

SOUTH ASIAN JOURNAL OF MANAGEMENT RESEARCH (SAJMR)

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**Chh. Shahu Institute of Business
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Late Dr. A.D. Shinde

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This issue of SAJMR is dedicated to the fond memory of Late Prof. Dr. A. D. Shinde a renowned Chartered Accountant and Founder of SIBER Trust. It was his vision and untiring efforts that has led to the creation of the educational empire in Southern Maharashtra. Number of students from all over the country and especially students of rural areas have been immensely benefited from the educational programs initiated by Dr. A. D. Shinde. In his memory on the first anniversary, Dr. C. Rangarajan, Chairman, Economic Advisory Council to the Prime Minister of India delivered the first memorial lecture. We are happy to publish this memorial lecture as a lead article in the current issue.

Keeping in view the interdisciplinary approach of the journal the articles ranging from the fields of economics, finance, marketing and health care services have been selected for the present issue. All these articles are comprehensive in their coverage and use latest statistical tools for analyzing both the primary and the secondary data collected. These statistical techniques include factor analysis, reliability test and techniques of hypothesis testing and others. We are sure this issue of SAJMR would provide an excellent reference material both for the researchers and students from different disciplines.

As a continuing feature of the journal we have incorporated a Case Study for the benefit of the readers. This is followed by a book review on Future of HRM. In all the present issue covers wide range of issues from management area along with a case study. It is expected that these articles will provide new insights to readers and thereby encourage them for taking up further research on these lines.

Dr. T. V. G. Sarma
Editor

The Indian Economy : Some Current Concerns*

Dr. C. Rangarajan

Chairman

Economic Advisory Council to the Prime Minister

e-mail: c.rangarajan@nic.in; chrtfc@nic.in

(* Speech Delivered for the First Dr. A. D. Shinde Memorial Lecture at Chh. Shahu Institute of Business Education and Research, Kolhapur on 26th August 2011)

It gives me great pleasure to be in your midst this morning and to deliver the First Dr. A.D. Shinde Memorial Lecture. The late Prof. A.D. Shinde was a Chartered Accountant who, among other things, was responsible for building up this Institute of Business Education and Research. I understand that SIBER is doing well as an academic institution and has been recognized by the UGC as a college with potential for excellence. It is a fitting tribute to the memory of Dr. A.D. Shinde.

1. Economic Reforms and Their Rationale

India has traveled through a remarkable journey in the last two decades. Seen purely from the angle of growth, the performance has been very impressive. In the Ninth Plan the annual growth rate was 5.5 per cent. It rose to 7.5 per cent in the Tenth Plan and to an 8.2 per cent in the first four years of the Eleventh Plan.

The year 1991 is a landmark in the post-independent economic history of India. The country faced a severe economic crisis, triggered in part by a serious balance of payments situation. The crisis was converted into an opportunity to effect some fundamental changes in the content and approach to economic policy.

There is a common thread running through all the measures introduced since July 1991. The objective is simple and that is to improve the efficiency of the system. The regulatory mechanism involving multitudes of controls had fragmented capacity and reduced competition even in the private sector. The thrust of the new economic policy is towards creating a more competitive environment in the economy as a means to improving the productivity and efficiency of the system. This is to be achieved by removing the barriers to entry and the restrictions on growth of firms. While the industrial policy seeks to bring about a greater competitive environment

domestically, the trade policy seeks to improve international competitiveness subject to the protection offered by tariffs which are coming down. The private sector is being given a larger space to operate in as some of the areas earlier reserved exclusively for the public sector are also now allowed to the private sector. In these areas, the public sector will have to compete with the private sector, even though the public sector may continue to play a dominant role. What is sought to be achieved is an improvement in the functioning of the various entities whether they are in the private or public sector by injecting an element of competition. There is, however, nothing in the new economic policy which takes away the role of the State or the public sector in the system. The New Economic Policy of India has not necessarily diminished the role of state; it has only redefined it, expanding it in some areas and reducing in some others. As it has been said, somewhat paradoxically 'more market' does not mean 'less Government', but only 'different Government'.

That the content and process of our economic reforms are in the right track is vindicated by the performance of the economy since the launch of the reforms. Between 1981-82 and 1990-91, that is the decade before the reforms, the economy grew at 5.6 per cent on a compound average basis. Between 1992-93 and 2010-11, the economy grew at an average rate of 6.8 per cent per annum, a significant improvement over the pre-reform period.

Coming to the more recent period, economic growth in the six year period from 2005-06 to 2010-11, despite the crisis-affected year of 2008-09, was at an average of 8.6 per cent. This clearly represented an acceleration in the pace of growth and marks a distinct break from any previous five year period. Per capita GDP grew by an average of 7.0 per cent in these six years.

Under the severe impact of the global crisis, the Indian economy registered a growth of 6.7 per cent in 2008-09 after having registered over 9 per cent rate of growth for three successive years. By any standards, the Indian economy was able to protect itself reasonably well in the turbulent conditions of the financial crisis.

The growth rate picked up subsequently and the economy achieved a growth rate of 8.0 per cent in 2009-10 despite a severe drought. Disaggregating this growth rate, it is seen that the growth rate of agriculture was 0.4 per cent, that of industry was 8.0 per cent and that of services 10.1 per cent.

The growth rate of the Indian economy was 8.5 per cent in 2010-11. There was a substantial jump in agricultural production. The monsoon had been good and, therefore, the agriculture GDP grew at 6.6 per cent during that year. Industrial production was strong in the first half and started slowing down in the second half. From April 2010 to March 2011, the growth in manufacturing sector was 8.1 per cent. With the jump in agricultural production and with industrial and service sectors growing at 7.9 per cent and 9.4 per cent, respectively, the growth rate in 2010-11 comes to 8.5 per cent.

India's growth rate in 2011-12 will be 8.2 per cent. Agriculture is expected to grow at 3 per cent while industry and services will grow at 7.1 per cent and 10 per cent, respectively. Monsoon has been good so far and we should expect to see agriculture grow reasonably well. The expected growth rate of 3 per cent in agriculture will be on top of a strong growth of 6.6 per cent in the previous year. As far as industry is concerned, while the first quarter may not show strong growth, there can be a good pick up from August 2011 onwards. Services sector may grow at 10 per cent which will be a slight improvement over the growth rate of the previous year. In this context, we need to take into account the world

economic situation which is by no means encouraging. If the world situation further deteriorates, it will have an impact on the growth of our economy.

In this context, a frequently asked question is whether India has the potential to grow at 9 per cent in a sustained way. India's savings rate has crossed 34 per cent of GDP. The investment rate has exceeded 36 per cent of GDP. Even with an incremental capital-output ratio of 4, this should enable the Indian economy to grow at 9 per cent. Thus the broad macro economic parameters relating to savings and investment are conducive for achieving a high growth rate. However, for this to happen, we also need to remove the constraints that may come in the way.

2. Distribution of Income

Before going into the issue of constraints let me turn to the issue of distribution of income. While growth is important, it is necessary to remember that it is not the only dimension for measuring performance or achievement. It is equally important to know who benefits from growth. There has been considerable dispute in this country in estimating the people below the poverty line. There is no consensus yet on what constitutes the poverty line. According to the methodology adopted by the Planning Commission until recently, the number of people below poverty line in 1993-94 was 36.0 per cent. According to the same methodology, it came down to 27.5 per cent in 2004-05. However, the Tendulkar Committee by adopting a slightly different methodology came to the conclusion that the overall poverty ratio was 45.3 per cent in 1993-94 and 37.2 per cent in 2004-05. While the Tendulkar Committee estimates are higher than the earlier estimates, both methodologies show that the reduction in the poverty ratio was in the range of 8 to 8.5 per cent. While growth has contributed to reducing the poverty ratio, it has to be acknowledged that the absolute level of poverty is still high. Truly we have miles to go before eliminating poverty. We need to ensure that the growth process is such as to include every section of the economy. We must maintain, nevertheless, a high growth rate which will alone enable the government to raise the resources to meet the various socio-

economic obligations. In short, growth and equity must be weaved together to provide a coherent pattern of development.

One aspect of the growth process is balanced regional development. It is normally expected that with economic development, the per capita income of the States will show a tendency to converge. Comparing the two periods of 1993-94 to 1999-00 and 1999-00 to 2008-09, data do not show a convergence. However, there is a strong evidence of "catching up" by the lower income States. The median growth rate increased one-and-a-half times between the two periods, increasing from 3.9 per cent in the earlier period to 5.7 per cent in the latter period. States with lower per capita GSDP like Assam, Orissa, UP and Bihar have made significant gains in growth rates in the latter period. Notwithstanding these gains, convergence was subdued because some of the higher income States like Gujarat, Kerala, and Haryana also posted high growth rates. In other words, what the recent data indicate is that while most of the lower income States have shown stronger growth rates, several of the higher income States have also shown an increase in the recent period.

3. Short Term Concerns

There are a few areas where immediate engagement of the policy makers is needed. In the short run, managing inflationary pressures is the biggest challenge. I shall talk about it in some detail later.

A second concern relates to the balance of payments. India's current account deficit remained low till 2008-09. Since then it has started climbing and the current account deficit was 2.8 per cent of GDP in 2009-10. In the first half of 2010-11 the current account deficit remained very high at 3.7 per cent of the GDP. However, in the second half, exports picked up strongly while import growth was weaker. It is now estimated that the current account deficit for this year may be around 2.5 per cent of the GDP. We have had no problems so far in financing the current account deficit. Even in 2010-11, capital flows were adequate to cover the current account deficit and add to the reserves \$12 billion. Efforts must be made to

keep the current account deficit around the manageable level of 2.5 per cent of GDP. This is desirable to impart much needed stability on the external payment front and to reduce the risk the domestic economy runs from volatility in international financial markets.

Another critical challenge on the way forward is fiscal consolidation which is a necessary prerequisite for sustained growth. In the wake of the international financial crisis, India like many other countries adopted an expansionary fiscal policy in order to stimulate demand. As a consequence, the fiscal deficit of the Government of India which was coming down started rising. In 2008-09, the fiscal deficit was 6 per cent of GDP. It rose to 6.4 per cent in the next year. Unlike other countries in the advanced world, where there is a continuing debate regarding when to terminate the expansionary fiscal policies, we in India have taken a decision to initiate the process of fiscal consolidation. In 2010-11, the fiscal deficit came down to 4.7 per cent of GDP and it is projected to fall to 4.6 per cent in the current year. We should maintain this course and reach soon the FRBM target of 3 per cent of GDP.

4. Medium Term Constraints

In the medium term, the two sectors which pose a major challenge are the farm economy and the power sector. The first of these, farm economy is primarily constrained by the relatively low levels of yield in major cereal crops and pulses as compared to other Asian economies especially China. We have large science and technology establishments for agricultural research. But the results in terms of productivity gains leave much to be desired. Necessary steps must be taken to revitalize the traditional crop agriculture which is vital to food security and farm income. Equally, as shifts in demand occur reflecting changes in income and taste, agricultural production must also respond to them.

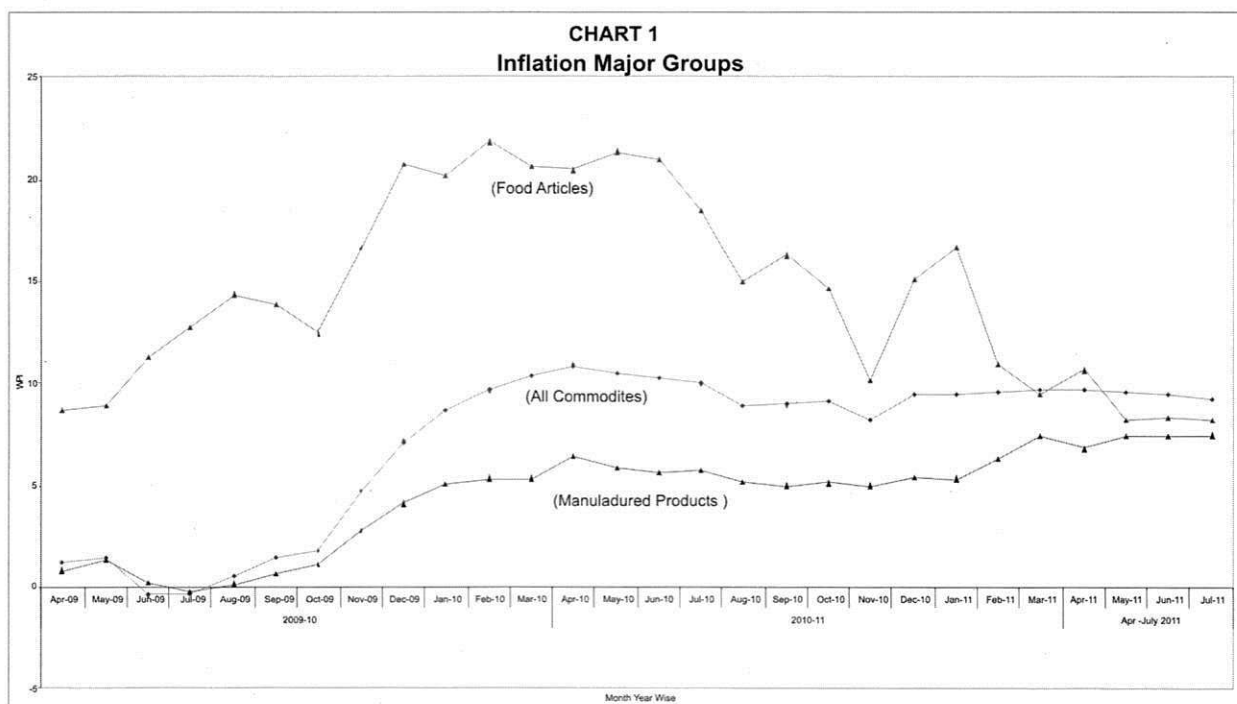
The second challenge for the country is the shortage of physical infrastructure of which the single most important item is electricity. Shortage of electric power leads not only to direct production losses but also results in inefficiency in a broad range of areas impacting profitability and competitiveness. Recent data

clearly indicate a short fall in achieving the targets for capacity creation. This is despite the fact that the achievement in capacity creation in the first four years of the 11th Plan is higher than that in the first four years of the 10th Plan. Government is the largest player in production, transmission and distribution of power and a high order of Government intervention in capacity creation and other supportive components of electricity business is crucial to sustaining a high growth rate of 9 per cent. A more aggressive path of capacity creation must start immediately.

