An advertiser often seeks to attract the buyers by comparing his product or service with that of his main competitor. In this widely-prevalent practice, the advertiser often uses questionable means. Ruchi Gupta analyses the legal and other relevant measures for regulating comparative advertising in India, and puts together selected cases decided by the courts.

The section on book reviews contains nine items, written by experts in the relevant fields. The books reviewed pertain to subjects as diverse as consumer behaviour, macroeconomics, security analysis and portfolio management, advertising, intercultural communication, industrial relations, organisational behaviour, and business organisation and management.

I express my indebtedness to the eminent authors and expert book-reviewers for their precious contribution to the journal. Moreover, several experts have extended their help and expertise by way of assessing the articles received for publication and making critical comments and suggestions for improving their quality and fine selection. I express my sincere thanks to each one of them.

Dr. Shobhit Kumar, Chancellor; Kunwar Shekhar Vijendra, Pro-Chancellor; and Professor Rajendra P. Agarwal, Vice-Chancellor of Shobhit University, have been the guiding spirit behind this venture intended to promote and disseminate research in the vibrant field of business. They have taken keen interest in this academic endeavour. I express my profound gratitude to them.

D.P.S. VERMA
Editor

LINKAGE BETWEEN FDI INFLOWS AND EXPORTS
The Indian Context

Niti Bhasin* and Aanchal Gupta**

Abstract

Foreign direct investment and exports are important factors of international trade. Several theories suggest the possible linkages between the FDI and the exports growth in the economy. In India, both the exports and the FDI have grown over the last three decades. While several factors may have contributed to this growth, there is a need to examine the possible linkages between the two. This study examines the relationship between FDI inflows and exports with special reference to India, from 1981 to 2010. While the results of co-integration do not establish a long-run relationship between them, the causality tests indicate bi-directional relationship between the exports and the FDI inflows.

Key words: ***Exports, Foreign direct investment inflows, Stationarity, Co-integration, Causality, India***

INTRODUCTION

FOREIGN direct investment (FDI) plays an important role in the economic development of a country, by augmenting the availability of capital, enhancement of competitiveness of the domestic economy through transfer of technology, strengthening infrastructure, raising productivity, and generating new employment opportunities. Foreign investment, therefore, is a strategic instrument of development policy. Countries of the world, particularly the developing economies, vie with each other to attract foreign capital. The last two decades have witnessed a rapid expansion in the FDI by Multinational Corporations (MNCs), which is largely attributable to the liberalisation of trade and investment, and de-regulation and privatisation of markets in many countries, including developing countries, like India.

With the ever-increasing importance of the FDI, the linkages between the FDI inflows and trade have been an area of continued interest among scholars. This study seeks to examine the relationship between the FDI inflows and the exports. It is often argued that the FDI helps the host country improve its export performance. By increasing the efficiency and improving the product quality, the FDI makes a positive impact on the host country's export competitiveness. Further, through international linkages of MNCs, the FDI provides the host country better

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access to foreign markets. On the other hand, exports have a potential to stimulate economic growth in the exporting country through export-led growth. Exports can affect the growth of an economy through productivity-enhancing externalities, such as technology spill-over. Strong fundamentals of the economy, in turn, can positively affect the FDI inflow.

While the above may hold, differences in policy regimes and in motives for investment can have different impact on the relationship between exports and the FDI. While an outward-oriented trade and investment regime is believed to encourage export-oriented FDI, an inward-oriented policy regime attracts the FDI mainly to capture domestic, rather than export, markets. The motive for FDI also plays an important role in determining its relationship with exports. If the motive behind FDI is to capture domestic market (market-seeking), then it may not contribute to export growth. On the other hand, if the motive is to tap export markets by taking benefit of the country's comparative advantage (efficiency-seeking), then the FDI may contribute to export growth.

This paper examines the nature of linkages between exports and FDI inflows for India for a period of 30 years. Firstly we examine the possibility of long-run relationship between the two, using co-integration test and then the presence of any causal relationship between exports and FDI inflows, using causality tests.

Trends in FDI Inflows and Exports in India

The annual flows of FDI inflows and total exports for India, from 1981 to 2010, are shown in **Table 1**.

As shown in the table, while exports have risen at a very fast pace, especially since 1999, the rise in FDI flows is relatively less steep. Export growth may have been brought by factors, namely, the real depreciation of Indian currency, improvements in price competitiveness, and provision of export subsidies, during the period. Similarly, FDI flows could have been affected by policy liberalisation. While the above-mentioned factors may have played a role in the growth of both these variables, we further examine if there are any linkages between the two that could have affected the trends shown.

Table 1

FDI Inflows And Exports for India (From 1981 to 2010)

Year	FDI Inflows (in US $ million)	Exports (in US $ million)
1981	92	8,704
1982	72	9,108
1983	6	9,449
1984	19	9,878
1985	106	8,905
1986	118	9,745
1987	212	12,089
1988	91	13,970
1989	252	16,613
1990	237	18,145
1991	75	17,865
1992	252	18,537
1993	532	22,238
1994	974	26,331
1995	2,151	31,795
1996	2,525	33,470
1997	3,619	35,006
1998	2,633	33,219
1999	2,168	36,822
2000	3,588	44,560
2001	5,478	43,827
2002	5,630	52,719
2003	4,321	63,843
2004	5,778	83,536
2005	7,622	1,03,091
2006	20,328	1,26,414
2007	25,350	1,62,904
2008	42,546	1,82,800
2009	35,649	1,78,751
2010	24,640	2,54,402

Source: RBI and UNCTAD database

In the light of the above, this paper seeks to examine whether the FDI inflows have made any significant contribution to India's export growth and whether export growth has a positive effect on the FDI inflows.

REVIEW OF LITERATURE

Theoretical Studies on the FDI and Trade Relationship

A large body of theoretical research has focussed on the nature of relationship between the FDI and trade. The classical trade theories of Ricardo and Heckscher-Ohlin in their true form do not allow for any conclusion about the relationship between the FDI and the trade, since production factors are assumed to be immobile, internationally. However, if the immobility assumption is relaxed, it becomes possible to analyse FDI in a Heckscher-Ohlin framework. One of the earliest examples of a study relaxing the assumption of internationally immobile production factors is the seminal paper by Mundell (1957). The paper develops a standard two-good, two-factor, two-country Heckscher-Ohlin trade model. Capital mobility between the two countries is introduced, and the Heckscher-Ohlin assumption of identical production functions is relaxed. In this setting, capital movement becomes a perfect substitute for trade. Markusen (1983) concluded that the result of substitutability between the FDI and the trade found by Mundell (1957) was a special case only, presented in factor-proportions models. The product life-cycle theory, propounded by Vernon (1966), described how the location of production changed as a product went through different stages of its life cycle. Change in the location of production generated an outflow of the FDI from the U.S. to low-income countries and replaced exports.

While the above studies treated FDI and exports as substitutes, there are other major studies (Schmitz and Helmberger, 1970; Horst, 1976), which find evidence of a complementary relationship between the two. Using a spatial equilibrium framework, Schmitz and Helmberger (1970) showed that trade increased when capital mobility was introduced. In a setting with trade in both products and factors, a complementary relationship between the FDI and trade is possible. Horst (1976) argued that foreign investment was not limited to local production of final goods in the host country. The multinational corporations (MNC) investing in the host country also engages in non-manufacturing activities not directly related to production such as advertising, retail distribution, technical assistance and adaption of the good to local preferences. These activities increase the demand for the MNC good in the host country market.

The models developed by Helpman (1984) and Markusen (1984) are among the first trade models that incorporate MNCs. Helpman (1984) presented a model of vertical MNCs and FDI. The paper developed a general equilibrium trade model, based on the differences in factor endowments. The firms were modelled as having one labour-intensive activity and one capital-intensive activity. Factor intensities differ between the two activities and they could be separated geographically. MNCs only arise if the differences in factor endowments were large enough. Markusen (1984) provided a general equilibrium model incorporating horizontal MNCs. The model was based on firm-level scale economies.

The distinction between the horizontal and vertical FDI, as modelled in Helpman (1984) and Markusen (1984) and similar papers has important implications for the relationship between the FDI and trade. In the case of the horizontal FDI, a substitutive relationship is expected. The MNC produces the good locally instead of exporting it from the home country. For the vertical FDI, the FDI is expected to have a complementary relationship to trade. Instead, demand for intermediate goods from the MNE affiliate can result in an increase in the exports to the host country. Brainard (1993) showed how including intermediate goods into a trade model allowed for the possibility of a complementary relationship between the FDI and trade.

The distinction between the horizontal and the vertical FDI has been extended in recent so-called knowledge-capital models. Examples of this type of model were presented in Carr, *et al.* (2001) and Markusen and Maskus (2002). These models added more realism since they allowed the combinations of horizontal MNCs, vertical MNCs, and national firms, to arise endogenously. Knowledge-capital models consequently incorporated both a complementary and a substitutive relationship between the FDI and trade.

Ekholm, *et al.* (2007) modelled a form of FDI where FDI was made in order to create an export-platform in the host country. Such export-platform, FDI, is defined as MNC production in a host economy when the output is sold in third markets and not in the parent or host-country market. The authors constructed a three-country model with two high-cost countries and one low-cost country. Numerical simulations of the model were performed in order to find conditions that tended to result in export-platform FDI. The export-platform model, consequently predicted a complementary relationship between the inward FDI and the host country exports.

Empirical Research on FDI and Trade Relationship

There has been substantial empirical research that studied the linkages between the FDI flows and trade for developed economies. Horst (1972) examined the relationship between the U.S. exports and the FDI to Canada. He found that the exports and foreign investments were the alternative ways for U.S. manufacturing firms to supply to the Canadian market. Lipsey and Weiss (1984) used the data for individual U.S. firms in order to investigate the effect of foreign production on exports from the home country. They found that higher MNC affiliate sales in the host country were linked to higher exports from the MNC parent, that is, foreign production does not substitute for exports.

Pfaffermayr (1994) applied Granger causality analysis to the Austrian outward FDI and the exports, and found a complementary relationship between those variables, with causality running in both the directions.

Lin (1995) studied the effect of Taiwan's outward and inward FDI on the bilateral trade with four other Asian economies using time series data. He found that while the outward FDI had a positive effect on exports, the inward FDI did not affect the country's imports. Kim and Kang (1996) investigated whether the outward FDI substituted exports from the home country, using industry-level data for Korea and Japan. They concluded that the outward FDI did not substitute for exports either for Korea or Japan.

The impact of the FDI inflows on export growth had been well-documented in various studies (De Mello, 1999; Borensztein, *et al.*, 1998; Balasubramanyam, 1996). In order to examine the spatial correlation between the FDI flows, Blonigen, *et al.* (2007) used the data for the U.S. FDI to a panel of 20 OECD economies, from 1980 to 2000. They found the evidence consistent with the export-platform FDI into Europe.

The impact of the FDI on exports is not straightforward and varies across countries, industries and over time, depending on wide range of factors, both for home and host countries, e.g., locational attractions, industrial and institutional composition, and the MNC's motives. Thus, whether FDI substitutes trade (by serving as an alternative means of supplying foreign markets) or complements it (by facilitating exports of the host country) depends critically on the motives of the foreign investor, type of industries (industry-mix), and the nature of investment made. Therefore, different studies have somewhat different results.

Studies in Indian Context

Sahoo (1999) showed that foreign firms had higher export ratios as compared to the domestic firms in selected industries, from 1990 to1994. Sharma (2000) used a simultaneous equation model to examine the factors explaining the export growth in India, during 1970-98. He found that the FDI had no significant effect on export performance although its coefficient had a positive sign. Pailwar (2001) argued that India had not been able to attract the FDI in export-oriented areas. Banga (2003) concluded that the FDI had a positive

and significant impact on the export-intensity of non-traditional export sector, leading to export diversification.

According to Basu, *et al.* (2003), as a consequence of trade liberalisation, long-run causality was uni-directional from the GDP to the FDI as India might have no longer belonged to the group of relatively closed host countries. Gupta (2005) noted that India's earlier import substitution strategy had impaired the economic benefits from the FDI and trade liberalisation, should have resulted in larger benefits.

In a study analysing the export-orientation of over 4,000 Indian manufacturing enterprises for the period 1988-2001, Kumar and Pradhan (2003) found that Indian affiliates of the MNCs performed better than their local counterparts in terms of export-orientation. They control for several firm-specific factors, fiscal incentives, and industry characteristics. GuruGharana (2012) examined the causal relationship of GDP with trade and FDI for India for the period 1971 to 2008. He focussed on the post-liberalisation period from the pre-liberalisation period in the GDP-Export-FDI nexus. Employing the ARDL (Auto-regressive Distributed Lag) bound-testing approach, he found that there was lack of evidence for long-run co-integration for the entire period. However, in the post-liberalisation period, there was stronger evidence of the long-run relationship with the GDP as the dependent variable. The analysis of error-correction model showed that export was a highly significant determinant of the changes in the GDP. Moreover, the exports have the short-run, as well as the long-run Granger causality towards the GDP. In contrast, the FDI did not show any short-run Granger causality towards GDP. This study revealed strong support for export-led growth hypothesis only in the post-liberalisation period.

Pradhan (2010) also investigated the role of trade openness on the FDI inflows in the Indian economy during the period 1980-2007. He found that trade openness had a significant positive impact on the FDI inflows. However, its impact is much stronger in the post-globalisation era (i.e., from 1991 to 2007) compared to the pre-globalisation era (i.e., from 1980 to 1990). Other factors that significantly affected India's FDI inflows during this period were real effective exchange rate and the terms of trade. The author, therefore, suggested that the government should continue the openness policy with greater caution in order to attract more FDI inflows onto the Indian economy

Most of the studies mentioned above concentrate on the relationship between trade and the FDI inflows. While there have been studies to examine the impact of exports and the FDI on economic growth, there is a need to study the causal relationship between exports and the FDI inflows for India. The existing literature on the Indian position in relation to this subject is far inadequate.

RESEARCH ISSUES AND OBJECTIVES

From a policy perspective, we examine the relationship between the FDI inflows and exports. Exports have a potential to stimulate economic growth in the exporting country through export-led growth. Exports can affect the economy as a whole through productivity-enhancing externalities, such as technology spill-over. If the FDI is found to promote exports, the FDI can indirectly enhance economic growth. Developing economies which have as yet failed to embark on a path towards increasing standards of living, could try to implement similar policies which results in export-led growth.

Most of the studies conducted so far, focussed on the FDI inflows with economic growth or with development of a particular country, but still they lacked research on the FDIIN-EXP nexus and there were some areas which remained unexplored till today. This paper is an attempt to throw light on some of these critical and strategic issues relating the FDI inflows and exports relation. Therefore, the study has three objectives:

1. To examine the trends of the FDI inflows and export growth in India;

2. To investigate the long-term relationship between the FDI and export; and
3. To ascertain the causal relationship between the FDI inflows and exports (e.g., FDIIN causes EP, or EXP causes FDIIN, or both, reinforce each other).

DATA SOURCES AND RESEARCH METHODOLOGY

For the study, the secondary data was collected from various publications of the Government of India, *Reserve Bank of India Bulletin*, *UNCTAD Database*, and Department of Industrial Policy and Promotion. The variable under study are the FDI inflows (FDIIN) and exports (EXP). The paper studies the relationship between FDI inflows and exports for the period 1981-2010 with respect to India using annual time series data.

The studies conducted during recent years show that before indulging in any econometric modelling using time-series data, one should be concerned about the problem of non-stationarity or unit root. So, in the first stage, stationarity of series on each variable was examined, using Augmented Dickey-Fuller test.

One advantage of the Augmented Dickey-Fuller (ADF) test is that it corrects for higher-order serial correlation by adding the lagged difference term on the right hand side. The ADF test constructs a parametric correction for higher-order correlation, by assuming that the *y*-series follows an AR (p) process and adding *p* lagged difference terms of the dependent variable *y* to the right-hand side of the test regression:

$$\Delta Y_t = \alpha + \gamma Y_{t-1} + \delta_1 \Delta Y_{t-1} + \delta_2 \Delta Y_{t-2} + \ldots + \delta_p \Delta Y_{t-2} + \varepsilon_t \ldots$$

This augmented specification is then tested for:

$$H_0: \gamma = 0$$

$$H_1: \gamma > I$$

The results are, then, seen at a different levels of significance (1 per cent or 5 per cent Level of Significance) and, thereby, rejecting or accepting the null hypothesis.

Co-integration Analysis

Co-integration test is applied to find out the presence of long-run relationship between the two variables. A number of series are said to be co-integrated if they are non-stationary at the level and have the same order of integration, but there is at least a linear combination of these variables which is stationary.

If both the variable, i.e., X_t and Y_t are non-stationary (other than I (0) variable) at the level and integrated in the same order, the next step is to estimate the long-run relationship of the form.

$$Y_t = \beta_1 + \beta_2 X_t + \mu_t$$

In order to determine if the variables are actually co-integrated, denote the estimated residual sequence from the equation by $\hat{\mu}_t$.Thus, $\hat{\mu}_t$ is the series of the estimated residuals of the long-run relationship.

The null hypothesis of the unit root in $\hat{\mu}_t$ corresponds to the null of 'absence of co-integration' between X_t and Y_t. Similarly, the alternative of $\hat{\mu}_t$ being stationary (an I (0) variable) implies that X_t and Y_t are co-integated.

Then, afterwards, we execute the following regression:

$$\Delta\hat{\mu}_t = \alpha_1 \hat{\mu}_{t-1} + \sum^{n} \delta_i \Delta\hat{\mu}_{t-i} + \varepsilon_t$$

where *n* is a suitably chosen lag.

If $\hat{\mu}_t \sim$I (0), then the null hypothesis that the variables X_t and Y_t are not co-integrated, is rejected.

Testing for Causality

The test of co-integration ignores the effect of the past values of one variable on the current value of the other variable. So, we tried the Granger causality test to examine such possibilities.

If a variable *X* causes *Y* and *Y* causes *X*, then there is a feedback or bi-directional causality. If only one variable causes the other, there is unidirectional causality. To find out such type of possibility, we will be using the causality test, namely the Granger's Causality test, to examine

the existence of a causal relationship between the FDI inflows and exports in India. Since the reliability of results of the Granger causality test depends on whether the variables are stationary or not, we applied this test on the first difference of series which are reported to be stationary. We know that Granger causality test is sensitive to the choice of lag length. To avoid this problem, we applied Akaike information criterion to choose the optimum lag length.

The test involves estimating the two regressions, namely

$$FDIIN_t = \sum_{i=1}^{n} \alpha_i EXP_{t-i} + \sum_{j=1}^{n} \beta_j FDIIN_{t-j} + u_{1t}$$

$$EXP_t = \sum_{i=1}^{n} \lambda_i EXP_{t-i} + \sum_{j=1}^{n} \delta_j FDIIN_{t-j} + u_{2t}$$

where it is assumed that the disturbance u_{1t} and u_{2t} are not correlated.

Equation (1) and (2), respectively, postulate that current *Y* is related to past values of itself as well as that of *X* and a similar relation for *X*. In the above equations, α's, β's, and δ's are parameters.

Uni-directional causality from the FDIIN to EXP is indicated if the estimated coefficients on the lagged FDIIN in Equation (1) are statistically different from zero as a group (i.e., $\Sigma\alpha i \neq 0$) and set of estimated coefficients on the lagged EXP in Equation (2) is not statistically different from 0 (i.e., $\Sigma\delta j=0$). Conversely, uni-directional causality from EXP to the FDIIN exists if the sets of lagged FDIIN coefficients in Equation (1) are not statistically different from zero (i.e. $\Sigma\alpha i=0$) and the set of the lagged EXP coefficients in Equation (2) is statistically different from zero (i.e., $\Sigma\delta j \neq 0$). Feedback or bi-directional causality is suggested when the FDIIN causes EXP and *Y* causes the FDIIN. In this case, the set of coefficient of the FDIIN and EXP are statistically significant from zero in both the regressions. Finally, independence is suggested when the FDIIN does not cause EXP and EXP does not cause the FDIIN, that is, the set of coefficients are not statistically significant in both the regressions.

FINDINGS AND ANALYSIS

As pointed out above, performing regressions on non-stationary time-series can result in spurious regression (Granger and Newbold, 1974; Granger, 1981). It is, therefore, necessary to determine whether the data is stationary or not. Accordingly, a formal analysis of the unit root test, i.e., the ADF test was performed on the individual time-series. The results of the ADF tests for FDI inflows are shown in **Table 2**.

Table 2

Augmented Dickey-Fuller test for Unit Roots (Foreign Direct Investment Inflows)

		t- Statistics	Prob.
At Level	ADF Test Statistic	2.134768	0.9998
	Test Critical Values : 1%	-3.752946	
	5%	-2.998064	
At 1st Difference	ADF Test Statistic	-5.288119*	0.0002*
	Test Critical Values : 1%	-3.711457	
	5%	-2.986225	

Note: Used Akaike Info Criterion for the ADF Test.
The values are at optimal lags, which are selected automatically by *e*-views
* signifies statistically significant at 1 per cent level.
** signifies statistically significant at 5 per cent level.

The FDI inflows, when tested at level, the ADF test suggests that the null hypothesis of non-stationarity cannot be rejected at both 1 per cent and 5 per cent levels of significance. So, the FDI series is transformed to first difference and the resulting series are statistically significant at 1per cent level of significance.

Table 3

Augmented Dickey-Fuller Test for Unit Roots (Total Exports)

		t- Statistics	Prob.
At Level	ADF Test Statistics	5.484215	1.0000
	Test Critical Values : 1%	-3.699871	
	5%	-2.976263	
At 1st Difference	ADF Test Statistics	1.154627	0.9969
	Test Critical Values : 1%	-3.711457	
	5%	-2.981038	
At 2nd Difference	ADF Test Statistics	-9.165231*	0.0000*
	Test Critical Values : 1%	-3.711457	
	5%	-2.981038	

Note: Used Akaike Info Criterion for the ADF Test.
The values are at optimal lags, which are selected automatically by *e*-views.
*signifies statistically significant at 1 per cent level.
**signifies statistically significant at 5 per cent level.

The results of the ADF tests for the total exports are shown in **Table 3**.

In the case of exports, when tested at level, the ADF test reveals that the null hypothesis of non-stationarity cannot be rejected at both 1 per cent and 5 per cent levels of significance. Now, at first difference level also, one cannot reject the null hypothesis of the unit root presence. So, export series is transformed to the second level differenced and the resulting series are statistically significant at 1 per cent level of significance.

Results of Co-integration Test

In the second stage, the tests for co-integration were applied to examine if any long-run equilibrium relationship existed between these two pairs of variables. We carried out co-integration test, using the methodology suggested by Engle and Granger (1987). The results are shown in **Table 4**.

Table 4

Results of Co-integration (Engle and Granger) Test

Dependent Variable	tau-statistic	Prob.	*z-statistic*	Prob.
Exports	-0.518437	0.9626#	-1.485320	0.9541#
FDI Inflows	-0.919070	0.9166#	-5.588199	0.6478#

Note: # signifies statistically not significant at 1 per cent and 5 per cent level of significance.

Both the Engle-Granger tau-statistic (*t*-statistic) and normalised auto-correlation coefficient (which we term as *z*-statistic) for residuals obtained using each series in the group as the dependent variable in a co-integrating regression are broadly similar for different dependent variables, with the tau-statistic, uniformly failing to reject the null hypothesis of no co-integration at conventional levels. On the contrary, there is no long-run relationship between the two variables. These long-run relationships, based on the observed data, reveal that the covariate fluctuations for the variables in each pair are not correlated over time.

Results of Causality Tests

The test of co-integration ignores the effect of the past values of one variable on the current value of the other. So, finally, we applied the Granger causality test to examine such possibilities. Since the reliability of the results of the Granger causality test depends on whether the variables are stationary or not, we applied this test on the first difference of the FDI inflows series and the second difference of exports series, which are reported to be stationary. The results are summarised in **Table 5**.

Table 5

Results of Granger Causality Test

Null Hypothesis	*F*-Statistic	Prob.	Remarks
FDI inflows do not Granger cause exports	3.41834	0.0519**	Weak causality from EXP to FDIIN
Exports do not Granger cause FDI inflows	27.0846	2.E-06*	Causality from FDIIN to EXP

Notes: * signifies statistically significant at 1 per cent level.

** signifies statistically significant at 5 per cent level lag taken as 2.

The results suggest that we can reject the null hypothesis that FDI inflows do not Granger cause Exports at around 5 per cent, but not at 1 per cent. So, we can say there are indications of a weak form of causality flowing from the FDI inflows to exports. We also reject the hypothesis that the exports do not Granger cause FDI inflows at both 1 per cent and 5 per cent level of significance, implying thereby that causality flows from exports to FDI inflows. Therefore, it appears that there is bi-directional causality, i.e., weak causality run from the FDI inflows to exports and strong causality from exports to the FDI inflows.

The causal effect running from the FDI inflows to exports can be explained as follows. The FDI inflows brings with them updated technology, latest working methods and new management skills, which have spill-over effects for the existing domestic industries as well and boost their productivity. A well-developed and improved industrial base raises the competitiveness of the products of the host country and hence can play an important role in boosting the exports. Moreover, where the foreign investment has been made with the specific intention of sourcing parts/components (or even final products) from the host country to take advantage of low-cost, the FDI contributes to exports directly. Enhanced export possibility contributes to the growth of the host economy by relaxing the demand side constraints on growth.

The results also indicate causality from exports to FDI inflows implying that exports contribute to FDI inflows. Higher exports from a country reflect competitiveness of its products in the international market which, in turn, represent industries which are modern and developed and which are conducive to support investment from other countries. The global exposure of firms engaged in exports also augments the competitiveness of the host country. All this makes the country an attractive destination for FDI.

CONCLUSION

The results of co-integration test point towards the absence of a long-term relation between the FDI inflows and exports. This implies that, in the long-run, the FDI inflows are affected by determinants other than exports. The same holds for exports too. For the short-run period, the Granger causality tests indicate the presence of a causal relationship both ways. Thus, while exports and FDI inflows may be determined by other more important factors in the long-run, there is evidence of short-run causality between the two. If the FDI promotes exports in India as above, then an outward-oriented trade policy is most desirable to reap the benefits of this linkage. Export-led growth contributes to foreign exchange earnings and improves the image of the country globally. There are also indications of export-led FDI in India where exports influence the economy as a whole through productivity-enhancing externalities, such as technology spill-over and foreign exchange earnings. This, in turn, leads to more FDI. From a policy perspective, these short-term linkages imply that trade and investment policies should complement each other to improve the growth and overall attractiveness of the economy.

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Men who for truth and honour's sake,
Stand fast and suffer long;
Brave men who work while others sleep,
Who dare while others fly;
They build a nation's pillars deep,
And lift them to the sky.

Ralph Waldo Emerson
from A Nation's Strength

★★★★★

Men in great place are thrice servants: servants of the sovereign or state; servants of fame; and servants of business.

Francis Bacon, Essays
Of Councils

PERFORMANCE OF BUY-WRITE STRATEGY ON CNX IT
An Empirical Examination

Navdeep Aggarwal* and Mohit Gupta**

Abstract

The buy-write strategy entails the writing of a call option on an equity index against a long position in the same underlying equity index. The strategy is generally implemented passively, without explicitly incorporating the market timing. This paper seeks to assess the performance of buy-write strategy on the CNX IT index. Using the daily data from January 2007 to June 2011, the strategy was implemented using different 'moneyness' of the written call, viz., 5% ITM, 2% ITM, ATM, 2% OTM, and 5% OTM. The expiration of written calls was restricted to one month as two- and three-month calls did not have sufficient volume. The study has revealed that the buy-write strategy outperformed the index on the absolute as well as the risk-adjusted basis. In particular, the 5% OTM call-based strategy did exceptionally well. This performance is robust to the measures which specifically take into consideration the non-normality of the returns distribution.

Key words: ***Buy-write strategy, CNX IT index, Return, Risk, Leland's alpha***

INTRODUCTION

DERIVATIVES, which were originally introduced as financial instruments to hedge the financial risk, are now increasingly used for speculative purposes as well. It is widely believed that the performance of pure-stock portfolios can be enhanced by incorporating different options strategies. Out of the innumerable trading strategies, no trading strategy has been as popular and still as controversial as the buy-write strategy (also called the 'covered call' strategy). A buy-write strategy comprises a long position in a stock or a basket of stocks or any other asset-class and writing (or selling) call options for certain premium that would cover the stock position or other asset-class (Hoffman and Fischer, 2010). It has been the most popular option-trading strategy since the options were listed in 1973, accounting for a major portion of all the calls written (Lakonishok, Lee, Pearson, and Poteshman, 2007).

Among the different versions of the buy-write strategy, the index-based buy-write strategy has emerged as the most popular strategy across the world. So large has been the volume resulting

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from this strategy that the Chicago Board of Options Exchange (CBOE) has introduced indices that simulate buy-write strategy on a variety of equity indices, such as the S&P 500, the Dow Jones Industrial Average, the Nasdaq 100, and the Russell 2000 (refer to *www.cboe.com*, for detailed information about such products). Even the funds based on a buy-write strategy have been proposed by a number of firms, such as Eaton Vance and Blackrock (Kapadia and Szado, 2007).

Investment professionals as well as individual investors generally treat the buy-write strategy as a relatively safe and conservative strategy that helps generate additional income (Tergesen 2001), while partially protecting one against the downside risk (Crawford, 2005). The reason behind this claim is that the cash received as option premium acts as the extra return and, at the same time, provides a cushion against the minor drops in the asset price (Hoffman and Fischer, 2010). The strategy is, therefore, highly recommended in the bearish to the moderately bullish markets.

Researchers see two major dimensions behind the popularity of the buy-write strategy. Firstly, in the Markowitz (1952) mean-variance framework, performance of a portfolio could be improved by writing the overpriced calls (McIntyre and Jackson, 2007). In fact, Constantinides, *et al.* (2008) have reported a strong evidence for such overpricing. The second dimension emerges from the behavioural finance, which emphasises that most investors do not base their decisions only on the risk-and-return considerations, but are also influenced by heuristics and frames. Shefrin and Statman (2000) and, more recently, Hoffman and Fischer (2010) used the prospect theory (Kahneman and Tversky, 1979) and hedonic framing (Thaler, 1985) in the context of the buy-write strategy to conclude that it will be preferred by a prospect-theory investor who is risk-averse in the domain of gains (that is, the sure gains are preferred over the gamble).

They further predicted that in a prospect theory, investor is likely to choose a particular buy-write design over others, though net cash flows may be equal. This goes well in line with the philosophy of prospect theory, which states that the investors are less willing to gamble with the profits than the losses. Investors show asymmetric response with respect to the equivalent amount of profits or losses. Therefore, it is very likely for the investors to prefer writing in-the money calls though the net cash flows may be equivalent to writing at-the money or out-of the money calls.

While the USA was the first to introduce index-based options in its financial markets, many countries in Europe and Asia also did the same, later. For instance, in the European countries, options on the Italian index MIB 30 were first introduced in November 1995, options on the German index DAX in August 1991, options on the Swiss index SMI in December 1988, options on the French index CAC 40 in 1991, options on the Finish index FOX in May 1988, options on the Spanish index IBEX 35 in January 1992, and index options on the Swedish index were introduced in 1986.

Similarly, in Asia, options on the Korean index KOSPI 200 were introduced in July 1997, options on the Hong Kong index Hang Seng in March 1993, and options on the Taiwanese index TAIEX were first traded in December 2001.

In India, the index options were introduced on the National Stock Exchange (NSE) in 2000, for its diversified stock index S&P CNX Nifty and on the Bombay Stock Exchange (BSE) in 2001, for its diversified index Sensex. Options on other indices started by the bourses were also introduced later. For example, Index options were introduced by the National Stock Exchange on the IT sector index CNX-IT, banking sector index Bank Nifty, and other diversified indices, including the CNX Nifty Junior, CNX 100, Nifty Midcap 50, and the S&P CNX Defty.