5. Current Inflation

We have had two years of high inflation (Chart 1). 2009-10 was badly affected because of the deficient monsoon. Foodgrain production declined by 17 million tonnes. The decline in the production of rice alone was 11 million tonnes. As a consequence, inflation was triggered by the increase in foodgrain prices. Food inflation stood at as high as 21 per cent in

February 2010. Overall inflation as measured by the wholesale price index touched the peak of 10.9 per cent in April 2010. It was expected that inflation would moderate through 2010-11. It in fact started happening till November 2010. However, prices started rising after that. As of March 2011, year on year inflation had touched 10.0 per cent. While the food price inflation of 2009-10 was triggered by the rise in foodgrain prices, in 2010-11 it was triggered by the rise in the prices of vegetables, fruits and eggs, meat and fish. The increase in vegetable prices has been significant. The late rains had a severe impact on the supply of some vegetables including onion. Inflation in vegetables rose to 34 per cent in December 2010 and 67 per cent in January 2011. Normally, vegetable prices show a seasonal decline during winter months. During 2010-11, prices of raw cotton rose on an average by 43 per cent. The persistence of food inflation led to the spread of inflation to other sectors.



In 2010-11, the weighted contribution of the manufacturing sector to total inflation was 41.8 per cent.

Inflation continues to remain an area of concern in the current year. As of July 2011, the

headline inflation in wholesale price index stood at 9.2 per cent. While inflation in food articles has eased from 10.6 per cent in April 2011 to 8.2 per cent in July 2011, inflation in manufactured products has risen from 5.3 per

cent in January 2011 to 7.5 per cent in July 2011. Weekly data show a further easing in food inflation since the second half of July 2011. However, primary food inflation still remains at a fairly high level. The rationalization process in the pricing of petroleum products is still to be completed and this may have an impact on price levels in the coming months. Factoring all these, the headline WPI inflation would remain high till October 2011. One could expect significant easing in the last quarter of the year and inflation may come down to 6.5 per cent in March 2012.

Supply side constraints have to be necessarily eased in order to continue with growth along with price stability. However, interventions in the area of supply constraints take some time to mature, which only means that the problem has to be identified rapidly and the process of intervention rolled out with some haste. In our case, at least as far as foodgrains is concerned, use of the official stocks in an imaginative manner can be used to keep prices under control.

Thus the extraordinarily high level of inflation seen in the last two years is due to certain severe supply constraints, particularly of agricultural products. An analysis of the inflation rate and growth rate for the last six years clearly indicates that in the three years when the growth rate was around 9 per cent, inflation rate was not necessarily higher.

The fact that inflation is triggered primarily by supply side shocks does not mean that monetary policy has no role to play in such conditions. As mentioned earlier, food price inflation, if it persists long enough, gets generalized. Thus, monetary policy and at one step removed, fiscal policy have to play their part in containing the overall demand pressures. It is only in this context one can understand the series of actions taken by RBI to control inflation.

6. Impact of Inflation

There are, however, situations in which growth can contribute to push up inflation. High growth rate may result in higher inflation, when the growth rate exceeds the potential capacity of the economy. That will be the situation of "over-heating". We have had examples of such situations even in the recent

period. In early 2007, inflation picked up because the economy was operating at full capacity. However, it did not last long because investment rate was high and output caught up with increased demand. Thus the crucial factor lies in determining "potential" growth of the economy. As mentioned earlier, the investment rate in the Indian economy now exceeds 36 per cent and can realistically be expected to rise to 38 per cent under favourable investment conditions. Even with an incremental capital-output ratio of 4:1 we should be able to grow at 9 per cent comfortably. This rate of growth of 9 per cent may be regarded as the 'potential' of the economy. We have not touched this level of growth in the last two years when the inflation rate had remained at double digit level for several months. Supply constraints have been the main trigger of inflation. In fact, what we need to watch out is the impact of high inflation on growth. Persistent high inflation can distort the motives for investment and thereby undermine growth.

There has been a considerable debate on what is an acceptable level of inflation. I had in a different context used the term "threshold level of inflation", defining it as the level beyond which costs of inflation begin to rise sharply. The Chakravarty Committee (of which I was a Member) regarded the acceptable rise in prices as 4 per cent. This, according to the Committee, will reflect changes in relative prices necessary to attract resources to growth sectors. When growth takes place, it does not happen uniformly in all the sectors. Thus maintenance of absolute price stability meaning thereby zero rate of increase in prices may not be possible. Nor is it desirable. Obviously, there is a certain amount of judgement involved in determining the acceptable or threshold level of inflation. One has to take into account not only the impact on output but also the distributional implications.

In the early decades after Independence, the argument that inflation was endemic in economic growth led to very steep increases in prices. We should not let that happen in the years of high growth. We must remain committed to maintain inflation at a low level. High growth does not warrant a higher level of

inflation. We must use all of our policy instruments to bring down the current inflation and re-anchor the inflationary expectations to the 5 per cent comfort zone.

7. Need for High Growth

As mentioned earlier, with the investment rate touching 38 per cent of the GDP, the economy should be able to grow at 9.0 per cent. Pushing the economy beyond that will run into problems. First of all, it will be difficult to achieve the required investment rate, second, pushing the economy beyond its capacity would result in strong inflationary pressures re-emerging. The deficit in the current account of the balance of payments will also widen. It is, therefore, prudent to aim at a growth rate of 9 per cent.

Some people raise a question whether it is necessary at all to grow at this rate. Growth is an important factor in generating employment and reducing poverty. Obviously, the composition of growth is equally important. As I mentioned earlier, particular focus on agriculture is extremely important. Growth in agriculture is necessary not only from the point of view of ensuring food security but also in making a dent on poverty. Nevertheless, overall growth is an important factor while examining the progress in terms of living standards. With population growth rate coming down, a strong growth will mean a substantial growth in the per capita income. If we grow at 9 per cent per annum, India's per capita GDP will increase from the current level of \$1,600 to \$8,000-10,000 by 2025. Then we will become part of the middle income group of countries. Without a strong growth, we will not be able to provide employment to the growing number of young people who will join the labour force. Analysis of the preliminary NSSO data for 2009-10 suggests that, compared to 2004-05, there has been a reduction of about 3-4 percentage points in the poverty ratio. Continued strong growth will help to accelerate the declining trend in poverty ratio. In the recent period, we have launched a number of schemes aimed at broadening the base of growth. These include employment guarantee scheme, universalisation of education, expansion of rural health and food security. All these programmes have made a substantial demand on public

expenditure. This has been made possible only because of the strong growth that we have seen in recent years. Growth has facilitated raising more resources by the Government.

Development has many dimensions. It has to be inclusive; it must be poverty reducing and it must be environment-friendly. We need to incorporate all these elements in the growth process. However, at our present stage of development, we cannot afford to sacrifice growth. It is key to improving the living standards of our people. A strong and balanced growth will enable the economy to achieve multiple goals including lowering inflation. Over the medium and long terms, increasing the availability of goods and services *pari pasu* with the increase in demand will keep inflation low. However, if in the short term because of temporary aberrations inflation raises its head, the dominant concern of the policy makers must be to contain and tame inflation.

Income Velocity of Money in Ethiopia

Alemayehu Kebede & S. Marulu Reddy

College of Arts and Commerce, Department of Economics, Andhra University,
Visakhapatnam 530 003, India

e-mail: alemayehukk2003@yahoo.com, marulureddy@gmail.com

Abstract : Velocity of money can be defined as the average number of time that the national currency is moving from ones hand to the other. It can be defined as the ratio of nominal income divided by the stock of money (NGDP/M). The effectiveness of monetary policy depends on the predictability of income velocity of money. In Ethiopia it is found to be stable and predictable. Therefore the monetary authority by using monetary aggregate as intermediate targeting variable can control the price level which is a prime objective of monetary authority.

JEL Classification:

Key words: Income Velocity, Effectiveness of Monetary Policy, Ethiopia

1. Introduction

Velocity of money can be defined as the average number of time that the national currency is moving from ones hand to the other. It can be defined as the ratio of nominal income divided by the stock of money (NGDP/M).

The effectiveness of monetary policy is depends up on the stable function of velocity of money. If the income velocity of money function is stable it helps to predict the effects of the change in money supply on income, price and employment. But the stability of velocity of money remains a controversial issue by many researchers.

The predictability of income velocity of money is very important in the Ethiopian economy to use broad monetary aggregate as intermediate target variable.

2. Literature review

The economic system is functioning like a human body, in human body it is both the blood and its circulation that matters by the same token in the economic system it is not the mere existence of stock of money but also the velocity of money that plays a role in the well functioning of the economic system (Shuibo Sun: n.d.). In the classical economists idea since the nominal income is determined by movements in the supply of money then the

velocity of money (PY/M) could be treated as constant (Mishkin: 2007). But Keynes by incorporating the speculative demand for money introduces the role of interest rate that affects the demand for money. So he argues that velocity is not constant since there is a substantial fluctuation in interest rate. Whereas according to Friedman change in interest rate has little effect on the demand for money therefore interest insensitivity of demand for money implies the predictability of the velocity of money by the monetary authority.

Traditionally velocity of money was considered as an analogue of the demand for real balance and taken as a function of income and interest rate which is a proxy variable of opportunity cost of holding money(Bordo, Joung and Siklos :1993). But Barodo and Joung (1990) in addition to these traditional determinants they argued that the income velocity of money is a function of changes in financial system. These change in financial institution passed through two phases which are monetization and the financial sophistication of the economy. At the stage of monetization there is a spread of banking services and increasing deposit and notes throughout the economy. In the case of the growth of financial sophistication the substitution of bank deposits and notes by financial assets will be undertaken. The sum of

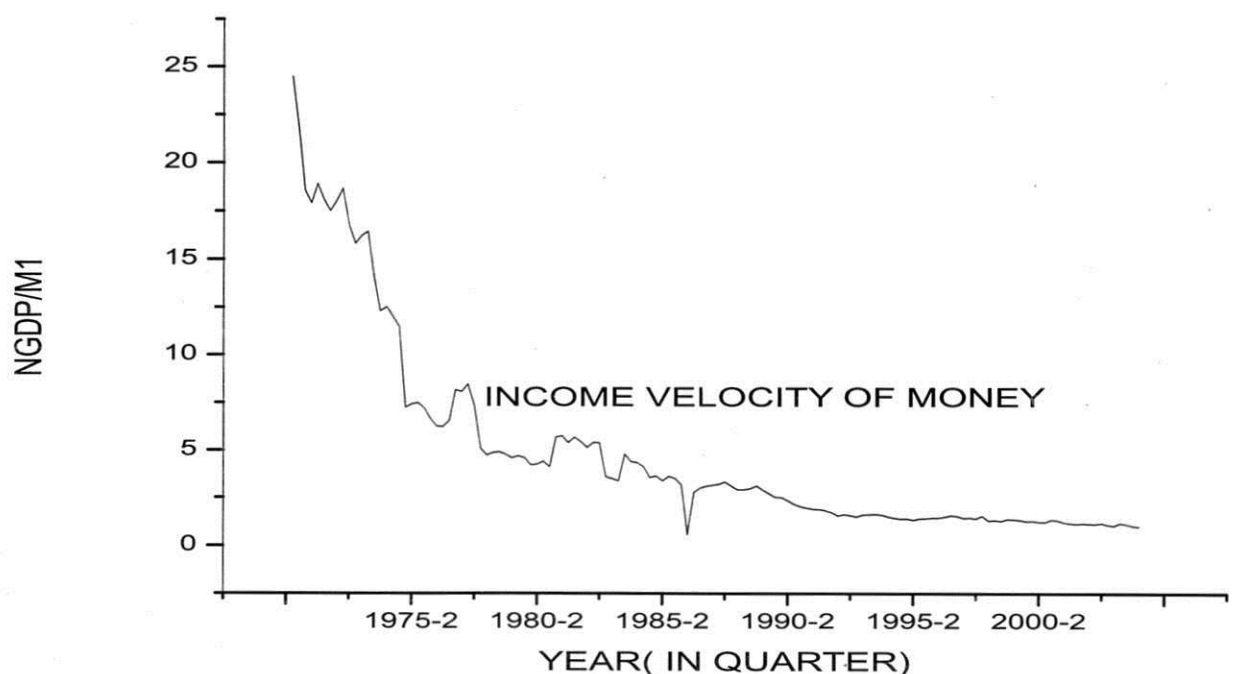
these two factors leads to a “U” shaped curve of velocity of money. The falling part of the curve is due to the monetization of the economy and reaches its minimum when monetization of the economy is completed. The rising part of the curve indicates the substitution of deposit and notes by financial assets and stable economic system. The more stable the economic environment, the more it reduces the demand for precautionary balance and increases the income velocity of money.

Arnold (1996) explained in the following way how we measure monetization and financial sophistications that gives “U” shape for income velocity of money.

- i. The process of monetization and spread of commercial banking represented by the share of agricultural labour force in non agricultural sector and the currency money ratio.
- ii. The proxy of financial sophistication is the ratio of total non bank financial asset to total financial assets.
- iii. Economic stability is measured by standard deviation of the annual percentage change in per capita income of the six years moving average.

The income velocity of money (NGDP/M1) in Ethiopia is not constant rather it is continuously declining. The income velocity of money is continuously declining at an increasing rate especially during the majesty period. In this period after the National bank of Ethiopia came in to being in 1964 more private banks started to flourish and commercial bank of Ethiopia (owned by the government) expands its branches. Due to this there is a sharp decline in the velocity of money in the country as it is clearly shown in figure 1. But after this period, following the communist regime, due to confiscation of private banks by the government and the limit imposed on the interest rates paid on savings the public developed fear and hoard cash rather than putting their money in the banks. As it can be seen from graph-1- below the velocity of money is declining at a slower rate after 1975 up to 1991. After the current regime came to power in 1991 there is a continuous declining in the income velocity of money. The factors contributed for the declining of income velocity of money in the current

Figure-1- Income Velocity of Money



Source: National Bank of Ethiopia

i. Privatization: The economic system which was regulated by central planning for seventeen years changed in to market friendly economic system. Due to this many private enterprise flourished and injects dynamism in the social, psychological and institutional aspects of the economy

a. The financial behavior of saving, depositing, borrowing, lending are changed by the financial institutions, the private business sectors and individuals.

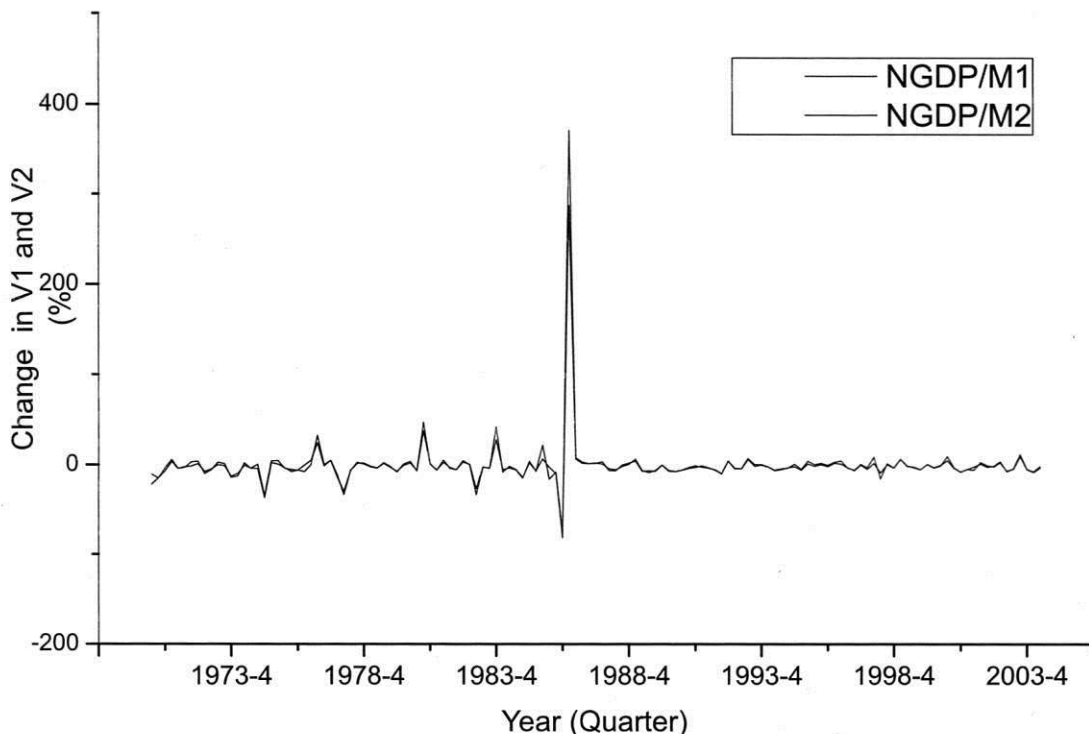
b. The behavior of individuals custom in competitiveness and business has changed.

ii. Liberalization of the financial sectors: one of the major reforms in the financial sector was the emergence of domestic private banks which creates competitiveness in the banking sector. In addition the expansion of saving and credit associations branches in many parts of the country's rural area which were not accessible for banking services in the preceding regimes. With the expansion of banking sectors in Ethiopia changes are occurred in service efficiency, increase in financial transactions, loan distribution techniques, channeling idle

resources in to the banking system e.t.c. The establishment of Micro financial Institutions in the rural area further increases the monetization of the rural economy by providing credit and saving access. Liberalization of the lending and deposit rates by setting only the floor by the government and market determined managed floating exchange rates are part of the liberalization which creates competitiveness in the financial sectors.

But we don't have the upward portion of the income velocity of money due to the fact that the economy lacks financial sophistications. Lack of financial sophistication in the economy means the public do not have options to substitute the demand deposit, time deposit and cash in to financial assets due to the non existence of capital market and the limited role of money market in the economy. Therefore in Ethiopia there is an increasing monetization of the economy by expanding the banking sectors and Micro finance institutions. But there are no financial sophistications due to the non existence of capital market in the country.

Figure -2- Rate of change in Velocity from quarter to Quarter



During the Derge regime (1974-1991) the growth rates of income velocity of money (NGDP/M1) was exhibited large swings of up and down as shown in figure 2. This was due to the substantial economic volatility following the socialist government which the period was characterized by command economy, drought and war. Even though during the present regime the income velocity of money is moderate, there is a difference in the growth rate of income velocity of money from quarter to quarter. For example if you are taking the year 2003 of quarter two to quarter three it was 12.12% and -4.7878% is from quarter three to the fourth quarter of the same year. The difference between the two consecutive periods reveals that the nominal GDP was lower by 16.91% than it would have been if velocity had been constant or growing at rate of the year 2003 quarter three to four. If you take the same comparison of income velocity of money (broad money which is M2 in Ethiopian case) had velocity of M2 was constant for the same period the percentage change in NGDP/M2 from 2003 quarter two to quarter three was 10.289% and -4.79% for quarter three to four of the same year. This implies that had income velocity of broad money was constant the nominal GDP was lower than 15.08% than it would have been. After 1991 income velocity of broad money (NGDP/M2) remained more stable than income velocity of narrow money (NGDP/M1). The quarterly rate of change of income velocity of narrow money is 6.5% which is much higher than the rate of growth of (NGDP/M2) broad money by more than 2.1%. This is the right measure to use broad money aggregate as intermediate target variable of monetary policy.

3. Data and Model Specification

Short (1973) used Velocity as a function of interest rate, number of banks as a proxy measure of financial institutions development, real income (RGDP) to estimate the income velocity of money in Singapore and Malaysia for the period 1951-1966. He found that income velocity of money is negatively related with GDP and positively related with number of banks and interest rate turns out to be insignificant. And Akhtaruzzaman (2008) used C/D, DD/TD, real income, interest rate paid on

deposit and consumer's price index was used in estimation of velocity of income in Bangladesh. Again here the financial development was measured using proxy variables. Also Owoye (1997) to estimate the variability of income velocity of money for 30 developing countries using the conventional equation of exchange and arrived at mixed results. To estimate the income velocity of money in Ethiopia we use the following specification.

$$M_2/Y = PY \dots\dots\dots 1$$

Where:

- M2 = Broad money which a simple sum of currency plus demand deposit
- V2 = Income velocity of money defined as a ratio of nominal gross domestic product to broad money (NGDP/M2).
- P = Inflation rate proxies by consumer's price index (CPI)
- Y = Real Gross Domestic Product (RGDP)

The superiority of this specification over the other specifications is that it does not use proxy variables to measure financial developments where in a country financial asset and financial market developments are limited. In addition to this the model used by Sort (1973) and Akhtaruzzaman(2008) had the following short comings to use in Ethiopian:

- i. The number of bank branches shows only the rate of transaction under taken by the economy,
- ii. Currency to deposit ratio and demand deposit to time deposit ratio are determined by the growth of income , the higher the income the lower the currency to deposit ratio and demand deposit to time deposit ratio and vice versa.
- iii. The deposit rate of interest available in Ethiopia was not market determined therefore it does not show the opportunity cost of holding money.

By transforming equation number 1 in to logarithmic form and by rearranging we can estimate the following model.

$$\ln V = \alpha \ln Y + \beta_1 \ln P - \beta_2 \ln M + \varepsilon_t \text{-----} 2$$

3.1 Expected sign and magnitude of the parameters

i. The sign of real income is expected to be negative because as it is shown in figure 2 the velocity of money is at a declining stage which shows that as real income increases velocity of money declines. In addition the country is not in financial sophistication stage. Had the country been in financial sophistication stage the sign of real income would have been expected to be positive.

ii. The sign of the inflation rate is expected to be positive or negative. Here inflation rate is the most appropriate measure of opportunity cost of holding money than nominal interest rate because rate of interest is not market determined in Ethiopia. Due to this reason we use inflation as a proxy of opportunity cost of holding money. If the expected sign of inflation is

a. Negative and significant: It shows as inflation increases the value of money declines and the public wants to hedge themselves by substituting money for real assets..

b. Positive and significant: The implication will be the public holding of money increase as inflation is raising or as inflation increase the public increase their expenditure which in turn increases their demand for money for transaction purpose and finally that will increase the velocity of money.

iii. And the sign of monetary aggregate is expected to be negative for the simple reason that as the amount of broad money increases the turnover of money from hand to hand will come down and vice versa.

4. Empirical Results

4.1 Data: The data in this study covers from the second quarter of 1972 up to the second quarter of 2004. The variables used to estimate income velocity of money are tested for stationary using PP test. Income velocity of money and broad money are stationary in levels where as real income and consumer's price index appeared to be non stationary in levels. But they are stationary in the first difference as it can be seen from table 1.

Table -1- Unit Root Test (Phillips -Perron)

Variables	Levels	First difference
LnV	-2.7*	
Ln RGDP	6.3	-3.4*
Ln CPI	2.9	-8.4
Ln M2	-6.3*	

4.2 Co integration

Had all the variables been non stationary we would have been using co integration analysis but since fifty percent of the variables are stationary in levels we cannot apply co-integration analysis rather we use Granger causality test and innovation accounting analysis. This implies that there is no long run relationship between income velocity of money and its determinants in Ethiopia for the study periods. To put it differently, no long run causality exists between income velocity of money and its determinants this challenge the monetarist view. By using Impulse response function and variance decomposition analysis we will get the dynamic effects of the variability of the independent variables on the dependent variable in the short run. Therefore, it is not advisable to estimate equation number 5.2. using VECM method to get the long run and short run relationship between variables. Only the short run relationship can be obtained by applying VAR, finding lag length and undertake the Granger causality test and accounting innovations analysis.

1.3 Granger causality test

The relationship between the dependent variable which is the income velocity of money and its determinant variables such as real income, consumer's price index and broad money is tested using Granger causality and the results are presented in table-4. Due to this first we take the first differences of these variables to make them stationary and then we can apply Granger causality test. Before proceeding further we have to determine the lag length which is important in finding Granger causality test. On the basis of Akaike Information Criterion the maximum number of the lag length is four and the VAR model is stable means no roots lies outside of the unit circle.

Table 2- Granger Causality Test

Null Hypothesis	F-Statistic	Probability
LnV2 does not Granger Cause LnM2	2.19175*	0.07378
LnM2 does not Granger Cause LnV2	1.84794	0.12393
LnRGDP does not Granger Cause LnV2	2.85051**	0.02666
LnV2 does not Granger Cause LnRGDP	2.37837*	0.05544
LnCPI does not Granger Cause LnV2	2.80676**	0.02854
LnV2 does not Granger Cause LnCPI	2.38337*	0.05501
LnRGDP does not Granger Cause LnM2	3.45709***	0.01029
LnM2 does not Granger Cause LnRGDP	3.04515**	0.01966
LnRGDP does not Granger Cause LnCPI	1.22568	0.30343
LnCPI does not Granger Cause LnRGDP	1.44624	0.22281
LnCPI does not Granger Cause LnM2	1.64360	0.16756
LnM2 does not Granger Cause LnCPI	1.68162	0.15849

Note: D means first difference in the variable and *, ** and*** means significant at 10%, 5% and 1% level respectively.

The Granger causality test reveals that there is a uni- directional causality relationship between income velocity of money and broad money supply that is running from income velocity to broad money which is significant at 10% level.

The policy implication of the non existence of Granger causality from broad money supply to income velocity shows that the money supply has low volatility effect on the income velocity of money which confirms that broad money aggregate is a useful monetary policy tool. Or the behavior of income velocity of money is predictable by monetary authority which helped them in achieving their goal of price stability. Therefore, any discretionary or rule based monetary measure cannot induced any considerable shocks to nominal income which would bring fluctuations in the general price. From this we can bring out two conclusions

- Since there is a stable income velocity of money then a change in money supply will have a change in the general price, then the monetary authority by gradual reduction in the money supply can reduce the problem of inflationary pressure.
- Given this stable or non variability of income velocity of money with a change in money supply the aggregate economic activity

can be regulated by the monetary authority.

There is also a bi-directional causation between income velocities of money to real income and income velocity of money and consumer's price index. In the interaction of other variables only the broad money supply and real income are granger cause with each others. The Granger causality test that we failed to reject the alternative hypothesis imply the past values of the variables appear in the right hand (independent variables) side of the equations explain the dependent variables. Or simply means that the dynamics of the relationship between these variables are mainly contemporaneous. Granger causality test is a test of the null hypothesis that the lagged values of the other variable does not contain important information in the prediction of the dependent variables. Since it is a statistical analysis it does not explain how the external or internal shocks affect the other variable in the model. For this purpose we use impulse response function and variance decomposition analysis. In this analysis we used VAR analysis to describe and characterize the dynamic behavior of the variables and it is possible to explain these dynamic relationships of a VAR system through impulse response function and variance

decomposition analysis (Brandt and Williams: 2007).