This paper seeks to estimate the risk and return characteristics of passive buy-write strategy on the major indices in the Indian capital market. The motivation for the study comes from world-wide high volumes and large interest in the use of the buy-write strategy. Although many previous studies (for instance, see Hill, *et al.*, 2006)

have established that the buy-write strategy on the S&P 500 outperforms the S&P 500 on a risk-adjusted basis, it is certainly worthwhile to check if such performance is robust across other indices (Kapadia and Szado, 2007), particularly those which are relatively less traded. This is especially required in the options market of India, which is still at the developing stage, but has achieved a unique success in obtaining liquidity and turnover (Aggarwal and Gupta, 2009). However, the financial markets in India depend more on the Foreign Institutional Investors (FII) than the Domestic Institutional Investors (DII) or retail investors. Moreover, the market efficiency has also been weak and the predictability of the returns tends to be higher (Pandey, 2003; Gupta and Basu, 2007). All these characteristics make Indian options market a unique case for testing the performance of buy-write strategy.

We specifically carried out a performance check on the buy-write strategy, using the index options available on the CNX IT, the IT industry-based index available on the National Stock Exchange of India (Details of the index are available at *www.nseindia.com*).

EARLIER STUDIES

Ever since their formal introduction on the exchanges, financial options have generated immense interest among researchers. The most researched topic has been the examination, whether it was possible to outperform an un-optioned portfolio by using option strategies (those typically focussing the buy-write strategy include Merton, *et al.*, 1978, Bookstaber and Clarke, 1985, Morard and Naciri, 1990, Whaley, 2002, Feldman and Roy, 2004, Hill, *et al.*, 2006, Kapadia and Szado, 2007, Constantinides, *et al.*, 2008, Aggarwal, 2010).

Early studies on the subject, however, produced mixed results. Pounds (1978), for example, found that an equally weighted portfolio, using the buy-write strategy, outperformed the stock portfolio by yielding a higher return and a lower variance. Yates and Kopprasch (1980) also reported similar findings by using an index that tracked the performance of option writing for all stocks on the CBOE. However, Merton, *et al.* (1978), Bookstaber and Clarke (1985), and Booth, *et al.* (1985) reported contradicting results and concluded that this strategy did not enhance the performance of the stock portfolio. Even using stochastic dominance approach, Clarke (1987) and Brooks, *et al.* (1987) did not find any evidence of the superior performance.

Early evidence on the performance of the buy-write strategies is rather mixed. However, most of it seems questionable as it relies on the return distributions in the mean-variance framework, without paying attention to the fact that the return distributions are possibly non-normal (Isakov and Morard, 2001). Using simulated buy-write portfolios, this issue was well-addressed by Bookstaber and Clarke (1981,1984, 1985) through a series of articles. The results were confirmed by a number of later researches see, for example, Kapadia and Szado, 2007; Aggarwal, 2010, who concluded that the distribution of an optioned portfolio was generally non-normal.

This raises questions against the use of traditional mean-variance framework, which employs first two moments, for analysing portfolios that contain options (see Leland, 1999; Lhabitant, 2000). The use of traditional measures to compare the portfolios with non-normal distributions can lead to wrong conclusions regarding the performance of portfolios.

In the light of non-normality of the returns distribution, relatively recent studies claim that considerable risk-adjusted improvements are possible (see Hoffman and Fischer, 2010). For example, Morard and Naciri (1990) reported an improved portfolio performance and concluded robustness of results across both the mean-variance analysis and the stochastic dominance approach. Whaley (2002) studied the performance of the BXM, which is a hypothetical buy-write strategy-based index that involved simultaneously buying of the S&P 500 and shorting of an at-the money S&P 500 index call, and concluded that this investment strategy outperforms the S&P 500 both returns and risk dimensions. Similar results were reported by Feldman and Roy (2004), Callan Associates (2006), and Hill, *et al.* (2006). In the European context too, McIntyre and Jackson (2007) found similar performance for the buy-write strategy on the FTSE-100.

From the foregoing discussion, one thing clearly emerges that the buy-write has generated tremendous interest among the researchers. However, another thing that is also conspicuous is that most of the research has been confined to the US context only. The emerging markets, especially India, which have attracted attention from the investors from all over the world, deserve scholars' attention also. This study is a step in that direction.

OBJECTIVES OF THE STUDY

The motivation behind this paper came from the significant interest in the use of the buy-write strategy for trading or investment purposes. Although many earlier studies have established that the buy-write strategy on the S&P 500 outperforms the index on a risk-adjusted basis, it was certainly worthwhile to check if such a performance is robust across other indices, more so in the case of less-traded indices.

The study seeks to examine the performance of the buy-write strategy, using the index options available on the CNX IT, specifically, to investigate the returns and the risk associated with the returns from the buy-write strategy on the CNX IT.

RESEARCH METHODOLOGY

The buy-write strategy involves an investor writing a call option contract on an asset he owns. The call option is considered 'covered' because the option seller is 'covered' against the unlimited losses in the event that the option goes in the money and is exercised. The option seller keeps the premium of the call, but if the security goes above the strike price, he has capped the amount he can make. This strategy is, therefore, used in the neutral to moderately bullish market, where a slow rise in the market price of the underlying security is anticipated (see Dash and Liu, 2009). The buy-write can be executed in three different ways: using out-of-the money (OTM) calls, using in-the money (ITM) calls, and using at-the money (ATM) calls.

THE DATA AND INTERPRETATION

The Information Technology (IT) industry has played a major role in the Indian economy during recent years. A number of large, profitable Indian companies today belong to the IT sector and a great deal of investment interest is now focussed on the IT sector. In order to have a good benchmark of the Indian IT sector, the CNX IT index provides the investors and the market intermediaries with an appropriate benchmark that captures the performance of the IT segment of the market. This index represents about 93.99 per cent of the free-float market capitalisation of the stocks forming part of the IT sector as on December 30, 2011. During the last five years, the IT sector has seen large-scale ups and downs, emerging out of the global financial meltdown, the European crisis, and the restrictions imposed by the US Government. The CNX IT Index, thus, provides an effective avenue to hedge against the adverse movements as well as for generating income. The study was, therefore, carried out using the daily closing prices of all call options on the CNX IT available on the National Stock Exchange of India, for the period of January 2007 to June 2011.

The literature on the subject suggests that most of studies in this area (for example, Whaley, 2002; Hill, *et al.*, 2006; Kapadia and Szado, 2007) have been carried out using the bid-and-ask prices. However, due to the limitations of data availability during the study period, we had to rely on the closing prices only. However, after 2009, the NSE has introduced options chain, where bid-and-ask prices for most active options are reflected after fixed time-periods.

Only the European style options are available on the CNX IT, with maximum expiry of three months. Owing to the insignificant volumes in two- and three-month options, we have restricted ourselves to one-month expiry options. In addition, depending on the 'moneyness' of the

call option, five types of buy-writes were taken up for the study, namely, ATM, 2% ITM, 5% ITM, 2% OTM, and 5% OTM. In case, strike prices as mentioned, were not available, nearest strike prices were utilised (for example, see Aggarwal, 2010). The total returns index for CNX IT, available from the paid services of the NSE, was used to calculate the daily returns from the index.

In order to execute the buy-write strategy, on every trading day, the index is purchased at the closing price, and the five call options with different 'moneyness' are sold. On the next trading day, all the positions are squared–off at the closing prices, and a new cycle is started, which is squared-off on the next trading day and so on; five buy-write positions are, thus, created and squared-off every day. The returns are calculated on the daily basis. The transaction costs have been ignored due to high frequency of trade. As it is a well-established fact that the optioned portfolios generally have non-normal returns distribution, modified form of mean-variance framework (see Leland, 1999; and Stutzer, 2000) was utilised to analyse the performance of the buy-write strategy on the CNX IT. The MIBOR rates were used as a proxy for the risk-free rates of return.

The performance has been studied along two dimensions, namely, the returns and the variability associated with the returns. For the calculation of returns, we define the relevant variables as given below:

R_t : Return from the buy-write strategy on day t

S_t : Closing price of the index on day t

D_t : Dividend on stocks constituting the index on day t

C_{t-1} : Call premium received on shorting the call on day $t-1$

C_t : Call premium paid on covering the short call on day t

On Day t, the return from the buy-write strategy is calculated as:

$$R_t = \{[(S_t + D_t - S_{t-1}) + (C_{t-1} - C_t)] / S_{t-1}\} \times 100$$

It needs to be seen that some researches, such as Hill, *et al.* (2006) invest the call premium received at continuously compounded LIBOR. But at the same time, they fail to talk about the cost of funds required for buying the index, the margin requirements for shorting the call and the mark-to-market requirements. This leaves the story one-sided, making the returns unjustifiably higher.

In this study, we have ignored all the financing costs for buying the index, margin requirements for shorting the call, mark-to-market requirements, and any investment of call premium at the London Interbank Offered Rate (LIBOR), or the Mumbai Interbank Offered Rate (MIBOR).

EMPIRICAL FINDINGS

In the following text, we provide summary statistics for the buy-write strategy, using different call expirations and different 'moneyness' of the call options sold. We present both the average returns and the standard deviation of the returns for each strategy implementation. As the literature reports, the non-normality in the returns from buy-write strategy (for instance, see Kapadia and Szado, 2007), Anderson-Darling statistics to check for normality are also reported. In the light of the same, the volatility (as measured by the standard deviation) may not be an effective measure of risk, alternative measures, such as the maximum and minimum of the returns, are also presented. Similarly, for performance also, we present the traditional measures, such as Sharpe Ratio (Sharpe, 1966), which is appropriate when the returns are normally distributed, as well as more contemporary Leland's Alpha and Beta (Leland, 1999), which is robust in the case of deviation from normality. Leland's measures have been briefly discribed in **Appendix 1**.

Table 1 summarises the statistics for returns from the 5% ITM, 2% ITM, ATM, 2% OTM, and the 5% OTM, one month buy-write on the CNX IT, along with the returns from the index itself. The return distributions are presented graphically in **Figures 1 to 6**, respectively.

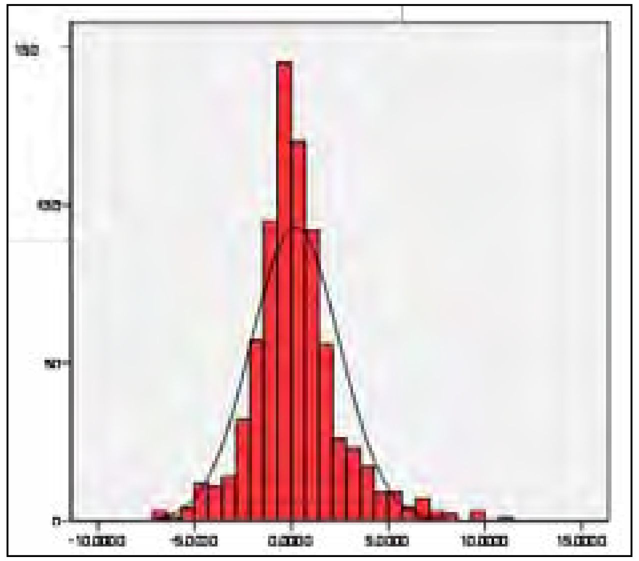

Figure 1: Returns from Buy-write Strategy on CNX IT using 5% ITM Call

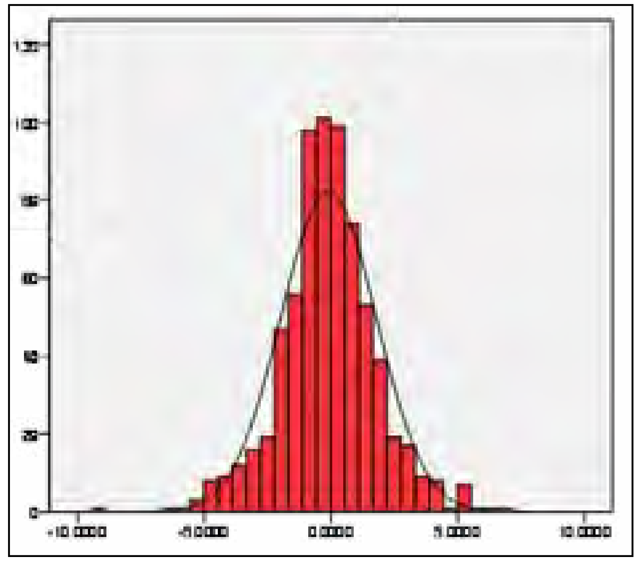

Figure 2: Returns from Buy-write Strategy on CNX IT using 2% ITM Call

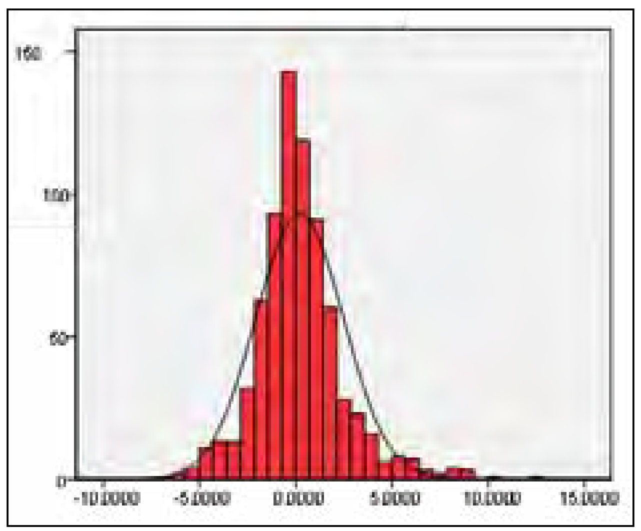

Figure 3: Returns from Buy-write Strategy on CNX IT using ATM Call

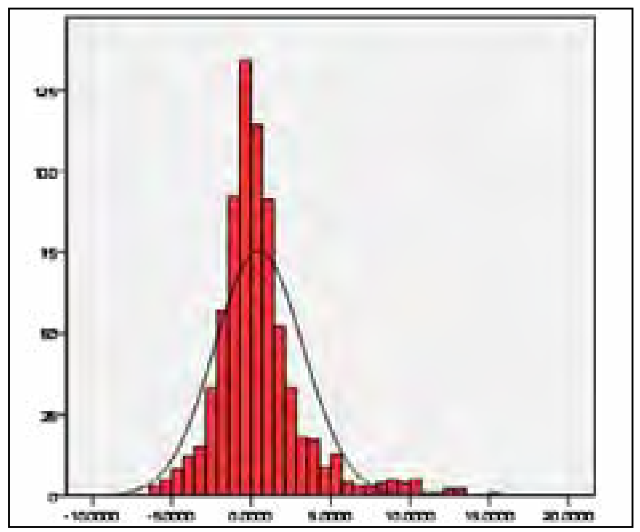

Figure 4: Returns from Buy-write Strategy on CNX IT using 2% OTM Call

It can be seen that the average return was highest for 5% OTM buy-write (0.49 per cent), followed by 2% OTM buy-write (0.44 per cent) and the lowest for ATM buy-write (-0.09 per cent). The average returns from the index stood at 0.03 per cent. Clearly, the absolute returns from the 5 % OTM buy-write strategy far outweigh the returns form pure buy and hold strategy. The minimum returns from the 5% OTM also stood better at -6.07 per cent vis-à-vis 6.70 per cent for the index. However, the volatility of returns for index was lower at 1.90 per cent, compared to 2.80 per cent and 2.90 per cent for the 5% OTM and the 2% OTM buy-writes.

Any discussion about the returns is incomplete, unless it mentions the adjustment about the risk involved; the Sharpe Ratio of 0.17 for the 5% OTM buy-write far outweighs the ratio of 0.01 for the index. Similarly, the 2% OTM buy-write performs fairly well at the Sharpe ratio of 0.15. This strongly reflects that the 5% OTM one month buy-write strategy performs far better than the index; the 2% OTM buy-write also produces superior returns on the risk-adjusted basis.

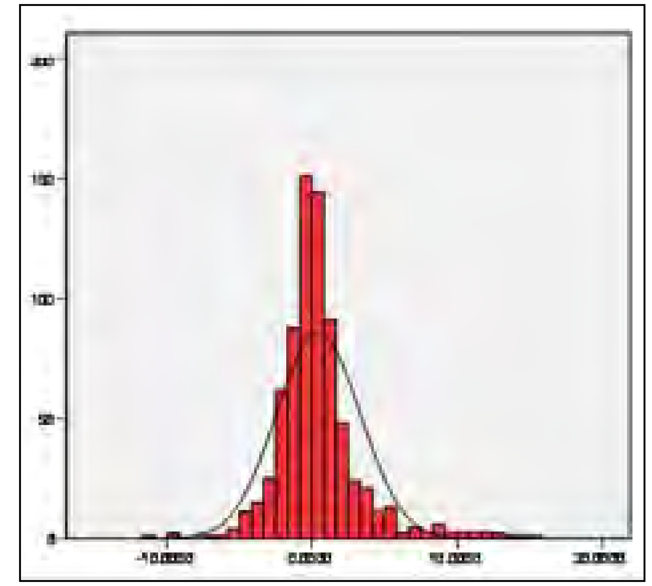

Figure 5: Returns from Buy-write Strategy on CNX IT using 5% OTM Call

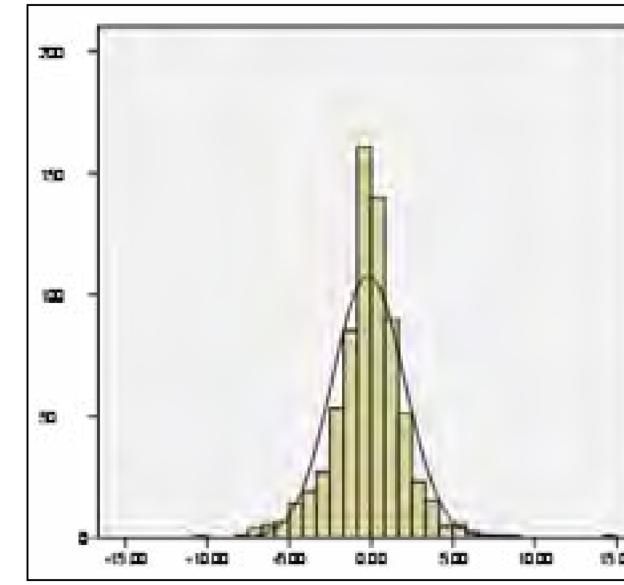

Figure 6: Returns from CNX IT Index

Table 1

Descriptive Statistics for Returns from One Month Buy-write on CNX IT

Measures	5% ITM	2% ITM	ATM	2% OTM	5% OTM	CNX IT
Mean	0.21 per cent	0.26 per cent	-0.09 per cent	0.44 per cent	0.49 per cent	0.03 per cent
Standard Deviation	2.29 per cent	2.30 per cent	1.89 per cent	2.90 per cent	2.80 per cent	1.90 per cent
Minimum	-6.97 per cent	-6.86 per cent	-9.33 per cent	-11.36 per cent	-6.07 per cent	-6.70 per cent
Maximum	11.02 per cent	12.24 per cent	6.83 per cent	15.78 per cent	15.65 per cent	7.50 per cent
Anderson-Darling A2	10.27 (p<0.0001)	8.95 (p<0.0001)	3.44 (p<0.0001)	18.83 (p<0.0001)	18.11 (p<0.0001)	3.94 (p<0.0001)
Sharpe Ratio	0.08	0.11	-0.06	0.15	0.17	0.01
Beta	-0.01	0.90	-0.03	0.91	0.92	1.00
Leland's Alpha	0.19 per cent	0.23 per cent	-0.10 per cent	0.31 per cent	0.36 per cent	0.00 per cent
Leland's Beta	-0.10	0.96	-0.11	0.97	0.98	1.00

The Anderson-Darling test conforms to the literature-reported finding that the return distributions are non-normal (all distributions are non-normal, $p<0.0001$). We, therefore, rely on the contemporary measures of Leland Alpha and Leland Beta for understanding the performance of the strategies. It can be seen in Table 1, the magnitude of Leland's beta is larger than that of the CAPM-based beta for all, indicating that the returns from the strategies were more sensitive to the returns from the underlying index. A positive value of Leland's Alpha at 36 basis points for the 5% OTM buy-write and 31 basis points for the 2% OTM buy-write reflect the value added by the short call over and above the returns from the underlying index.

Our findings are similar to the findings of Kapadia and Szado (2007), who conducted a study on buy-write strategy, using the Russell 2000 index. They concluded that the primary driver of the performance of buy-write strategy was the underlying index. A significant contribution was, however, made by the written call premium towards the alpha generated by the buy-write strategy. Constantinides, *et al.* (2008) also found that the American options on the S&P 500 were overpriced and breached the upper bounds with a very high frequency, making the business of writing options profitable for the traders. However, whether such overpricing is due to the behavioural bias or due to the market inefficiency needs to be examined through further studies.

CONCLUSION

The buy-write strategy entails the writing of a call option on an equity index against a long position in the same underlying equity index. The strategy is generally implemented passively, without explicitly incorporating the market timing. Using the daily data from January 2007 to June 2011, the strategy was implemented using different 'moneyness' of the written call, viz., 5% ITM, 2% ITM, ATM, 2% OTM, and 5% OTM. The calls sold had expiration of one month.

The study has revealed that the buy-write strategy can outperform the index under standard-performance measures, such as the Sharpe Ratio. Since the returns distribution from various strategies and the Index were not normal, application of contemporary Leland's Alpha and Beta were carried out to assess their performance. Here also, the buy-write strategies outperformed the underlying index on an absolute as well as risk-adjusted basis. As seen from Leland's Alpha, the 5% OTM and 2% OTM buy-write strategy, especially, outperform the underlying index by a fairly good margin.

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APPENDIX 1:
LELAND'S ALPHA AND BETA

Leland's (1999) alpha and beta allow for non-normality in security returns, although they assume that market returns are normal. Leland's measures reflect the preference for low kurtosis and positive skewness. Utilising Rubinstein's (1976) equilibrium, the pricing equation is:

$$P_0 = [E\,[P_0(1+ r_p)] - \lambda\, x\, \rho\, [P_0(1+ r_p) - (1+ r_{mkt})\text{-}b]\; x\; stdev\,[P_0(1+ r_p)]] \,/\, (1+r_f)$$

where r_p is the portfolio return, r_{mkt} is market return, r_f is risk free rate of return, ρ is the correlation of portfolio and market returns, λ a is the sharpe ratio, and –b is the exponent of the average investor's marginal utility function.

Leland models portfolio returns as:

$$E(r_p) = r_f + B_p\,[E(r_{mkt}) - r_f]$$

where B_p is Leland's beta and is given by:

$$B_p = Cov\,[r_p, -(1+ r_{mkt})\text{-}b] \,/\, Cov\,[r_{mkt}, -(1+ r_{mkt})\text{-}b]$$

and b is the market price of the risk. If market returns are normally distributed, b is given by:

$$b = \log\,[E\,(1+ r_{mkt})] - \log\,(1+r_f) \,/\, Var\,[\log\,(1+ r_{mkt})]$$

Thus, the Leland alpha would be:

$$A_p = E(r_p) + B_p\,[E(r_{mkt} - r_f) - r_f$$

Read not to contradict and confute,
nor to believe and take for granted,
nor to find talk and discourse,
but to weigh and consider.

Francis Bacon
Of Studies

GUIDELINES FOR WRITING BOOK REVIEW

We invite academicians and others to write reviews of books on business management and allied subjects.

The book-reviewers are requested to follow the guidelines given below:

1. The reviewer should begin with a listing of the bibliographical details of the book, comprising the name(s) of the author(s), full title and sub-title of the book (as they appear on the cover), details of the place and name of the publisher, year of publication, number of pages in the book, whether hardbound or paperback, and the price, if mentioned.

2. The review can range from 1000 to 3000 words, depending on the topic and the importance of the book.

3. The review should engage with the theme of the book and the issues and problems raised, and should make a rigorous attempt to identify and assess the main arguments put forth by the author.

4. The review should be written in a manner and style that would qualify it as a short article in its own right.

5. The reviewer should provide a confirmation that this review has not been sent for publication elsewhere and that the author will cede the copyright, if it is accepted for publication in NICE Journal of Business.

6. The book under review should have been published recently, preferably in the current or the previous year, and be preferably the new release.

7. The reviewer should also comment on the stylistic aspect and literary presentation of the book.

8. Bibliographical references should be avoided. If the references are considered essential, the citation style adopted by NICE Journal of Business should be used.

Thus, the review should be an objective assessment of the book, indicating its specific strengths and weaknesses, and an overall assessment by the reviewer.

DETERMINANTS OF CUSTOMER SATISFACTION AND THEIR RELATIVE IMPORTANCE IN RETAIL INDUSTRY
An Empirical Study

G. P. Dang* and Amit Adlakha**

Abstract

The retail industry in India is undergoing sweeping changes due to increased competition and the introduction of modern technology. Customers expect quality service from the retail outlets. The present study seeks to identify the determinants of customer satisfaction and to assess their relative importance. The study is based on a survey of 900 customers shopping at selected organised retail stores, located in Dehradun city. Factor analysis was performed to identify the determinants of customer satisfaction. Multiple regression analysis was conducted to assess the importance of these factors on customer satisfaction. To ascertain whether the customers are more satisfied with organised or unorganised retail outlets, the mean values were calculated and t-test was performed. The study has revealed that the customers were more satisfied with organised retail stores as compared to unorganised outlets. A wide array of products, ambience, hygienic environment, and personalised attention provided by these outlets, has enhanced their shopping convenience. The government ought to provide protection to unorganised retailers and, at the same time, increase the growth prospects for organised retailers.

Key words: ***Customer satisfaction, Organised retailing, Unorganised retailing, Customer loyalty, Growth prospects***

INTRODUCTION

CUSTOMER satisfaction occupies a key position in the marketing arena because it is a vital determinant of customer vulnerability and plays a crucial role in the translation of satisfaction into loyalty. In today's competitive milieu, an organisation's ability to deliver quality product or service to satisfy the customer is the key to sustainable competitive advantage. Furthermore, customer satisfaction is considered to be one of the most important competitive tools which influence the firm's profit-earning ability. It is a driving force for the firm to improve its reputation and image, to reduce customer turnover, and to increase customer attention and satisfaction. This helps an organisation in creating the barriers to switching

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and improving business relationship with the customers. During the past two decades, the retail sector in India has undergone radical changes, and has led to intense competition.

In the new and evolving marketplace, the existence of loyal relationship between a customer and his retail outlet has become scarce. In the Western world, retailing is one of those industries where customer satisfaction has attracted attention of research scholars. Several strategies are being adopted to attract and retain customers. With the intention of increasing customer loyalty, many retail outlets have introduced innovative products and services. Operating in a market with intense competition demands focus on customer satisfaction and loyalty for increasing the profits.

LITERATURE REVIEW

Customer satisfaction has been central to marketing thought and practice, primarily because of its importance in engendering brand loyalty which positively affects company profitability. All through the 1980s, the practitioners made great strides in dissecting databases to know about the customers which were less or more profitable. There is ample empirical evidence to support that many customers who stated that they were satisfied with the service-provider subsequently switched to the competitor. Murali, Kristin, Stephen, and Rajdeep (2006) found that from amongst the households complaining of service problems only 54 per cent maintained brand loyalty when their problems were satisfactorily resolved. In a meta-analysis on customer satisfaction, Syzmarski and Herard (2001) found that the satisfaction explained less than 25 per cent of the variance in repeat purchase.

Most of the previous researches have laid emphasis on the magnitude of customer satisfaction and ignored the important aspects of strength of conviction required to satisfy the customer which is actually the factor on which the customer loyalty is based.

Westbrook and Oliver (1981), Westbrook (1987), Oliver (1993), and Oliver (1996) defined customer satisfaction as a mental state which resulted from the customer's comparison of expectations prior to the purchase, with the performance perception after the purchase. In their research, Bearden and Teel (1983), Innis (1991), and Roest and Pieters (1997) found that satisfaction and attitude were the major antecedents of customer re-purchase intentions, leading to the loyalty over time.

On the surface, customer satisfaction appears to be a simple concept. However, it is quite a complex phenomenon. Even the positive relationship between customer satisfaction and re-purchase behaviour have been challenged by researchers, like Andreassen and Lindestad (1991), and Fornell (1992). Heskett, *et al.* (1994), and Danaher and Mattsson (1998) noted that while dissatisfaction encouraged switching, satisfaction did not necessarily ensure customer's commitment and loyalty.

Despite the above arguments, Rai (2006) considered customer satisfaction to be an important objective of a business organisation. Levit (1980) considered customer satisfaction to be the core of the marketing process and given the 'totality' concept of a product, where he considered a product to be more than an object in the hands of the manufacturer. It is viewed in a retail setting as offering of a cluster of values that are important for a customer to attain total satisfaction with a product.

Sinha, *et al.* (2002) observed that the customer convenience and availability of merchandise were the two most important reasons for choosing a store. The choice criteria, however, varied across product categories. Convenience was indicated by consumers as the most important reason in choosing of groceries and fruit outlets, chemists, and lifestyle items, while merchandise was indicated as the most important factor in durables, books, and apparel.

While emphasising the reasons why organised retailers provided larger volume of sales in comparison to their counterpart in the unorganised sector, Radhakrishnan (2003) noted

that organised retail stores were larger, carried more stock-keeping units, and had a self-service format and experiential ambience. Those factors enhanced customer satisfaction.

Ramaswamy and Namakumari (2010) stated that the factors facilitating the spread of retail chains included the availability of quality products at lower prices, improved shopping standards, convenient shopping and display, and the blending of shopping with entertainment.

Rizwan (2009) examined how a 10-12 per cent increase in the economies' disposable income brought about a change in the pattern of selling goods and services, thereby changing the buying behaviour of customers and their satisfaction level. He also noted that the retail trade in India contributed 10-11 per cent towards the GDP and employed over four crore people.

Nathan (2001) discovered that the traditional formats, like hawkers, grocers, and pavement shops co-exited with the modern formats, like supermarket and non-store retailing channels, such as multi-level marketing and tele-shopping.

The review of the above-mentioned studies has revealed that though a lot of research has been conducted on the factors affecting the customer satisfaction, there exists a gap in the area of relative influence of the factors affecting customer satisfaction in retail industry.

RESEARCH OBJECTIVES AND HYPOTHESES

The main objectives of the study are:

1. To identify the factors affecting customer satisfaction in a retail outlet;
2. To assess the influencing power of these factors on overall customer satisfaction; and
3. To measure the overall customer satisfaction with regard to organised and unorganised retail outlets.

These objectives were converted into statements which served as the guiding factors. In conformity with the objectives, the following hypotheses were formulated for testing:

H_{01}: There is no significant influence of demographic factors on customer satisfaction in retail outlets.

H_{02}: There is no difference in the level of customer satisfaction in organised and unorganised retail outlets.

RESEARCH METHODOLOGY

For the purpose of the study, the data was collected from 900 customers shopping at the organised retail outlets in Dehradun, the capital city of the Hill State of Uttarakhand. It is a major city of the State and has a large and diverse population. The respondents were interviewed through a structured, close-ended questionnaire. An attempt was made to analyse the customer satisfaction with regard to organised and unorganised retail outlets. For testing the hypotheses, Factor Analysis was performed to identify the underlying factors from an array of seemingly-important variables that affected customer satisfaction. Then, a multiple regression analysis was performed to assess the influencing power of these factors on the overall customer satisfaction.

Demographic Profile of the Respondents

Among others, the questionnaire included a segment on customer's profile. This was done because an assortment of demographic and other factors were likely to influence the degree of customer satisfaction on the products and services offered by the retail outlet. The information on demographic features is also useful in formulating a marketing strategy. The demographic profile of the respondents is summarised in **Table 1**.

As shown in the table, despite the high literacy level and sufficient employment opportunities in the capital city, the income level still remains low.