4.4 Variance decomposition and impulse response analysis

To explain further the short run dynamic properties of the relationship between income velocity of money and its determinants we employ the variance decomposition and generalized impulse response analysis.

4.5 Forecast Error Variance Decomposition

By definition the forecast variance decomposition shows the proportion of forecast error variance for each variable that is attributed to its own innovation and to innovation in the other exogenous variables. This method provides complementary information on the dynamic behaviors of the variables used in the

study. In this analysis it is possible to decompose the forecast error in each variable in to the contributions by each of the different shocks. Brandt and Williams (2007) the forecast error decomposition is based on how much the fitted model is differs from the actual values of the vector of endogenous variables. And the variance of these errors is decomposed and the percentage of forecast variance due to each endogenous variable is determined. If the variables are exogenous the innovation in one variable does not explain the variation in other variable. If they are contemporaneously correlated the variables in one variable can begin to explain the other with a lag. The results of variance decomposition which complement the Granger causality test are presented on the following table.

Table -3- Forecast Error Variance Decomposition

Panel - A Variance Decomposition of D(LNV2)					
Period	S.E.	D(LNV2)	D(LNM2)	D(LNCPI)	D(LNRGDP)
1	0.179140	100.0000	0.000000	0.000000	0.000000
2	0.195656	97.12043	1.081376	0.093209	1.704988
3	0.197797	95.07992	1.297091	0.111008	3.511977
4	0.198066	95.05384	1.302403	0.117599	3.526154
5	0.198182	95.04686	1.302205	0.120998	3.529940
6	0.198200	95.03340	1.303923	0.121933	3.540746
7	0.198202	95.03218	1.305060	0.121972	3.540784
8	0.198203	95.03207	1.305118	0.121972	3.540839
9	0.198203	95.03182	1.305130	0.121991	3.541058
10	0.198203	95.03180	1.305136	0.122000	3.541068

Panel - B Variance Decomposition of D(LNM2)					
Period	S.E.	D(LNV2)	D(LNM2)	D(LNCPI)	D(LNRGDP)
1	0.177435	96.80879	3.191205	0.000000	0.000000
2	0.195807	94.91815	3.546863	0.043911	1.491077
3	0.197446	93.38118	3.588225	0.118964	2.911633
4	0.197770	93.39661	3.579977	0.120525	2.902891
5	0.197899	93.37372	3.575392	0.124127	2.926764
6	0.197910	93.36581	3.577340	0.124472	2.932382
7	0.197912	93.36452	3.578607	0.124520	2.932351
8	0.197913	93.36449	3.578616	0.124541	2.932354
9	0.197913	93.36438	3.578669	0.124549	2.932403
10	0.197913	93.36437	3.578671	0.124551	2.932404

Panel - C Variance Decomposition of D(LNCPI)					
Period	S.E.	D(LNV2)	D(LNM2)	D(LNCPI)	D(LNRGDP)
1	0.039974	0.157488	5.293018	94.54949	0.000000
2	0.041299	0.533198	6.572585	92.50619	0.388022
3	0.042775	0.872423	10.07513	86.35529	2.697159
4	0.043205	1.032565	9.957561	84.64801	4.361864
5	0.043313	1.031604	9.923044	84.34147	4.703881
6	0.043357	1.056734	9.903595	84.21602	4.823647
7	0.043373	1.056097	9.904919	84.15987	4.879119
8	0.043377	1.056059	9.905592	84.14532	4.893035
9	0.043379	1.056003	9.905068	84.14101	4.897916
10	0.043379	1.055985	9.904849	84.139 08	4.900091

Panel - D Variance Decomposition of D(LNRGDP)					
Period	S.E.	D(LNV2)	D(LNM2)	D(LNCPI)	D(LNRGDP)
1	0.029820	0.016729	38.59122	13.61851	47.77354
2	0.032256	4.610347	33.13343	11.69846	50.55776
3	0.032266	4.608073	33.11290	11.70693	50.57210
4	0.032332	4.660536	33.06326	11.79279	50.48342
5	0.032340	4.674316	33.04663	11.79338	50.48567
6	0.032342	4.673856	33.04974	11.79603	50.48038
7	0.032342	4.675390	33.04903	11.79657	50.47901
8	0.032342	4.675376	33.04922	11.79656	50.47884
9	0.032342	4.675402	33.04923	11.79658	50.47879
10	0.032342	4.675402	33.04924	11.79657	50.47878

Note: Cholesky Ordering: D(LNV2) D(LNM2) D(LNCPI) D(LNRGDP)

How one standard deviation shock to innovation in each variable is transmitted in to the other variables are presented in the above table -3- of four panels (Panel A, B, C and D) which the ordering is given as velocity , broad money supply, consumers price index and real gross domestic product explained as follows.

Panel A: A shock arising from income velocity of money.

A standard deviation initial shock to the income velocity of money is absorbed 100% by the velocity of money itself. This means the other variables do not have any effect on the income velocity of money immediately. But after the second quarter the other variables such as broad money supply, consumer's price index and real income have effect on velocity of money which accounts 1.08%, 0.09%, 1.75% respectively. For the entire ten quarter or two and half years the effects of money supply, consumer's price index and real income on velocity of money

following the shock arising from velocity of money innovation is negligible never exceeding more than 5% of their sum. The variation in income velocity is highly affected by its own shock than the other variables. It shows that the variation arising from income velocity accounts more than 95% of its own shock and the next is coming from the real income. The impact of money supply on velocity of money is very small and constant over the periods. This implies the velocity of money is not affected by money supply and the velocity of money is predictable by monetary authority.

Panel B : Variance decomposition arising from money supply

In table -3- panel B we can see the effects of one standard deviation shock that arises from the broad money supply. The innovation shock from money supply causes an immediate change in the income velocity of money and the resulting change in velocity of money has

96.8% effect on broad money supply. But the remaining variables do not have immediate effect on money supply in the first quarter. The shock arising in broad money supply (which is one standard deviation) is absorbed by velocity of money than the money supply itself. It means whenever there is a shock in money supply it is absorbed by the income velocity of money and immediately affects the money supply. This is confirmed by the Granger causality that runs from velocity of money to money supply, which is explained in table 2.

From this shock the effects of consumers price index and real income on broad money supply accounts only 3% over the ten quarters and the lion share of 93% is coming from the velocity of money and the remaining is absorbed by the broad money supply itself. Generally we can say that innovation in broad money supply have large impact in predicting the forecast variation of income velocity of money. Therefore, the fluctuation in the broad money supply does not bring volatility in the income velocity of money.

Panel C : A shock started from consumer's price index.

From this panel we can trace the variation in consumer's price index and other variables such as income velocity, money supply and real income due to an initial shock of one standard deviation to consumer's price index. This shock has an immediate effect on consumer's price index, broad money supply and velocity of money but it does not have effect on real income. In the first quarter 94.5% of the shock absorbed by inflation itself and the remaining 5.2% and 0.15% are accounted by broad money supply and income velocity respectively. The first quarter change in inflation has impact on money supply, income velocity and in turn these variables have an effect on inflation in quarter two. In quarter two for the variation in inflation broad money supply accounts 6.6%, income velocity 0.53% real income 0.39% and inflation itself contributes 92.5%. The influence of money supply changes from quarter two to quarter three by 53.3% and the change remains constant after the fourth period. The influence of other variables due to a unit standard deviation shock arising from inflation increases from time to time. By the end of two and half years the total

variation of inflation accounted by money supply is 9.9%, real income 4.9% and income velocity 1.05%. Inflation also accounts by 84% of its own variation of that time. This reveals that in Ethiopia money supply does not affect inflation.

Panel D : Variance decompositions running from real income to the other variables.

Own shock of real income ranged from 47.7% to 50.5% over the ten quarters and also broad money supply accounts the forecast error variance of real income ranged from 33% to 38.5%. The persistent of past shocks of real income after two and half years of the shock explains about 50.5% of the variation in its own shock and while money supply, inflation and income velocity accounts 33.1%, 11.8% and 4.67% respectively. This is supported by the Granger causality test presented on table number 2.

The salient features of variance decompositions applied on the income velocity of money (panel A) reveals that the predominant source of fluctuations in the income velocity of money is largely due to variations in its own shocks and by real income but the contribution of money supply is insignificant which 1.3% over the ten quarters is. In conclusion we can say that the forecast error variance decomposition of money supply is a better predictor of income velocity of money because the variation in income velocity is not affected by money supply.

The unexpected change in broad money supply arising due to a one standard deviation shock to money supply (Panel B) have a small effect on the innovation in velocity of money that is not more than 3.6%. But the innovation in the income velocity of money arising due to a one standard deviation shock of broad money supply have a large impact in predicting the forecast error or variation of broad money supply. Which is supported by the Granger causality that income velocity granger cause the broad money supply. To conclude the variability of income velocity of money in Ethiopia is not influenced or arising from the fluctuation of broad money supply. But this is contradictory with Oluwole (1997) study of thirty less developing countries including Ethiopia found that large proportion of the variability in income

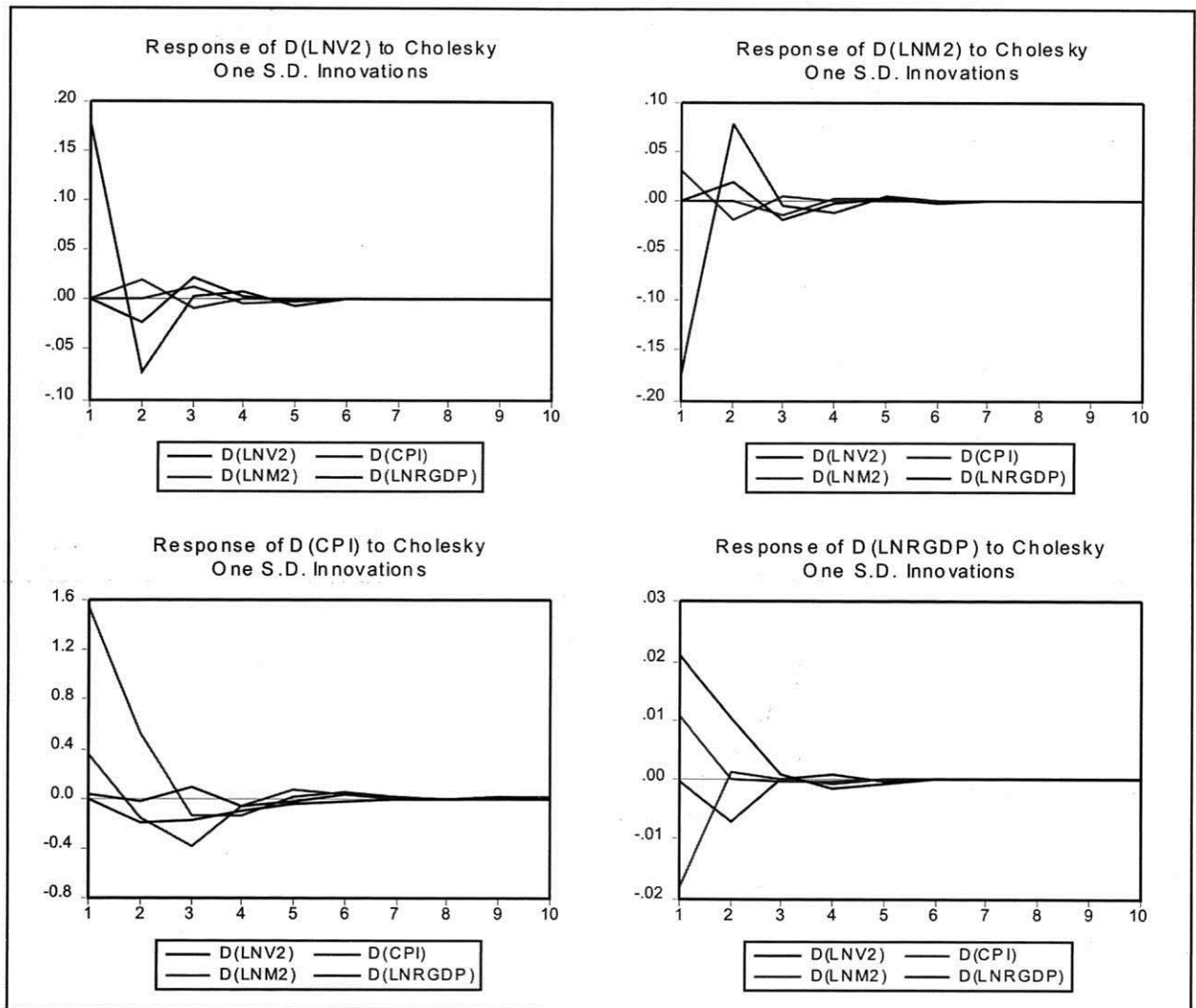
velocity of money is stemmed from volatility in the growth of money supply.

4.6 Impulse response Function

The impulse response allows us to analyze the dynamics of a VAR model by converting in to its vector moving average (VMA) representation.

This method used to trace out the dynamic impacts of changes in each of the endogenous variables over time. Impulse response can be defined as the response of endogenous variables to a unit shock change to innovations.

Figure -3- Impulse Responses to Generalized One S.D Innovation



Using the above impulse response function of figure-3-we can interpret the relationship between variables as follows.

4.7 The income velocity of money

Innovation which has been shocked by one standard deviation of the income velocity residuals caused the income velocity to increase by 0.1797 percent. It means the velocity of

money increases by the total amount of shock emanating from its own residuals in the first round. Or the innovations coming from the residual of income velocity money is fully absorbed by the velocity itself in the first quarter. In the second round (one period ahead) income velocity declined by 0.0723 percent relative to the base period as a result of exogenous shock to income velocity of money.

Whereas broad money supply and consumer's price index increased income velocity by .001995% and by 0.0019% respectively but RGDP reduced it by 0.022% and so on. The effects of all the variables are dying after quarter six.

4.8 Broad money supply

A one standard deviation shock to broad money supply increase money supply by 0.0316% and quickly dies out after quarter four. The same shock does not have any innovation effect from CPI and RGDP. Or CPI and RGDP do not have innovation effect on money supply in the first round. But by the second round money supply declined by 0.0184% relative to the base year as a result of the exogenous shock to broad money supply and increased by 0.078%, 0.0015%, 0.02% as a result of shock from income velocity, CPI and RGDP respectively. All the variables effect dies out after the 5th quarter.

4.9 CPI

A one standard shock arises from CPI residual will increase it by 1.54% initially and gradually dies out at quarter eight or after two years. From the same shock the innovation coming from broad money supply and income velocity reduces CPI by 0.17% and 0.037% respectively in period one. But after quarter two the shock will have its innovation until it die out in period nine.

4.10 Real GDP

Finally if we look at the RGDP residual shock in the first quarter it increases RGDP by 0.021% and the innovation from broad money supply and income velocity decreased RGDP by 0.0005% and 0.018% respectively where as CPI increased it by 0.011%. Almost all the variables die out before quarter seven.

5. Policy Implications

From the above analysis we found that the income velocity of money is stable or it is not affected by the change in money supply in Ethiopia. The policy implication of this finding is stated as follows.

i. When the growth of money supply Granger cause income velocity of money it is impossible to predict the future behavior of income velocity of money by monetary

authority. Therefore the instability of the income velocity of money following a change in the money supply will affect the objective of price stability by monetary authorities. Hossain (2009) found that it was due to this reason the unstable income velocity of money that the Philippines monetary authority switched in to inflation targeting in 2002 under flexible exchange rate system. Generally the unpredictable volatility in the velocity of money violates the basic assumption in the conduct of monetary policy. It means monetary aggregates cannot be used as reliable intermediate target variables because either it becomes to less controllable or the relationship between their growth rate and economic activities are weakens. And the only option available for the monetary authority is to use rate of interest rate as intermediate variable which is impractical to a country like Ethiopia where there is no capital market and with a limited money markets. If it is exercised even for emerging economies it is very dangerous because they lifted control in capital flows.

ii. Velocity of money is a constant function not a single number then velocity can vary systematically and predictably in response to variables in the function. This implies that a growth rate of money supply becomes a key determinant of inflation in the long run. Therefore, if the growth of money supply do not give rise to volatility in the income velocity of money, then it is possible to curtail down inflation by controlling money supply growth. Therefore from the analysis we obtained that the variation in the income velocity of money in Ethiopia is not affected by the volatility of money supply then we can recommend or support to use broad money as intermediate target variable of monetary policy.

iii. When an increase in money supply is followed by an opposite and equal movement in the velocity of money, then the shock will not be transmitted to the price level or output. Any expansion in money supply would be completely absorbed by a change in the velocity of money, without any change in output or the price level. Therefore, the direction and extent of the movement of velocity of money have profound implications for the reliability and

effectiveness of monetary policy in bringing changes in output or the price level. This implies that when there is variability in the income velocity of money the use of monetary aggregate to regulate aggregate economic activity may be highly questionable.

iv. The stability of income velocity of money confirms the long run stable relationship between the growth of money and nominal income growth. But if there is variability in the growth of income velocity it will break the long run relationship between money growth and nominal income growth. And at this time

discretionary or rule based monetary policy could results considerable shock in nominal income which would brought price fluctuations and very difficult to achieve price stability in the economy. Due to the variability of income velocity of money targeting nominal GDP could result significant economic destabilization.

v. Whenever there is a stability of income velocity of money the central bank has full control over money supply since money multiplier is stable and income velocity is predictable.

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Factors Affecting on Customers' Satisfaction in E-Banking: A Case Study of Public and Private Banks

Vijay M. Kumbhar

Rayat Shikshan Sanstha Satara's, Abasaheb Marathe College, Rajapur Dist- Ratnagiri State-
Maharashtra, India 416 702

e-mail : vijay.kumbhar9@gmail.com

Abstract : This study evaluates major factors (i.e. service quality, brand perception and perceived value) affecting on customers' satisfaction in e-banking service settings. This study also evaluates influence of service quality on brand perception, perceived value and satisfaction in e-banking. Required data was collected through customers' survey. For conducting customers' survey likert scale based questionnaire was developed after review of literature and discussions with bank managers as well as experts in customer service and marketing. Collected data was analyzed using principle component (PCA) using SPSS 19.0. A result indicates that, Perceived Value, Brand Perception, Cost Effectiveness, Easy to Use, Convenience, Problem Handling, Security/Assurance and Responsiveness are important factors in customers satisfaction in e-banking it explains 48.30 per cent of variance. Contact Facilities, System Availability, Fulfillment, Efficiency and Compensation are comparatively less important because these dimensions explain 21.70 per cent of variance in customers' satisfaction. Security/Assurance, Responsiveness, Easy to Use, Cost Effectiveness and Compensation are predictors of brand perception in e-banking and Fulfillment, Efficiency, Security/Assurance, Responsiveness, Convenience, Cost Effectiveness, Problem Handling and Compensation are predictors of perceived value in e-banking

Keywords : Service quality, Brand perception, Perceived value, Satisfaction, E-Banking

1. Introduction

A customer satisfaction is an ambiguous and abstract concept. Actual manifestation of the state of satisfaction will vary from person to person, product to product and service to service. The state of satisfaction depends on a number of factors which consolidate as psychological, economic and physical factors. The quality of service is one of the major determinants of the customer satisfaction (Parasuraman, Zeithaml and Barry, 1985; 1998; Cronin and Taylor, 1994; Gronroos, 1984; Zeithaml, Parasuraman, and Malhotra, 2000; Scheffer and Reichheld, 2000; Marcel Gommans, Krish S. Krishnan, & Katrin B. Scheffold, 2001; Yoo and Donthu, 2001 and Loiacono, Watson and Goodhue, 2002). Many researchers and experts mentioned that, service quality can be enhanced by using advanced information and communication technology (ICT).

Today, almost all banks in are adopted ICT as a mean to enhance service quality. They are providing ICT based e-services to their customers which is called as e-banking, internet banking or online banking etc. It brings

connivance, customer centricity, enhance service quality and cost effectiveness in the banking services and increasing customers' satisfaction in banking services. Even now, customers are also evaluating their banks in the light of e-service era. However, author felt that, there may be some possibilities of gaps between customers' expectations and actual perception of service quality, brand perception and perceived value in e-banking. Therefore, author has conducted this research to identify the major factors affecting on customers' satisfaction in e-banking in Indian context.

2. Review of Literature

There is huge literature available in relation to measuring service quality and customer satisfaction relating to online and offline services. It elaborate that, there is strong relationship between service quality, brand perception and perceived value with customer satisfaction and loyalty.

2.1 Service quality and customer satisfaction

The relationship between expectation, perceived service quality and customers

satisfaction have been investigated by a number of researches (Zeithaml, et al, 1988). They found that, there is very strong relationship between quality of service and customer satisfaction (Parasuraman et al, 1985; 1988;). Increase in service quality of the banks can satisfy and develop attitudinal loyalty which ultimately retains valued customers (Nadiri, et al 2009). The higher level of perceived service quality results in increased customer satisfaction. When perceived service quality is less than expected service quality customer will be dissatisfied (Jain and Gupta, 2004). According to Cronin and Taylor (1992) satisfaction is super ordinate to quality-that quality is one of the service dimensions factored in to customer satisfaction judgment.

2.2 Brand reputation and customer satisfaction

Marketing literature including NCSI and ACSI literature examined positive of the link between the satisfaction and the brand reputation. Wafa et al (2009) mentioned that, the nature and amount of a consumer's experience with an evoked set of brands. Perceived brand reputation has significant impacts on customer satisfaction and a consumer's beliefs about brand is derived from personal use experience, word-of-mouth endorsements/criticisms, and/or the marketing efforts of companies. (Woodruff et al.1983). A brand perception is also one of the important aspects of in banking sector. Perceived brand reputation in banking sector refers to the banks reputation and existing place of bank in the banking industry (Che-Ha and Hashim, 2007, Reynolds, 2007). It measures experience of the customer how he/she fill with this brand and their services. A perceived overall brand performance is determined by some combination of beliefs about the brand's various performance dimensions (Woodruff et al 1983; Che-Ha and Hashim, 2007). A brand perception is important factor to service provides because, satisfied customer with brand will recommend that service to others.

2.3 Perceived value

Apart from brand perception, perceived value also one of most important constructs of the customer satisfaction measurement; it is used to

assess the actual benefits of the service. Perceived value is compression between price or charges paid for the services by the customer as sacrifice of the money and utility derived by service perception (Holbrook, 1994; Bolton, & Drew, 1991; Cronin and Taylor, 1992; 1994). In this study we have assessed overall satisfaction also it can be say cumulative satisfaction. It is overall perception and concluded remark of the customer regarding alternative banking channel used by customers. The overall remark of the customer is based on his/her expectations about various aspects of service quality and actual service he/she perceived by the particular bank.

2.4 Conceptualization and Measurement of Customer Satisfaction

The term 'e-customer' refers to the online purchaser/users whether it is individual or corporate. It can be defined as "e-customer is an individual or corporate one who are using e-portals to purchase, order, receive information and pay price / charges through various types of e-channels" i.e. internet banking, mobile banking, ATM, POS, credit cards, debit cards and other electronic devises. Traditionally the level of customer satisfaction was determined by the quality of services, price and purchasing process. Consequently, the level of e-satisfaction is also determined by the quality of e-services, the price level and e-purchasing process (Ming Wang, 2003). Literature on e-consumers satisfaction realizes that there are different factors of e-customers satisfaction than formal customer, e-satisfaction are modeled as the consequences of attitude toward the e-portals (Chen and Chen, 2009). After review of the literature some important factors of e-satisfaction were extracted (Table 1). There are number of scales and instruments are available to assess service quality. Available literature shows that, the customer satisfaction is measured via service quality and service quality measured by various measurement tools and instruments developed by various researchers (Riscinto-Kozub, 2008) and marketing consultancy organisations i.e. Gronroos's 'Perceived Service Quality Model, SERVQUAL, SERVPERF, SITQUAL, WEBQUAL, etc

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Table 1: Snap Shot of Literature Review

	Service/Scale	Auth or/s	Attributes/Dimensions Used in the Study
1	Kano's Model	Kano (1984)	Must-be requirements, One-dimensional requirements, Attractive requirements, Reverse Quality
2	Perceived SQ Model	Gronroos (1984)	Technical service quality, Functional service quality, Corporate image
3	SERVQUAL	Parasuraman, Zeithaml and Barry (1985; 1998)	Reliability, Responsiveness, Assurance, Empathy and Tangibles
4	SERVPERF	Cronin and Taylor (1994)	Reliability, Responsiveness, Assurance, Empathy and Tangibles
5	E-commerce	Schefter and Reichheld (2000)	Customer support, on-time delivery, compelling product presentations, convenient and reasonably priced shipping and handling, clear and trustworthy privacy
6	e-SQ and e-SERVQUAL	Zeithaml, Parasuraman, and Malhotra (2000)	efficiency, reliability, fulfilment, privacy, responsiveness, compensation, and contact
7	e-Satisfaction	Szymanski and Hise (2000)	Convenience, Merchandising, Easiness, Information, Design, Financial security
8	E-loyalty	Marcel Gommans, Krish S. Krishnan, & Karin B. Scheffold (2001)	Website & Technology, Value Proposition, Customer Service, Brand Building and Trust & Security
9	SITEQUAL	Yoo and Donthu (2001)	Ease of use, aesthetic design, processing speed, and security
10	WebQual	Loiacono, Watson and Goodhue (2002)	Information fit to task, interactivity, trust, responsiveness, design, intuitiveness, visual appeal, innovativeness, websites flow, integrated communication, business process and viable substitute, accessibility, speed, navigability and site content.
11	e-Satisfaction	Anderson and Srinivasan (2003)	convenience motivation, purchase size, inertia, trust and perceived value
12	E-S-QUAL and E-RecS-QUAL	Parasuraman, Zeithaml & Malhotra in (2005)	Efficiency Fulfilment, System availability, Privacy, Responsiveness, Compensation and Contact
13	Movie-Related Websites	Cho Yoon, and Joseph Ha (2008),	Ease of use, Usefulness, involvement, information factor, Convenience, technology, Community Factor, Entertainment Factors, Brand Name, Price Factor
14	BANKZCT	Nadiri, et al (2009)	Desired, adequate, predicted and perceived service quality

Source: Review of Literature

Table 2 shows that, 82.1% of the respondents were male, 17.9 % were female. In terms of age group, 20% were below 25 years, 34.7% of 25 to 35 years, 35.8% were 36 to 50 years and 9.5% were 51 to 60 years old out of 190 respondents. There were no respondent above 60 years however; some retired persons from military and army were covered under study as samples. Educational status of the respondents indicates that 4.2% of respondents were below HSC,

5.3% were HSC, 49.5% were graduates and 41.1% were post graduates. There were 31.6% were employees and 36.3% were businessmen as a core respondent who were using most of alternative channels. However, 13.7% were professional (doctor, engineers, chartered accountants, investment consultants, insurance agents etc.), 14.2% were students and 4.2% were retired persons.