DATA ANALYSIS AND FINDINGS

Exploratory Factor Analysis

The data collected through questionnaire was analysed, using SPSS 17.0 (Green, *et al.*, 2000) and

Table 1

Demographic Profile of the Respondents

S. No.	Demographic Variables	Respondents	
		Number	%
	Gender		
1.	Male	468	52
	Female	432	48
	Age (Years)		
	Below 25	200	22.2
2.	26-35	452	50.2
	36-45	146	16.2
	Above 45	102	11.3
	Marital Status		
3.	Married	369	41
	Unmarried	531	59
	Education		
	Graduation	557	61.8
4.	Post-graduation	290	32.2
	Others	53	5.9
	Employment Status		
	Self-employed	42	4.7
	Wage employment	261	29
5.	Professionals	384	42.7
	Students	190	21.1
	Others	23	2.6
	Monthly Income (Rs.)		
	Below 10,000	209	23.2
6.	10,000-15,000	346	38.4
	15,001-20,000	287	31.9
	Above 20,000	58	6.4

the exploratory factor analysis was done in order to summarise the 21 variables into smaller sets of linear composites that preserved most of the information in the original data-set. The data was subjected to the principal component analysis, a method categorised under the broad area of factor analysis. Twenty-one variables were reduced to seven principal components through the Varimax rotation. The items with factor loadings of 0.40 or higher were clustered together to form separate constructs, as proposed by Hair, *et al*. (2006). The factors with the Eigen values greater than one were considered to be significant. The results are shown in **Table 2**.

With regard to the pre-analysis testing for the suitability of the entire sample for the factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be 0.733 and the Bartlett's test of sphericity 1558.699, significant at $p < 0.001$ **(Table 3)**.

Thus, the sample was considered suitable for the factor-analytic procedures (Hair, *et al.*, 2006). The Chi-square (χ^2) test statistic of 1558.699 and the *p*-value of 0.000 implied that the variables were correlated with each other. Moreover, as shown in the table, seven factors, having eigen values greater than 1.0, were obtained. These accounted for 67.151 per cent of the total variance.

In order to establish the internal consistency, alpha (α) value were calculated for the seven factors as suggested by Cronbach (1951). The values thus calculated, are shown in **Table 4**.

The derived factors represent the different elements of retail shopping, which forms the underlying factors from the original 21-scale response items. As shown in the table, the first factor represents the elements of the core services provided by the retail outlets and is, therefore, labelled as Core Competence'. These elements are the skills and competencies of the employees, their confidence-instilling behaviour, the number of persons employed by each retail outlet, convenient timings of the outlet, and all the statements related to the overall image of the retail outlet as perceived by the customer, i.e., the mission and vision, clear objectives to satisfy the customer, and the brand image of the outlet.

The statements loaded into the second factor pertained to the convenience and comfort that a customer should experience at a retail outlet. These were termed as 'Customer Convenience'. The elements included the convenient location of the outlet, credit facility, home delivery, and product display.

The third factor consisted of the elements that lead a customer to continue with the retail outlet, termed as 'Customer Continuance'. The elements factored were: general ambience and shopping experience being provided, offering of satisfactory products and services, and overall customer satisfaction.

The fourth factor was a summation of the elements that led to the speedy resolution of the customer's problems, thus, giving rise to a healthy relationship between the retail outlet

Table 2

Results of Factor Analysis of 21 Items and Their Seven Constructs

Factor / Items	Cronbach's α	Factor Loadings	Variance (%)	Cumulative Variance (%)
Core Competence:	0.811	3.523	16.013	16.013
'The employees have satisfactory skills and competencies'			0.763	
'The retail outlet has convenient operating hours'			0.706	
'The behaviour of employees instills confidence in you'			0.703	
'The retail outlet has sufficient number of employees'			0.692	
'The outlet has the clear objective to satisfy customers'			0.621	
'The brand image of the outlet is appealing to customer'			0.601	
Customer Convenience:	0.787	2.740	12.455	28.468
'The outlet is at a convenient location'			0.799	
'The outlets' credit facility makes it convenient to shop'			0.758	
'The home-delivery facility provided by the outlet adds to your shopping convenience'			0.674	
'The product display at the outlet makes it convenient to locate products'			0.653	
Customer Continuance:	0.778	2.642	12.011	40.479
'The products available at the outlet are satisfactory'			0.822	
'You wish to continue with the outlet as you are satisfied with its services'			0.680	
'The general ambience of the outlet provides a satisfactory shopping experience'			0.635	
Problem Resolution:	0.674	1.672	7.599	48.079
'The personnel at the outlet takes a long time to resolve your problems'			0.869	
'It usually takes a longer time to shop at the outlet'			0.692	
'As a customer, when you have a problem, you get proper response from the employee concerned'			0.608	
Price Policy:	0.589	1.553	7.061	55.140
'The price charged by the retail outlet for various products is competitive enough'			0.573	
'The price of the product matches with its quality (value for money)'			0.516	
Promotional Policy:	0.610	1.343	6.106	61.245
'You are satisfied by the discount offers, distribution of free gifts, lucky draws and other promotional offers made by the outlet'			0.694	
'The after-sale services provided by the outlet are satisfactory'			0.654	
Parking Facility:	1.000	1.299	5.906	67.151
'Parking space available in the outlet is sufficient'			0.727	

Table 3

KMO and Bartlett's Test

KMO Measure of Sampling Adequacy		**0.733**
Bartlett's test of sphericity	Approx. Chi-square	1558.699
	Degree of Freedom	213.000
	Significance	0.000

Table 4

Internal Consistency of the Constructs/Factors

Constructs/factors	Cronbach's α
Core Competence	0.811
Customer Convenience	0.787
Customer Continuance	0.778
Problem Resolution	0.674
Price Policy	0.589
Promotional Policy	0.610
Parking Facility	1.000

and the customer. These elements were termed as 'Problem Resolution'. The loaded elements were: time taken in resolving a problem, shopping time at the outlet, and the receiving of proper response from the employee concerned when the customer faced any problem.

The fifth factor related to the pricing policies adopted by the retail outlet, termed as 'Price Policy'. The items that were factored are: the competitiveness of the price charged for the product and the matching of price with the product quality.

The sixth factor related to the sales promotion schemes and after-sale services provided by the retail outlet. Hence, it was labelled as 'Promotional Policy', which included discounts, free gifts, lucky draws, etc., and the satisfactory after-sale services. The last factor comprised the availability of sufficient parking space and was termed as 'Parking Facility'.

Multiple Regression Analysis

The factor solution obtained above reflected a high degree of separation (no cross-loadings). Hence, it is considered to exhibit sufficient reliability and validity, and could, therefore, be used in further analysis.

In order to test the first null hypothesis, it was necessary to assess the relative importance of these factors on the overall satisfaction of the customers in retail outlets. The factor scores were obtained and used as independent variables in standard multiple regression analysis. The respondents' response with their overall satisfaction with the retail outlet was taken as the dependent variable.

The proposed regression model is as follows:

$$Y = \alpha + \beta_1 \, CoreComp + \beta_2 \, CustConv + \beta_3 \, CustCont + \beta_4 \, ProbReso + \beta_5 \, PricePol + \beta_6 \, PromPol + \beta_7 \, ParkFacl + \varepsilon$$

where the dependent variable is Y = the overall satisfaction of the customers, and the independent variables are:

CoreComp = Core services provided by the retail outlet;

CustCon = Customer convenience provided by the outlet;

CustCont = Customers' intention to continue shopping at the outlet;

ProbReso = Resolution of customers' problems by the outlet;

PricePol = Price-related policies adopted by the outlet;

PromPol = Promotion-related policies adopted by the outlet; and

ParkFacl = Parking facility provided by the outlet.

α = Intercept; and

ε = Error term.

Results of Multiple Regression Analysis

In order to assess the influencing power of these factors, multiple regression analysis was carried out. The results of the multiple regression analysis (all the variables having been entered at the same time), are shown in **Table 5**.

The above analysis brought out some interesting results. The value of the multiple correlation coefficients (R) between the independent variables and the dependent variable was 0.616. The R^2 for the model was 0.379, suggesting that about 37.9 per cent of the variability in the outcome is accounted for by the predictors (independent variables). The adjusted R^2 for the model was 0.355, and the difference between the values of R^2 and adjusted R^2 (0.379 - 0.355 = 0.024, or 2.40 per cent) was not very high. This implies that if the model was derived from the population, instead of the sample, it would have accounted for approximately 2.40 per cent of less variance in the outcome. The f statistic obtained was 15.459 (p-value = 0.000), thus, indicating that the independent variables had a significant influence on the dependent variable, at 5 per cent level of significance, and that the model was effective. Co-linearity diagnostic confirmed

Table 5

Results of the Multiple Regression Analysis: Coefficients

Variable	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	β	Std. Error	β		
Constant	3.286	0.073	-	44.970	0.000
Core Competence	0.632	0.073	0.511	8.623	0.000
Customer Convenience	0.224	0.073	0.181	3.062	0.003
Customer Continuance	0.138	0.073	0.111	1.877	0.000
Problem Resolution	0.270	0.073	0.218	3.683	0.000
Price Policy	0.054	0.073	0.044	0.741	0.460
Promotional Policy	0.117	0.073	0.095	1.599	0.112
Parking Facility	0.152	0.073	0.123	2.071	0.040

R: 0.616

R^2: 0.379

Adjusted R^2: 0.355

Std. Error of the Estimate: 0.99402

Dependent Variable: Overall customer satisfaction

that there were no concerns of multi co-linearity. The Variance Inflation Factor (VIF) was less than 2 for the above model.

Since the standardised coefficient for the independent variable, Core Competence, is the highest (β = 0.511, t = 8.623, and p = 0.000). Thus, it can be said that it has the strongest influence on the overall satisfaction of the customers. The second strongest influence is of the resolution of customer problems, Problem Resolution (β = 0.218, t = 3.683, and p = 0.000). The convenience that a retail outlet should provide to its customers, termed as Customer Convenience in the present study, also has a significant influence (β = 0.181, t = 3.062, and p = 0.003) on overall customer satisfaction.

Customer Continuance, or the factor that encompasses the variables that lead a customer to continue with the retail outlet, had the fourth strongest influence (β = 0.111, t = 1.877, and p = 0.000) on overall customer satisfaction. Finally, it is observed that the parking facility at the retail outlet, labelled 'Parking Facility', also significantly affect (β = 0.123, t = 2.071, and p = 0.040) customer's overall satisfaction.

The results also show that pricing and promotion-related factors, namely, Price Policy and Promotional Policy, are not very significant (β = 0.044, t = 0.741, and p = 0.460; and β = 0.095, t = 1.599, and p = 0.112, respectively) in explaining the variation in overall customer satisfaction.

Overall Customer Satisfaction

In order to assess the overall customer satisfaction, the respondents were asked to indicate the extent of their satisfaction with regard to both the organised and the unorganised retail outlets, on a 5-point Likert's scale (1 representing 'extreme dissatisfaction' and 5 representing 'extreme satisfaction'). Nearly 35 per cent of the respondents indicated that their satisfaction was with organised retail outlets, as against only 20 per cent, stating that they were more satisfied with unorganised retails outlets. While the mean satisfaction with organised retail outlets was 3.79, with unorganised retail outlets it was 3.01 **(Table 6).**

Hence, the second null hypothesis stands rejected. Thus, the customers, in Dehradun, were more satisfied with the organised retail outlets than with the unorganised ones. A wide array of products, ambience, hygienic environment, and personal attention, provided by these outlets, added to their shopping convenience.

Table 6

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction with organised retail outlets	900	3.7964	1.22872	0.04098
Satisfaction with unorganised retail outlets	900	3.0133	1.40229	0.04677

One-Sample Test

Test Value = 0						
	t	*df*	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Satisfaction with Organised Retail	92.641	899	0.000	3.79644	3.7160	3.8769
Satisfaction with Unorganised Retail	64.431	899	0.000	3.01335	2.9216	3.1051

CONCLUSION

The study has revealed seven factors which affect customer satisfaction. These are: core services provided by the retail outlet, customer convenience, customer's intention to continue shopping at the outlet, prompt resolution of customer's problem, reasonable pricing policy, appropriate promotional measures, and the parking facility provided to customers. It has also been found that these factors have a significant influence on customer satisfaction. The study has further revealed that customers were more satisfied with organised retail stores as compared to unorganised outlets. A wide array of products, store ambience, hygienic environment, and personalised attention provided by the outlet, has enhanced their shopping convenience.

Unorganised retailing is performing a vital function in the economy and is a significant source of employment. However, it suffers from inefficiency as a result of which consumers do not get what they want. In contrast, organised retail outlets provide consumers with a wider choice of products, lower prices, and a pleasant shopping environment. The competition from organised retail outlets might have affected the business of unorganised retailers. It has been observed that in their struggle to face this competition, they are handicapped by lack of credit from banks. It is suggested that proper government policy should be evolved to provide support to the unorganised sector in order to improve its competitiveness.

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Words are things; and a small drop of ink;
Falling like dew upon a thought, produces;
That which makes thousands, perhaps millions, think.

Lord Byron
(1788-1824)

★★★★★

Words are timeless. You should utter them or
write them with knowledge of their timelessness.

Kahlil Gibran
Mystic, Poet and Artist (1883-1931)

★★★★★

Better than a thousand days of diligent study is one day with a great teacher.

Japanese proverb

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PROFITABILITY OF COMMERCIAL BANKS AFTER THE REFORMS
A Study of Selected Banks

R.C. Dangwal* and Reetu Kapoor**

Abstract

The banking industry in India has undergone significant changes after implementation of the financial-sector reforms, suggested by the Narasimham Committee. The present paper analyses the profitability of four major banks in India, namely, Punjab National Bank, State Bank of India, ICICI Bank, and Federal Bank, during the post-reforms period from 2004 to 2009. The sample banks represented different types, namely, public sector banks, nationalised banks, new private-sector banks, and foreign banks. The paper seeks to examine the factors affecting the profitability of these banks with the help of correlation co-efficient matrix and univariate regression analysis. The study has revealed that while the average profitability was highest in the case of ICICI Bank, it was lowest in Federal Bank. On the basis of empirical results, the paper suggests the measures to be taken to curtail the burden and to augment the fund-based activities to increase the level of spread.

Key words: ***Profitability parameters, Commercial banks, Bivariate correlation, Multivariate analysis, Univariate regression***

INTRODUCTION

WITH the introduction of liberalisation, by Indian government during the 1990s, there has been a paradigm shift in the profitability of banks in the country. The globalisation of banking operations, along with increased competition, continuing de-regulation, and technological advancement significantly altered the face and scope of banking operations. In terms of banking skills, however, there may be no significant differences among different banks, but, in terms of functional environment and the ability to adapt quickly to emerging situations, public-sector banks may not have the type of flexibility possessed by Indian private-sector banks and foreign banks operating in India. As a result of financial reforms, there has been a shift in the focus from quantitative to qualitative growth. The banking industry has undergone rapid changes, followed by a series of fundamental developments. Significant among them are the advancements in information technology as well

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as the communication system. These have changed the very concept of traditional banking activities by being instrumental behind broadening and disseminating of financial information along with the costs of many financial activities. In fact, there is an added thrust on meeting ever-rising customers' satisfaction level, reduction in cost of banking operations, and increased productivity. Thus, there is a tremendous scope for Indian banks to enhance their competitiveness among different segments, namely, public-sector banks, nationalised banks, new private-sector banks, and foreign banks.

REVIEW OF LITERATURE

A large number of studies have been conducted on the subject. More important among them are reviewed here.

Sogala and Ramasastri (1998) analysed the trends in excess capacity in the banking sector, during the period from 1992-93 to 1995-96, by comparing the return on earning assets of banks with a minimum threshold return. They noted that excess capacity, as measured by the percentage of banks along with the percentage of earning assets at sub-optimal level, showed a decreasing trend. It was highest among nationalised banks and lowest among foreign banks.

Edirisuriya and Fang (2001) compared the performance of Indian commercial banks with the banks in 12 selected OECD countries, with the focus on Australian banks, for the period 1991 to 1998. They observed that banks in the OECD countries provided a variety of financial services and products, which were not available in India. The average net profit to the total assets of Indian banks was -0.14 per cent. The Finland banks were the worst-performer banks which recorded -0.25 per cent average net profit to total assets.

Das (2002) developed a model to rank nationalised banks during 1999-2000 and 2000-2001. He covered 17 nationalised banks, excluding the Indian Bank and the UCO Bank. Corporation Bank emerged as the top-most bank, followed by Andhra Bank and Oriental Bank of Commerce (OBC). While, in business performance, Punjab National Bank (PNB) was the top ranker, in efficiency and labour productivity, Corporation Bank was at the top. In terms of safety and soundness, Andhra Bank obtained the highest rank.

The panel regression techniques were used by De (2003) to examine the effect of ownership on bank performance in the context of Indian commercial banks. He noted that in the case of public-sector banks, old private-sector banks, and new private-sector banks, the ownership had no effect on the return on assets. However, public-sector banks had a higher ratio of net interest margin and operating cost. He also found that new private-sector banks were showing a higher return on assets when the State Bank of India (SBI) and its associates were dropped from the sample.

Qamar (2003) identified the differences in terms of endowment factor, risk factor, revenue diversification, profitability, and efficiency that might have existed among 100 scheduled commercial banks, divided into three groups, for the year 2000-2001. His study revealed that the public-sector banks were better endowed in terms of their assets base, share capital, and shareholders' equity than other banks, whereas, foreign banks and old private-sector banks operated at a very high capitalisation ratio.

Uppal (2004) studied the impact of ten factors on the profitability among five bank groups, namely, SBI and its associates, other nationalised banks, old private-sector banks, foreign banks, and new private-sector banks, from 1997 to 2001. He calculated correlation coefficients and regression coefficients to measure the effect of each variable on group profitability, and concluded that average profitability was the highest in case of new private-sector banks followed by foreign banks.

Arora and Verma (2005) analysed the banking-sector reforms and evaluated the performance of 27 public-sector banks, during the period 1992 to 2003. They considered 31 indicators to measure the growth rate. Their study revealed that Corporation Bank had highest and Indian Bank had the lowest financial parameters. While, UCO Bank scored a negative growth in productivity

and profitability parameters, Vijaya Bank scored top in profitability parameters and UBI got the highest rank in productivity parameters.

Mohanty (2006) discussed credit-deposit ratio (from the period of March 1999 to September 2005), spread (for the period of 2003-04 and 2004-05), and other financial indicators, like income, expenditure, operating profit, net profit, and net interest margin (for the years 2002-03, 2003-04, and 2004-05). He stressed on portfolio management of customers to increase in non-interest income. He also favoured the concept of social banking and planned priorities for the developing economies.

The impact of financial development and bank characteristics on operational performance of 14 commercial banks in China, during the years 1996 to 2004, was examined by Wu, *et al.* (2007). Using the panel data to estimate the fixed and the random effects models, they found that the ROA performance was the worst in the case of the older banks. Moreover, the efforts of the Chinese banks to develop non-traditional banking business actually had a negative impact on the return on assets.

Makesh (2008) evaluated the financial management practices of Federal Bank and Dhanalakshmi Bank, along with the SBI, for the financial year 2006-07. He revealed that all the three banks maintained capital in excess of the stipulated norms of the RBI. Federal Bank had the lowest NPA Ratio to net advances and had the maximum return on equity. Dhanalakshmi Bank maintained a very high liquidity. But Federal Bank performed well in cost management, as compared to the SBI and Dhanalakshmi Bank.

Pat (2009) made an assessment of the RBI's Report on 'Trend and Progress of Banking' in India, 2007-08, which reported a relatively-healthy position of the Indian banking system. He noted that the various groups of banks reported improvements in net profits, return on assets, and return on equity. Two basic indicators of a sound banking system, namely, capital to risk weighted assets and quality of assets, also revealed considerable improvements over the years.

Sharma (2010) assessed the bank failure resolution mechanism to analyse the powers given by the countries to their regulators to carry out resolution of failed banks among 148 countries during 2003. She used 12 variables for correlation and regression analysis. Her study revealed that the countries which had faced systemic crisis were more prone to providing liquidation powers to their regulators. These countries had a tendency to protect their regulators through immunity, rather than any legal action. Systemic crisis did not significantly influenced the regulators' powers for the re-structuring of the banks.

Dangwal and Kapoor (2010) evaluated the financial performance of nationalised banks in India and assessed the growth index value of various parameters through overall profitability indices. The data for 19 nationalised banks, for the post-reform period from 2002-03 to 2006-07, was used to calculate the index of spread ratios, burden ratios, and profitability ratios. They found that while four banks had excellent performance, five achieved good performance, four attained fair performance, and six had poor performance.

Jha and Sarangi (2011) analysed the performance of seven public-sector and new private-sector banks, for the year 2009-10. They used three sets of ratios, operating performance ratios, financial ratios, and efficiency ratios. In all, eleven ratios were used. They found that Axis Bank took the first position, followed ICICI Bank, BOI, PNB, SBI, IDBI, and HDFC, in that order.

The above review indicates that the profitability measurement of commercial banks in countries like India, China, Australia, and OECD (Organisation for Economic Co-operation and Development) countries has attracted attention of researchers in India and abroad. However, no systematic and comprehensive analysis has been conducted for the post-reform period to test the trends in profitability behaviour, along with the factors affecting the profitability of commercial banks, which the present study takes into account. This gap in the research is particularly noticeable, because in this liberalised economy, the public-sector and private-sector banks' growth depends upon their profitability. The present study is intended to fill this gap in this important area of business.

OBJECTIVES OF THE STUDY

The study was conducted with the following objectives:

1. To examine the profit earning of the four selected major banks in the post-reforms period; and
2. To investigate the factors affecting the profit earning of the selected banks during the period.

RESEARCH METHODOLOGY

Sample Size

For the in-depth analysis of the profitability, four major banks, namely, Punjab National Bank (PNB), State Bank of India (SBI), ICICI Bank (ICICI), and Federal Bank (FB) were selected, one each from different groups, i.e., nationalised banks, SBI and its associates, new private-sector banks, and old private-sector banks, during the second phase of the banking-sector reforms period, from the year 2004 to 2009.

Data Collection

The study is based on the secondary data, collected from the *IBA Bulletin*, annual issues and monthly issues, statistical tables relating to banks in India, and the Reserve Bank of India monthly bulletins and annual reports.

Tools of Analysis

In order to evaluate the trends in profitability, Karl Pearson's correlation analysis, Univariate regression analysis, and *t*-test were applied. In the multivariate analysis, we selected the following ten factors (ratios) which affected the profitability of the banks:

1. Net profit as a percentage of total assets (Y_1);
2. Priority-sector advances as a percentage of total advances (X_1);
3. Total credits as a percentage of total deposits (X_2);
4. Establishment expenditure as a percentage of total expenditure (X_3);
5. Number of rural branches as a percentage of total branches (X_4);
6. 'Spread' as a percentage of total assets (X_5);
7. Savings deposits as a percentage of total deposits (X_6);
8. Fixed deposits as a percentage of total deposits (X_7);
9. Current deposits as a percentage of total deposits (X_8); and
10. 'Burden' as a percentage of total assets (X_9)

The mean, standard deviation, and co-efficient of variation were computed for each variable and the bank groups. The degree of association between the variables (X_1 to X_9) and the net profit, as a percentage of total assets (Y_1), was studied among the banks in India through Bivariate Correlation Coefficient matrix. Then, Univariate Regression Analysis was studied to look for different combinations of variables that explain variations in profitability among these banks. The analysis was performed with the help of software packages, namely, MS Excel and the SPSS 17.0.

DATA ANALYSIS AND FINDINGS

Profitability over the Years: Return on Assets

The profitability in the four banks, computed as the ratio of net profit as a percentage of the total assets, during the years 2004 to 2009, are shown in **Table 1**. This ratio is also known as the Return on Assets (ROA) Ratio. The benchmark for this ratio is more than 1 per cent.

As shown in the table, while profitability, in terms of average, was highest in the ICICI bank (1.074 per cent), followed by PNB (1.070 per cent), it was lowest in the SBI (0.90 per cent) and the

Table 1
Net Profit as a Percentage of Total Assets

Years	PNB	SBI	ICICI	FB
2004	1.08	0.90	1.31	0.90
2005	1.12	0.94	1.20	0.54
2006	0.99	0.89	1.01	1.09
2007	0.95	0.80	0.90	1.17
2008	1.03	0.93	1.04	1.13
2009	1.25	0.95	0.99	1.29
Mean	1.070	0.90	1.074	1.02
S.D.	0.11	0.05	0.15	0.27
C.V.	10.07	5.91	13.86	26.32

Table 2
Priority-Sector Advances as a Percentage of Total Advances

Years	PNB	SBI	ICICI	FB
2004	43.91	27.04	23.40	31.32
2005	46.79	28.59	21.98	32.15
2006	45.68	30.56	29.20	34.30
2007	37.81	30.24	28.22	37.26
2008	36.33	31.96	28.43	48.64
2009	32.41	29.66	31.34	38.80
Mean	40.49	29.68	27.10	37.08
S.D.	5.80	1.70	3.62	6.35
C.V.	14.32	5.73	13.34	17.13

second last rank was obtained by the FB (1.02 per cent). Moreover, the variations in FB were maximum (26.32 per cent), while the SBI showed only 5.91 per cent variations. Except SBI, all other banks were meeting the required norm of ROA, which is a healthy sign for the banks.

Priority-sector Advances

As per the guidelines of the RBI, every commercial bank of the Indian origin shall have to provide at least 40 per cent credit to the priority sector. Out of the 40 per cent, credit lending for agriculture should be at least 18 per cent, while for SSIs and other priority sectors, it should be 12 per cent and 10 per cent, respectively. The ratio of priority-sector advances as a percentage of the total advances during the study period is shown in **Table 2**.

As shown in the table, this ratio, in terms of average, was highest in PNB (40.49 per cent), followed by FB (37.08 per cent).

Credit-to-Deposits Ratio

Total credits as a percentage of total deposits are shown in **Table 3**. This ratio reveals as to what share of total deposits was utilised for advancing money to consumers.

Table 3
Total Credits as a Percentage of Total Deposits

Years	PNB	SBI	ICICI	FB
2004	53.72	49.57	91.17	57.14
2005	58.56	55.14	91.57	58.07
2006	62.35	68.89	88.54	65.64
2007	69.07	77.46	84.97	69.03
2008	71.79	77.55	92.30	72.95
2009	73.75	73.11	99.98	69.54
Mean	64.87	66.95	91.42	65.40
S.D.	7.94	11.88	4.98	6.47
C.V.	12.24	17.75	5.45	9.90

As shown in the table, the ICICI Bank had the highest share of this ratio (91.42 per cent), which is the vital factor affecting the profitability of this bank. SBI (66.95 per cent) took the second rank. This ratio is least in the case of PNB (64.87 per cent). While the highest variation was observed in SBI (17.75 per cent), the lowest variation was in the ICICI Bank (5.45 per cent).

Establishment Expenditure

Table 4 shows the ratio of establishment expenditure as a percentage of the total expenditure, which is the function of two factors: (1) the number of employees, and (2) the scale of their emoluments.

Table 4
Establishment Exp. as a Percentage of Total Exp.

Years	PNB	SBI	ICICI	FB
2004	19.37	18.75	5.29	13.17
2005	27.78	19.60	6.81	14.15
2006	22.46	20.82	6.79	15.99
2007	21.31	19.48	6.26	14.38
2008	17.32	15.29	5.87	10.67
2009	15.27	14.47	5.64	9.53
Mean	20.58	18.07	6.11	12.98
S.D.	4.39	2.57	0.62	2.44
C.V.	21.31	14.23	10.16	18.76

As shown in the table, the establishment expenditure, as a percentage of the total expenditure, constituted nearly 15 per cent to 28 per cent of the total expenditure in the case of PNB, while it was 5 per cent to 7 per cent in case of the ICICI Bank. This ratio, on an average, was quite high in PNB (20.58 per cent), followed by SBI and FB.

Rural Branches

The number of rural branches in these banks, as a percentage of the total number of branches, is given in **Table 5**. This ratio has pivotal impact on the profitability of commercial banks due to its societal implications.

Table 5
Number of Rural Branches as a Percentage of Total No. of Branches

Years	PNB	SBI	ICICI	FB
2004	46.98	44.80	19.62	6.95
2005	48.19	45.02	16.14	6.83
2006	45.80	42.80	13.46	7.08
2007	45.23	41.26	10.67	7.16
2008	44.40	39.43	10.49	6.46
2009	43.47	38.06	9.79	6.09
Mean	45.68	41.89	13.36	6.76
S.D.	1.72	2.84	3.88	0.41
C.V.	3.76	6.77	29.00	6.04

As shown in the table, while 45.68 per cent of the total branches of PNB were in the rural area, FB had only 6.76 per cent of its branches in the rural sector. SBI got the second highest rank.

Spread Ratio

'Spread' refers to interest earned minus interest paid. The average spread as a percentage of the total assets is given in **Table 6**.

We notice from the table that barring PNB, all the banks showed lower average ratio than the benchmark (more than 3 per cent). It appears to be due to stiff competition among the banks. This ratio was the highest in PNB (3.15 per cent), followed by FB (2.94 per cent) and SBI (2.71 per cent).

Table 6
Spread as a Percentage of Total Assets

Years	PNB	SBI	ICICI	FB
2004	3.54	2.74	1.50	2.79
2005	3.17	3.03	1.69	2.99
2006	3.21	3.16	1.87	2.91
2007	3.40	2.83	1.93	2.92
2008	2.78	2.36	1.83	2.67
2009	2.77	2.16	2.21	3.39
Mean	3.15	2.71	1.84	2.94
S.D.	0.32	0.38	0.24	0.24
C.V.	10.07	14.17	12.86	8.29

Savings Deposits

The status of the savings deposits as a percentage of the total deposits is shown in **Table 7.**

Table 7
Savings Deposits as a Percentage of Total Deposits

Years	PNB	SBI	ICICI	FB
2004	34.60	24.98	12.29	17.90
2005	34.26	25.86	11.41	18.86
2006	35.02	29.66	12.68	19.77
2007	34.38	29.65	12.51	19.60
2008	32.30	28.70	15.99	19.44
2009	29.87	26.71	18.79	20.02
Mean	33.40	27.59	13.95	19.26
S.D.	1.97	2.02	2.85	0.77
C.V.	5.91	7.31	20.41	4.02

As shown in the table, the ratio of savings deposit to total deposits was maximum in PNB (33.40 per cent), followed by SBI (27.59 per cent) and FB (19.26 per cent).

Fixed Deposits

The fixed deposits are often made for a longer-period of time and earn a higher interest rate, as compared to the savings deposits. **Table 8** gives the ratio of fixed deposits as a percentage of the total deposits.

Table 8
Fixed Deposits as a Percentage of Total Deposits

Years	PNB	SBI	ICICI	FB
2004	54.13	59.23	77.05	76.91
2005	53.66	58.72	75.73	75.48
2006	51.01	52.45	77.28	74.98
2007	53.84	51.52	78.22	74.77
2008	57.01	53.04	73.91	74.91
2009	61.17	58.36	71.30	75.50
Mean	55.14	55.55	75.58	75.42
S.D.	3.51	3.57	2.57	0.79
C.V.	6.37	6.42	3.41	1.04

As shown in the table, this ratio was the highest in the case of ICICI Bank (75.58 per cent), followed by FB (75.42 per cent).

Current Deposits

Current deposits are loose deposits and generally do not earn any interest. Current deposits, as a percentage of total deposits of these banks, are given in **Table 9**.

Table 9
Current Deposits as a Percentage of Total Deposits

Years	PNB	SBI	ICICI	FB
2004	11.26	15.78	10.66	5.20
2005	12.08	15.42	12.86	5.67
2006	13.97	17.89	10.04	5.25
2007	11.77	18.83	9.27	5.64
2008	10.69	18.26	10.10	5.65
2009	8.97	14.92	9.91	4.48
Mean	11.46	16.85	10.47	5.31
S.D.	1.65	1.67	1.25	0.46
C.V.	14.42	9.88	11.94	8.65

As shown in the table, this ratio is the highest in the case of SBI and is followed by PNB and ICICI Bank.

Average Burden

'Burden' refers to the non-interest expenditure minus non-interest income. The average burden as a percentage of the total assets for the banks under study is presented in **Table 10**.