Table 2: Demographic Profile of the Respondents

	Frequency	Percent		Frequency	Percent
<1 Lakh	39	20.5	<HSC	8	4.2
1 to 3 Lakh	31	16.3	HSC	11	5.3
3 to 8 Lakh	70	36.8	Graduate	94	49.5
8 to 15 Lakh	27	14.2	Post Graduate	77	41.1
15 to 25 Lakh	9	4.7	Total	190	100.0
>25 Lakh	4	2.1	Employee	60	31.6
Dependents	10	5.3	Businessman	69	36.3
Total	190	100	Retired	8	4.2
Below 25	38	20	Student	27	14.2
25-35	66	34.7	Professional	26	13.7
36-50	68	35.8	Total	190	100.0
51-60	18	9.5	Female	34	17.9
Total	190	100	Male	156	82.1
Source: Survey			Total	190	100

6.2 Reliability Test

In order to prove the internal reliability of the model used, the authors have performed Cronbach's Alpha Test of Reliability. Applying this test specifies whether the items pertaining to each dimension are internally consistent and whether they can be used to measure the same construct or dimension of service quality. According to Nunnally (1978) Cronbach's alpha should be .700 or above. But, some of studies 0.600 also considered acceptable (Gerrard, et al, 2006; Kenova and Jonasson 2006). Table no 3 indicates that the Cronbach's alpha value of accuracy was (.425) less than .700 therefore, this item was eliminated from the factor analysis. However, Cronbach's alpha value of all items were acceptable, it means that, present data is suitable for factor analysis.

Table no. 3 : Reliability Statistics

	Construct	Items	Cronbach Alpha
1	System Availability	3	.845
2	E-fulfillment	3	.985
3	Accuracy	2	.425
4	Efficiency	3	.752
5	Security	3	.846
6	Responsiveness	2	.854
7	Easiness	3	.883
8	Convenience	3	.877
9	Cost Effectiveness	3	.722
10	Problem Handling	3	.801
11	Compensation	3	.791
12	Contact	3	.702
13	Brand Perception	1	1.00
14	Perceived Value	1	1.00

6.3 Measure of Sampling Adequacy

The Kaiser-Meyer-Olkin measure of sampling adequacy tests whether the partial correlations among variables are small. High values (close to 1.0) generally indicate that a factor analysis may be useful with data. Bartlett's test of sphericity tests the hypothesis that correlation matrix is an identity matrix, which would indicate that variables are unrelated. Small values (less than 0.05) significance level indicate that a factor analysis may be useful with data. Table no 4 indicates that in the present test The Kaiser-Meyer-Olkin (KMO) measure was 0.745. Bartlett's sphericity test indicating Chi-Square = 1001.961, df= 78 with a significance of 0.000.

Table no. 4: KMO and Bartlett's Test			
KMO Measure of Sampling Adequacy.			.745
Bartlett's Test of Sphericity	Approx. Chi-Square	1001.961	
	df	78	
	Sig.	.000	

6.4 Principle Component Analysis

Extraction communalities are estimates of the variance in each variable accounted for by the components. Table 5 reveals that, communalities are ranging from .630 to .789, which indicates that the extracted components represent the variables well.

Table no 6 reveals that amount Eigenvalues and percentage of variance in the original variables accounted for by each component. Factor-1 loading about 32.45%, Factor-2 loading 15.86%, Factor-3 loading 12.94% and Factor-4 loading 8.82%. All four factors explain nearly 70% of the variability; it means only a 30% loss of information. According to Kenova and Jonasson (2006) and Garson, (2002) 60% is arbitrary level for good factor loadings in likert scale cases

Table 5: Communalities		
	Initial	Extraction
System Availability	1	0.685
Fulfillment	1	0.789
Efficiency	1	0.716
Security/Assurance	1	0.657
Responsiveness	1	0.704
Easy to Use	1	0.63
Convenience	1	0.744
Cost Effectiveness	1	0.747
Problem Handling	1	0.748
Compensation	1	0.719
Contact Facilities	1	0.662
Brand Perception	1	0.673
Perceived Value	1	0.739
Extraction Method: Principal Component Analysis.		

Table no. 4 suggest that System Availability, E-Fulfilment, Cost Effectiveness, Brand Perception, Security and Responsiveness, Efficiency, Easiness and Convenience, Contact, Perceived Value, are most important factors which loading score is more than (.800).

Table 6: Total Variance Explained						
	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.219	32.455	32.455	4.219	32.455	32.455
2	2.062	15.860	48.315	2.062	15.860	48.315
3	1.683	12.944	61.260	1.683	12.944	61.260
4	1.148	8.829	70.089	1.148	8.829	70.089
5	.724	5.569	75.658			
6	.604	4.649	80.307			
7	.575	4.422	84.729			
8	.538	4.140	88.869			
9	.365	2.806	91.675			
10	.355	2.732	94.407			
11	.308	2.366	96.773			
12	.236	1.819	98.592			
13	.183	1.408	100.000			
Extraction Method: Principal Component Analysis.						

Table 7 indicates that Factor 1 includes Perceived Value, Brand Perception and Cost Effectiveness; Factor 2 includes Easy to Use, Convenience, Problem Handling, Security/Assurance and Responsiveness. Factor 3 includes contact facilities, System Availability, and Fulfillment. Factor 4 includes Efficiency and Compensation. Factor 1 and Factor 2 covers eight attributes and explains variance 48.31 per cent.

Table 7: Rotated Component Matrix ^a				
	Component			
	1	2	3	4
Perceived Value	.835			
Brand Perception	.799			
Cost Effectiveness	.754			
Easy to Use		.508		
Convenience		.624		
Problem Handling		.778		
Security/Assurance		.775		
Responsiveness		.590		
Contact Facilities			.607	
System Availability			.821	
Fulfillment			.774	
Efficiency				.567
Compensation				.769
Variance	32.455	15.860	12.944	8.829
Cumulative Variance	32.455	48.315	61.260	70.089
Extraction Method: Principal Component Analysis.				

6.5. Testing of Hypothesis

Multiple regression tests were performed to test hypotheses H1, H2 and H3. R Square value .995, $F = 2611.705$ $df = 13/173$ sig. = .000 indicates that, Perceived Value, Responsiveness, Security/Assurance, Compensation, Easy to

Use, System Availability, Cost Effectiveness, Contact Facilities, Efficiency, Convenience, Brand Perception, Problem Handling, Fulfillment are good predictors of customers' satisfaction in banking (Table 8).

Table 8: Model Summary

Table 8: Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.997 ^a	.995	.995	.02849	
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.563	13	2.120	2611.705	.000 ^a
	Residual	.140	173	.001		
	Total	27.703	186			
a. Predictors: (Constant), Perceived Value, Responsiveness , Security/Assurance ., Compensation , Easy to Use ., System Availability ., Cost Effectiveness ., Contact Facilities , Efficiency ., Convenience ., Brand Perception ., Problem Handling , Fulfillment .						
b. Dependent Variable: Overall Satisfaction						

Table 9 indicates that, all service quality dimensions were predictors of overall satisfaction in e-banking therefore the results do

not permit to accept the null hypothesis. Hence, here Null hypothesis were rejected based on results of regression analysis.

Table 9: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Null Hypothesis
		B	Std. Error	Beta			
1	(Constant)	.105	.059		1.781	.077	Reject
	System Availability	.107	.014	.171	7.789	.000	Reject
	Fulfillment	.108	.019	.151	5.661	.000	Reject
	Efficiency	.102	.019	.134	5.474	.000	Reject
	Security/Assurance	.089	.017	.117	5.349	.000	Reject
	Responsiveness	.051	.012	.088	4.219	.000	Reject
	Easy to Use	.083	.009	.189	9.346	.000	Reject
	Convenience	.099	.010	.232	9.970	.000	Reject
	Cost Effectiveness	.050	.014	.080	3.444	.001	Reject
	Problem Handling	.102	.016	.154	6.423	.000	Reject
	Compensation	.084	.008	.207	10.595	.000	Reject
	Contact Facilities	.105	.009	.243	11.607	.000	Reject
a. Dependent Variable : Overall Satisfaction							

Table 10 indicates that, all service quality dimensions were not good predictors of brand perception in e-banking because R Square value .375 reveals that, service quality only explains 37 per cent of variance in brand perception. Table 10 also indicates that, Security/Assurance,

Responsiveness, Easy to Use, Cost Effectiveness and Compensation are predictors of brand perception in e-banking therefore H2 is partially accepted and partially rejected. Dimension wise rejection and acceptance of hypothesis 2 is indicates in the table no 10.

Table 10: Model Summary							
Model		R	R Square		Adjusted R Square		Std. Error of the Estimate
1		.612 ^a	.375		.335		.65013
a. Predictors: (Constant), Contact Facilities , Cost Effectiveness ., Easy to Use ., Responsiveness , Compensation , Security/Assurance ., System Availability ., Convenience ., Efficiency ., Problem Handling , Fulfillment .							
Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Null Hypothesis
		B	Std. Error	Beta			
1	(Constant)	.090	.461		.195	.845	
	System Availability	.211	.107	.167	1.964	.051	Accept
	Fulfillment	.177	.148	.123	1.195	.234	Accept
	Efficiency	-.097	.148	-.062	-.655	.513	Accept
	Security/Assurance	.266	.079	.276	3.389	.001	Reject
	Responsiveness	.226	.054	.263	3.281	.005	Reject
	Easy to Use	.253	.071	.250	3.589	.004	Reject
	Convenience	.021	.131	.014	.159	.874	Accept
	Cost Effectiveness	.254	.071	.265	3.589	.000	Reject
	Problem Handling	.062	.122	.046	.506	.614	Accept
	Compensation	.270	.061	.282	3.448	.003	Reject
	Contact Facilities	-.135	.112	-.105	-1.201	.231	Accept
a. Dependent Variable: Brand Perception							

Table 11 indicates that, all service quality dimensions were not good predictors of brand perception in e-banking because R Square value .469 reveals that, service quality only explains 47 per cent of variance in perceived value. Table 11 also indicates that, Fulfillment, Efficiency, Security/Assurance, Responsiveness, Convenience, Cost Effectiveness, Problem

Handling and Compensation are predictors of perceived value in e-banking therefore H3 is partially accepted for same. However, System Availability, Easy to Use and Contact Facilities are not predictors of perceived value therefore H3 was partially rejected. Dimension wise rejection and acceptance of hypothesis 2 is indicates in the table no 11.

Table 11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685 ^a	.469	.435	.58058

a. Predictors: (Constant), Contact Facilities , Co st Effectiveness ., Easy to Use ., Responsiveness , Compensation , Security/Assurance ., System Availability ., Convenience ., Efficiency ., Problem Handling , Fulfillment .

Coefficients^a

Model	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.	Null Hypothesis
	B	Std. Error	Beta			
1 (Constant)	.158	.411		.384	.702	
System Availability	.128	.096	.104	1.330	.185	Accept
Fulfillment	.290	.063	.272	3.756	.001	Reject
Efficiency	.255	.062	.265	3.452	.000	Reject
Security/Assurance	-.279	.047	-.254	-3.680	.003	Reject
Responsiveness	-.280	.044	-.264	-3.591	.005	Reject
Easy to Use	.118	.064	.119	1.856	.065	Accept
Convenience	.249	.070	.267	3.555	.000	Reject
Cost Effectiveness	-.289	.100	-.233	-2.888	.004	Reject
Problem Handling	.287	.109	.246	2.725	.005	Reject
Compensation	-.267	.055	.280	-3.218	.005	Reject
Contact Facilities	.344	.063	.369	5.431	.000	Accept

a. Dependent Variable: Perceived Value

7. Conclusion

The current study attempted to examine a contribution of various dimensions of service quality in customers' satisfaction. A result of the study indicates that, all 13 variables were found

significant and were good predictors of overall satisfaction in e-banking. However, A result of principle component analysis indicates that, Perceived Value, Brand Perception, Cost Effectiveness, Easy to Use, Convenience,

Problem Handling, Security/Assurance and Responsiveness are important factors in customers satisfaction in e-banking it explains 48.30 per cent of variance. Contact Facilities, System Availability, Fulfillment, Efficiency and Compensation are comparatively less important because these dimensions explain 21.70 per cent of variance in customers' satisfaction. Responsiveness, Easy to Use, Cost Effectiveness and Compensation are predictors of brand perception in e-banking and Fulfillment, Efficiency, Security/Assurance,

Responsiveness, Convenience, Cost Effectiveness, Problem Handling and Compensation are predictors of perceived value in e-banking. Therefore, banker and e-banking service designers should think over these dimensions and make possible changes in the e-banking services according to the customers' expectations and need of the time. It will be helps to enhance service quality of e-banking and increase the level of customers' satisfaction in e-banking.

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Annexure -I

Service Quality Dimensions Used in eBankQual	
Dimension	Description
1. System Availability	Up-to-date equipment and physical facilities - Full Branch computerization, Core banking, ATM, POS, internet banking, mobile banking, SMS alerts, credit card, EFT, ECS, E -bill pay
2. E-Fulfillment	Scope of services offered, availability of global network, digitalization of business information, Variety of services
3. Accuracy	Error free e -services through e -banking channels
4. Efficiency	Speed of service (clearing, depositing, enquiry, getting information, money transfer, response etc.), immediate and quick transaction and check out with minimal time.
5. Security	Trust, privacy, believability, truthfulness, and security, building customer confidence. freedom from danger about money losses, fraud, PIN, password theft; hacking etc.
6. Responsiveness	Problem handling, recovery of the problem, prompt service, timeliness service, helping nature, employee courtesy, recovery of PIN, password and money losses
7. Easy to use	Easy to use & functioning of ATM, Mobile banking, internet banking, credit card, debit card etc.
8. Convenience	Customized services, any where and any time banking, appropriate language support, time saving
9. Cost Effectiveness	Price, fee, charges, - i.e. commission for fund transfer, interest rate, clearing charges, bill collection and payments', transaction charges, charges on Switching of ATM, processing fees etc.etc price, charges and commissions should be reduced and charges taken by Telecommunication Company, device designer company, internet service providers
10. Problem Handling	It refers to problem solving process regarding computerized banking services
11. Compensation	It refers to recover the losses regarding problems and inconvenience occurred in using e -banking channels.
12. Contact	Communication in bank and customer or customers to bank, Via e-mail, SMS, Phone, interactive website, postal communication, fax
13. Brand Perception	Customers overall perception according to promises given by bank for banking services
14. Perceived Value	Consolidated perception from banking service in terms of perceived quality and money expended for getting banking services.