The table reveals that the lowest average burden ratio was in the ICICI Bank, while it was highest in PNB, followed by FB and SBI. The maximum consistency for this ratio was in FB (16.42 per cent) and the minimum was in ICICI Bank. The results indicated that the mean burden ratio was lower than the average spread ratio among all the four banks.

Table 10
Burden as a Percentage of Total Assets

Years	PNB	SBI	ICICI	FB
2004	2.46	1.84	0.19	1.89
2005	2.06	2.10	0.50	2.45
2006	2.22	2.26	0.86	1.81
2007	2.45	2.03	1.02	1.75
2008	1.75	1.43	0.79	1.54
2009	1.54	1.22	1.21	2.10
Mean	2.08	1.81	0.76	1.92
S.D.	0.37	0.41	0.37	0.32
C.V.	18.02	22.54	48.26	16.42

Estimates of Bank Profitability: Correlation Analysis

The correlation analysis involves measuring the magnitude and direction of the relationship between two or more variables. We used bivariate correlation to examine the strength of relationship between the two variables. The *t*-test was used as a parametric tool for testing the significance of correlation coefficients at 1 per cent and 5 per cent levels of significance. We sought to identify the role of different variables (from X_1 to X_9) having significant association among them.

The correlation coefficient matrix of the selected variables of PNB is shown in **Table 11**.

As shown in the table, in PNB, certain independent factors had significant positive and negative relationship with each other. The priority-sector advances and total advances (X_1), and rural branches and total branches(X_4) had significant positive association with each other (0.91). Another significant positive relation was observed between burden and total assets (X_9) and spread and total assets (X_5), with degree of association of 0.972. The values were significant at 5 per cent and 1 per cent level, respectively. No significant relationship was found between selected factors and profitability.

Table 11
Correlation Co-efficient Matrix: PNB

	Y_1	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
Y_1	1									
X_1	-0.333	1								
X_2	0.134	-0.881*	1							
X_3	-0.316	0.830*	-0.594	1						
X_4	-0.183	0.910*	-0.896*	0.859*	1					
X_5	-0.486	0.631	-0.765	0.466	0.658	1				
X_6	-0.741	0.846*	-0.738	0.712	0.750	0.831*	1			
X_7	0.750	-0.856*	0.659	-0.730	-0.685	-0.720	-0.974**	1		
X_8	-0.709	0.810	-0.522	0.702	0.563	0.539	0.879*	-0.963**	1	
X_9	-0.679	0.613	-0.672	0.471	0.594	0.972**	0.895*	-0.804	0.642	1

** Correlation is significant at 0.01 level (2-tailed).
* Correlation is significant at 0.05 level (2-tailed).

Table 12
Correlation Co-efficient Matrix: SBI

	Y_1	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
Y_1	1									
X_1	-0.077	1								
X_2	-0.282	0.895*	1							
X_3	-0.525	-0.298	-0.401	1						
X_4	-0.107	-0.671	-0.843*	0.795	1					
X_5	-0.395	-0.234	-0.407	0.982**	0.804	1				
X_6	-0.545	0.834*	0.816*	0.165	-0.412	0.160	1			
X_7	0.623	-0.790	-0.750	-0.219	0.311	-0.203	-0.975**	1		
X_8	-0.675	0.682	0.619	0.269	-0.168	0.240	0.878*	-0.963**	1	
X_9	-0.503	-0.211	-0.346	0.993**	0.771	0.993**	0.222	-0.272	0.314	1

** Correlation is significant at 0.01 level (2-tailed).
* Correlation is significant at 0.05 level (2-tailed).

Profitability in SBI

Correlation co-efficient matrix in the case of SBI is given in **Table 12**.

The table shows that while fixed deposits, as percentage of total deposits (X_7), had a positive relationship (0.623) with profitability, current deposits, as percentage of total deposits, (X_8) had negative association (-0.675) with bank's profitability. Priority sector advances as percentage of total advances (X_1) and totalcredits as a percentage of total deposits (X_2), had a high degree of significant and positive association with saving deposits as a percentage of total deposits (X_6), the degree of association being 0.834 and 0.816, which is significant at 5 per cent level.

Profitability in ICICI Bank

Correlation co-efficient matrix in the case of the ICICI Bank is presented in **Table 13**.

As shown in the table, three variables, namely, priority sector advances as a percentage of total advances (X_1), spread as a percentage of total assets (X_5), and burden as a percentage of total assets (X_9), were negatively and significantly correlated with bank's profitability, the degrees of association being -0.822, -0.818, and -0.929. While the first two values were significant at 5 per cent level, the third value was significant at 1 per cent level.

Table 13
Correlation Co-efficient Matrix: ICICI Bank

	Y_1	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
Y_1	1									
X_1	-0.822*	1								
X_2	0.137	0.271	1							
X_3	-0.276	-0.115	-0.442	1						
X_4	0.918**	-0.844*	-0.178	-0.095	1					
X_5	-0.818*	0.868*	0.431	0.059	-0.879*	1				
X_6	-0.397	0.741	0.793	-0.483	-0.668	0.748	1			
X_7	0.111	-0.431	-0.941**	0.358	0.456	-0.586	-0.898*	1		
X_8	0.674	-0.799	0.133	0.363	0.580	-0.495	-0.426	-0.014	1	
X_9	-0.929**	0.889*	0.221	0.149	-0.936**	0.973**	0.641	0-.421	-0.591	1

** Correlation is significant at 0.01 level (2-tailed).
* Correlation is significant at 0.05 level (2-tailed).

Table 14
Correlation Co-efficient Matrix: FB

	Y_1	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
Y_1	1									
X_1	0.547	1								
X_2	0.811	0.866*	1							
X_3	-0.415	-0.615	-0.458	1						
X_4	-0.341	-0.528	-0.421	0.930**	1					
X_5	0.242	-0.210	0.079	-0.344	-0.525	1				
X_6	0.641	0.481	0.800	-0.187	-0.347	0.478	1			
X_7	-0.346	-0.539	-0.734	-0.102	-0.008	-0.019	-0.827*	1		
X_8	-0.487	0.112	-0.092	0.490	0.600	-0.773	-0.270	-0.318	1	
X_9	-0.662	-0.626	-0.627	0.087	-0.116	0.567	-0.175	0.279	-0.183	1

** Correlation is significant at 0.01 level (2-tailed).
* Correlation is significant at 0.05 level (2-tailed).

Profitability in FB

Correlation co-efficient matrix in respect of the FB is shown in **Table 14**.

The table reveals that in the case of FB, not even a single factor had a significant relationship with its profitability. Only three variables had significant positive and significant negative relationship with each other.

Impact of Selected Variables on Banks' Performance

The correlation provides an insight into the relationship between the two variables, but it does not explain the casual analysis, which can be found by regression analysis. Univariate regression analysis reveals the impact of variables on profitability. It is done with the help of R_2, which shows the variation (in percentage) in the profitability due to independent variables.

The impact of selected variables on the performance of the banks is shown in **Table 15**

As shown in the table, in the case of PNB, SBI, and FB, not even a single variable had a positive and significant relationship with profitability. In case of ICICI Bank, only one variable, namely, rural branches, as a percentage of total branches (X_4) had a positive and significant relationship with profitability, explaining 84.27 per cent variations in the profitability.

Table15
Impact of Selected Variables on the Banks' Performance

Banks	PNB	SBI	ICICI	FB
Variables	R_2	R_2	R_2	R_2
X_1	0.1109	0.0059	0.6757	0.2992
X_2	0.0180	0.0795	0.0188	0.6577
X_3	0.0999	0.2756	0.0762	0.1722
X_4	0.0335	0.0114	0.8427	0.1163
X_5	0.2362	0.1560	0.6691	0.0586
X_6	0.5491	0.2970	0.1576	0.4109
X_7	0.5625	0.3881	0.0123	0.1197
X_8	0.5027	0.4556	0.4543	0.2372
X_9	0.4610	0.2530	0.8630	0.4382

Moreover, in the case of PNB, only two variables (X_2 and X_7) had a positive, but insignificant, relationship with profitability. Among these variables, fixed deposits, as a percentage of total deposits (X_7), showed 56.25 per cent variations in the profitability.

In the case of SBI, one variable, namely, fixed deposits as a percentage of total deposits (X_7) showed a positive, but insignificant relationship with profitability and explained 38.81 per cent variations in the profitability. All the other variables had negative and insignificant relationship with the profitability.

In the case of ICICI bank, variables X_2, X_4, X_7, and X_8 revealed a positive relationship with profitability from which only a single variable, namely, rural branches as a percentage of total branches (X_4) had a positive and significant relationship with profitability, explaining 84.27 per cent variations in it. All variables, except X_7, had a negative and insignificant relationship with profitability.

In the case of FB, variables X_1, X_2, X_5, and X_6, had a positive, but insignificant, relationship with profitability from which total credits as a percentage of total deposits (X_2) and savings deposits as a percentage of total deposits (X_6) showed 65.77 per cent and 41.09 per cent variations in the profitability.

CONCLUSION

The foregoing analysis has revealed that the overall profitability of SBI and Federal Bank (FB) during the study period was less than the profitability of ICICI Bank and PNB. As the banks' profitability is affected by various parameters, which include spurt in bank borrowings, opening of rural branches, hike in interest rates, hike in expenditure, spread ratio, and burden, these parameters also affect each other which further affect the profitability of the bank. In the case of PNB, savings deposits as a percentage of total deposits, fixed deposits as a percentage of total deposits, current deposits as a percentage of total deposits, 'burden' as a percentage of total assets, and 'spread' as a percentage of total assets, had more impact on bank profitability, while in the case of SBI, establishment expenditure as a percentage of total expenditure, total credits as a percentage of total deposits, fixed deposits as a percentage of total deposits, and current deposits as a percentage of total deposits, had more impact on profitability. In the case of ICICI Bank, priority-sector advances as a percentage of total advances, number of rural branches as a percentage of total branches, 'spread' as a percentage of total assets, and 'burden' as a percentage of total assets, affect the profitability, while in the case of FB, total credits as a percentage of total deposits, priority-sector advances as a percentage of total advances, establishment expenditure as a percentage of total expenditure, number of rural branches as a percentage of total branches, and 'burden' as a percentage of total assets, had a higher impact on profitability. The multivariate analysis has revealed that while ICICI Bank has ranked number one in profitability, PNB ranked number two. SBI and FB got the third and the fourth ranks, respectively, insofar as their profitability is concerned.

In order to improve the profitability of the banks, it is suggested that in the case of PNB, the bank should improve its credit-deposit ratio and should utilise its total deposits for advancing money to the borrowers. Moreover, SBI should have a check on its operating expenditure and interest payments, and should augment its interest income. ICICI Bank would do well to curtail its non-interest expenditure and augment its non-fund activities. FB should improve its spread and

fetch more current deposits, which do not bear any interest burden and help the bank in daily cash transactions. So, in the era of liberalisation and globalisation, the banks should adopt the latest framework as per the Basel-III Accord, and evolve cost-reduction strategies, and should venture into integrated banking services.

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BRAND POSITIONING OF FAST-MOVING CONSUMER GOODS IN INDIA

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Abstract

Brand positioning involves communicating the brand identity to consumers so as to create a desired and distinctive image of the brand in their mind. It requires the use of certain elements of the advertising message strategy that conform to the brand concept. This paper seeks to identify these message elements in positioning the FMCG brands in India and to examine their effectiveness in positioning such brands. To get an insight into the elements preferred by the brand manager while positioning his brand in the Indian market and to assess their perception of the effectiveness of such elements, a structured questionnaire was administered to selected brand managers. The effectiveness of the elements was judged by measuring the consumer response to various elements listed in another questionnaire. Emotional and functional elements of message strategy were found to significantly impact the consumer response and brand recall and, hence, were found to be more effective in positioning the brand. Brand managers too were found to have a higher preference for the use of these elements.

Key words: ***Brand positioning, Brand image, Communication elements, FMCGs, India***

INTRODUCTION

ONE of the most important tasks for a brand manager is to conceptualise the brand identity and effectively communicate such identity to the consumer, so as to efficaciously position the brand in the consumer's mind and endow the brand with a distinctive image. Marketing communication tools, in general, and advertisement, in particular, are important instruments in the hands of the marketer to achieve this objective.

A judicious use of marketing communication tools and incorporation of the right mix of elements of the message strategy in the brand campaign helps put across an envisaged identity of the brand to the existing and prospective customers. The challenge for a brand manager is to identify and use such message elements for positioning to conjure up the desired feelings, thoughts, emotions, images, and perception of the brand and evoke the right kind of experience of the customer with the brand or its marketing strategies.

In order to embed a brand in the consumer's mind, his knowledge of the brand has to be

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influenced. According to the 'Associative Network Model' (Keller, 2008), the consumer's brand knowledge consists of the brand awareness (which refers to the consumer's ability to identify the brand) and pieces of brand-related information with him. The brand-related information includes the actual attributes and the virtues associated with the brand and perceived brand associations. These pieces of brand-related information and associations combine together to form the consumer's image of the brand.

A brand manager, by using the marketing communication tools and advertising messages, would try to create and influence some of these brand information and associations, so as to create a favourable image of the brand in the consumer's mind. It is at this point that the brand manager needs to explore and select the right message which would be able to create and influence the brand associations and information and consequently the brand image in a desirable way.

Message Elements

The different elements of the message content strategy that can be used for effectively positioning a brand are: the physical elements, functional elements, cultural elements, emotional elements, and the hedonistic elements (Van den Putte, 2002 and 2009). These elements correspond to the different brand concepts and are related to the different facets of brand identity. These are briefly described below:

1. *The Physical Element:* It pertains to the physical attributes and features of the products and brands that differentiate it from the competitor's products and the competing brands.
2. *The Functional Element:* It pertains to the performance and performance efficiency of the product as well as the functional and utilitarian benefits offered by the brand to the consumer and is instrumental in developing those brand associations in the consumer's memory that corresponds to the 'personality' facet of brand identity and the functional brand concept.
3. *The Cultural Element:* It includes the consumer's culture or a foreign culture admired by him. It may be used to communicate the positioning of the brand. It specifies the cultural values with which the brand is associated and, subtly or overtly, exhibits the cultural benefit derived from the brand. When used to communicate the positioning of the brand, it develops a brand association that corresponds to the 'brand culture' facet of brand identity.
4. *The Emotional Element:* It includes the various emotions used to communicate the positioning of the brand. Emotional element, when used effectively in marketing communication, develops emotional association with the brand. This type of association corresponds with the 'relation' facet of brand identity.
5. *The Hedonistic Element:* The purpose of the use of hedonistic element in communication is to develop a feel good association with the brand. This type of association corresponds with the 'reflection' and 'self-image' facet of brand identity.

As the different message elements can be used to create, influence and fortify the brand information that combine together to form the brand image, the use of these message elements (which lie encrypted in the advertising appeals and get reflected in the company engineered brand associations) may have some impact on brand positioning. The present study has been carried out to measure the extent of this impact.

LITERATURE REVIEW

The strength of a brand can be measured in terms of its brand equity. Customer-based brand equity is defined as the differential effect of brand knowledge on consumer response to the marketing of the brand. Thus, the key element that affects brand equity is the brand knowledge, which comprises of the two constituents: brand awareness and brand image (Keller, 1993). Conveying a brand image to a target market is a fundamental marketing activity and a fundamental responsibility of a brand

manager. Researchers also suggested that a well-communicated image helps establish a brand's position and insulate it from competition (Park, *et al*., 1986). A brand image can be developed by properly understanding the brand concept. Thus, the brand concept guides the brand positioning and the brand image. The three brand concepts that guide the brand positioning and brand image are: functional, symbolic, and experiential. Besides these three concepts, another brand concept was the emotional concept that found its application in the marketing communication and image developing activity for a number of brands (Strebinger, 2002). According to Strebinger, functional brand concept was all about the utilitarian benefit of the product delivered through technical superiority, greater durability, or reliability. Symbolic brand concepts enabled the buyer to express personality, values and status, and helped to improve his self-esteem and social self-presentation. Experiential brand concept referred to the sensory experience with the brand and aimed to evoke hedonism and pleasure through a sensual product experience. The emotional brand concept was about emotions evoked by some generally accepted social values and emotional conditioning through music, pictures, and nostalgic associations. Emotional brand concepts evoked an emotional attachment to the brand as well as to the community, to impart a sense of familiarity with the brand. A study on symbolic brand concept found that advertisements depicting consumer culture had no significant influence on the response of the consumers towards the brand being advertised. However, a congruency between the values portrayed in the advertisements and the consumer's personal values significantly affected the consumer response (Chang, 2006).

Fournier (1991) identified eight categories of consumption objects in terms of the primary meanings that the consumers attach to different products. These were: objects of utility, objects of action, objects of appreciation, objects of transition, objects of childhood, ritual-enhancers, objects of personal identity, and objects of position and role. A similarity was noted between the brand concepts and the proposed consumption objects based on product meaning.

As noted by Strebinger (2002), these brand concepts could be applied to most of the products and product categories. However, certain product categories were more suitable for the use of some specific brand concepts. He also found that many brands did not use a 'pure' form of those brand concepts, but a mixture or combination of more than one of them. Bhat and Reddy (1998) concluded that a brand can be positioned successfully as both a functional and a symbolic brand.

A brand's value proposition emerged from a combination of the elements of brand concept, i.e., functional, symbolic, and experiential. The value proposition of the brand was a statement of the functional benefits, symbolic benefits (self-expressive benefit), and emotional benefits, delivered by the brand (Godeswar, 2008). According to Godeswar, functional benefits were the most common basis for a value proposition, based on a product attribute that provided functional utility to the customers and related directly to the functions performed by the product for the customer. His research on brand identity indicated that a brand identity, based on the emotional element of the brand concept and on the self-expressive benefit, was able to establish a strong connect and relationship of the brand with the consumers. Researches also indicated an emerging use of culture for developing brand identity and the emergence of the concept of cultural positioning, whereby culture was used as an element of positioning and as a communication element to convey the brand identity.

One of the objectives of marketing communication is to influence the attitude of the consumer towards the brand and its consumption. Attitude of a consumer towards a brand and its consumption, besides being affected by other factors, also depend on the consumer's motive of consumption. The studies by Batra and Ahtola (1990) and Voss, *et al.* (2003) suggested that the consumer motive was bi-dimensional, implying that the motive of consumption may be utilitarian or hedonistic. Hedonic consumption designated those facets of consumer behaviour that relate to the multi-sensory fantasy, and emotive aspects of one's experience with products. These multi-sensory experiences were not only afferent (i.e., conveying sensory information to the central nervous system) but also efferent (i.e., convening sensory information among from central nervous system) (Hirschman and Holbrook, 1982). Marketing literature further reveals that product categories that had a higher consumer involvement, during the consumption process, generated a hedonic response. Also, the stimuli that was more involved for the result in a more intense and greater hedonic response from the consumers (Spangenberg, *et al*., 1997). A combination of both utilitarian benefit and hedonistic benefit together shaped the general attitude of the consumer towards the product or the brand (Ahtola, 1985).

An important finding in the Indian context, particularly regarding the marketing of several brands of the FMCG products is that there is a difference between the brand position conceptualised by the companies and the consumers' perceived positioning. In other words, a gap exists between the brand identity and the actual positioning and image of these brands as perceived by the consumers (Bahl, *et al.*, 2012).

It has been observed that the consumer-oriented advertising in India had relatively few information cues and generated more of emotional associations than rational ones. The advertising themes used traditional Indian themes that generated local cultural associations (with the brand), themes with foreign association that generated foreign cultural association as well as themes that create association with hedonism, self–esteem, and individualism (Srivastava and Schoeebachler, 2000). The fact that the Indian consumer rated high on ethno-centricity and yet has a higher esteem for the quality of foreign brands and the technology used in them (Kinra, 2006), pointed towards the requirement of using a brand concept and developing a brand identity that would appease that aspect of the Indian consumer's attitude.

The above studies have stressed the impact of a well-communicated brand image on brand positioning and the relationship between brand concept and brand identity. They also have shown that in the absence of conformance between brand concept, brand identity, and brand image, positioning would be ineffective and brand gap would be created. However, no study has been conducted either to identify the elements of marketing strategy that can be used to communicate the brand image and to establish the right kind of brand positioning, or to evaluate the effectiveness of various message elements in positioning a brand. The research gap calls for a study on the use of communication elements in brand positioning.

OBJECTIVES OF THE STUDY

The study has the following major objectives:

1. To assess the impact of various message elements on consumers' response to the brand;
2. To compare the impact of different message elements on consumers' brand recall;
3. To measure the brand managers' perception of the effectiveness of message elements in positioning brands of FMCGs;
4. To identify the message elements which are effective in positioning a brand; and
5. To identify the elements of the message strategy that are more effective in positioning brands of FMCGs.

RESEARCH METHODOLOGY

The data for the study was collected using two questionnaires, one each for the consumers and the brand managers. In order to ascertain the effectiveness of the message elements used for brand positioning, the questionnaire was administered to 250 respondents, selected through judgemental sampling. The respondents belonged to five different States of India and included housewives, working professionals, businessmen, and graduate and post-graduate students. The

questions were designed to measure as to what extent the different message elements are able to attract the consumers to a brand and to measure the effectiveness of these elements in facilitating brand recall.

Another questionnaire was administered to brand managers and assistant brand managers working for Indian or foreign multinational companies operating in India and dealing in FMCG. Thirty respondents were selected from different multinational companies selling FMCG brands in India. The product categories for which the study was conducted are: food and beverage, confectionary, soaps and detergents, cosmetics, and home care products.

The questions administered to the brand managers were designed to understand their perception regarding the impact of message elements of positioning on consumer response towards the brand. The questionnaire also had questions to study the managers' perception regarding the impact of communication elements on brand recall. As elements of the message strategy for communicating positioning are encrypted in advertising appeals and get reflected in brand associations projected through advertisements, two questions were framed to judge the perceived impact of these elements on brand recall. One of these questions measured the impact of different advertisement appeals (having different message elements encrypted within) on brand recall as perceived by the brand managers. The other question measured the impact of different brand associations on brand recall as perceived by the brand manager.

The rationale of treating the impact of brand association as a direct impact of message element was based on the relationship between brand concept (from which the communication element for brand positioning is drawn) and brand association (Park, *et al*., 1986).

Rationale of using Brand Recall and Consumer's Response: The strength of a brand identity can be measured in terms of the top-of-the mind awareness of the brand, brand recall, and the consumer's response to the brand, which refers to the likelihood that the brand will be in the consumer's consideration-set (Keller, 1993). As brand positioning is all about the brand identity as perceived by the consumer (Kapferer, 2004), the strength of brand positioning can also be measured in terms of the extent of brand-recall and the consumer's purchase response to a brand. Based on this concept, the present study has taken brand recall as an indication of the strength of brand-positioning.

DATA ANALYSIS AND FINDINGS

Perception of Brand Managers

The data collected from the brand managers was analysed to get an insight into their perception of the effectiveness of various communication elements for brand positioning of FMCGs and to identify the communication element which is preferred to be used by a brand manager associated with the FMCGs in India. The analysis appears under the following headings:

1. Elements of message strategy (encrypted in advertisement appeal) that generate a better response from the consumer;
2. Elements of message strategy (encrypted in advertisement appeal) that ensure a stronger brand recall;
3. Message elements (when reflected in brand association) that are believed to ensure a better brand recall; and
4. Message elements that the brand managers, dealing in the FMCGs, prefer to use while positioning a brand.

Elements of Message Strategy Eliciting Better Consumer Response

An analysis of the brand managers' opinion regarding the consumers' response to message elements (concealed within an advertisement appeal) indicate that 46.7 per cent of the managers believed that a combination of rational and

Table 1

Advertisement Message Elements and Consumer Response

Appeal	Advertising		
	Responses		% of Respondents
	No.	%	
Functional element (as rational appeal)	3	6.4	10.0
Emotional element (as emotional appeal)	1	2.1	3.3
Cultural element (as cultural appeal)	3	6.4	10.0
Hedonistic element (as hedonistic appeal)	3	6.4	10.0
Rational and emotional element combined (As combination of rational and emotional appeal)	14	29.8	46.7
Rational and cultural element combined (as combination of rational and cultural appeal)	5	10.6	16.7
Rational and hedonistic element combined (as combination of rational and hedonistic appeal)	2	4.3	6.7
Emotional and cultural element combined (as combination of emotional and cultural appeal)	9	19.1	30.0
Emotional and hedonistic element combined (as combination of emotional and hedonistic appeal)	6	12.8	20.0
Cultural and hedonistic element combined (as combination of cultural and hedonistic appeal)	1	2.1	3.3
Total number of responses	47		

emotional appeals ensured a better response from the consumers (**Table 1**).

As the calculated Chi-square value for combination of rational and emotional appeal giving better consumer response' (0.13) is lesser than the table value of Chi-square (3.84) at the 0.05 level of significance and the degree of freedom being 1, the statement that a combination of rational and emotional appeal gives better consumer response is not rejected.

Here, it may be noted that the brand managers who felt that more than one message element may generate a favourable response from the consumer, registered their affirmative responses for more than one appeal. Thus, the total number of responses obtained (47) exceeded the total number of respondents (30). The column 'Percent of respondents' in Tables 1, 3, 5, 7, 9, and 10 shows the affirmative response obtained for each type of appeal as a percentage of the total number of respondents.

The Chi-square analysis also exhibits the influence of the combination of rational and emotional element on the response from the consumers (**Table 2**).

From the analysis, it can be inferred that the brand managers dealing in FMCGs in India believe that the combination of functional and emotional elements of communication have a significant impact on the consumer response.

Elements of Message Strategy for Ensuring a Stronger Brand Recall

An examination of the brand managers' perception regarding the type of message element that strengthen the brand recall reveals that 30 per cent of the brand managers believed that emotional appeal ensured a stronger brand recall (**Table 3**).

It was also noted that 30 per cent of the respondents believed that a combination of rational and emotional appeals ensured a stronger brand recall.

However, the Chi-square analysis does not indicate any significant influence of any of the advertisement appeals on brand recall (**Table 4**).

As the calculated Chi-square value for none of the statements regarding the influence of message elements (within advertising appeals) on the brand recall of the consumers is lesser than

Table 2

Association of Message Elements and Consumer Response

Advertising/ Appeal	Yes	No	*d/f*	Chi-square (p value)
'Functional element gives better consumer response'	3	27	1	19.20 (0.000)
'Emotional element gives better consumer response'	1	29	1	26.13 (0.000)
'Cultural element gives better consumer response'	3	27	1	19.20 (0.000)
'Hedonistic element gives better consumer response'	3	27	1	19.20 (0.000)
'A combination of rational and emotional element gives better consumer response'	14	16	1	0.13 (0.715)
'A combination of rational and cultural element gives better consumer response'	5	25	1	13.33 (0.000)
'A combination of rational and hedonistic element gives better consumer response'	2	28	1	22.53 (0.000)
'A combination of emotional and cultural element gives better consumer response'	9	21	1	4.80 (0.028)
'A combination of emotional and hedonistic element gives better consumer response'	6	24	1	10.80 (0.001)
'A combination of cultural and hedonistic element gives better consumer response'	1	29	1	26.13 (0.000)

Table 3

Elements of Message Strategy and Brand Recall

Advertising/ Appeal	Responses		% of Respondents
	No.	%	
Functional element (as rational appeal)	2	4.5	6.7
Emotional element (as emotional appeal)	9	20.5	30.0
Cultural element (as cultural appeal)	2	4.5	6.7
Hedonistic element (as hedonistic appeal)	3	6.8	10.0
Rational and emotional element combined (as combination of rational and emotional appeals)	9	20.5	30.0
Rational and cultural element combined (as combination of rational and cultural appeals)	3	6.8	10.0
Emotional and cultural element combined (as combination of emotional and cultural appeals)	8	18.2	26.7
Emotional and hedonistic element combined (as combination of emotional and hedonistic appeals)	8	18.2	26.7
Total number of responses	44		

Table 4

Association of Message Elements and Brand Recall

Advertising/ Appeal	Yes	No	*d/f*	Chi-square (*p* value)
'Rational element ensures strong brand recall'	2	28	1	22.533 (0.000)
'Emotional element ensures strong brand recall'	9	21	1	4.800 (0.028)
'Cultural element ensures strong brand recall'	2	28	1	22.533 (0.000)
'Hedonistic element ensures strong brand recall'	3	37	1	19.200 (0.000)
'A combination of rational and emotional element ensures strong brand recall'	9	21	1	4.800 (0.028)
'A combination of rational and cultural element ensures strong brand recall'	3	27	1	19.200 (0.000)
'A combination of rational and hedonistic element ensures strong brand recall'	0	30		
'A combination of emotional and cultural element ensures strong brand recall'	8	22	1	6.533 (0.011)
'A combination of emotional and hedonistic element ensures strong brand recall'	8	22	1	6.533 (0.011)
'A combination of cultural and hedonistic element ensures strong brand recall'	0	30		

the table value of Chi-square (3.84) at the level of significance 0.05 and the degree of freedom 1, all the statements that claim that message elements (within corresponding advertisement appeals) ensure strong brand recall are rejected.

Message Elements Believed to Ensure Better Brand Recall

On seeking an opinion from the brand managers regarding the type of message element (as reflected in brand association) that ensures a stronger brand recall, it was found that 46.7 per cent of the brand managers believed hedonistic/ experiential element (reflected in the association of a brand with special experience) ensured a stronger brand recall. At the same time, 43.3 per cent of the respondents believed that emotional element (reflected through celebrity association) ensured a stronger brand recall (see **Table 5**).

As shown in the table, the calculated Chi-square values for 'celebrity association ensuring better brand recall' and 'association with special experience ensuring better brand recall' are 0.5333 and 0.133, respectively. Both the values being lesser than the table value of Chi-square (3.84) at level of significance 0.05 and degree of freedom 1, the statements that 'Emotional element (reflected in celebrity association) ensures a better brand recall' and that 'Hedonistic element (applied as association with some special experience) ensures a better brand recall' are not rejected (**Table 6**).

From the table, it can be inferred that a majority of the brand managers dealing in the FMCGs believe in the ability and effectiveness of hedonistic element to strengthen brand recall and thus, its importance in brand positioning. Similarly, it can be inferred that a good percentage of brand managers (43.3 per cent) consider the emotional element of positioning important for brand recall and, thus for brand positioning.

Message Elements preferred by Brand Managers

The frequency table showing the type of communication elements that the brand managers prefer to use, while positioning their brands, reveals that most of the brand managers (46.7 per cent) of MNCs dealing in the FMCG brands in the Indian market prefer to use the sensory/ experiential element, followed by the emotional element as well as the functional element (as indicated in 43.3 per cent of the cases) while positioning their FMCG brands (see **Table7**).

As shown in the table, the calculated Chi-square values for 'preference of physical elements', 'preference of functional elements', 'preference of emotional elements', and 'preference of experiential/hedonistic elements' are 1.200, 0.533, 0.533 and 0.133, respectively. All these values are lesser than the table value of Chi-square (3.84) at the 0.05 level of significance and one degree of freedom. Hence, the statement 'Brand managers prefer to use physical elements while positioning', 'Brand managers prefer to use functional elements while positioning', 'Brand managers prefer to use emotional elements while positioning' and 'Brand managers prefer to use experiential/hedonistic elements while positioning' are not rejected.

However, as the calculated Chi-square value for the item 'Preference of cultural elements' (8.533) is greater than the table value of Chi square (3.84) at the 0.05 level of significance and the degree of freedom being 1, the statement that 'Brand managers prefer to use cultural elements while positioning', is rejected.

From the analysis of the data collected from the brand managers of various multinational companies dealing in the FMCGs, it can be inferred that the brand managers consider the functional element and a combination of functional and emotional elements as the most important message elements to the positioning of the FMCG brands to the consumers and to establish a distinctive position of the brand in the consumer's mind.

The response from the brand managers also indicate that the most commonly used and preferred message elements for positioning the FMCG brands in the Indian market are hedonistic element/experiential element, followed by the emotional element and functional element. Use of cultural element is least preferred while positioning the FMCG brands.

Consumers' Perception of Communication Elements

The data collected from the consumers was analysed to ascertain type of communication element which is actually more effective in positioning the FMCGs in the Indian market (**Table 8**). The analysis has been discussed under two headings:

Table 5

Brand Association3 and Brand Recall

Brand/ Association	Responses		% of Respondents
	No.	%	
Celebrity association (reflecting emotional element)	13	24.1	43.3
Health association (reflecting functional element)	6	11.1	20.0
Association with festivals and events (reflecting cultural element)	8	14.8	26.7
Association with culture and tradition (reflecting cultural element)	6	11.1	20.0
Performance association (reflecting functional element)	7	13.0	23.3
Association with special experience (reflecting hedonistic element)	14	25.9	46.7
Total	54	100.0	180.0

Table 6

Relationship between Brand Association and Brand Recall

Particulars	Yes	No	d/f	Chi-square (p value)
'Emotional element as celebrity association ensures better brand recall'	13	17	1	0.533 (0.465)
'Functional element as health association ensures better brand recall'	6	24	1	10.800 (0.001)
'Cultural element as association with festivals and events ensure better brand recall'	8	22	1	6.533 (0.011)
'Cultural element as association with culture and tradition ensures better brand recall'	6	24	1	10.800 (0.001)
'Functional element as performance association ensures better brand recall'	7	23	1	8.533 (0.003)
'Hedonistic element as association with special experience ensures better brand recall'	14	16	1	0.133 (0.715)

Table 7

Brand Managers' Preference for Communication Elements

Association	Responses		% of Respondents
	No.	%	
Physical elements	12	20.3	40.0
Functional elements	13	22.0	43.3
Cultural elements	7	11.9	23.3
Emotional elements	13	22.0	43.3
Sensory/experiential elements	14	23.7	46.7
Total	59	100.0	196.7

Table 8

Usage of Communication Elements for Brand Positioning

Particulars	Yes	No	*d/f*	Chi-square (*p* value)
Preference of physical elements in positioning	12	18	1	1.200 (0.273)
Preference of functional elements in positioning	13	17	1	0.533 (0.465)
Preference of cultural elements in positioning	7	23	1	8.533 (0.003)
Preference of emotional elements in positioning	13	17	1	0.533 (0.465)
Preference of sensory/ experiential element in positioning	14	16	1	0.133 (0.715)

Elements of Message Strategy Attracting Consumers towards a Brand

An analysis of the consumers' perception of the effectiveness of an advertisement appeal to attract the consumers towards a brand is shown in **Table 9**.

As shown in the table, as many as 40.8 per cent of the consumers got attracted towards a brand because of the rational appeal used.

In fact, rational appeal is a part of the functional element of communication used for positioning a brand. Thus, the consumers are more influenced by the functional element in the communication of brand positioning.

Elements of Message Strategy Enabling Brand Recall

A study of the frequency table exhibiting the consumers' response to the type of brand association that makes it easy for them to remember a brand shows that emotional element (as in celebrity association) is the most effective brand association that facilitates brand recall among the consumers (**Table 10**).

As shown in the table, quite a good number of consumers (43.6 per cent) felt that brands having some celebrity association were easy to remember and recall, followed by those FMCG brands that used performance association for their positioning.

Table 9

Message Elements Attracting the Consumers to Brand

Brand Association	Responses		% of Respondents
	No.	%	
Functional element (as rational appeal)	100	25.9	40.8
Emotional element (as emotional appeal)	59	15.3	24.1
Cultural element (as cultural appeal)	42	10.9	17.1
Hedonistic element (as hedonistic appeal)	39	10.1	15.9
Rational and emotional element combined (as combination of rational and emotional appeal)	45	11.7	18.4
Rational and cultural element combined (as combination of rational and cultural appeal)	25	6.5	10.2
Rational and hedonistic element combined (as combination of rational and hedonistic appeal)	31	8.0	12.7
Emotional and cultural element combined (as combination of emotional and cultural appeal)	23	6.0	9.4
Emotional and hedonistic element combined (as combination of emotional and hedonistic appeal)	11	2.8	4.5
Cultural and hedonistic element combined (as combination of cultural and hedonistic appeal)	11	2.8	4.5
Total	386	100.0	157.6

Table 10

Message Elements in Brand Association Facilitating Brand Recall

Brand Association	Responses		% of Respondents
	No.	%	
Celebrity association	109	26.7	43.6
Health association	50	12.3	20.0
Association with festivals and events	46	11.3	18.4
Association with culture and tradition	48	11.8	19.2
Performance association	97	23.8	38.8
Association with special experience	58	14.2	23.2
Total	408	100.0	163.2

As celebrity association hints at the use of emotional element of communication for brand positioning, it can be inferred that emotional element used in marketing communication has an impact on consumer's brand recall and brand positioning. Similarly as performance association hints at the use of functional element of communication for brand positioning, it indicates that functional element also effectively facilitates the brand recall and establish the positioning of the brand.

From the analysis of the data collected from the users of the FMCGs, it can be inferred that the functional element of communication is most effective in influencing the consumers' brand preference as well as in facilitating brand recall. The emotional element of communication has a significant influence on brand recall. Thus, the functional element and the emotional element of communication emerge to be more effective in positioning the FMCG brand than the other elements of communication, used for brand positioning.

CONCLUSION

Brand managers believe that a combination of functional and emotional element of communication is most effective in attracting the consumer response and is, thus, important for positioning the brand.

Though several brand managers felt that emotional appeal or a combination of rational and emotional appeals ensures a stronger brand recall, further statistical analysis reveals that none of the advertisement appeals has an exclusively distinctive influence on brand recall.

On the other hand, the brand managers feel that the use of special experience association (established through hedonistic communication element for positioning) facilitates brand recall, followed by the use of celebrity association (linked to the use of emotional element of communication for brand positioning). From these findings, it can be deduced that communication elements reflected in advertising appeals are not perceived by brand managers to have any significant effect on brand recall. However, these elements, when used for creating and highlighting brand associations, are perceived to have a significant impact on brand recall. Thus, emotional element, hedonistic element, and a combination of emotional and functional elements are thought to be most important by the brand managers in influencing the positioning of a brand.

As noted from the response of the consumers, rational appeal attracts most of the consumers to a brand. As rational appeal is a part of the functional communication element for brand positioning, it can be concluded that consumers are most influenced by the use of functional element. This is in conformity with the perception of the brand managers regarding the effectiveness of the communication elements.

Proving the belief (regarding the impact of communication elements on brand recall) of the brand managers fairly correct, celebrity association, that is linked to the use of emotional element of communication for positioning, is found to be most influential in facilitating brand recall, followed by the performance association that is linked to the functional communication element for positioning. Hedonistic element that is regarded by brand managers to be very significant in influencing brand recall is not so potent in reality. From the response of the consumers, it is concluded that emotional element of communication can be most effective in establishing a distinctive position for a brand in the minds of the consumer, followed by the functional element. Somewhat in conformity with the belief of the brand managers regarding the importance and influence of the communication elements on brand positioning, the most preferred communication element for positioning an FMCG brand in the Indian market, is the hedonistic element, followed by the emotional element and the functional element.

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My life has been full of terrible misfortunes,
most of which never happened.

Michel de Montaigne
Essayist (1533-1592)

★★★★★

Most people are mirrors, reflecting the moods and emotions of the times;
few are windows, bringing light to bear the dark corners where troubles fester.
The whole purpose of education is to turn mirrors into windows.

Sydney J. Harris
Journalist and Author (1917-1986)

IMPACT OF JOB STRESS ON JOB INVOLVEMENT AMONG BANK EXECUTIVES
A Study of Selected Commercial Banks

Ritu Lehal* and Nimarta Mann**

Abstract

Job stress affects employees' physiology as well as psychology. Increased working hours result in less time with family, friends, and community and in pursuing activities that one enjoys doing and taking time to grow personally and spiritually. While these aspects can be the cause of inequity in the areas of life, the need of the hour is work-life balance. The present study seeks to examine the impact of job stress on job involvement in the bank executives. Conducted on a sample of 400 bank executives from Punjab and Chandigarh, the study reveals that in order to have improved job involvement among bank executives, their job stress is to be minimised. Moreover, role stagnation, role ambiguity, personal inadequacy, inter-role distance, role erosion, and role-expectation conflict need to be curbed.

Key words: ***Job stress, Job involvement, Commercial banks, Human resource policies, Work-life balance***

INTRODUCTION

JOB stress is as an inevitable by-product of the constantly-changing organisational work culture, attributable to changes in policies with the introduction of globalisation and liberalisation, increased competition, and technological advancement. Some of the research studies have established that about one-third of the employees report high level of stress (NIOSH, 1999). While one-fourth of the employees view their job as the major stressor in their life (NNLIC, 1991), three-fourths of the employees believe that they have more on-the-job stress today (Princeton Survey Research Associates, 1997), than what it was a generation ago. Moreover, stress is considered to be the major cause of turnover in organisations. Stress is, therefore, a costly problem in today's workplace.

Many people expose themselves to the epidemic of stress and overwork in their pursuit of the 'American dream', resulting in money-rich, time-poor employees. While these aspects can be the cause of inequity in some areas of life, what is needed is the work- life balance.

REVIEW OF LITERATURE

Major studies on job stress and job involvement were reviewed with a view to analysing and critically examining them, and to connect the

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present knowledge with the earlier studies, in order to evolve a general framework for our study.

The study conducted by Cherry (1978), in a 'community cohort' of 1415, twenty-six year old men, in mixed occupations, displayed 'nervous strain' (a self-report single item) due to occupational status, but not by social class of origin. Jackson and Maslach (1982) reported that 142 police couples, evinced the effects of job stress on family life, showing that the officers who experienced stress displayed more anger, spent time-off away from the family, be uninvolved in family matters, and had unsatisfactory marriages. Parker and DeCotiis (1983) developed a model of job stress that focussed on organisational and job-related stress.

According to Brenner, *et al.* (1985), teaching 'stressful students' in the early school years, predicted poor mental health in the latter part of the years. Jackson, *et al.* (1986), who examined the relation of work-stress variables to the 'burnout' sub-scales (in another teacher sample), found that role conflict alone predicted emotional exhaustion. While only two 'support variables' predicted poor accomplishment, there were no predictors of 'de-personalisation'.

Aro and Hasan (1987), who examined the stressors at work, predicted that mental stress symptoms and poor perceived health led to smoking, drinking, and absenteeism. According to Taylor and Cooper (1989) personality firstly seems to be an independent risk factor for both depression and burnout, irrespective of the exposure to work-stressors. Kawakarmi, *et al.* (1990) observed that in the factory and among the blue-collar workers, studied for over 3 years, in Japan (N=468), 'lack of control overwork', 'unsuitable jobs', and 'poor workplace relations' predicted depression.

In a study by Phelan, *et al.* (1991), the effect of stressors of different 'origins' (those at work and those outside it) was assessed. Glickman, *et al.* (1991) noted that the pathways linking work-stressors and depression might not be direct, since in a study of blue-collar workers, neither the initial life events nor the work strain (economic difficulties and work overload) directly predicted the latter's depression. They, however, predicted subsequent life events and work strain.

Revicki, *et al.* (1993) observed that in relation to medical specialties, for instance, work-related stress, and specifically, 'low task–role clarity' predicted the latter's depression in emergency medicine residents. Carayon (1993) developed a model that proposed job control to be a primary causal determinant of the stress outcome. Fenwick and Tausig (1994) tested a model that conceptually linked the research on macroeconomic causes of stress with on-the job-related causes of stress among the employees. Their study revealed that the macroeconomic changes, such as recession, can affect individual stress because they led to changes in the routine job structure that represented increased and continued exposure to stressful conditions. Noor (1995) observed that in the case of working women, while work overload predicted the psychological disorder, surprisingly, their family-role stressors did not, and high occupational status diminished the impact of the work-overload on the psychological disorder.

Among more experienced teachers (Burke and Greenglass, 1995), burnout was predicted by both 'work-setting' and specific 'work stress'. Rout, *et al.* (1996) noted that the general practitioners' routine work administration, job demands, interference with family, and interruptions with work, predicted their negative mental well-being. Briner (1997) and Cooper and Cartwright (1997) reviewed the stress interventions in the workplace and emphasised the need to distinguish between the primary interventions (organisation/structural change), secondary interventions (stress management/coping strategies), and the tertiary interventions (i.e., the interventions targeted for those actually stressed).

Mills and Huebner (1998) found that among school psychologists, while personality (neuroticism) predicted all burnout sub-scales, self-reported work stressors predicted only emotional exhaustion and poor accomplishment.

Taris (1999) demonstrated a reciprocal relation between 'job resources' (autonomy, variety, and skill utilisation) and mental health.

Weinberg and Creed (2000) found that both the work and the non-work stressors contributed to depression among the medical personnel. The study by Schaufeli and Peeters (2000) revealed that the most notable stressors for correctional officers included the role problems, work overload, demanding social contacts (with prisoners, colleagues, and supervisors), and the poor social status. A report from *Health Canada* (2002) suggested that employees who experienced work stress (caused by interpersonal, job control, and management problems) were six times more likely to be absent from their work for six or more days, than others.

Larson (2004) used the Ivancevich and Matteson Stress Diagnostic Survey and collected the data concerning job stress for a large national sample of internal auditors in the USA. He found that the organisational stressors in their work environment were more a source of stress, than the so-called individual job factors. Landsbergis and Vaughan (2006) evaluated the impact of an intervention based on organisational development, action research, and Karasek's Job-strain model. Sharma (2007) researched on a representative sample of executives from manufacturing and service industries, in which stress personality emerged as the most important predictor of executive burnout. Role-expectation conflict, role stagnation, self-role distance, role overload, inadequacy, and ambiguity were found to be the role-related predictors among executives, in India.

A study of climate, stress, and coping was undertaken by Srivastav (2007) in a large telecommunication-equipment manufacturing company in the public sector. His study revealed that the achievement climate was related to role stress in quality and miscellaneous functions. He suggested appropriate measures for strengthening the achievement climate in the public sector, including opportunities for growth, development, and career advancement. Feilder, *et al.* (2008) found that the work-related stress was the major concern for employers, and the UK Health and Safety Executive introduced 'management standards' for employers to support them in managing stress at workplace.

The studies on job involvement have been conducted mainly in foreign countries and only a few of them have touched an Indian perspective.

Rabinowitz, *et al.* (1977) examined the relative importance of job scope and individual differences on job involvement. The study of over 200 middle and senior-level managers, conducted by Misra and Kalro (1981), supported the notion that the attitude of job involvement was the function of the level of satisfaction of one's salient needs, whether intrinsic or extrinsic. According to Pathak (1983), job involvement is the degree to which the employees identified themselves with their job. A study by Ron and Graham (1987) indicated a high level of relationship between work satisfaction, job security, decision influence, productivity, communication, commitment, and job involvement. The study by Gomez-Mejia (1990) suggested that while gender differences in the work values existed (as measured by task-oriented, contextual, and job involvement scales), the magnitude and significance of the observed differences between men and women, decreased as the occupation and the length of socialisation were partialled out.

Agrawal (1993) suggested re-structuring through formation of autonomous work groups, reducing hierarchy, relocation, creating awareness about the existing work culture, and acculturation as the processes through which a strong work culture can be developed for high-involvement and high-performance work organisations. The study by Knoop (1995) demonstrated that the employee involvement was not related to the overall satisfaction, but only to two specific facets, namely, the satisfaction with work and the promotion opportunities. In a study of hospital nurses (N=154), Jernigan, *et al.* (2002) observed that satisfaction with professional status was a significant predictor of moral commitment.

Freund and Carmeli (2003) examined the relationships among five work-commitments: protestant work ethics, career commitment, job involvement, continuance commitment, and affective commitment. Their findings were unique to this reconstructed model. Job involvement and career commitment appeared as mediating variables, unlike previous models where job involvement directly related to affective commitment. The relationship between personality and work involvement was investigated by Bozionelos (2004) in a sample of 279 white-collar employees. The study revealed the existence of a relationship between the two variables, although not strong or extensive.

Cortis and Cassar (2005) found no differences between job involvement and work-based self-esteem of male and female managers. The study by Rotenberry and Moberg (2007) revealed that the employees' self-reported job involvement significantly predicted certain supervisor-performance ratings, above and beyond, work 'centrality'. The job involvement of customer contact personnel was significantly correlated with customer satisfaction, profit, and productivity of the organisation (Emery and Barker, 2007). Kuruuzum, *et al.* (2009) demonstrated structural relationship between job involvement, job satisfaction, and three dimensions of organisational commitment (i.e., affective commitment, normative commitment, and continuance commitment) in the Turkish hospitality industry. Their study revealed that job involvement, affective commitment, and normative commitment increased job satisfaction, and job involvement affected affective and normative commitment.

Thus, there has hardly been any study that exhibited direct relationship between job stress and job involvement. However, direction for further research on the given variables was provided in some of the studies, such as Kahn, *et al.* (1964), Skinner (1980), Greenhaus and Beutell (1985), and Leiter and Durup (1996). Moreover, while many authors have undertaken these two variables, namely, job stress and job involvement in their studies separately, certain other studies took the two variables together. Furthermore, the banking sector has not been explored fully in this regard and there is scope for research in this important area of business. The present study seeks to bridge this gap.

OBJECTIVES OF THE STUDY

The study was conceived with the following objectives:

1. To explore the impact of job stress on job involvement in the banking sector; and
2. To suggest appropriate strategies for minimising job stress and improving job involvement.

RESEARCH METHODOLOGY

This study is concerned with the analysis and interpretation of the data collected through questionnaire-cum-scale for job stress and job involvement. The executives in commercial banks constituted the scope of the study, within that it is limited to such banks located in Punjab and Chandigarh. As many as 400 bank executives (200 from public-sector, 150 from private-sector, and 50 from amongst the foreign banks) formed the sample. For the present study, while standardised questionnaires-cum-scales, namely, Pareek's Job-stress scale, comprising 50 questions and covering ten sub-variables: inter-role distance, role stagnation, role-expectation conflict, role erosion, role overload, role isolation, personal inadequacy, self-role distance, role ambiguity, and resource inadequacy, were used for measuring the job stress, Lodahl and Kejner's (1965) job involvement scale, comprising 20 questions and covering predominantly the areas, such as the time an employee willingly spends on his job and the importance an employee attaches to his job in his life, were used for measuring job involvement.

Karl Pearson's coefficient of correlation was used to ascertain the relationship between job stress and job involvement in totality as well as through the ten sub-variables of job stress. The significance of coefficient of correlation was also calculated by using 2-tailed significant value. The interpretation of the size of a correlation coefficient depends on the context and purposes. For the purpose of this study, the criterion used for the interpretation of coefficient of correlation is shown in **Table 1**.

Table 1

Criterion for Interpretation of Correlation

Correlation	Negative	Postive
None	−0.09 to 0.0	0.0 to 0.09
Weak	−0.3 to −0.1	0.1 to 0.3
Moderate	−0.5 to −0.3	0.3 to 0.5
Strong	−1.0 to −0.5	0.5 to 1.0

The main purpose of this study was to gauge the impact of job stress on job involvement in commercial banks, which was done through simple linear regression analysis. Job stress and its sub-variables form the independent variable (i.e., job involvement), constituted the dependent variable; the regression equation being:

$$Y = a_0 + a_1.x_1,$$

where Y is the dependent variable, X_1 is the independent variable, and a_1 is the coefficient that describes the size of the effect of the independent variable on the dependent variable and a_0 is the value that Y is predicted to have when the independent variable is equal to zero. It is constant. It can be said that the regression equation helps to predict the most likely measure in one variable from the known measure in the other variable. If the correlation between Y and X is perfect, we can make predictions of Y from X or of X from Y, with total accuracy; the error of prediction would be zero. Conversely, if the correlation was zero, the prediction would be futile. Within these limits, predictions are possible with varying degrees of accuracy. Higher the correlation, greater the accuracy of the prediction and smaller the errors involved. The regression analysis, as explained, proves useful when the independent variable in the data-set has some correlation with the dependent variable. Therefore, after ascertaining the strength of the association between the independent and dependent variables, simple linear regression analysis was carried out.

The regression equation was applied in order to predict the contribution of the sub-variables of job stress to job involvement, which is the dependent variable. Also, an effort was made to identify the sub-factors which have a marked influence on the job involvement in all the banks under study.

RESULTS AND DISCUSSION

Relationship between Job Stress and Job Involvement

The relationship between the executives' job stress and their job involvement was found through Karl Pearson's coefficient of correlation and the significance of the coefficient of correlation was calculated by using 2-tailed significant value. The results of the analysis are presented in **Table 2**.

Table 2

Relationship between Job Stress and Job Involvement in Commercial Banks

Banks	Coefficient of Correlation (*r*)	Sig. (2-tailed)
All commercial banks (N=400)	−0.14**	0.006

Note: **Significant at 0.01 level (2-tailed)

As shown in the table, the correlation coefficient value was −0.14. The coefficient falling between −0.3 and −0.1 shows a weak and negative association between job stress and job involvement. This weak and negative correlation itself suggests that executives experiencing pressing stress at work will also possess relatively low job-involvement. An adverse stress level should be perceived as poor job involvement and vice versa. A significant (2-tailed) value was calculated to ascertain the significance of correlation, which was found to be 0.006. It suggests that the correlation is significant at 0.01 level. Thus, it may be concluded that job stress leads to lesser job involvement of executives in the overall banking sector.

Impact of Elements of Job Stress on Job Involvement

The objective explained above was examined by focussing on the relationship of each sub-variable of job stress with job involvement. **Table 3** demonstrates the element-wise values of coefficient of correlation in commercial banks.

Table 3

Impact of Elements of Job Stress on Job Involvement in Commercial Banks

Elements (Sub-variables) of Job Stress	Coefficient of Correlation 'r'
Inter-role distance (IRD)	–0.114*
Role stagnation (RS)	–0.167**
Role expectation conflict (REC)	–0.105*
Role erosion (RE)	–0.108*
Role overload (RO)	–0.02
Role isolation (RI)	–0.08
Personal inadequacy (PIN)	–0.12*
Self-role distance (SRD)	–0.09
Role ambiguity (RA)	–0.172**
Resource inadequacy (RIN)	–0.06

Note: *Significant at 0.05 level (2-tailed).
**Significant at 0.01 level (2-tailed).

It can be noted from the table that in the commercial banks, role ambiguity has correlation coefficient value of –0.172, which showed a weak and negative correlation with job involvement. It means that if the bank executives are not clear about the various expectations people have from them, they will have lower job involvement. Role stagnation, personal inadequacy, inter-role distance, role erosion, and role-expectation conflict also showed a weak and negative correlation with job involvement. Thus, the executives adversely affected by these sub variables will have low level of job involvement. The remaining four sub-variables, viz., self-role distance, role isolation, resource inadequacy, and role overload, showed no correlation with job involvement. Thus, the bank executives were adversely experiencing these four sub-variables of job stress are not likely to bear a definite effect of it on their job involvement. However, this is found to be statistically insignificant.

Impact of Job Stress on Job Involvement

An attempt was made to ascertain the sub-variables of job stress having the maximum impact on the dependent variable, job involvement, by using regression analysis. The results so obtained are exhibited in **Table 4**.

The *R*-square value is the measure of the overall predictive accuracy of a regression model and is the amount of variance in the dependent variable that can be explained by the model. If the *R*-square value is 1.0, this means the model explains 100 per cent of variance, and it will produce perfect predictive accuracy. However, it never happens so in the real world. It conveys that closer to the value of *R*-square value of 1.0, the better would be the model, and conversely, the closer the *R*-square value to 0, the worse would be the model.

Role Stagnation

As shown in the table, out of all the ten sub-variables of job stress, role stagnation has the maximum negative impact on job involvement, with the coefficient value of –0.142. The supplementary value of *R*-square for Model RS was found to be 0.028, showing 2.80 per cent of variance in job involvement. The regression equation is:

Job Involvement = 4.801 + (–0.142 *Role Stagnation*)

(Significant at <0.05 level)

This explains that as the bank executives continue in the same job for many years, they get bored and are stagnant and uninterested in their job. There is a limit to the amount the executives are willing to devote to improve their work, thus, reducing their job-involvement.

Role Ambiguity

The coefficient value of the role ambiguity is –0.138. This arises due to the lack of clarity about the expectations people have from an employee. The results show that it has the subsequent greatest negative impact on job involvement. The supplementary value of *R*-square for Model RA was found to be 0.030, indicating a variance of 3.00 per cent in job involvement. The regression equation, thus, appears as under:

Job Involvement = 4.854 + (–0.138 *Role Ambiguity*)

(Significant at <0.05 level)

Apparently, the ambiguity about the activities, responsibilities, personal style, and the norms, gives rise to conflict in the executives' minds. They are unsure of what is expected of them and unaware of what way their efforts are to be directed, thereby causing a hindrance in their job involvement. Thus, the role ambiguity has resulted in lower job involvement in the commercial banks.

Table 4

Job Stress and Job Involvement: Regression Analysis for Overall Banking Sector Coefficients (*a*) and *R*-square

Independent Variable	Model	Unstandardised Coefficients	Sig.	*R-square*
Inter-role distance	(Constant)	4.709	0.000	0.013
	IRD	–0.088	0.023	
Role stagnation	(Constant)	4.801	0.000	0.028
	RS	–0.142	0.001	
Role-expectation conflict	(Constant)	4.697	0.000	0.011
	REC	–0.083	0.036	
Role erosion	(Constant)	4.691	0.000	0.012
	RE	–0.087	0.031	
Role overload	(Constant)	4.497	0.000	0.000
	RO	–0.017	0.721	
Role isolation	(Constant)	4.625	0.000	0.006
	RI	–0.066	0.127	
Personal inadequacy	(Constant)	4.725	0.000	0.014
	PIN	–0.097	0.017	
Self-role distance	(Constant)	4.676	0.000	0.007
	SRD	–0.076	0.086	
Role ambiguity	(Constant)	4.854	0.000	0.030
	RA	–0.138	0.001	
Resource inadequacy	(Constant)	4.584	0.000	0.003
	RIN	–0.049	0.255	
Job stress	(Constant)	4.874	0.000	0.019
	Job stress	–0.149	0.006	

Personal Inadequacy

Personal inadequacy has –0.097 as the value of coefficient. The supplementary value of *R*-square for Model PIN is 0.014, depicting a variance of 1.40 per cent in job involvement. The regression equation, here, is:

Job Involvement = 4.725 + (–0.097 *Personal Inadequacy*)

(Significant at <0.05 level)

This signifies that an executive's feeling of not being primed enough to execute the assigned role effectively is surely an impediment in his job involvement. When an executive is under-equipped for a role, there is an inherent feeling of inhibition and avoidance of taking the job head on. Thus, an employee's personal inadequacy results in significantly lowering his job involvement.

Inter-role Distance

The inter-role distance is the next sub-variable affecting an employee's job involvement.

Its coefficient value, here, is −0.088. The supplementary value of *R*-square for Model IRD was found to be 0.013, indicating a variance of 1.30 per cent in job involvement, due to the inter-role distance. The regression equation, here, runs as follows:

Job Involvement =
4.709 + (−0.088 *Inter-role Distance*)

(Significant at <0.05 level)

An employee always feels drawn between his organisational role and the different societal roles played by him. Sometimes, family issues spill-over into his work and vice versa, and cause strain. Such a situation is bound to interfere in both the roles, causing an executive to be less involved in his job. The data establishes this fact and explains that the inter-role distance results in significantly lowering the employees' job involvement in banks.

Role Erosion

The role erosion is another such sub-variable which affects job involvement with the coefficient value of −0.087. The supplementary value of *R*-square for Model RE is found to be 0.012, depicting a variance of 1.20 per cent in job involvement. The regression equation now is:

Job Involvement = 4.691 + (−0.087 *Role Erosion*)

(Significant at <0.05 level)

This illustrates that when an executive finds that some tasks, for which he bears an affinity and would like to execute, are being assigned to others, he will certainly be less involved in the tasks at hand. The results also confirm the fact that role erosion also leads to significantly lower job involvement.

Role-expectation Conflict

The role-expectation conflict appears as the next sub-variable affecting job involvement with the coefficient value of −0.083. The supplementary value of *R*-square for Model REC is found to be 0.011, depicting 1.10 per cent of variance in job involvement. The regression equation runs as:

Job Involvement =
4.697 + (−0.083 *Role-expectation Conflict*)

(Significant at <0.05 level)

This indicates that when an executive faces contradictory demands from superiors, subordinates, peers, and clients, a feeling of ambivalence emanates, causing low job involvement. The results indicate that the role-expectation conflict adversely affects job involvement.

Self-role Distance

The self-role distance had a coefficient value of −0.076 and value of *R*-square for Model SRD of 0.007, showing 0.70 per cent variance in job involvement. The regression equation, here, is as under:

Job Involvement =
4.676 + (−0.076 *Self-role Distance*)

(Significant at >0.05 level)

This proves that when an executive's idea of the assigned job goes against his own notion about himself, he is likely to lose interest in the job, which leads to low job involvement. The analysis reveals that a disparity between the employee and his self-role distance has a negative impact on the job involvement. However, this is found to be statistically insignificant.

Role Isolation

The sub-variable of role isolation has recorded a coefficient value of −0.066. The supplementary value of *R*-square for Model RI is found to be 0.006, depicting 0.60 per cent of variance in job involvement due to role isolation. The regression equation runs as under:

Job Involvement = 4.625 + (−0.066 *Role Isolation*)

(Significant at >0.05 level)

This describes that when there is lack of proper interaction among the employees, it is likely to result in lesser job involvement. The results of the study indicate that the role isolation has a negative

impact on job involvement in commercial banks, though it is statistically insignificant.

Resource Inadequacy

The resource inadequacy appears next in order of impact on job involvement. Its coefficient value is −0.049. The corresponding *R*-square for Model RIN is found to be 0.003, explaining 0.30 per cent variance in job involvement due to this sub variable. The regression equation is as follows:

Job Involvement =
4.584 + (−0.049 *Resource Inadequacy*)

(Significant at >0.05 level)

This suggest that when an executive is expected to manage with inadequate means, information, people, material, finance and other facilities, his flow in effective execution of work gets obstructed, thereby hindering his job involvement. The study shows that the resource inadequacy has a negative impact on job involvement. However, this impact is statistically insignificant.

Role Overload

The role overload appears as the last sub–variable, which has relatively the smallest coefficient value of −0.017. The corresponding *R*-square value for Model RO is found to be 0.000, depicting nil variance in job involvement. The regression equation runs as under:

Job Involvement = 4.497 + (−0.017 *Role Overload*)

(Significant at >0.05 level)

This implies that an executive performing excessive amount or difficult work, would exhibit lower job involvement in banks. However, the *R*-square value depicts that this model of RO has poor predictive accuracy, and further significance value shows that this result is statistically insignificant.

Job Stress

Finally, in view of the composite job stress variable, the coefficient value is −0.149. The supplementary value of *R*-square for the job stress model is 0.019, depicting 1.90 per cent variance in job involvement. The regression equation is as follows:

Job Involvement = 4.874 + (−0.149 *Job Stress*)

(Significant at <0.05 level)

Job stress, an executive undergoes while executing an assigned job at workplace, is the reason, to a great extent, for his low job involvement. The results reveal that job stress attributable to six sub-variables: role stagnation, role ambiguity, personal inadequacy, inter-role distance, role erosion, and role expectation conflict, out of the total ten are responsible for shedding a significantly negative impact on job involvement in the banking sector. However, the remaining four sub-variables (self-role distance, role isolation, resource inadequacy, and role overload) of job stress exhibits insignificantly negative impact on job involvement. This further validates our previous finding that these very four sub-variables of job stress have insignificant correlation with job involvement in the banks.

The earlier findings showed that job stress together with its other six sub-variables had a significant correlation with job involvement. Thus, the findings of this study suggests that in order to have improved job involvement among banking executives, efforts have to be made to minimise their job stress.