Leadership Style and Emotional Intelligence: A Gender Comparison

Mohammed Shahedul Quader

Department of Marketing Studies and International Marketing

Faculty of Business Administration

University of Chittagong, Bangladesh

e-mail: shahedulquader@yahoo.com

Abstract: The purpose of this study is to examine the relationship between three distinct variables: gender, leadership style, and emotional intelligence. Two leadership styles were explored: transactional and transformational. No significant gender differences were found between either of the two. Emotional intelligence was defined by five factors: Self-Awareness, Managing Emotion, Self-Motivation, Relating Well, and Emotional Mentoring. Women were found to score more highly than men in the two Interpersonal factors: Relating Well and Emotional Mentoring. Finally, there was a noticeably higher interaction between three components of E.I (Self-Awareness, Self-Motivation and Emotional Mentoring) and the transactional, rather than transformational leadership style.

Keywords: Leadership, Emotional Intelligence, Gender and Comparison

1. Introduction

1.1 Overview

Professional organizations form the backbone of today's society. Beyond its intrinsic role in human survival and the workplace is increasingly considered as an opportunity for human interaction and personal development. It is due to this rising significance of the quality of relationships established in the workplace, and the extent to which these can benefit the organization as a whole, that issues of diversity in emotional intelligence (EI), leadership style and gender are brought forward by this study. For the past couple of decades, the subject matter has been attracting more and more general interest. Popular literature has created a virtual industry related to gender differences associated with emotional intelligence.

1.2 Research Questions and Objectives

In the traditionally patriarchic nature of organizations, where gender has often constituted an object of prejudice, and where an uncritical adoption of stereotypes still prevails, it has become of paramount importance to attempt to discern the differences that do in fact exist between genders. It is a current urgent need to be able to substantiate one's arguments with scientific evidence and widely conducted research results. Thus, one of the central aims of this study is to unveil the true role of gender in determining two critical areas of Organizational

Behavior: leadership style and emotional intelligence. Recently, increasing numbers of scholars have argued that emotional intelligence is a core variable that affects the performance of leaders. It is also therefore the objective of this study to examine the extent to which leadership style (and whether a particular type of leadership can emerge as most positive) is influenced by E.I. (argued to have a positive effect on job performance and attitudes). Considering the above factors lead to the following research questions:

- What defines successful leadership, and how far can one assume that a certain leadership style will be regarded as having more favorable implications than another?
- How exactly emotional intelligence is related to leadership?
- Why should there be such an interest in gender differences in E.I?
- To what extent leadership is impacted by gender?

2. Literature Review

2.1 Leadership

2.1.1 Transactional vs Transformational Leadership: Definitions

As a generic term, leadership undoubtedly encompasses a wide range of interpretations, and literary opinion has often been divided in

terms of the number and styles of leadership that exist. Transformational leadership is of particular interest, since it is considered to be mostly connected with emotional intelligence. In addition, in a content analysis of articles published in *Leadership Quarterly*, Lowe and Gardner (2001) found that one third of the research was about transformational or charismatic leadership, clearly suggesting the 'central place it occupies in leadership research. Transactional and transformational leadership were first conceptualized by Burns (1978) and later developed by Bass (1984). Bass and Avolio (1994) defined transformational leadership as leadership that occurs when the leader stimulates the interest among colleagues and followers to view their work from a new perspective. The transformational leader generates an awareness of the mission or vision of the organization, and develops colleagues and followers to higher levels of ability and potential. In addition, the transformational leader motivates colleagues and followers to look beyond their own interests towards interests that will benefit the group. As its name implies, transformational leadership is a process that changes and transforms people. It is concerned with emotions, values, ethics, standards, and long-term goals and includes assessing followers' motives, satisfying their needs, and treating them as full human beings. Bass and Avolio (1994) suggested that its current popularity may be due to its emphasis on intrinsic motivation and follower development. It fits the needs of today's work groups, who want to be inspired

and empowered to succeed in times of uncertainty. In comparison to transformational leadership, Bass and Avolio (1994) described transactional leadership occurring when the leader rewards or disciplines the follower with regards to performance. Burns (1978) described transactional leaders as leaders that emphasize work standards, assignments, and task-oriented goals.

2.1.2 The Additive Effect of Transformational Leadership

Several researchers have investigated the effects of transformational and transactional leadership. Bass (1997) found transformational leadership when compared to transactional leadership, predicted higher employee ratings of effectiveness and satisfaction. Bass (1997) noted that transformational leaders were promoted more often and produced better financial results than transactional leaders. Furthermore, Keller (1995) found that certain aspects of transformational leadership predicted higher group performance. Evidence also suggests that leadership enhances subordinates' trust (Barling et-al., 2000; Pillai et-al., 1999; Podsakoff et-al., 1996)) in leadership, as well as employee's affective commitment (Barling et-al., 1996). More importantly, top performing managers are seen as more transformational in their leadership style than ordinary managers and transformational leadership is fundamentally morally uplifting (Avolio, 1994). This emphasis sets the transformational approach apart from all other approaches to leadership because it suggests that leadership has a moral dimension.

TRANSFORMATIONAL LEADERSHIP

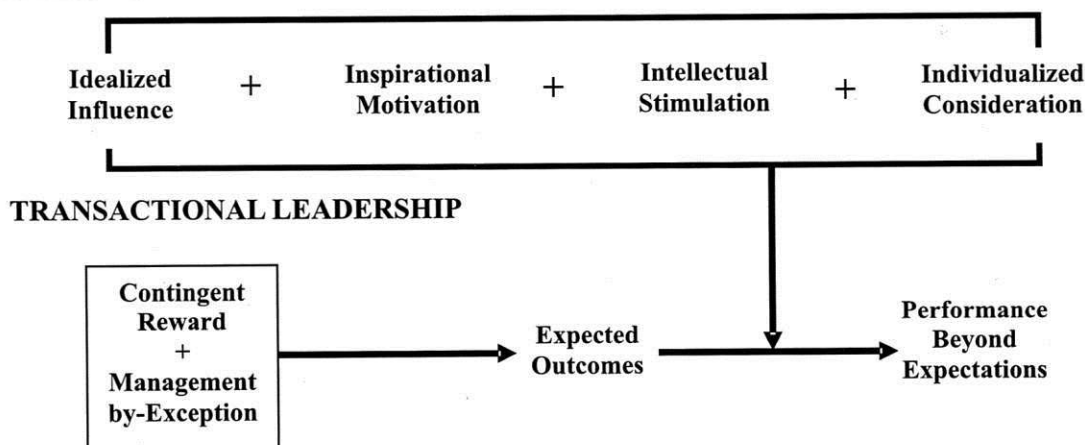


Figure 1: The Additive Effect of Transformational Leadership. (Bass and Avolio 1994)

Given the usefulness of transformational leadership, attention has turned to other issues such as how it develops (Zacharatos et al., 2008), and associated factors such as moral development that may predispose individuals to use transformational leadership (Turner and Barling, 2000).

2.1.3 Leadership Success Beyond Leadership Styles

Transformational Leadership is not without any important criticisms in itself. Amongst the most prominent, is that it has the potential to be abused. If this style of leadership is concerned with changing peoples' values and moving them to a new vision, who is to determine whether the new directions are good and more affirming? Who decides that a new vision is a better vision? If the values to which the leader is moving his or her followers are not better, and if the set of human values is not more redeeming, then the leadership must be challenged. Various theories in the past have concentrated on the need to look beyond leadership styles and simple comparisons between them, and to emphasize more the role of the context, or situation that drives leadership action. These theories stress using different styles of leadership appropriate to the needs created by different organizational situations. They postulate that no single type is outstanding in all situations, that all leadership types have good and bad points, and each will be effective in the right situation. (Fiedler and Chemers 1984).

Contingency Theory of Fiedler and Chemers (1984) states that a leader's success is contingent on two factors: (1) the leader's typical way of interacting with members of the group (i.e., the leadership style); and (2) the degree to which the leader has control over the situation (i.e., the group, the task, and the outcome). This is called "situational control". Why then, is situational control so important and what does it depend on? Feeling in complete control of the leadership situation means being relaxed, secured, and at ease, whilst when the outcome of the actions is in doubt, there is an element of tension, uncertainty, and perhaps excitement. Three contextual variables are responsible for achieving control: the leader's relationship with the group, the structure of the task, and the power vested in the leader's position. Effective

leadership required to match the situation to particular leadership style. Fiedler and Chemers (1984) reveal that task-motivated leaders (transactional) perform best in situations of high control or low control and relationship-motivated (transformational) leaders perform best in situations of moderate control.

2.2 Emotional Intelligence

2.2.1 The Definition and Domain of EI

Emotional intelligence has its roots in the concept of "social intelligence" that was first identified by Thorndike in 1920. Thorndike defined social intelligence as "the ability to understand and manage men and women, boys and girls — to act wisely in human relations." Following Thorndike, Gardner (1993) included social intelligence as one of the seven intelligence domains in his theory of multiple intelligences. According to Gardner, social intelligence is comprised of a person's interpersonal and intrapersonal intelligences. Intrapersonal intelligence relates to one's intelligence in dealing with oneself, and is the ability to "symbolize complex and highly differentiated sets of feelings." In contrast, interpersonal intelligence relates to one's intelligence in dealing with others and is the ability to "notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations and intentions". Salovey and Mayer (1990) were among the earliest to propose the name "emotional intelligence" to represent the ability of people to deal with their emotions. They defined emotional intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions". This in fact constitutes the most widely accepted scientific definition of E.I. Goleman (1996) adopted Salovey and Mayer's (1990) definition, and proposed that EI involves abilities are categorized as: (a) Self-awareness, (b) Self regulation, (c) Self-motivation, (d) Understanding one's emotions and (e) Managing relationships.

2.2.2 E.I. as a Leadership Quality

Leadership concerns the interaction of leaders with other individuals. Once social interactions

are involved, emotional awareness and emotional regulation become important factors affecting the quality of the interactions. As House and Aditya (1997) summarized, "contemporary research on intelligence offers renewed potential for leadership trait research. Leadership is embedded in a social context, and the idea of social intelligence as a required leadership trait is a powerful one" According to Goleman (1996), most effective leaders are alike in that they all have a high degree of emotional intelligence. He claimed, "emotional intelligence is the sine qua non of leadership.... without it, a person can have the best training in the world, and incisive analytic mind, and an endless supply of smart ideas, but he still won't make a great leader" Emotional Intelligence plays an increasingly important role at the highest levels of the company, where differences in technical skills are of negligible importance (Goleman, 1996).

More specifically, transformational leadership as a most contemporary and effective way of management, is shown to be greatly dependent upon E.I. levels. Focusing on a multiple model of intelligence, a review of studies (Atwater and Yammarino, 1993; Gibbons, 1986; Howell and Avolio, 1993; Ross and Offerman, 1997; Southwick, 1998) that examined the relationship between leadership style and emotional intelligence found evidence of correlations between transformational leadership and traits of emotional intelligence, less for social intelligence and least for cognitive intelligence. Bass (1997) proposes that transformational leaders must possess multiple types of intelligence and that social and emotional intelligence are critical because these are important to the leader's ability to inspire employees and build relationships. According to Mayer and Salovey (1989), emotional intelligence underlies a leader's relationship skills. In fact, relationship skills (relating well, demonstrating empathy) as a main component of emotional intelligence, also constitute an important factor differentiating between leadership and management. Whilst a manager focuses on systems and structures, relies on control and aims at doing things right, a leader focuses on people, inspires trust and rather than doing things right, does the right thing.

Weathersby (1999) argued that leadership focuses on the creation of a common vision, It means motivating people to contribute to the vision and encouraging them to align their self-interest with that of the organization. It means persuading, not commanding. Management is efficiency in climbing the ladder of success. Leadership determines whether the ladder is leaning against the right wall." This kind of charisma and its emotional components, has often been considered a prerequisite of the transformational style of leadership (Bass and Yammarino, 1993).

In the same way Inspirational Leadership is inextricably intertwined with relationship management, optimism is essentially associated with self-management and self-motivation: two of the other main components of Emotional Intelligence. While optimism does not differentiate between success and failure in leaders, being low in pessimism, according to Wunderley et-al (1998) does. This is consistent with Gardner's (1993) observation that what differentiates successful and unsuccessful leaders is how they handle failures, perhaps because failure experiences are demotivating and decrease persistence. Furthermore, George and Bettenhausen (1990) found that the extent to which leaders of work groups experienced positive moods was positively related to levels of pro-social behaviour performed by group members and negatively related to group labour turnover rates.

2.3 GENDER

2.3.1 *Gender Differences*

There are some small psychological differences between women and men on traits that are often seen as related to effective leadership, such as men showing slightly more assertiveness than women and women showing somewhat higher levels of integrity than men (Franke, 2004). French anthropologist François Héritier, emphasises however, that a female leader does not possess fundamentally different attributes than a male leader. The brain of both sexes works in the same way. She goes on declaring that the gender hierarchy is not a biological, but a cultural phenomenon that over history, civilizations throughout the world have perpetuated with undiminished force (www.lemonde.fr).