CONCLUSION AND POLICY IMPLICATIONS

The study reveals that the predictive accuracy of the regression model between job stress and job involvement is good. Six out of ten sub-variables of job stress have shown a significantly negative correlation with job involvement. The highest negative impact on job involvement is that of role stagnation, followed by role ambiguity, personal inadequacy, inter-role distance, role erosion, and role expectation conflict, respectively. Four elements of job stress, viz., self-role distance, role isolation, resource inadequacy, and role overload, have a statistically insignificant, negative impact on job involvement. Job stress has a significantly negative impact on job involvement in commercial banks.

According to the findings of the study, stress arising from role stagnation has the maximum adverse effect on job involvement. In order to improve job involvement of its executives, the bank management should minimise stress caused by their feeling of being stuck up in the same role. Opportunities for learning and progress should be provided to the employees for greater job involvement, which is possible only through job rotation, workshops, and career advancement. It is proposed that six job stressors should be curbed in order to enhance the executives' job involvement. Job rotation may help in avoiding role stagnation. Moreover, the employees need to be encouraged to be more innovative at their job. Furthermore, role ambiguity demands that the employees need to be informed about the organisation's expectations from them so that they feel involved in attaining the organisational objectives. Furthermore, adequate training should be provided to the executives so as to build and develop their skills for effective execution of work and, thereby, enhancing their job involvement. Adequate flexibility should be provided at the workplace so that the employees are able to properly manage their domestic and job duties, thereby minimising their inter-role distance and increasing their job involvement. Moreover, the assignment of work to an executive in accordance with his preference will lead to higher job involvement by increasing his interest in the job. Finally, a synchronisation of the demands of the key people working at different levels is necessary for lower role-expectation conflict and, therefore, higher job involvement of the executives.

It is hoped that the findings of the study provide food for thought and impetus for further research that eventually prompts the banks to formulate appropriate human resource policies, conducive to lower job stress and optimum level of job involvement, leading to more efficient and productive bank workforce, benefitting the employees, employer-banks, customers, and the society at large.

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DETERMINANTS OF PURCHASE-DECISION FOR MOTORCYCLE
A Study in Selected Cities of Gujarat State

H.J. Jani* and Kerav Pandya**

Abstract

This study seeks to investigate the determinants of purchase-decision for motorcycle in India. The data was collected from 450 motorcycle-users, located in five major cities of relatively affluent districts of the Gujarat State, by using the convenience sampling method. We found that friends and relatives were the main source of information and the major influencers in the motorcycle purchase. Moreover, fuel-mileage, technology, and maintenance cost were found to be the most important features of motorcycle for the users. Based on cluster analysis, the respondents were classified into three clusters. While cluster-1 respondents were seen to give attention to specific motorcycle features, including style, power, technology, safety, and pick-up, Cluster-2 respondents were concerned about price and mileage, and Cluster-3 respondents were found to be more demanding and attached equal importance to all the relevant product features. The study concluded with significant policy implications for motorcycle manufacturing companies.

Key words: ***Purchase-decision, Motorcycle users, Product features, Gujarat state***

INTRODUCTION

EVERY human being is a consumer. People consume things of daily use; they buy products according to their needs, preferences, and buying capacity. Buying of a product depends on the buyer's perception, self-concept, social and cultural background, age and family cycle, attitudes, beliefs, values, motivation, personality, social class, etc., that may be internal or external to the buyer. Marketing authorities feel that a buyer is primarily influenced by the social environment in which he lives – his family, neighbours, friends, peer-group, and the society. And every component of his social environment leaves an imprint on him, which influences his buying behaviour.

Understanding the buying behaviour of the target market is the essential task of a marketing manager under modern marketing (Kotler, *et al.*, 2009). However, the study of consumer behaviour is probably the most complex of all the marketing activities, as the consumer needs, wants, tastes, and preferences often change and are affected by several factors, which are difficult to analyse and assess. At the same time, it is necessary to study consumer behaviour so that effective marketing strategies can be evolved in respect of the product, price, promotion, and physical distribution.

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Simply stated, an understanding of the buyer behaviour provides insight into planning and implementation of various marketing programmes and strategies. A marketer who understands how the consumer responds to different product features, price, advertising appeal, media, and distribution system will have an enormous advantage over his competitors.

Motorcycle Industry in India: A Brief Profile

The dynamics of the Indian two-wheeler industry has changed significantly over the years. There has been a shift in the demand towards motorcycle from the geared scooters. This change has occurred due to various factors, including the vehicle's style, variants, fuel consumption, pick-up, after-sales service, and price. Among these, a narrow price difference between a 'boxy' geared scooter and a 'sleek-cum-trendier' motorcycle contributed significantly to the shift in demand.

In India, the two major manufacturers of motorcycle are Hero MotoCorp (earlier known as Hero Honda) and Bajaj Auto. Both of them seem to be well-poised to capitalise on the growth opportunity, mainly due to a wider distribution network and an impressive new-model launch. Hero's legacy of a strong after-sales service and well-established brand equity, have helped the company to increase its sales and profit volume growth. TVS, the third two-wheeler manufacturer has also been growing, but at a lower rate. Apart from the domestic market, these three players are also targeting the South-east Asian markets for their future growth. Moreover, Kawasaki has plans to utilise Bajaj's manufacturing facility at Pune as a global outsourcing base for select markets. This will keep sales growth ticking for Bajaj. A majority of private transport users in India depend on the two-wheeler due to convenience and lower price and maintenance cost as compared to the four-wheeler. Moreover, nearly 78 per cent of the two-wheeler market is accounted for by the motorcycle segment (SIAM, 2012). In the motorcycle industry, various Indian and foreign players are competing for a larger market share. They all seek to study the consumer psychology for providing the preferred features in the two-wheeler, for designing their advertisements, and for identifying appropriate ways of communication to consumers.

LITERATURE REVIEW

India is the second largest country in the world, after China, in terms of population, and the majority of people fall in the lower and middle-income groups. Therefore, it is important for the marketer to study this segment to understand consumer needs and preferences. Subrahmanyan and Gomez-Arias (2008) conducted a study on the integrated approach to understand consumer behaviour from the bottom-of-the pyramid. The authors found that despite the income and resource constraints, the bottom-of-the pyramid consumers were sophisticated and creative. Moreover, they were motivated not just by survival and physiological needs, but were also interested in fulfilling higher-order needs either to build the social capital for cultural reasons or as a compensatory mechanism. Advances in information and communication technologies have enabled the bottom-of-the pyramid to connect to the global economy. The authors noted that mobilising community efforts, creative pricing methods, innovative product designs, tapping into cultural and locally prevalent ways of communicating, were the major successful marketing strategies for this segment. Desarbo, *et al.* (2002) noted that consumers preferred to buy popular brands, as they are perceived to be representing their beliefs.

According to a study conducted by Global Consulting Firm, Frost and Sullivan (2005), the two-wheeler industry is the fastest-growing segment of the automobile industry in India. Moreover, among all the personal transport vehicles, the motorcycle segment is expected to grow fastest, followed by passenger car. All these developments and facts have made the two-wheeler industry one of the core industries in India.

George, *et al.* (2002) found that the motorcycle segment had a larger number of entries than scooter or moped segments. In the scooter and motorcycle

segments, inter-brand transmission of information through promotion, product development, and pricing was likely to be effective in influencing the growth rates of the firms operating in such segments. The firms in the moped segment, on other hand, probably compared themselves with the firms in other segments (such as motorcycles) or with other modes of transport and were, therefore, not inter-dependent. This argument explains why convergence is conditional in two-wheeler segment.

Rajmanohar (2007) noted the major changes in the Indian two-wheeler industry after reforms in 1991. These reforms led the motorcycle to dominate the two-wheeler market, capturing more than 80 per cent of the market share. In terms of the individual growth of the motorcycle companies, Hero MotoCorp dominates the market, followed by Bajaj Auto and TVS motors. On the other hand, Honda motors and scooters and TVS motors dominate the scooters market. The geared scooters segment has almost disappeared and has been replaced by gearless scooters. In motorcycles also, the technology had shifted from two-stroke to four-stroke two-wheelers. Besides, electric scooters have also entered the consumer market.

Rajan (2007) noted the attributes of the two-wheeler which are important to customers included its look, engine power, mileage, and comfort. He noted that people in the age group of 18 to 30 were swayed by the look and engine power in a two-wheeler.

Viraj (2005) studied auto two-wheelers industry and noted that the Indian two-wheeler market constituted 20 per cent of the global market and was increasing by about 20 per cent per year. In the motorcycle segment, Bajaj Auto had gained ground. However, Hero MotoCorp, through its wide dealer network and fuel efficient models, continues to remain attractively poised to reap the rewards of the growth in industry. The author expressed that in future, competition is likely to be from companies, like HMSI, LML, Suzuki, and Kinetic.

Saraswathi (2008) conducted a study on customer satisfaction over post-sales service, with reference to two-wheeler automobile industry. The study revealed that more than 50 per cent of the respondents perceived that examining the vehicle and filling of the job card were not preformed in their presence. For all other variables, the respondents had favourable perception. While taking the delivery of the vehicle, as many as 31 per cent of the respondents were not aware of service-stations. The purchasers should be made aware of the location of the service centre at the time of delivery, which was of key concern to them. It was found that the mean satisfaction values for some of the dimensions of service are moderate. Hence, the manufacturers or dealers should invest highly valuable resources in the areas, like specific problems of service staff, product knowledge of service staff, customer satisfaction after the test ride, and the quality of consumer's service.

Hanif, Gnanadhas, and Karim (2006) found that family members, friends, and relatives were the important sources of information about the two-wheeler. With regard to the purchase decision, the majority of the respondents took the decision by themselves, but in consultation with their family members, friends, and/or relatives. Moreover, fuel economy, price, and maintenance expenses were the main factors influencing the buying decision for a particular two-wheeler, followed by its brand name, style, and after-sales service.

Krishnansantanan (2007) looked into the various issues faced by the two-wheeler industry. He noted that the motorcycle industry was likely to face competition from the used- and low-price cars. Other issues examined included the declining profit margin due to increased material cost and the shift in the customers' demand in favour of electric vehicles to save on petrol. In terms of the growth, there were expectations that the industry was to grow by 15 per cent. Most of the growth was likely to come from motorcycle. Some of the Indian motorcycle companies were also likely to set up plants in foreign countries to meet the export needs.

According to Reddy (2006), there are four major factors which influenced the buying behaviour of consumers: cultural, social, personal, and psychological. It was found that as far as the mileage was concerned, Hero MotoCorp was ruling the market. Yamaha and TVS were far below the expectations of the consumers based on the mileage per litre of petrol. Moreover, while Hero MotoCorp bike was more popular among the students, TVS was favoured more by employed people, and businessmen opted for Yamaha. As regards the satisfaction from motor bike, 85 respondents stated that Yamaha gave the highest satisfaction and the lowest was from TVS bike.

RESEARCH OBJECTIVES AND HYPOTHESIS

The study was undertaken with the following four major objectives:

1. To ascertain the role of different reference groups in a purchase decision of a motorcycle;
2. To identify the main sources of information and clarifications for the buyer;
3. To explore the product characteristics (attributes and features) that influence the purchase-decision for a motorcycle; and
4. To identify the influence of price on purchase-decision of a motorcycle.

The following hypothesis was formulated to check the relationship between the buyer's age and his main influencer in purchasing motorcycle:

H_{01}: There is no association between the buyer's age and the main influencer in the purchase-decision for a motorcycle.

RESEARCH METHODOLOGY

The convenience sampling method was used to collect data from 450 motorcycle users, located in five cities of Ahmedabad, Vodadara, Surat, Rajkot, and Himmatnagar, in the Gujarat State. The region-wise distribution of the respondents is given in **Table 1**.

Table 1

Distribution of Respondents by Region

Region	City	Respondents	
		No.	%
North Gujarat	Himmatnagar	65	14.44
South Gujarat	Surat	85	18.89
Central Gujarat	Ahmedabad	120	26.67
	Vadodara	100	22.22
Saurashtra	Rajkot	80	17.78
Total		450	100.00

DATA ANALYSIS AND FINDINGS

Consumer Preference for Motorcycle

The study shows that an overwhelming majority (97.33 per cent) of the users preferred motorcycle over other two-wheelers, like scooters and mopeds. The respondents attributed the higher petrol mileage (52.4 per cent), followed by the style (27.3 per cent), to be the main reason for their preference for motorcycle. Other reasons, such as power (9.7 per cent), pick-up (4.9 per cent), and range of choices (2.7 per cent) were preferred by a small percentage of the motorcycle-users. About 2.7 per cent of users showed their preference to two-wheelers other than motorcycle, primarily because of the small parking space required.

Sources of Information and Major Buying-Influencers

About massive majority of 83.55 per cent (376 out of 450) respondents quoted that a thorough search from various sources such as friends, dealers, advertisement, etc., was made by them before purchasing the motorcycle. The break-up of the sources of information is given in **Table 2**.

As shown in the table, a sizeable number of buyers of motorcycle (39.33 per cent) relied on the information obtained from their friends and relatives. Moreover, since motorcycle is considered to be a high-involvement product, influencer plays an important role in its purchase. The table lists main influencers to the respondents in purchasing the motorcycle. As shown in the table, the majority of motorcycle buyers' decision were influenced by their friends and relatives

Table 2

Sources of Product Information and Influencers in Buying Motorcycle

Major Sources	Information Source Respondents		Major Influencer Respondents	
	No.	%	No.	%
Friends/relatives	177	39.33	251	55.78
Product advertisement	76	16.88	78	17.33
Auto mechanic	37	8.22	49	10.89
Show room/dealer	83	18.45	50	11.11
Other sources	3	0.67	22	4.89
Buyers without any information search	74	16.45	-	-
Total	450	100.00	450	100

(55.78 per cent), followed by the advertisement (17.33 per cent), company showroom dealer (11.11 per cent), and auto mechanic (10.89 per cent).

Main Sources for Clarification

As revealed by our survey, the main sources used by buyers to seek clarifications and to clear their doubts are given in **Table 3**.

Table 3

Main Sources for Seeking Clarifications

Source	Respondents	
	No.	%
Company showroom and dealers	298	66.22
Mail to manufacturer	5	1.11
Brochure/leaflet/advertisement	26	5.78
Auto mechanic	114	25.33
Other sources	7	1.56
Total	450	100

As shown in the table, nearly two-thirds (66.22 per cent) of the respondents contacted the company showroom or the dealer for seeking information about the motorcycle before its purchase.

Relative Importance of Product Features

Various product features and attributes of a motorcycle are assigned different importance by the buyers. For this study, 17 features were identified and the importance attached by respondents was sought. The detail about the features used is summarised in **Table 4**.

A five-point scale (with anchors 1 for 'not at all important' to 5 for 'extremely important') was used to identify the importance of different features by the respondents. From the table, it is observed that majority of the respondents considered all the seventeen as significant for motorcycle. At the same time it is also seen that all the features are not equally important for the consumers. Specifically, mileage is found to be extremely important factor as suggested by 59.56 per cent of the respondents, followed by technology (43.11 per cent) and maintenance cost (38.44 per cent). On the flip side, finance facility (6.22 per cent) and colour (3.56 per cent) of the motorcycle are relatively less important factors for respondents in motorcycle segment of two-wheeler industry.

Usage of Promotional Schemes

Price of motorcycle plays an important role in choosing a motorcycle. To attract customers, motorcycle manufacturing companies offer some promotional schemes that reduce the overall significance of price of the motorcycle. A sub-question regarding the usage of promotional schemes used was asked to the respondents who purchased motorcycle under promotional schemes. The data is represented in **Table 5**.

The table shows that only 28.22 per cent of the respondents purchased their motorcycle under some promotional schemes, indicating

Table 4

Importance Assigned Relative to Features of Motorcycle

Product Features	Not at all important		Not important		Indifferent		Important		Extremely important	
	No.	%	No.	%	No.	%	No.	%	No.	%
Fuel-mileage	9	2.00	11	2.44	31	6.89	131	29.11	268	59.56
Price	14	3.11	20	4.44	76	16.89	173	38.44	167	37.11
Style/aesthetics	8	1.78	31	6.89	66	14.67	190	42.22	155	34.44
Engine power	6	1.33	15	3.33	54	12.00	208	46.22	167	37.11
Pick-up	5	1.11	17	3.78	54	12.00	224	49.78	150	33.33
Brand image	6	1.33	18	4.00	78	17.33	202	44.89	146	32.44
Warranty	11	2.44	25	5.56	81	18.00	194	43.11	139	30.89
Financing facility	28	6.22	54	12.00	143	31.78	143	31.78	82	18.22
Re-sale value	14	3.11	50	11.11	120	26.67	162	36.00	104	23.11
Comfort	5	1.11	9	2.00	55	12.22	233	51.78	148	32.89
Safety	7	1.56	9	2.00	46	10.22	220	48.89	168	37.33
After-sales service	6	1.33	14	3.11	58	12.89	206	45.78	166	36.89
Colour	16	3.56	38	8.44	97	21.56	184	40.89	115	25.56
Availability	10	2.22	32	7.11	97	21.56	218	48.44	93	20.67
Technology	8	1.78	12	2.67	43	9.56	193	42.89	194	43.11
Maintenance cost	10	2.22	26	5.78	52	11.56	189	42.00	173	38.44
Durability	5	1.11	16	3.56	82	18.22	213	47.33	134	29.78

Table 5

Usage of Different Promotional Schemes

Schemes	Frequency	%
Free gift	38	29.92
Price-off	53	41.73
Free insurance	33	25.98
Other schemes	03	0.021
Total	127	100

that consumers do not give much importance to such promotional schemes. It is also noticed that 53 out of 127 respondents (41.73 per cent) used the price-off schemes, 29.92 per cent used the free-gift schemes, and 25.98 per cent used the offer of free insurance, while 0.02 per cent used other schemes in purchasing the motorcycle. It seems that the price-off scheme was more popular among buyers of motorcycle, followed by free gift and free insurance.

Most Preferred Brand when Price is not a Constraint

In order to understand the importance of price, a question, 'which motorcycle would you have purchased if price is not a constraint', was asked to the respondents. The preference of respondents for motorcycle brand when price is immaterial is given in **Table 6**.

Table 6

Most Preferred Motorcycle Brand if Price is not a Constraint

Motorcycle Brand	Respondents	
	No.	%
Hero MotoCorp	223	49.60
Bajaj	150	33.30
Yamaha	23	5.10
Honda	23	5.10
Royal Enfield	12	2.70
TVS	11	2.40
Suzuki	4	9.00
Harley Davidson	4	9.00
Total	450	100

The table shows the buyers' preference for Hero MotoCorp, as about half of the respondents preferred (49.60 per cent) it. The second most preferred company was Bajaj, which was chosen by 150 respondents. The least preferred brands included Suzuki (9 per cent) and Harley Davidson (9 per cent).

Relation between Purchase Influencer and the Respondent's Age

The data regarding the main influencer in the purchase-decision for a motorcycle and the respondent's age were cross-tabulated to check the association between these two variables (**Table 7**).

The table shows that for all the age-groups, influence of friends/relatives is highest for purchasing a motorcycle. Further, it is also revealed that unlike matured people, young people considered all influencers while purchasing a motorcycle.

The Chi-square test was performed at 5 per cent level of significance with 9 degree of freedom. The Pearson Chi-square significance value is 0.015, which rejects the null hypothesis. Thus, it might be concluded that there is an association between the age of the respondent and his main influencer in purchasing a motorcycle.

Relative Importance of Product Features: Cluster Analysis

Cluster analysis is a multivariate procedure ideally suited for developing market-segmentation strategy. It classifies the objects (respondents, products, or other entities) so that each object is similar to others in the cluster with respect to some pre-determined selection criteria. Thus, the resulting clusters of objects exhibit high internal (within cluster) homogeneity and high external (between clusters) heterogeneity (Hair, *et al.*, 2006 and Nargundkar, 2005).

In the present study, cluster analysis was applied to 17 factors/features, which were given scores between 1 to 5, where 1 indicates the least important and 5 as the most important. *e*-Cluster analysis was run in two stages. The stage-wise clustering process is discussed below:

Stage 1: Hierarchical Clustering

For the study, the hierarchical cluster analysis was employed using Ward's method. **Table 8** represents the last 10 observations of an agglomeration schedule of hierarchical clustering for the seventeen variables. Agglomeration coefficients and per cent changes in the coefficients were used to identify the number of clusters to be retained.

It is observed from the table that the change in the coefficients is largest when going from Cluster 2 to Cluster 1 (34.61 per cent), followed by the one when going from the third to the second cluster (9.74). If the first change is ignored, then the 3-cluster solution is appropriate. The table also suggests that the cluster solutions beyond four clusters are not efficient as the percent change in coefficient values is increasing.

Table 7

Major Influencers in Purchase Decision: Respondent's Distribution by Age

Main Influencer	Age (in years)				Total
	Below 26	26-35	36-45	Above 45	
Friends/relatives and others	120 (134.07)	93 (87.36)	41 (35.80)	19 (15.77)	273
Advertisements	47 (49.11)	27 (32.00)	2 (13.11)	2 (5.77)	100
Auto mechanic	27 (24.06)	15 (15.68)	6 (6.42)	1 (2.83)	49
Company showroom/dealer	27 (24.55)	9 (16)	10 (6.55)	4 (2.88)	50
Total	221	144	59	26	450
Pearson Chi-square value	20.553(a)				
df	9				
Asymp. Sig. (2-sided)	0.015				

Note: Figures in parentheses indicate expected frequency. 3 cells (18.8 per cent) have expected count less than 5. The minimum expected count is 2.83.

Table 8

Agglomeration Coefficients: Hierarchical Clustering

Cluster No.	Stage	Coefficient	Change	% Change
10	440	43.74	3.60	8.22
9	441	47.33	0.72	1.51
8	442	48.05	0.48	1.01
7	443	48.53	0.71	1.46
6	444	49.24	0.93	1.89
5	445	50.17	12.71	25.33
4	446	62.88	2.77	4.41
3	447	65.65	6.39	9.74
2	448	72.05	24.94	34.61
1	449	96.98		

Stage 2: K-means Clustering

From the first stage, appropriate numbers of clusters were found as three, which is used as an input for the K-mean clustering. In this stage as well, respondents were classified on the basis of the importance of seventeen factors/features of the motorcycle. **Table 9** represents the initial cluster centres. These initial solutions were developed after performing a number of iterations. By these iterations, the initial cluster centres are improved and the final cluster centres are developed.

In all, 20 iterations were performed to get the final cluster centres (**Table 10**).

Table 9

K-means Clustering: Initial Cluster Centres

Product Features	Cluster 1	Cluster 2	Cluster 3
Fuel-mileage	5	5	5
Price	3	3	5
Style/aesthetics	4	1	3
Power	5	1	4
Pick-up	3	1	4
Brand image	5	3	4
Warranty	1	1	5
Finance facility	1	1	5
Re-sale value	1	3	5
Comfort	5	2	1
Safety	5	1	4
After-sales service	3	1	5
Colour	5	1	2
Availability	5	2	1
Technology	5	1	5
Maintenance cost	3	1	4
Durability	5	1	3

Table 10

Iteration History: 3-Cluster Solution

Iteration	Change in Cluster Centres		
	Cluster 1	Cluster 2	Cluster 3
1	4.809	4.259	5.003
2	0.572	1.467	0.388
3	0.286	0.947	0.235
4	0.158	1.141	0.187
5	0.077	0.604	0.092
6	0.063	0.519	0.097
7	0.083	0.637	0.099
8	0.149	0.636	0.139
9	0.114	0.294	0.071
10	0.071	0.162	0.028
11	0.032	0.099	0.031
12	0.037	0.080	0.030
13	0.037	0.095	0.032
14	0.065	0.116	0.033
15	0.084	0.107	0.029
16	0.082	0.111	0.026
17	0.103	0.074	0.027
18	0.067	0.042	0.023
19	0.069	0.058	0.020
20	0.000	0.000	0.000

Note: Convergence achieved due to no or small change in cluster centres. The maximum absolute coordinate change for any centre is 0.000. The current iteration is 20. The minimum distance between the initial centres is 10.344.

Based on this iteration process, final cluster centres were identified for 3-cluster solution. The final cluster centres are shown- in **Table 11**.

As shown in the table, the final cluster centre values of Cluster 3 are higher for all the variables. This indicates that the respondents in this cluster

Table 11

Final Cluster Centres

Product Features	Cluster 1	Cluster 2	Cluster 3
Fuel-mileage	3.616	4.605	4.732
Price	3.009	4.194	4.455
Style/aesthetics	4.214	3.326	4.316
Engine power	4.375	3.535	4.397
Pick-up	4.375	3.504	4.330
Brand image	3.884	3.636	4.354
Warranty	3.366	3.884	4.292
Finance facility	2.473	3.512	3.909
Re-sale value	2.902	3.434	4.182
Comfort	4.188	3.674	4.388
Safety	4.098	3.729	4.512
After-sales service	3.795	3.876	4.483
Colour	4.098	2.860	4.144
Availability	3.536	3.264	4.234
Technology	4.125	3.636	4.651
Maintenance cost	3.491	3.837	4.560
Durability	3.679	3.713	4.373

are more demanding. The respondents in this cluster attach more importance to all the features of motorcycle. On the other hand, respondents in Cluster 2 give more importance to the factors, like mileage and price. The total numbers of respondents in each cluster are presented in **Table 12**.

Table 12

Number of Cases in each Cluster

Clusters	3-Cluster Solution
Cluster 1	112 (24.89)
Cluster 2	129 (28.67)
Cluster 3	209 (46.44)
Total	450

Note: Figures in the parentheses represent percent value.

The table indicates that Cluster 1 clubs 112 respondents. Similarly, Cluster 2 consists of 129 respondents, while the third cluster is the largest and consists of 209 respondents. Cluster 2 respondents have given relatively less importance to the factors, like colour, style, and availability whereas all other factors are moderately important to them. This indicates that respondents in Cluster 2 are more conscious about economy. While respondents in Cluster 1 consider factors, like style, power, pick-up, comfort, safety, and technology to be more important. They are least interested in the factors, like finance facility, re-sale value, and price. All other features are moderately important in this group.

CONCLUSION AND POLICY IMPLICATIONS

The study has revealed that motorcycle is the first preference among the two-wheeler users. Higher fuel-mileage and the style of the motorcycle are found to be the main reasons for this preference. Hence, the two-wheeler companies ought to concentrate more on motorcycle as compared to the other two-wheelers (scooters and mopeds). Bajaj and TVS may do well to use more customer-centric approach to improve their product image in the customers' mind.

Friends/relatives have been found to be the main source of information and influencers in the motorcycle purchase. Hence, marketers may evolve marketing strategies directed towards these reference groups. The study has also revealed that there is an association between the respondent's age and the main influencer in purchasing a motorcycle. Besides the friends/ relatives as main influencers, users also trust the information provided by the company show-rooms, dealers, and auto mechanics.

All the 17 factors/features of motorcycle are considered important by the consumers. Among these features, the three most important ones are mileage, technology, and maintenance cost, whereas finance facility and colour of the motorcycle are relatively less important. Motorcycle manufacturers should improve their product in terms of fuel-consumption (mileage) and improve the technology to reduce the maintenance cost in order to attract more customers. Furthermore, pricing of the motorcycle is noted as one of the major influencers in purchase- decision. Consumers felt that if the price of the motorcycle is ignored, they will prefer premium level, stylish, and powerful motorcycle. Thus, if manufacturers use the same style (design) for medium and lower-end motorcycles, it will be easy for marketers to attract customers. While purchasing motorcycle, Group 1 customers consider style, power, comfort, safety, and technology, Group 2 customers focussed on economy factors, like mileage and price, and the third group of customers attach due importance to all the product features.

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Guard well within yourself that treasure, kindness. Know how to give without hesitation, how to lose without regret, how to acquire without meanness.

George Sand
[pen name of Amantine Aurore Lucile Dupin]
Novelist (1804-1876)

★★★★★

A writer must refuse to allow himself to be transformed into an institution.

Jean-Paul Sartre
Writer and Philosopher (1905-1980)

CONSUMER PERCEPTION AND BUYING INTENTIONS FOR ECO-FRIENDLY PRODUCTS
An Empirical Study

H.C. Purohit*

Abstract

In recent years, companies have been under increasing pressure to communicate their corporate social responsibility (CSR) performance to their stakeholders. It is one of the important factors which may influence the market performance of a business concern. Environmental issues, these days, are very common to be addressed and communicated through their offerings in terms of eco-friendly products to the community. As awareness of the environmental issues and then impact on our life increases, more people are willing to change their behaviour and consumption habit in order to help improve the environment. This paper seeks to ascertain the consumers' buying motives and their awareness about eco-friendly products. It will help the manager in designing and positioning of consumer goods. Indian consumer market is one of the largest markets of the world and designing and positioning of an eco-friendly product as per the expectation of the consumer will definitely help them to succeed in the globally competitive market.

Key words: ***Consumer perception, Buying intentions, Eco-friendly products, Environmental concerns***

INTRODUCTION

CONSUMER learning is a branch of consumer behaviour that focusses on the consumer's learning process. This subject has attracted attention of marketers, since it provides an important opportunity to teach individuals in their role as consumers. Marketers must ensure that their products and services are preferred over their competitors, by teaching to the consumers (Schiffman and Kanuk, 2008). The increasing volume and spread of marketing and advertising is creating a big challenge to the companies to either create awareness about the new products or to retain the consumer's interest in their product.

According to Polonsky (1994), green or environmental marketing includes all activities that are designed to generate and facilitate exchanges intended to satisfy human needs and wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment. Ottman (1997) observed that marketers are incorporating green attributes of products into their existing

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product-lines as a marketing strategy to meet the demand of eco-friendly consumers. Grunert (1993) felt that since the industrial revolution, humans have done irreparable damage to the planet, which has been exploited beyond their regenerative capacity; the consumption activities of private households affected 30 to 40 per cent of environment. D'Souza, *et al.* (2007) observed that marketing practitioners and academics are making efforts to identify and understand green consumers and their needs, and developing market offerings to fulfill these needs.

Environmental marketing can be described as a shift in the managerial thought from viewing the natural and physical environment as an external influence on the decision-making to viewing it as the centre of marketing and management strategy (Menon and Menon, 1997). Product and advertising are two key means of directly influencing consumer awareness (Shrum, *et al.*, 1995; Prakash, 2002). They also have the potential to impact consumer purchase behaviour in different ways, since consumers react differently to different stimuli (McCarthy and Perreault, 2008).

LITERATURE REVIEW

Laroche, *et al.* (2002) reported that ecologically conscious consumers believed that current environmental conditions deteriorated and represented serious problems endangering the security of the world, whereas the consumers who were less sensible to ecological issues perceived that environmental problems would solve themselves. Consumer attitudes towards environmental issues do not necessarily lead to actual environment-friendly purchasing behaviour.

Gan, *et al.* (2008) found that consumers who were environmentally-conscious were more likely to purchase green products. Traditional product attributes, such as price, quality, and brand, are still the most important attributes that consumers consider while making green purchasing decision. Product attributes play a very important role in product development, since they affect consumer product choices and help marketers to satisfy customers' needs, wants, and demands. Ottman (1993) found that all types of consumers, both individual and industrial, are becoming more concerned and aware about the natural environment. Wessells, *et al.* (1999) reported that environmental attributes of a product are more difficult for a consumer to be compared with other easily observable product attributes. According to Uncles, *et al.* (2003), consumer loyalty is the repeat purchase of a product, for that the consumers must find a level of satisfaction in order to purchase the product in future.

Consumer Environmental Values

The studies on green marketing have suggested the following environmental values that influence the consumer behaviour:

Consumption Values

Laroche, Bergeron, and Barbaro-Forleo (2001) stated that modern business firms and consumers are more concerned with the natural environment and realise that their production and consumption behaviour will have direct impact on the environment.

Emotional Value

According to Brown and Reingen (1987), the value which is associated with consumers' feelings (e.g., feeling good, excited) and affective states, resulting in consumer evaluation of a product, can be treated as the consumer's emotional value.

Social Value

Social values are the consumption motives of a consumer that hold beyond a product's function. Consumers use the products for social reasons to enhance their social status rather than their functional attributes (Leigh and Gabel, 1992). De Marez, *et al.* (2007) observed that the social status and image were reflected by the use of innovative green products.

Functional Value

It is the maximum benefit that a consumer seeks at the lowest possible cost, and the acquisition of a green product with the desired physical attributes. Sweeny and Souter (2001) defined the functional value as the major attributes, like price and quality of a product.

a) Price value: It is the utility derived from a green product for the reduction of its perceived short-term and long-term costs.

b) Quality value: Nowlis and Simonson (1996) described the quality value of a product as the utility derived from the perceived quality and expected performance of a green product in comparison to the consumer pre-purchase expectations.

Azjen (2002) observed that behavioural intentions are guided by three considerations: behavioural beliefs, normative beliefs, and control beliefs; more favourable the attitude and subjective norm, the greater the perceived control; the persons' intention should be stronger to perform the action. According to Kotler and Armstrong (2009), at the evaluation stage, the consumer ranks brands and forms purchase intentions. Two factors can influence purchase intention and purchase decision: the consumer attitude and the consumer's expected income, price, and expected product benefits. Peattie (2001) observed that green consumers make green purchasing decisions, based on two purchase characteristics: the degree of compromise required to purchase a green product and the degree of confidence people have in the green product. Roberts (1996b) observed that consumer attitude or belief involved the perceived consumer effectiveness (PCE), which is positively correlated with ecologically-conscious consumer behaviour (ECCB). The PCE is the single strongest predictor of the ECCB, surpassing all other demographic and psychographic variables.

Researchers have analysed various stages of the product's life cycle and developed methodologies to improve the design of the product from an environmental perspective. Consequently, eco-design was broken down into many stages, including product's manufacturing, use, and end-of-life (EOL). Horvath, *et al.* (1995) suggested three goals of eco-design: (a) minimise the use of non-renewable resources; (b) effectively managing renewable resources; and (c) minimise toxic releases to the environment.

Kollmuss and Agyeman (2002) reported that the eco-sensitive consumer consciously seeks to minimise the negative impact of one's actions on the natural resources and minimise resource and energy consumption, use non-toxic substances, and reduce waste production. The researches described that environmental consciousness is influenced by two sets of determinants: (1) external determinants, like media, family, culture; and (2) internal determinants, includes demographics, psychology of a consumer. Consumer's ecological buying behaviour is influenced by four factors: environmental consciousness, willingness to pay higher price for eco-products, perceived environmental characteristics of a product, and company's environmental reputation. Nurse, *et al.* (2010) found that consumers' buying decision of green products depends on attitude, perceived social norms, perceived consumer effectiveness, availability, current purchase behaviour (willingness to pay higher price (WTP), and perceived behaviour control. Straughan and Roberts (1999) reported that the attitude or belief of a consumer is referred as perceived consumer effectiveness (PCE).

The following issues are extracted from the above studies:

1. Environment-conscious consumers are more likely to purchase green products.
2. Consumers' attitude towards environmental issues does not necessarily lead to their actual eco-friendly buying behaviour.
3. Eco-friendly attributes are more difficult to identify as compared to other observable product attributes.
4. Individual and industrial consumers are becoming more concerned to environment and are aware of natural environment.

5. Eco-friendly products have to go through different stages of their life cycle, i.e., Manufacturing → Use → End-of-life (EOL).
6. Eco-sensitive consumers minimise the negative impact of their action on the natural environment.
7. Consumers' buying decision of green products depends on their attitude and willingness to pay high prices for green products.

OBJECTIVES

The present study has the following objectives:

1. To ascertain the relationship between environmental values, consumer satisfaction, and brand loyalty;
2. To explore the ecologically-conscious consumer buying behaviour (ECCB); and
3. To investigate the future action of the consumers for the purchase of eco-friendly products.

RESEARCH METHODOLOGY

The survey questionnaire consists of four parts: (1) green consumption value, (2) satisfaction, (3) loyalty, and (4) information about green products. Green consumption value was measured by using multiple-item scales, modified from previous research studies (Sheth, *et al.*, 1991; Sweeney and Soutar, 2001). Assessment of customer satisfaction and customer loyalty were obtained on a 5-point Likert's scale, ranging from 'strongly agree' to 'strongly disagree'. Satisfaction items reflect a person's positive and affective reaction to evaluations of consumption experiences (De Wulf, *et al.*, 2001). The ecologically-conscious consumer behaviour (ECCB) measures the extent to which an individual respondent purchases goods and services believed to have a more positive (or less negative) impact on the environment (Roberts, 1996). He reported that the behavioural orientation of the scale helps to mitigate one problem widely noted in marketing research and green marketing research in particular, that attitudes often do not translate into behaviour. The ECCB construct was measured using the same 30-item scale used in the Robert's (1996b) study. The individual items were on a Likert's scale ranging from 'always true' (5) to 'never true' (1). The demographic information was also collected.

The Sample

The data was collected from the university students. A structured questionnaire, consisting of the items related to consumption behaviour as well as the ECCB, along with the demographic details, was distributed to them. More than 130 questionnaires were distributed. However, only 105 questionnaires were found suitable for analysis.

Sampling Plan

The questionnaire was distributed to the students of VBS Purvanchal University, Jaunpur. The students who were present in the class/laboratory at the time of distribution of the questionnaire were included and their responses were recorded. The sample was collected from all category students, i.e., science, engineering, management, pharmacy, and social sciences streams.

Reliability of the Scale

In order to ascertain the soundness of the scale, its reliability was checked. It was found that the scale was reliable as Cronbach's Alpha of the scale was 0.876 for the consumption behaviour scale and the ECCB scale was also found to be reliable with the 0.755 value of Cronbach's alpha, as shown in **Table 1**.

Table 1

Reliability Scale

Scale	Cronbach's Alpha	No. of Items
Scale 1	0.876	19
Scale 2	0.755	30

Respondents' Profile

The demographic profile of the respondents is presented in **Table 2**.

Table 2

Demographic Profile of Respondents

Demographic Factors	Category	%
Age	16 to 19 years	8
	20 to 24 years	83
	25 and above	9
Education	Under graduate	25
	Post graduate	74
	Research degree holder	1
Gender	Male	64
	Female	36
Income (Family)	Upto Rs. 10,000	25
	Rs. 10,001- 50,000	35
	Rs. 50,001-1,00,000	27
	Rs. 1,00,001 and above	13
Marital Status	Married	11
	Unmarried	89
Family Occupation	Service	54
	Business	27
	Professional	17
	Farming	2
Family Size	Up to 2 members	8
	3 to 5 members	33
	6 and above members	59

Age: While an overwhelming majority (83 per cent) of the respondents was from the young-age group of 20 to 24 years, 8 per cent were from the teen-age group, and only 9 per cent of the respondents were over 25 years of age.

Education: A large majority (75 per cent) of the respondents were highly educated, the rest (25 per cent) were only graduates

Gender: Majority (64 per cent) of the respondents were male.

Family Income: One-fourth (25 per cent) of the respondents were from the low-income group, i.e., monthly income of up to Rs. 10,000, and more than one-third (35 per cent) were from the income group of Rs. 10,001 to Rs. 50,000, around one-fourth (27 per cent) of the respondents were from the middle-income group, i.e., Rs.50,001 to Rs. 1,00,000, and the rest (13 per cent) had a higher income of more than Rs. 1,00,000.

Marital Status: An overwhelming majority (89 per cent) of the respondents were unmarried.

Occupation: More than half (54 per cent) of the respondents belonged to service class, around one-fourth (27 per cent) of the respondents' family had their own business, and the rest 19 per cent were from other professions or from farming.

Family Size: More than half (59 per cent) of the respondents were from large families, i.e., more than six members and one-third (33 per cent) had three to five members in the family, while the rest (8 per cent) were from small families, i.e., up to two-members or a single-member family.

DATA ANALYSIS AND FINDINGS

The data obtained with the help of both the scales were analysed with the help of the SPSS. The factor analysis of the scale was also conducted. The scale was found significant on KMO Bartlett's test. The data explained 67.212 of the variance (**Table 3**).

Table 3

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.797
Bartlett's Test of Sphericity	Approx. Chi-square	954.111
	df	171
	Sig.	0.000

The factor loading of the items indicate that all the 19 items were categorised into five factors. These factors are referred to as: Factor 1- consumer buying-decision of green products, Factor 2 - consumer satisfaction, Factor 3 - consumer emotional value, Factor 4 - product quality, and Factor 5 - consumer green values. Seven items were loaded in Factor 1, six items in Factor 2, two in Factor 3, two in Factor 4, and two items in Factor 5 (**Table 4**).

The ecologically-conscious consumer behaviour (ECCB) was also found significant on KMO Bartlett's test which explained 54.861 per cent variance of the data (**Table 5**).

The factor analysis of the data was conducted and seven factors of each of the 30 items were obtained (**Table 6**).

Table 4

Consumption Behaviour: Factor Analysis

Statements	Factors				
	1	2	3	4	5
'I would absolutely consider buying those products that are environmental-friendly'.	0.833				
'Everything considered, how likely you, in the future to purchase another new environmental friendly product, are'.	0.792				
'I would absolutely plan to buy the environmental friendly products'.	0.786				
'I definitely expect to buy those products that are environmental friendly'.	0.784				
'I would definitely intend to buy those products that are environmental friendly'.	0.753				
'There is a feeling of individuality about the eco-friendly products'.	0.730				
'Would you recommend those products that are environmental-friendly to a friend or relative'?	0.612				
'I feel proud about my product'.		0.830			
'My product was a smart choice'.		0.817			
'Eco-friendly products are exciting'.		0.680			
'How would you rate your overall satisfaction with your environmental friendly products'?		0.501			
'Overall, how would you judge your satisfaction with your environmental friendly products'?		0.486			
'I am satisfied with my purchase decision of environmental friendly products'.		0.458			
'There is a feeling of freedom in recycled products'.			0.807		
'My product is environmental and technical innovative'.			0.695		
'My vehicle reflects a sense of success'.				0.835	
'My product is environmental friendliness'.				0.807	
'There is a feeling of power in my green products'.					0.777
'There is a sense of prestige about my product'.					0.641
Extraction Method: Principal Component Analysis. *Rotation Method:* Varimax with Kaiser Normalisation.					
a. Rotation converged in 7 iterations.					

Table 5

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.536
Bartlett's Test of Sphericity	Approx. Chi-square	1154.823
	df	435
	Sig.	0.000

Relationship with Consumer Satisfaction

The relationship between the consumer's age and his satisfaction was found significantly negative. However, other demographic factors, like income and family size had no relationship with the consumer satisfaction. This indicates that the new generation consumers are more conscious of their environment, irrespective of whether they belong to a large family or a small family, and whether they are from the lower or higher income-group. Consumer satisfaction was found significantly correlated with his emotional value and green value, but there was no relationship with the product quality. This trend indicates that environmentally-conscious consumers are not much concerned with the quality of the product, but they are not willing to compromise with their ecology. The ECCB factors also have positive relationship with consumer satisfaction. It is noticed that while Factors 1, 2, 5, 6, and 7 have significant relationship with satisfaction, Factors 3 and 4 have no significant relationship with consumer satisfaction (**Table 7**).

Relationship with Consumers' Buying Intentions

The demographic variables, like age, family income, and family size, did not have any positive significant relationship with consumer buying-

Table 6

Ecologically-Conscious Consumer Behaviour: Factor Analysis

Statements	Factors						
	1	2	3	4	5	6	7
'I have switched products for ecological reasons'.	0.682						
'I have convinced members of my family or friends not to buy some products which are harmful to the environment'.	0.627						
'I do not buy products in aerosol containers'.	0.624						
'I have replaced light bulbs in my home with those of smaller wattage so that I will conserve on the electricity I use'.	0.520						
'I will not buy a product if the company that sells it is ecologically irresponsible'.	0.487						
'To save energy, I drive my car as little as possible'.	0.485						
'I do not buy household products that harm the environment'.		0.699					
'I make every effort to buy paper products made from recycled paper'.		0.696					
'I try to buy energy efficient household appliances'.		0.532					
'I use a recycling center or in some way recycle some of my household trash'.		0.375					
'I buy Kleenex made from recycled paper'.			0.778				
'I buy paper towels made from recycled paper'.			0.591				
'I usually purchase the lowest priced product, regardless of its impact on society'.			0.577				
'I buy toilet paper made from recycled paper'.			0.528				
'Whenever possible, I buy products packaged in reusable containers'.				0.781			
'I normally make a conscious effort to limit my use of products that are made of or use scarce resources'.				0.691			
'When I have a choice between two equal products, I always purchase the one which is less harmful to other people and the environment'.				0.473			
'When there is a choice, I always choose that product which contributes to the least amount of pollution'.				0.441			
'To reduce our reliance on foreign oil, I drive my car as little as possible'.					0.832		
'I try to buy products that can be recycled'.					0.686		
'I have purchased a household appliance because it uses less electricity than other brands'.					0.394		
'When I purchase products, I always make a conscious effort to buy those products that are low in pollutants'.						0.778	
'If I understand the potential damage to the environment that some products can cause, I do not purchase these products'.						0.513	
'I buy high efficiency light bulbs to save energy'.						0.506	
'I always try to use electric appliances (e.g. dishwasher, washer and dryer) before 10 a.m. and after 10 p.m.'.						-0.476	
'I have purchased light bulbs that were more expensive but saved energy'.							0.628
'I have tried very hard to reduce the amount of electricity I use'.							0.566
'I will not buy products which have excessive packaging'.							-0.528
'I have purchased products because they cause less pollution'.							0.513
'I use a low-phosphate detergent (or soap) for my laundry'.							-0.463
Extraction Method: Principal Component Analysis. *Rotation Method:* Varimax with Kaiser Normalisation.							
a. Rotation converged in 18 iterations.							

Table 7

Relationship of Consumer's Buying-Decision with Demography, Consumption Behaviour, and ECCB

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Age	1														
Family income	-0.101	1													
Family size	0.204*	0.207*	1												
Buying decision	0.048	0.099	0.076	1											
Satisfaction	-0.460**	0.119	-0.106	0.480**	1										
Emotional value	-0.205*	-0.157	-0.140	0.256**	0.383**	1									
Product quality	0.054	-0.102	0.087	0.141	0.150	0.211*	1								
Green value	-0.060	-0.170	-0.153	0.379**	0.471**	0.292**	0.280**	1							
Factor 1	-0.236*	0.006	0.111	0.003	0.263**	0.206*	0.088	0.002	1						
Factor 2	-0.080	0.096	0.067	0.393**	0.369**	0.087	0.166	0.124	0.233*	1					
Factor 3	0.189	0.003	-0.007	0.274**	0.176	0.006	0.016	0.074	0.216*	0.265**	1				
Factor 4	-0.048	-0.182	0.116	0.257**	0.103	0.101	0.129	0.238*	0.343**	0.311**	0.108	1			
Factor 5	-.0054	-0.034	-.213*	0.341**	0.276**	0.070	0.141	0.319**	0.154	0.324**	0.255**	0.216*	1		
Factor 6	-0.086	-0.011	-0.309**	0.180	0.273**	.254**	-0.230*	0.138	0.268**	0.131	0.303**	0.190	0.125	1	
Factor 7	0.066	0.004	0.039	0.223*	0.297**	-0.002	-0.065	0.214*	0.462**	0.387**	0.230*	0.363**	0.378**	0.306**	1

decision. This confirms that the consumer's age, income, and family size were not a criterion for making a buying-decision of eco-friendly products. Consumer buying-decision was having significant relationship with satisfaction, emotional value, and green value of the consumers, but it has no significant relationship with product quality. This indicates that the quality of a product is not a determinant of consuming a green product. The consumer may ignore the quality if it is eco-friendly, but they were found to have brand loyalty about the green products. Further, consumer buying-decision was also found to have significant relationship with the five factors of the ECCB, except two factors (Factors 1 and 6). These factors were found to have significant relationship with buying decision of a consumer (see Table 7).

Prediction of Consumer Buying-decision

Consumer satisfaction, along with consumption value, as well as the ECCB had 42 per cent contribution in the consumer's buying decision. This trend indicates that the consumer in the society are ecologically conscious and they wish to consume such products which are eco-friendly or less harmful to the environment. This supports the findings of Klein (1990), that 60 to 90 per cent of consumers in North America were concerned about the environmental impact of their purchases. While Factors 1, 3, and 4 of the ECCB were found to have a significant relationship with consumer buying-decision, the other factors evinced no significant relationship with the buying-decision (**Table 8**).

CONCLUSION

The study confirms that the consumer buying and consumption decision is eco-conscious. The younger generation is highly concerned with ecology. The growing age of the consumer has negative relationship with his satisfaction. It indicates that the younger generation is more satisfied with the eco-friendly products. This may be because of the high promotion campaign and excessive product-positioning of the eco-products which has created awareness and changed the cognition of the target customer. But the age had no significant relationship with buying decision which confirms that the consumer buying-decision is based on the product performance and not on the consumer's demography. If the performance is satisfactory, then only the consumers will

Table 8

Prediction of Consumer Buying-Decision

Model		Beta	*t*	Sig.	*R2*	*F*
1	Buying Decision				0.418	6.084
	Satisfaction	0.320	3.024**	0.003		
	Emotional Value	0.130	1.391	0.167		
	Product Quality	-0.002	-0.021	0.983		
	Green Value	0.072	0.702	0.484		
	Factor 1	-0.276	-2.764**	0.007		
	Factor 2	0.169	1.749	0.084		
	Factor 3	0.174	1.977*	0.051		
	Factor 4	0.184	1.979*	0.051		
	Factor 5	0.116	1.257	0.212		
	Factor 6	-0.009	-0.094	0.925		
	Factor 7	0.027	0.252	0.801		

intend to buy the same product again in future. The family income and size also did not have any relationship with satisfaction and buying decision of the consumers. This supports the similar findings of earlier studies conducted by Bearden and Teel (1983), Miller (1972), and Oliver (1980) that consumers perceived product performance as the factor to satisfy their and satisfaction led to brand loyalty.

Consumer satisfaction had positively significant relationship with the buying-decision for green products and consumer consumption values, like emotional and green value, along with the ECCB factors except the two factors that had significant relationship with consumer satisfaction. This indicates that the consumers are emotionally attached with the green products where the quality may be ignored or compromised for the sake of environmental issues, but they intend to consume eco-friendly products and save their environment. The marketers should identify the green attributes of their products as it is more difficult in comparison to the observable product attributes (Wessells, *et al.*, 1999) and position the eco-friendly products to address or target the consumer. Then only, they will be able to succeed in this globally-competitive ecologically-conscious market, as this is an opportunity to the companies to increase their market-share by introducing eco-friendly products.

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INFLUENCE OF CONSUMER'S SELF-MONITORING PERSONALITY TRAIT ON BRAND LOYALTY

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Abstract

This paper seeks to ascertain the relationship between consumer's self-monitoring personality trait and brand loyalty. It examines the self-monitoring personality in a free-recall situation and provides the results that are instructive in providing further information on the specific nature of self-monitoring personality. The data was collected from 116 randomly-selected consumers. The Analysis of Variance (ANOVA) was conducted to identify the significant difference in brand loyalty and consumer's high self-monitoring personality. The study has revealed that there is a negative correlation between self-monitoring personality and brand loyalty, and that while the high self-monitored consumers are brand-switcher, low self-monitored consumers are brand-loyal. This paper also reviews other personality traits which may affect the brand loyalty.

Key words: ***Consumer's personality, High self-monitors, Low self-monitors, Brand loyalty, Brand-switching, Consumer behaviour***

INTRODUCTION

AN individual gets motivated by several physiological and psychological drives, such as hunger, social recognition, affiliation, power, achievement, and personality traits. There is a divergence in brand loyalty due to the difference in an individual's personality, since individuals differ from one another when responding to various environmental factors. There are many changes occurring in the consumer expectations and the competition in the market place, resulting in a variety of brands available in the same product category. Traditionally, the term, 'personality', was used in reference to how individuals could influence others through their external appearances or action. No two individuals are alike and this is visible in the way they express themselves, their attitudes, interest, behaviour, acting, and ability to adapt to the social features of their environment. It is possible to find individuals having a single personality characteristic. In the external environment, there are stimuli which are in the form of cues, such as a brand, an ad, or a word of mouth. An individual with a specific drive or need seeks a cue which could satisfy him. After spotting the cue, his response is to buy the product or brand.

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A customer shows loyalty towards the brand by maintaining differentiation. One useful way to differentiate is on the basis of quality. On the other hand, loyalty may also influence the personality of the consumer. This study seeks to construct a whole and a more realistic conception of brand loyalty and self-monitoring personality trait. Here, we consider self-monitoring personality trait and its influence on brand loyalty. A personality trait is a strong factor in the prevention of brand-switching. Self-monitoring refers to an individual's ability to adjust his behaviour to external situational factors.

According to Snyder (1974), the population can be divided into two groups: (a) High self-monitors (HSMs), who use the behaviour of others to guide their own conduct, and (b) Low self-monitors (LSMs), who use their inner beliefs values, attitudes, and other personal attributes, for their behaviour. It has been suggested that the HSMs are concerned with their image that they present to others, and tend to use situational and interpersonal specifications to ascertain their behaviour in the given situations. They, therefore, exhibit different behaviour in different situations, depending on the social cues, evident in each context. It is the HSMs that show noticeable situation-to-situation changes in their behaviour (Snyder, 1974). The findings tend to support this idea, with HSMs showing marked changes in their behaviour, relative to the situational cues of appropriateness.

In contrast, the LSMs tend to use their values, beliefs, and attitudes as guide for behaviour, and less emphasis on situational cues. They are not concerned with altering their behaviour to 'fit in' any situation. That is, they are concerned to act in accordance with their inner beliefs and dispositions, and, therefore, show strong consistency in behaviour.

This study focusses upon consumer behaviour, and the role that self-monitoring trait plays in his behaviour. In this context, Snyder suggests that the LSMs focus on quality-based characteristics in order to express inner values and attitudes. The HSMs, on the other hand, wishing to present a particular image to others, will focus on image-related product characteristics while evaluating a product. In other words, while LSMs will choose consumer items based upon purported quality characteristics inherent in these products, the HSMs will focus on image, or value-expressive characteristics for evaluating consumer items. They are highly sensitive to external cues and can behave differently in different situations. The HSMs are capable of presenting striking contradictions between their public persona and their private self, and are capable of putting on different 'choices' for different brands. The LSMs cannot disguise themselves in that way. They tend to display their true disposition and attitudes in every situation. Hence, there is a high behavioural consistency in who they are and what they do.

This concept of self-monitoring (HSM and LSM) was used as an independent variable and brand loyalty as a dependent variable in this research. All other variables which may influence the consumer's brand loyalty were controlled by the researchers.

Brand loyalty is the formation of preference for a brand, emerging from the evaluation by the consumers. In such an evaluation, a brand must offer superior value and uniqueness that drives loyalty. Out of the products of daily use, when the need arises, the consumer buys a particular brand. When he continues to buy the same brand over a period of time, he develops brand loyalty. It, then, becomes a condition that he buys the particular brand whenever there is a need. Buying is done in a stereotypical manner without cognitive involvement. A wrong decision is unlikely to hurt the customer.

This study seeks to investigate the relationship between the psychological construct of self-monitoring and consumer behaviour. Moreover, the results demonstrate a relationship between two sub-disciplines of psychology, namely self-monitoring (Snyder, 1974) and decision-making (Damasio, 1994; Epstein, 1997; Hammond, 1996). A habitual buying leads to two possibilities: (a) a habitual buyer may be a loyalist, or (b) he may be buying due to inertia.

Brand loyalty is not a dichotomous construct. It may operate at different levels. Five levels of brand loyalty can be distinguished, extending from a committed buyer on one extreme to a brand-switcher or indifferent buyer, on the other. The other three categories of buyers are in between these states. Each state implies a different type of brand equity asset and different types of marketing challenges. At the lowest level, the indifferent buyer does not attach importance to the brand. The buying is done on a basis, other than the brand, like product availability, price, and package. These buyers are switchers and are indifferent to the brand. The second category of buyers comprises those who are satisfied with the brand (absence of dissatisfaction). Even if they have no reason to switch, they may switch, given the stimuli from the competitors. These can be called 'habitual buyers'. They are vulnerable and can succumb to the benefits offered by the competitor. The third category is of those satisfied with the brand, though they have switching costs in term of time, money, and risk. In all these categories of customers, a virtually negligible element of attitudinal commitment to the brand is visible. They all signify different shades of loyalty.

The fourth category of loyalty implies that the buyers like the brand. They tend to have some sort of emotional attachment to the brand. This attachment may develop with the prolonged relationship (usage over a long period of time), experience, or perceived high quality. It is an effect-driven loyalty and people of this category consider a brand as a friend. At the next level of loyalty, the customers tend to be committed to the brand. The commitment is "an enduring desire to continue the relationship and to work to ensure its continuance". Customers get committed to a brand when it achieves personal significance for them. It happens when buyers perceive it to be a part of them. This study is based on the above five categories of brand loyalty. It is assumed that the people who come under the first three categories are referred to as high self-monitors and the people who fall under the last two categories are low self-monitors.

Variety-seeking behaviour occurs when brands are perceived to be differentiated and the product falls into the low-involvement category. This means the product category does not matter in terms of functional or symbolic satisfaction. The variety-seeking behaviour is encouraged by the 'why not try it' attitude. The trial is not made by the buyer after deliberation, rather, the consumer sticks to shortcut decision-making, jumping away from the need recognition to purchase. This type of buying is made by high self-monitors.

REVIEW OF LITERATURE

There has been an increasing interest in the concept of brand loyalty among marketing academicians and practitioners (Aaker, 1997). Brand loyalty is the central aspect in brand management (Choudhari and Holdbrook, 2001). It has been shown that a brand is a valuable intangible asset. Brand loyalty is more than a simple re-purchasing; customers may re-purchase a brand due to situational constraints, lack of viable alternatives, or out of convenience (Jones, Mothersbaugh, and Beatty, 2002). Despite massive attention being paid to brand management in the last two decades, few brand management concepts exhibit how the value of a brand increases. This is not a specific brand management weakness, scholars, like Doyle (2001), Srivastava, Shervani, and Fahey (1998), and Moorman and Rust (1999) have drawn similar conclusion about the entire marketing discipline. Many scholars have sought to answer the question as to how a brand is perceived. They have focussed solely on intangible aspects and are not clear on how external perception is transformed into value for the brand-owning firm. Brand personality is the set of human characteristics associated with a brand (Aaker, 1997). According to Freling and Forbes (2005), brand personality does matter, and it matters more than we thought it did. Individuals differ to the extent to which they monitor (observe and control) their expressive behaviour and self-presentation (Snyder, 1974). The LSMs tend to exert relatively little control over their expressive behaviour. They project towards others, a stable self in diverse settings of social interaction and their behaviour is guided predominantly by inner beliefs and attitudes rather than social influences. In contrast, high self-monitors exert more expressive control over their social behaviour and tend to adapt their appearance and actions to specific situations. During the last three decades, a substantial body of research has been accumulated on self-monitoring in social psychology, in general, and in consumer psychology, in particular (DeBono and Harnish, 1988; Shavitt, Lowrey, and Han, 1992; Snyder and DeBono, 1985). While the HSMs produce word association responses that suggest selective activation of an experimental and personally-meaningful system, the LSMs produce responses indicative of a factual, intellective system (Epstein, 1991, 1994, 1997; Hammond, 1996; Loewenstein, 1996; Bechara, *et al.*, 1997). While the HSM always focussed on the product quality, LSM focussed on the product image.

The studies do not support the tendency of HSMs to focus selectively to the ideas relating to image/form/social expressiveness, or for LSMs to focus selectively on ideas relating to functions, quality, and utilitarianism. While the findings indicate that LSMs focus on intellectual, factual, and non-personal information, HSMs focus on highly-individualised, experiential ideas (Sue-Ellen Kjeldel, 2003), when describing the objects.

There have been a number of valuable studies on brand loyalty and self-monitoring personality trait. However, not many studies have been conducted to explore the interrelationship between these two important variables to understand the effect of consumer personality on brand loyalty. Therefore, there was a need to conduct a systematic research to fill this gap. That is why the present study was conducted.

RESEARCH OBJECTIVES AND HYPOTHESIS

The main objectives of the study are given below.

1. To ascertain the relationship between a consumer's personality and his loyalty towards a particular brand by using a testable hypothesis;
2. To explore the personality of a consumer who is brand loyal;
3. To examine the phenomenon and to achieve new insights with brand loyalty and self-monitoring personality trait;
4. To examine whether the consumers having high self-monitoring personality are less brand loyal and the consumers having low self-monitoring personality are high brand-loyal; and
5. To propose appropriate marketing strategies for policy-makers to attract consumers having different personality traits.

The following null hypothesis was formulated for testing:

H_{01}: There is no association between the self-monitoring personality trait of a consumer and his loyalty towards a particular brand.

RESEARCH METHODOLOGY

Nature of the study

The study is empirical in nature. The survey method was used with the help of a structured questionnaire for collecting the primary data. Around 180 questionnaires were distributed but only 132 completed questionnaires were received out of which 16 incomplete responses were eliminated and the final usable sample size, 116, became the source of the primary data. The response rate was, thus, 64.4 per cent. Before delivering the questionnaire to the respondents, the concepts of brand loyalty and self-monitoring were explained, so that the participants could properly understand them before filling the questionnaire. The respondents' profile is given in **Table 1**.

Questionnaire and Measures

The questionnaire used for data collection had three parts. Part I of the questionnaire contained demographic information about the respondent, such as age, education, work experience, and income. Part II was intended to measure the consumer's brand loyalty which was based on Sharma and Mishra (2009), whose validity and reliability was already tested. Part III was intended to explore the self-monitoring behaviour of the respondent with the help of an instrument developed by Lennox and Wolfe (1984).

Table 1

Respondents' Profile

Variables	No.	Per cent	Cumulative percentage
Age Group (in years)			
20-30	32	28	28
31-40	34	29	57
41-50	22	19	76
51 and above	28	24	100
Total	**116**	**100**	
Education Level			
Graduates	32	28	28
Post graduates	84	72	100
Total	116	100	
Field of Education			
Arts	31	27	27
Commerce	38	33	60
Science	21	18	78
Engineering	17	14	92
Medicine & Law	***9***	***08***	***100***
Total	**116**	**100**	
Gender			
Male	24	21	21
Female	92	79	100
Total	**116**	**100**	
Income (in Rs.)			
Less than 2,00,000	17	15	15
2,00,001-3,00,000	24	21	36
3,00,001-4,00,000	22	19	55
4,00,001 and above	56	45	100
Total	**116**	**100**	

The data analysis was carried out by using the following variables:

Independent Variable	High Self-Monitor Low Self-Monitor
Dependent Variable	Brand Loyalty
Control Variable	Other variables can also influence the consumer brand loyalty. However, in the present study, it was assumed that either those variables did not influence the brand loyalty or they could be controlled by giving the respondent necessary instructions while administering the questionnaire.

RESULTS AND DISCUSSION

Section I: Results

The categories of brands and consumer's personality traits are shown in **Table 2**.

For testing the hypothesis, the data was analysed with the help of the Analysis of Variance (ANOVA), taking the scores of self-monitoring personality trait and brand loyalty at a significance level of 0.05.

Grand sum: $\left(\sum X + \sum Y\right)$: 2828+5204= 8032

Grand sum of squares: $\left(\sum X^2 + \sum Y^2\right)$= 73398 + 239102 = 312500

Step 1: Correction (C): $\frac{\sum X^2}{N} = \frac{(8032)^2}{232} = 278073$

Table 2

Brand Categories and Personality Characteristics

Brand Category (with scores)*	No.	Per cent	Cumulative percentage
Category 1 (00-08)	00	00	00
Category 2 (09-16)	13	11	11
Category 3 (17-24)	39	34	45
Category 4 (25-32)	55	47	92
Category 5 (33-40)	09	08	100
Total	116	100	
Personality Trait	No.	Per cent	Cumulative percentage
High Self-monitors	52	45	45
Low Self-monitors	64	55	100
Total	116	100	

Step 2: Total sum of squares (TSS): $\sum X^2 - C$

=312500-278073

=34427

Step 3: Between sum of squares (BSS):

$$\frac{\left(\sum X_1\right)^2}{N_1} + \frac{\left(\sum X_2\right)^2}{N_2} - C$$

$$= \frac{(2828)^2}{116} + \frac{(5204)^2}{116} - 278073$$

$$= (68944 + 233462) - 278073 = 24333$$

Step 4: Within sum o f squares:

TSS-BSS = 34427-24333 =10094

Step 5: F-test:

$$\frac{\text{Between group variance}}{\text{Within group variance}} \quad \frac{24333}{88.54} \quad 274.82$$

where:

X= Brand loyalty

Y= Self-monitoring

N= Number of the pairs of observations

Since there were 116 cases, we have *N-1= 116-1= 115* degree of freedom *(df)* in all. The *df* for between-groups is equal to the number of group *(K) minus* one.

Summary of Analysis of Variance (ANOVA) (One-way)

Source of Variation	*Sum of Squares*	*Degree of Freedom (df)*	*Mean Square or Variance*
Between-Groups	243.3351	2-1=1	$\frac{24333}{1} = 2433$
Within-Group	100.9352	116-2=114	$\frac{10094}{114}$=88.84
Total	344.2663	116-1=115	
$\frac{\text{Between group variance}}{\text{Within group variance}} = \frac{24333}{88.54} = 274.82$			

Since there are two groups, *df* for between-groups is *K-1= 2-1= 1*. The *df* for within-groups is equal to the number of cases *minus* the number of groups *(K)*. Hence, it is equal to *N-K= 116-2= 114.* After putting the number of degree of freedom, the sum of squares for each of the three sources of variations, we computed mean squares or variances, which were obtained by dividing each of the sums of squares by the respective number of degree of freedom. These two types of variances are the estimates of the population variance.

The *F*-ratio is interpreted by using the *F*-Table (Guilford and Fruchter, 1978). In the *F*-table, the number of the degree of freedom for the greater mean square (df_1) is written at the top and the number of the degree of freedom for the smaller mean square (df_2) on the left-hand side. In this case, df_1 = 1 and df_1 =114. Locating at these *df*s, we find that the required *F*-ratio at the 0.05 level is 1.96 and at 0.01 level, 2.58. Since the calculated value of *F*-ratio is 274.86, which exceeds the table value. The null hypothesis is rejected.

Thus, it can be concluded that there is an overall association between the self-monitoring personality trait and the consumer's loyalty towards a particular brand. To find the degree of correlation, we use Karl Pearson's Coefficient of Correlation in the next section.

Section II: Calculation of Karl Pearson's Coefficient of Correlation

Karl Pearson's Coefficient of Correlation can be computed as follows:

$$r = \frac{\sum dxdy}{N\sigma_x\sigma_y}$$

where:

x = Brand loyalty score

y = Self-monitoring score

r = Correlation coefficient

N = Number of the pairs of observations

$\bar{x}$ = Mean of x

$\bar{y}$ = Mean of y

σ_x = Standard deviation of series x

σ_y = Standard deviation of series y

$$\sigma_x = \sqrt{\frac{\sum dx^2}{N}} = \sqrt{\frac{4453.31}{116}} = 6.19$$

$$\sigma_y = \sqrt{\frac{\sum dy^2}{N}} = \sqrt{\frac{5639.79}{116}} = 6.97$$

$$r = \frac{-3384.93}{116 \times 6.19 \times 6.97}$$

or, *r = -0.6763*

The value of *r* is -0.67, which shows that there is a moderately negative correlation between the brand loyalty and the self-monitoring personality trait.

Testing of Correlation Significance

Probable Error (P.E.) $= \frac{2}{3} \times \frac{1-(r)^2}{\sqrt{n}}$

$$= \frac{2}{3} \times \frac{1-(-0.67)}{\sqrt{116}}$$

$$= \frac{2}{3} \times \frac{1-0.4489}{10.7703}$$

$$= \frac{2}{3} \times \frac{0.5511}{10.7703}$$

Probable Error = 0.03411

Hence, *6 (P.E.)* = 6 X 0.03411 = *0.2046*

The coefficient of correlation (r) is more than 6 times of P.E. (r > P.E.) (0.67>0.2046) The correlation between the data (brand loyalty and self-monitoring personality trait) series exists and is definite and significant. This moderate negative correlation is graphically represented in **Figure 1**.

The High self-monitors' are defined as those with scores of approximately 45 or higher. If respondents are high self-monitors, they probably adapt leading market situations and adjust their buying behaviour accordingly. The result of coefficient of correlation reveals (*r* = -0.67) that as the score of the respondents of self-monitoring scale goes higher, the brand loyalty goes lower and vice versa. The low self-monitors (whose self-monitoring score in lower than 45) tend to ignore external cues (advertisement, sales promotion, substitute's price, and market situation), and maintain buying behaviour consistency even when the market demand changes.

Section III: Discussion

As regards, the effect of self-monitoring personality traits on the consumers' loyalty, towards a product or service, it was found that the high self-monitors were brand-switchers. Moreover, they seek to promote a desired public image, are sensitive to situational and interpersonal cues,

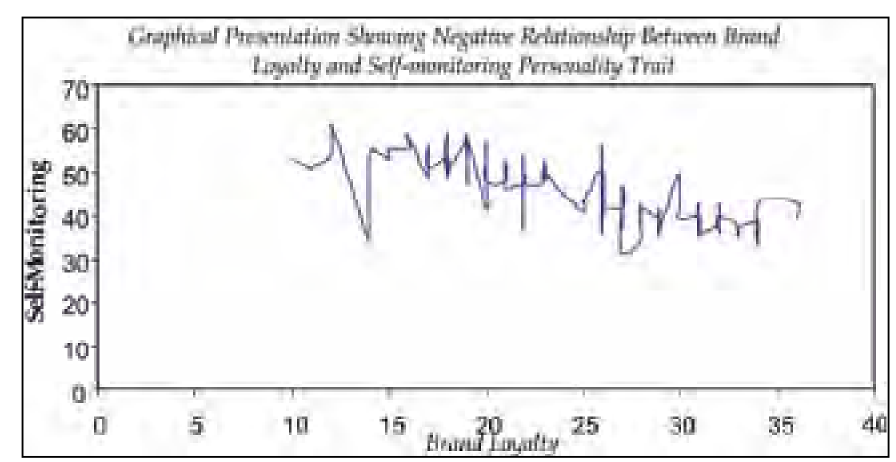

Figure 1 : Correlation between Brand Loyalty and Self-monitoring Personality Trait

and regulate their expressive self-presentation by jumping brands, while low self-monitors lack either the motivation or the ability to regulate their expressive behaviour, and express behaviour that is consistent with their inner attitudes and beliefs that make them brand-loyal.

In addition to the difference in monitoring expressive behaviour and self-presentation in the society, high and low self-monitors differ in their buying behaviour. High self-monitors use their behaviour as a means for impression management .They tend to be more pragmatic and utilitarian, investing emotionless commitment to a particular brand (Snyder and Simpson, 1984). On the contrary, low self-monitors tend to be driven by self-validation motives. They tend to develop strong affective bond and maintain them for a longer period of time.

A typical characteristic of high self-monitors, which is reflected from this study, is their ability to impress and entertain and to play on others' expectations in order to get along and be liked.

POLICY IMPLICATIONS

Brand loyalty has been a major focus on strategic marketing planning and offers an important basis for developing a sustainable competitive advantage that can be realised though marketing efforts. The ability to convert a brand-switching buyer into a loyal buyer is higher where the buyer has favourable personality traits and has optimistic attitude towards the particular brand. The role of trust in building and maintaining brand loyalty has been researched extensively in consumer personality.

The findings of the study have a number of practical implications for the practising marketing managers, who wish to establish the consumer loyalty. Those consumers who are high self-monitors tend to look to other brands for bearing and accordingly guide their own buying behaviour. They are more sensitive and responsive to image-oriented advertisements and willingly try such products. They are more likely to the product innovators. On the other hand, a company should identify with and plan accordingly so that the consumers who are low self-monitors are guided by their own preferences or standards and are less likely to be influenced by product features. They pay more attention to advertisements that focus on product features, quality, and benefits. Furthermore, they are likely to try and pay extra for such products and are less consumer innovators.

In a general sense, these results are helpful in further explicating the manner in which high self-monitors and low self-monitors differentially focus on particular product characteristics. The study has provided more specific description of the qualitative differences in ideas that high self-monitors and low self-monitors have towards the objects. Rather than high self monitors focussing on product quality, and low self-monitors focussing on product image, as previous research in this area has indicated, it would seem that the differences between these two groups are more fundamental in nature, and relate to differential access to particular memory systems, namely, the rational, or the factual system and the experiential, or individualised system.

The goal of the marketers and consumer behaviour psychologists is to better understand the behaviour of the consumers, and it is suggested that the (self-monitoring) research is instructive in this regard. It has provided a link between self-monitoring theory and brand loyalty, thus, moving consumer behaviour research a little close to its (above-stated) goal.

CONCLUSION

The study confirms that personality factors do have an impact on brand loyalty. Moreover, the persons with high self-monitoring personality are less brand-loyal and are more calculative in selecting the brand rather than pursuing a particular brand. They are sensitive enough while selecting any brand as their behaviour varies from situation to situation and this quality makes them brand-switchers. On the other hand, the low self-monitored consumers are brand-loyal, reason

might be the quality of the product or any other variable which may influence them to stick to a particular brand. Hence, this quality makes them brand-loyal. The study also reveals that there is an association between the consumer's personality and his loyalty towards a particular brand. Whether a consumer is brand-loyal or switcher, it depends on his personality traits because personality is the composition of various unique characteristics. Furthermore, it is noted that the high self-monitors tailor their buying behaviour for the sake of the desired public appearance and the company's message for a product or services, whereas low self-monitors are relatively unlikely to practice such situational guided impression-management strategies. As regards the influence of company's advertisement and sales promotion schemes, the high self-monitors would modify their buying habits in a direction consistent with the attitudes attributed to the product. Conversely, the low self-monitors would be unaffected by advertisements.

Thus, self-monitoring propensities involved fundamental differences in the ways in which the consumers thought of the brands around them. In terms of the cognitive process that are activated in the service of initiating product-consumer relationship, the high-self-monitoring consumers were found to be more brand-loyal than low self-monitoring ones to engage in the mental effort required to lay the foundation for product-consumer relationship.

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REGULATION OF COMPARATIVE ADVERTISING IN INDIA

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Abstract

Comparative advertising is a widely-used form of commercial advertising in many countries. It basically involves making comparison between two products or services, by one of the competitors with the intention of showing his product as superior to the other. Such advertising intends to influence consumers' buying behaviour by comparing the features of the advertiser's product with that of the competitor. This article is intended to analyse the statutory provisions governing comparative advertising in India, judicial pronouncements in the area, and the measures to regulate comparative advertising in a way that a competitor is not put to disadvantage by denigrating his product or service.

Key words: ***Comparative advertising, Statutory provisions, Decided cases, ASCI guidelines, India***

CONCEPT OF COMPARATIVE ADVERTISING

COMPARATIVE advertising refers to advertising where one firm promotes its goods or services by comparing them with its competitor's goods or services. The comparison is made with a view to increasing the sales of the advertiser, either by suggesting that his product is superior to that of his competitor or by denigrating the quality of the competitor's product.

Comparative advertising basically involves making comparison between two competitive products or services, by one of the sellers, claiming his product or service to be superior to the other. It often involves the use of an identical logo or trademark, a play on words, or a research-claim. Trade rivalry has been a common phenomenon in the advertising world. Customers often witness product wars on television and other advertising media. In India, the concept of comparative advertising emerged in the nineties. The 1990s era witnessed the Pepsi vs. Coke war, which was followed by the Complan vs. Horlicks tug of war, and the latest in the basket has been the Rin vs. Tide war. In all these advertisements, one firm disparaged its competitor's product to establish the superiority of its product in the market.

Unfortunately, there is no absolute prohibition of such advertising under the Indian law. A firm is at liberty to reclaim its product as the best, through advertising. However, the regulation of such practices comes with some riders, such

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as not hurting the reputation of the competitor's brand. The Advertising Standards Council of India (ASCI) provides guidelines to regulate the contents of advertisements. However, its recommendations have no statutory backing.

BENEFITS OF COMPARATIVE ADVERTISING

Benefits to the Consumer

The increase in competition results in a greater use of comparative advertising by companies to tell consumers why their products should be bought. With numerous brands sold in the market, consumers are often confused. A consumer who plans to buy a high value, durable product, has some tough decisions to take. It is here that comparative advertising steps in.

1. Comparative advertising can play the role of a salesman who helps remove and clarify doubts about a brand. A person who has already gone through the various stages in the buying process, like need recognition and information search, may be stuck because he is not able to make comparative evaluation between the brands which he has shortlisted. It is at this stage that comparative advertising helps the consumer to take a better decision.
2. Comparative advertising can give compulsive reasons to a potential consumer to buy a product, and the very fact that the challenger is confident, can create a positive impression.
3. Because of the interest-evoking ability, comparative advertisement often succeed in increasing the extent to which consumers process the information.
4. Consumers, sometimes, get to know the defects and shortcomings of the competing brand.

Thus, comparative advertising helps in informing customers on the relative features of two competing brands. It provides an opportunity to help consumers decide as to which product is better and what is best suited for them. Though comparative advertising has created a lot of controversy, the consumer can get benefitted by such advertising. He can ultimately become more discerning with his improved product evaluation.

Benefits to the Marketer

Comparative advertising also offers some benefits to the marketer.

1. Follower brands can compare with the leader brand. A follower who compares himself with the leader gains in terms of being perceived similarly, and positioning itself near the leader, by putting itself and the competitor on the same consideration set. Thus, comparative advertising is an effective positioning tool for the marketer.
2. If comparisons are genuine and can be substantiated, positive results can be attained.
3. A brand may also be able to reveal the weaknesses of the competing brand through comparative advertisements.

While comparative advertising may have its advantages, advertisers should tread on this path cautiously and avoid overdoing it. It is alright to offer logical reasons in order to drive home a product's superiority. However, there is no point in using comparison unless there is a genuine superiority.

RESEARCH ON COMPARATIVE ADVERTISING

The researches conducted on whether or not comparative advertising helps in improving the image of the challenging brand is not definitive. While it may help in damaging the image of the challenged brand or denigrating it, it cannot be conclusively said whether it helps enhance the image of the challenging brand itself. However, the following points can be made out on comparative advertising.

1. The comparison offered to consumers who are educated and have the cognitive ability to understand the arguments, might be more effective. On the other hand, in the case of consumers whose cognitive ability is less, comparative advertising would have little effect. The advertisers in such cases may have to resort to cheap gimmicks to denigrate the competitor's product which may not be in the interest either of consumer or the industry.
2. Comparative ads are found to be more effective for categories where consumers tend to use their analytical mind. They tend to fail where consumers use imagery while evaluating the brands. For example, products like automobiles use comparative ads extensively and with effectiveness.
3. When a comparison is made over something insignificant or trivial, it is sure to boomerang. Consumers may soon find out the truth. The company unnecessarily takes the risk of exposing itself.

STATUTORY FRAMEWORK FOR COMPARATIVE ADVERTISING IN INDIA

The Monopolies and Restrictive Trade Practices Act, 1969 (hereinafter referred to as "MRTP Act") and the Trade Marks Act, 1999, work in tandem to provide the basic structure that governs comparative advertising in India.

The Monopolies and Restrictive Trade Practices Act, 1969

Earlier, under the Monopolies and Restrictive Trade Practices (MRTP) Act, 1969, the Monopolies and Restrictive Trade Commission was empowered to pass a cease-and-desist order, where it considered any advertisement to be prejudicial to the public interest in addition to awarding compensation for any loss or injury caused to any person. Now, the Competition Act, 2002, has repealed and replaced the MRTP Act, 1969. The Competition Act came into force on 31st March, 2003. The MRTP Commission, set up under the MRTP Act, has been wound up on September 19, 2009.

The Competition Act is intended to prevent practices having adverse effect on competition, to promote and sustain competition in the market, to protect the consumer interest, and to ensure the freedom of trade carried on by other firms in the market. Under the Act, any excessive expenditure made by a firm on advertising may amount to an anti-competitive practice. The Act also prohibits the abuse of dominant position by an enterprise. Thus, an enterprise should not take undue advantage of its dominant position, by creating entry barriers for small companies, through its large-scale and heavy advertising expenditure.

In case any advertisement of a firm encourages an anti-competitive practice, or takes an undue advantage of its dominant position, so as to create entry barriers for small companies, the Competition Commission of India (CCI), set up under the Competition Act, can conduct an inquiry and can pass appropriate orders. Thus, indulging in any anti-competitive practice can have severe consequences for a company, including the imposition of a fine, or imprisonment, or both.

In India, there is a rich collection of decided cases under the MRTP Act, which lay down the basic framework governing the practice of comparative advertising in India.

Section 36A of MRTP Act listed several actions to be an 'unfair trade practice'. The provision which pertained to comparative advertising were contained in Section 36A(1)(x) of the MRTP Act.

This section defined an unfair practice as a trade practice which, for the purpose of promoting the sale, use or supply of any goods, or for the provisions of any services, adopted any unfair method or unfair or deceptive practice, including any of the following practices, namely, the practice of making any statement, whether orally or in writing or by visible representation which gave false or misleading facts disparaging the goods, services, or trade of another person.

Thus, according to the MRTP Act, unfair trade practices included those practices which led to any disparagement of the goods, services, or trade of another person.

Concept of Disparagement

The term 'disparagement' is not defined in any statute, but judicial pronouncements on the topic appear to have adopted the dictionary meaning of the term.

As defined in *The New International Webster's Comprehensive Dictionary*, 'disparagement' means, 'to speak of slightly, undervalue, to bring discredit, or dishonour upon, the act of depreciating, derogation, a condition of low estimation or valuation, a reproach, disgrace, an unjust classing, or comparison with that which is of less worth, and degradation'. According to *The Concise Oxford Dictionary*, 'disparage' means to bring discredit on, slighting of, or to depreciate. Thus, if a company, in its advertisement, brings some sort of a disgrace, or passes a derogatory remark, or undermines the value of a competitor's product, it would amount to a disparaging advertisement.

The Trade Marks Act

The Trade Marks Act, 1999, which came into force after the Trade and Merchandise Marks Act, 1958, was repealed, defines a 'trade mark' as a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others.

The Act provides for the registration and better protection of trade marks and to prevent the use of fraudulent marks on products and services. Thus, any method of advertising designed to create confusion in the mind of the public, as between the products and services of one firm and another, shall not be permitted. Any person who falsely applies a trade mark and thereby seeks to cheat the people, shall be punishable with imprisonment, or fine, or both.

DECIDED CASES OF COMPARATIVE ADVERTISING

Comparative advertising in India was sought to be regulated under the MRTP Act, 1969 (as amended in 1984) as an unfair trade practice. It was only after the enactment of the Trade Marks Act, 1999 that some headway was made in the direction of comparative advertising. However, as the said Act was made effective only in 2003, comparative advertising case law in India is yet to develop. In the mean time, the MRTP Act was also repealed and replaced by the Competition Act, 2002. However, there are cases of comparative advertising decided by the courts under the MRTP regime. While the focus of these cases was largely on the protection of the consumer rather than the infringement of trademarks, they provided the groundwork for the present legal stance towards comparative advertising in India.

The leading judgments in this respect were the two cases involving Reckitt and Colman. In *Reckitt & Colman of India Ltd vs. Kiwi* {1996 (16) PTC 393}, the Delhi High Court held that a statement made by a manufacturer claiming his product to be the best or puffing up his goods will not give a cause of action for disparagement. However, any statements that portray competitor's similar goods in bad light while simultaneously promoting the manufacturer's own goods is not permitted and will be tantamount to disparagement. In the given case, both parties were in the business of manufacturing shoe polish.

The defendant company, whose brand name was 'Kiwi', issued an advertisement comparing a bottle of its shoe polish with another bottle, marked as 'Product X', whereby the virtues of the defendant's product were extolled while disparaging the other unnamed product. The plaintiff claimed that 'Product X' had a striking resemblance in design to its own product, namely, 'Cherry Blossom' and that the advertisement disparaged its product. The Delhi High Court granted an injunction against the defendants for the disparaging contents of the advertisement.

The Calcutta High Court took a step farther in the case of *Reckitt & Colman of India Ltd vs. MP Ramachandran & Another* {1999 (19) PTC 741}. The plaintiffs were engaged in the manufacturing of blue whitener under the name of 'Robin Blue' for which they had a design registration over the bottle. The defendant company, who was in the same business, issued an advertisement

comparing its product to others, stating that not only was their product cheaper, but was also more effective. In this depiction the company compared its product to a bottle having the same shape and pricing as that of the plaintiff's product. While holding that the advertisement was made with the intent to disparage and derogate the plaintiff's product, the Calcutta High Court laid down five principles in aiding the grant of injunction in such matters:

1. A trader is entitled to declare his goods to be the best in the world, even though the declaration is untrue.
2. He can also say that his goods are better than his competitors', even though such statement is untrue.
3. For the purpose of saying that his goods are the best in the world or his goods are better than his competitors', he can even compare the advantages of his goods over the goods of others.
4. However, while saying that his goods are better than his competitor's, he cannot say that his competitor's goods are bad. If he says so, he really slanders the goods of his competitor. In other words, he defames his competitor and his goods, which is not permissible.
5. If there is no defamation to the goods or to the manufacturer of the goods, no action lies, but if there is such defamation, an action lies and if an action lies for recovery of damages for defamation, the Court will also be competent to grant an order of injunction restraining the repetition of such defamation.

These principles were used in the much-publicised case of *PepsiCo., Inc. vs. Hindustan Coca Cola Ltd* {2003 (27) PTC 305}. However, this case differed from the earlier cases in that the Delhi High Court, in this case, also dealt with the copyright and trademark-related issues.

The plaintiff, in the instant case, claimed disparagement of trademark and copyright in two advertisements of the defendants. Both advertisements allegedly desecrated the plaintiff's products with derogatory remarks. One of the advertisements depicted a thinly-veiled substitute of Pepsi as a '*bachhon wali drink*', while mocking Pepsi's advertising slogan by saying '*Yeh Dil Mange No More*'. The entire commercial conveyed to the viewers that kids should prefer Thums Up over Pepsi, if they want to grow up.

The Court, while using the principles laid down in the two afore-mentioned cases, also went on to state that in order to decide the question of disparagement, the following factors have to be kept in mind: (1) The intent of the commercial; (2) The manner of the commercial; and (3) The story-line of the commercial and the message sought to be conveyed by the commercial.

Out of the above, 'the manner of the commercial', is very important. If the manner is ridiculing or condemning the product of the competitor, then it amounts to disparaging, but if the manner is only to show one's product better or best without derogating any other's product, then that is not actionable. Mere puffing of goods is not actionable. A businessman can say his goods are best or better. But, by comparison, he can neither slander nor defame the goods of the competitor or can call it bad or inferior. It has been so held in *Hindustan Lever Ltd vs. Colgate Palmolive (I) Ltd* {1998 (1) SCC 720}. Hindustan Lever introduced a new toothpaste, called 'New Pepsodent', claiming to be '102 per cent better than the leading toothpaste'. The advertisement showed New Pepsodent to be superior in killing germs than any other toothpaste. The lip movement in the ad indicated Colgate to be the other toothpaste referred, although the voice muted. Moreover, the same jingle as used in the Colgate ad was played. The Court held that the direct reference about the inferiority need not be shown and such reference amounted to disparagement, as the advertisement was likely to leave any doubt in the mind of the viewer that New Pepsodent was being compared with Colgate. The Court granted an injunction against the ad.

The Delhi High Court ruled that if the manner in showing the commercial was only to show that the product was better without derogating somebody's product, there was no actionable claim. However, if the manner of the commercial was ridiculing or condemning the product of the competitor, then it amounted to disparagement. In essence, this is reflective of the ratio of the Reckitt & Colman cases. Therefore, the Court, while concluding that there was no disparagement, also held, without making it a precedent, that Pepsi's advertising slogan was copyrightable. The Court, however, observed that the mere use of the trademark-protected Pepsi logo and parody of the slogan did not give rise to the *ipso facto* infringement.

In *Dabur India Ltd vs. Emami Ltd* {2004 (29) PTC 1}, it was held that even if there has been no direct reference to the product of the plaintiff and only a reference was made to the entire class of a product (*Chyawanprash)* in its generic sense, a manufacturer was entitled to make a statement about those circumstances where disparagement was possible. There was an insinuation against the user of *chyawanprash* during the summer months, in the advertisement in question, for Dabur *Chyawanprash* is also a *chyawanprash* as against which disparagement was made. This is in consonance with the judgment of the Calcutta High Court in *Reckitt & Colman of India Ltd vs. M.P. Ramachandran & Another*.

In *Dabur India Ltd vs. Colgate Palmolive India Ltd* {2004 (29) PTC 401} too, the decision proceeded on the same lines. The Court observed that one had to look at whether the advertisement merely puffed the advertised product or the advertiser in the garb of doing the same directly or indirectly claimed that the other trader's product was inferior. It was contended that the insinuations against all others are permissible though the same may not be permissible against one particular firm. According to the Court, the generic disparagement of a rival product without specifically identifying or pin-pointing the rival product is equally objectionable. Clever advertising can indeed hit a rival product without specifically referring to it, and no one can disparage a class or genre of a product within which a complaining plaintiff falls and raise a defence that the plaintiff has not been specifically identified.

There is another side to the coin as well. When a statement disparaging the plaintiff's product is found to be true in comparative advertising, no relief can be given to the plaintiff. In *Reckit Benckiser (India) Ltd vs. Noga Ltd and Others*, the plaintiff had filed a suit for permanent and mandatory injunction, being aggrieved by the defendant's television commercial. The issue was whether the defendant had disparaged the plaintiff's product even though no false statements had been made by the defendant. The Court held that if a competitor makes the consumer aware of his mistaken impression, the plaintiff cannot be heard to complain of such action. The Judge observed, "I find it difficult, not impossible, to hold a party liable for libel when all that has been stated by the competitor is the truth. Truth is always a complete defence against any assault or challenge regardless of whether any damage was sustained as a result of it."

In *Dabur India Ltd vs. Wipro Ltd* {2006 (32) PTC 677}, the Court added a new dimension to the existing tests for determining disparagement. The Court observed that in comparative advertising, the degree of disparagement should be such that it would be tantamount to defamation. Only at such a level of disparagement would the Court interfere with the marketing strategies employed.

The decision in *Godrej Sara Lee Ltd vs. Reckitt Benckiser (I) Ltd* {2006 (32) P.T.C. 307} reflected of what the courts thought an honest comparative advertisement to mean. In this case, the defendants advertised their product '*Mortein*' which was meant to kill cockroaches as well as mosquitoes and the commercial highlighted this aspect. The plaintiff claimed that the ad disparaged their product 'Hit', which had two separate versions for killing cockroaches and mosquitoes. The Court observed that the advertiser had a right to boast of his technological superiority in comparison with the competitor's product. Telling the consumer that he could use one single product to kill two different species of insects without undermining the plaintiff's product did not amount to disparaging the plaintiff's product.

In 2010, Hindustan Unilever Limited targeted Procter and Gamble's detergent '*Tide*' in the commercial for its detergent brand '*Rin*'. The matter was put to rest by the Calcutta High Court issuing an interim order against '*Rin*' showcasing its commercials. Justice Patheriya of Kolkata High Court ruled that the commercial amounts to a clear case of disparagement and thus, issued an injunction. The injunction was granted on the following grounds:

The Hindustan Unilever's advertisement depicted '*Tide Naturals*' whereas the voice-over was for '*Tide*'.

The laboratory reports produced by Hindustan Unilever under cover of two affidavits in support of its claim of superior whiteness had inherent defects, i.e., the advertisement drew comparison of samples of '*Tide*' and '*Tide Naturals*'.

Thus, comparative advertisement is, in most cases, an unethical method of promoting a product and is prohibited under the law. This is evidently clear from the judgments mentioned above. Advertisements have a lot of impact on the viewer's mind. Of late, it is a general notion that comparative advertisements help in the better promotion of the targeted product which steals the viewer's sympathy. Thus, comparative advertising is a lost case on all fronts. It helps in the promotion of the rival product and is a waste of money because eventually the telecast of the advertisement is banned. Also, in view of the ever growing corporate strength and competitiveness in the Indian economy, it appears that the electronic media will be a platform for many more comparative advertisements which will pave way for the growth of stronger advertisement laws.

SELF-REGULATION OF COMPARATIVE ADVERTISING

Advertising in India is also sought to be regulated by the Advertising Standards Council of India (ASCI), which is a self-regulatory body and lays down a Code of Conduct for the advertising industry, which should not be in contradiction with the law. With respect to comparative advertising, the Code lays down as follows:

1. To ensure that the advertisement must observe fairness in competition such that the consumer's needs to be informed on choice in the market-place and the canons of generally-accepted competitive behaviour in business are both served.
2. An advertisement containing comparison with other manufacturer or supplier or with other product, including those where a competitor is named, is permissible in the interests of vigorous competition and public enlightenment, provided:
   a. It is clear as to what aspects of the advertiser's product are being compared with what aspects of the competitor's product.
   b. The subject matter of comparison is not chosen in such a way as to confer an artificial advantage upon the advertiser or to suggest that a better bargain is offered than is truly the case.
   c. The comparison is factual, accurate, and capable of substantiation.
   d. There is no likelihood of the consumer being misled as a result of the comparison, whether about the product advertised or that with which it is compared.
   e. The advertisement does not unfairly denigrate, attack, or discredit any other product, advertiser, or advertisement either directly or by implication.
3. An advertisement does not make any unjustifiable use of the name or initials of any other firm, company or institution, nor takes any unfair advantage of the goodwill of the trade mark or symbol of another firm or its product or goodwill acquired by its advertising campaign.
4. An advertisement shall not be similar to any other advertiser's advertisement in general layout, copy, slogans, visual presentations, music, or sound effects, so as to suggest plagiarism.

Guidelines to be followed

The onus of ensuring healthy competition does not merely lie with the courts. It is important that the marketers engage in comparative advertising within the permissible parameters of the law. These are briefly stated below:

1. Comparison should be made on the basis of verifiable facts about the advertisers' and the competitors' products/services, which can be substantiated.
2. If a comparison is based on clinical tests results, there should be sufficient proof that they were conducted by an independent body. Partial results or differences should not be shown in the advertisements so that consumers do not draw improper conclusions from them.
3. It accurately depicts the competitor's mark with appropriate trade mark or symbols and adds a footnote identifying the correct owner and disclaiming any affiliation. A competitor's mark should not be altered.
4. Avoid using a rival mark in a highlighted or prominent fashion that implies an affiliation with or sponsorship by the competitor of your advertisement.
5. Keep the primary goal of your advertisement limited to inform the consumer and not to unfairly attack, criticise, or discredit other products, advertisers, or advertisements directly or by implication.
6. The product or services being compared should reflect their value and usefulness to the consumer. The comparative advertisement should be informative and convey the features of the product or service advertised.
7. The advertisement should not make unjustifiable use of any firm, company, or institution's name and should not take unfair advantage of the goodwill of any trade name or symbol of any other firm.

If these guidelines are followed by the marketers, it allows for the fostering of a better corporate environment to invest in. It is important for both the companies and the law-enforcing agencies to work in tandem to restore the parity in comparative advertising whereby fair trade practices, intellectual property protection, and consumer interest can go hand in hand.

CONCLUDING REMARKS

Comparative advertising aims to objectively and truthfully inform the consumer, and seeks to promote market transparency, keeping down prices and improving products by stimulating competition. Healthy competition is necessary in a capitalist society, and hence comparative advertising is welcome. But the way it functions these days, it has been reduced to an unfair practice between brands and hardly affects the informed consumers' choice of products and services. In order to project their clients as the best in the market, advertising agencies often parody of their competitors' products, leading to virtual war in the market. Therefore, it is important to protect the interests of such competitors by not allowing comparative advertising to cause confusion, or to mislead the consumer, or to discredit the competitor.

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