Gender can be predominantly characterized as a process. Society at large has determined that some situations and activities are more masculine or feminine just as society has concluded certain behaviours are more masculine or feminine (Petrides and Furnman, 2000). Childhood socialization by parents, school, peers, and/or the media encourages girls to be cooperative, expressive, and attuned to their interpersonal world, whereas boys are led to be openly competitive, independent, and instrumental (Petrides and Furnman, 2006). Thus, through childhood experiences, women learn to value nurturance and interpersonal interconnectedness more highly than men (Gunkel et-al 2007). In the same vein that gender difference is socially constructed, work is gendered. One gender difference that is robust and pertains to leadership is that women are less likely than men to ask for what they want (Reiff et-al, 2001). Reaching elite leadership positions has not done in a vacuum; people must negotiate with others to access the right positions, experiences, opportunities, resources, and assistance in both the professional and domestic spheres. However, women are less likely to negotiate than men are.

2.3.2 *Gender and Leadership Styles*

As more women begin occupying positions of leadership, questions as to whether they lead in a different manner from men and whether women or men are more effective as leaders have garnered greater attention. Increasingly, writers in the mainstream press are asserting that there are indeed gender differences in leadership styles and that in contemporary society women's leadership is more effective (Petrides and Furham, 2000). However, academic researchers have a greater diversity in their views; indeed, many argue that gender has little or no relationship to leadership style and effectiveness. In a meta-analysis of gender and leadership literature, Eagly and Carli (2003) found that women exhibited more tendencies of transformational or charismatic leadership than did men despite typical stereotypes of women as less effective leaders. As various researchers (Eagly and Carli, 2003; Young and Hurlic, 2007) have asserted, any substantial leadership style differences between women and men that might exist, should not disadvantage women

and can even offer a female advantage. Because the glass ceiling makes it so difficult for women to attain elite leadership positions, the ones who do make it tend to be very competent.

Heilman et-al, (1995) explained that women are typically believed to be less competent than men, particularly in terms of management responsibilities. The authors used supporting evidence from studies on gender and selection, in which women were found to be less desirable candidates for management positions. Terms used to describe successful managers included competence, independence, and rationality, typically masculine terms, according to the authors, and typically not used to describe women. Among male and female managers, women were scored lower than men on attributes of success. Yet, Johnson (1994) found no gender differences in actual managerial behaviour when studying men and women. Gunkel et-al, (2007) also concluded, based upon the results of an extensive meta-analysis, that there is more support for gender similarities than for differences.

2.3.3 *Gender and Emotional Intelligence*

An important question arises when dealing with the concept of organizations as social arenas in which all human emotions are likely to emerge. The question is that of who deals with the negative emotions (e.g anxiety and emotional pain) that can threaten to overwhelm organizational initiatives and contribute to lower performance (Ginkal et-al 2007). It is undoubtedly an important one that relates to the health and well-being of organizational members. From an interactionist perspective, a study anticipated that increasing levels of managerial responsibility would unlock discretionary helping behaviour related to differences in self-monitoring and positive affectivity (Ginkal et-al 2007). Results from a study of 94 members of a recruitment firm confirmed that those active in providing emotional help to others in the workplace tended to possess a combination of managerial responsibility and a high self-monitoring or high positive affectivity disposition. By contrast, when members were low in positive affect of self-monitoring they provided less

emotional help to others, irrespective of the level of managerial responsibility. These interaction results remained significant after taking into account centrality in friendship and workflow networks, as well as significant effects of gender. Research shows that women are slightly superior to men in perceiving emotions (Mayer and Geher, 1996; Wong and Law, 2002; Joseph et-al, 2000). Again, women demonstrated slightly greater abilities in social and emotional intelligence, greater doubt about feelings and decisions, and less emphasis on the intellect.

3. Hypothesis

Having considered the above, the number of hypothesis that this paper produces are listed below:

1. Men make greater use of the Transactional Leadership Style than women.
2. Women use Transformational Leadership more than men.
3. There is a significant difference between genders across each of the five Emotional Intelligence variables (Self-Awareness, Managing Emotions, etc), Women score higher than men in each of E.I.'s components.
4. Transformational Leadership is more related to Emotional Intelligence than Transactional Leadership.

4. Research Methodology

The aim of this section is to provide the reader with a thorough representation of the steps taken to conduct a practical research on the topic. Due to the comparative rather than in-depthly informative nature of this research, it was deemed more suitable to use a quantitative rather than qualitative method of collecting related information. Literally acclaimed questionnaires were used as the basis of this research.

4.1 Participants

In total, the sample comprised of 51 participants of whom 29 were male and 22 were female. Two questionnaires were distributed, one measuring leadership style and the other one emotional intelligence. Initially it was thought that the E.I. questionnaire should be distributed

to managers and the one on Leadership Style solely to subordinates who would comment on their supervisors. It was believed that this would be the most effective way of gathering data which could be as realistic and reliable as possible. At a later thought however, it was perceived that the combination of both a 360 degree survey as well as a Self Report (SR) on leadership styles would have provided a more interesting and potentially more accurate set of results. The goal was to find a total of 30 managers (e.g general managers, middle managers and supervisors) who would answer both questionnaires (all therefore SRs). This goal was eventually achieved. 30 however, would be the minimum number of people who would only answer the leadership style" questionnaire. In the end, 51 completed the latter. These were either supervisors or subordinates, having on rare occasions more than one subordinate commenting on the same manager. (In the Analysis section that follows, a distinction between the set of scores resulting from Self-Reports/ Observer reports, will be demonstrated). Of the 30 occupying some kind of leadership position. 17 were men and 13 were women.

The industry sectors these managers belonged to were mostly banking (7) and construction (8), although also accounting (4), sports, sales, residential housekeeping and catering. The sample at large included people from an even wider range of industries including publishing, recruitment consulting and marketing. The variety of industry backgrounds was necessary, given the traditionally male/female dominated nature of an overwhelming number of professions. Indeed, finding an adequate combination of male and female managers within a single domain proved challenging, revealing the applicability of the earlier-mentioned principle that 'work is gendered'. The educational levels of the sample therefore also varied, with a postgraduate degree being the highest level of attained education and a school leaving certificate the lowest. The national/cultural background of all the participants was mostly British. Although specific information on age was not requested, it can be stated with fair confidence that the estimated age range of the sample managers

was early 40s to mid-60s, while employees could be as young as in their mid-20s.

4.2 Measures

The questionnaire assessing Leadership Styles that was used in this research was taken from Northouse's (2007) *Leadership: Theory and Practice* book. It is made up of 20 items that assess two orientations: task and relationship (or transactional transformational style). All items are rated on a five-point scale (where 1-Never, and 5-Always). The questionnaire gathered therefore, each individual acquired two separate scores (from 10 to 50 in each), corresponding to the two leadership styles. Some strengths and weaknesses of the above questionnaire should be mentioned here. Firstly, it is a reliable approach to studying the behavior of leaders (rather than only their personal traits or characteristics) because it is supported by a wide range of studies. Also this style approach is valuable because it underscores the importance of the two core dimensions of leadership behavior: task and relationship. It reminds leaders that their impact on others occurs along both dimensions. On the negative side, researchers have not been able to associate the behavior of leaders (task and relationship) with outcomes such as morale, job satisfaction, and productivity. Therefore, an interpretation of the gender—transformational leadership style comparison results should be treated with caution. Moreover, it should be borne in mind that researchers from the style approach have not been able to identify a universal set of leadership behaviors that would consistently result in effective leadership.

The Emotional Intelligence questionnaire was used for this study taken from Weisinger's (2000) *"Emotional Intelligence at Work"* book. It comprises of 45 items rated on a seven-point scale (where 1 indicates low ability and 7 high ability). The items are categorized into two main components and 5 factorial components. The two main components are Intrapersonal and Interpersonal, whilst the factorial components are: Self-Awareness, Managing Emotions, Self-Motivation (Intrapersonal); Relating Well, and Emotional Mentoring (Interpersonal). These constitute besides, the attributes of Goldman's (1996) definition of E.I.

as stated earlier. 12 items were under Self-Awareness, 10 under Managing Emotions, 7 under Self-Motivation, 20 under Relating Well and 13 under Emotional Mentoring, indicating of course, an overlap between some of the items' categories. Clarifying further, the Intrapersonal component acts as a scale for assessing the inner self. Individuals who score high on this scale are considered to be in touch with their feelings, they feel good about themselves, and they feel positive about the way things move in their lives (Bar-On, 1997). Bar-On (1997) identified the second component, Inter-personal, to be characteristic of responsible and dependable individuals who have good people skills. Individuals who score high on this scale understand, interact and relate well with others (Bar-On, 1997). Using Microsoft Excel, each participant's scores were entered on the program and double-checked for calculation errors. A statistical analysis of the data was then carried on making use of the program's relevant tools, and an interpretation made.

5. Analysis

A set of descriptive statistics (sample size, sample mean, sample standard deviation) were initially found for the eight number of variables under which the data set was grouped (please see Section 1 in the Appendix for a detailed illustration of both the data set and descriptive statistics). Independent t-tests were then conducted to determine gender differences in the emotional intelligence scores and leadership styles of male and female managers.

At a following step, a comparison was undertaken between Self and Observer-Reported Leadership Styles using the above method of analysis (descriptive statistics and t-test). The hypothesis formed was that there would be a significant difference between the results obtained by the two methods. The Statistical Analysis concluded with the Correlation procedure (using Pearson Correlation). The main aim of the Correlation procedure was to examine the degree of association between the two leadership styles and the various components of Emotional Intelligence. Given the different scale ranges for these variables, it was considered necessary

for precision purposes, to first standardize the participants' scores (please see Table VII.3(ii) in Appendix) before proceeding to find their correlation coefficients. The Correlation procedure additionally examined the degree of association between firstly the Leadership Styles only, and secondly the number of E.I.s components only.

5.1 Results

For the 51 men and women involved, the summary of descriptive statistics presented in VII.1 in the appendix, shows the mean

transactional leadership score to be 38.59 and that of transformational slightly higher, at 40.29 in a scale of 10-50. Table 1 below demonstrates that scores for men and women separately were also always slightly higher for the transformational style. The Standard Deviations were also smaller for this style. Men overall had higher mean scores than women in both styles. A t-test however, did not confirm any gender differences in leadership style ($p > .05$ for a more detailed illustration of p-values please see Section 1 Table 1.2 to Table 1.4 in the Appendix.)

Table 1: Descriptive Statistics for Gender, Leadership Style and E.I.

	Male (Means and standard Deviations)	Female (Means and standard Deviations)	p
LEADERSHIP STYLE	n	n	
	29	22	
Transactional	39.17 (5.71)	37.82 (6.74)	>.05
Transformational	40.93 (3.83)	39.45 (5.70)	>.05
EMOTIONAL INTELLIGENCE:	n	n	
	27	13	
Self-Awareness	63.71 (9.18)	65.92 (6.34)	>.05
Managing Emotions	47.29 (7.12)	45.15 (7.99)	>.05
Self-Motivation	33.24 (6.26)	34.85 (6.14)	>.05
Relating Well	104.12 (14.10)	113.62 (14.23)	<.05
Emotional Mentoring	67.71 (9.51)	73.62 (8.19)	<.05

It is important to note however, that there were significant differences between self and Observer-Reported scores in Leadership Style. Table 2 below demonstrates this. The Mean differences for the TA (Transactional) and TF (Transformational) leadership styles were as high as 4.68 and 4.23 for SR and OR respectively, with SR scores being higher. It is also worth mentioning here the respective p-values, which were particularly low, justifying in large part, the validity of the initial statement: P (T=t) two-tail: 0.01 for TA L.S. and less than

0.01 for TF L.S. (please see Table No. 2.2 to Table No. 2.3 in Appendix for details) The relatively large difference in the number of observations under each variable however (33 for SR and 18 for OR), is also a factor to consider in the interpretation of these results. Moreover it should be stated that the imbalance of gender variation under each of this specific group of scores (SR - M: 24, F: 9; OR— M: 13, F: 5). prevented further research into possible gender differences between Self and Observer-Reported measurements.

Table 2: Self-Report and Observer Report differences in Leadership Styles

		SR (n=33)	OR (n=18)	p-value
TA L.S.:	Mean	40.24	35.56	>.05
	St. Dev.	5.56	6.15	
TF L.S.:	Mean	41.79	37.56	>.05
	St. Dev.	3.71	5.28	

Note: TA L.S.: Transactional Leadership Style; TF L.S.: Transformational Leadership Style.

As for the Emotional Intelligence scores, Table 1 above shows how there were no significant differences between men and women's mean scores in three components of E.I.: Self-Awareness, Managing Emotions and Self-Motivation. Nevertheless, women scored more highly than men in the "Relating Well" and "Emotional Mentoring" factors of E.I. with mean scores for women at 113.62 and 73.62 respectively, against 104.12 and 67.71 of men. P-values are less than 0.04 in both of these factors demonstrate that these results are of statistically significant. It should also be stated that these latter two factors make up the Interpersonal dimension of E.I., while the first three the Intrapersonal one. In examining the degree of association in the variables, it was deemed necessary to preliminarily verify the independence of the two variables under Leadership Style, as asserted by the author of the distributed questionnaire. In fact, the results showed a certain degree of association between Transactional and Transformational Leadership, with a correlation coefficient of 0.22 (as demonstrated in Table 3). Overall, the correlation coefficient among all the variables was both positive and significant, demonstrating that not only is there a degree of association between the two Leadership Styles'

variables, but also between Leadership Style and Emotional Intelligence, as well as among the various components of Emotional Intelligence themselves. As can be seen from the first two columns of the table below, correlation coefficients were on the whole higher among Transactional Leadership and E.I. rather than Transformational Leadership and E.I.

As a result, it can be concluded that Hypothesis No 4 is rejected. Particularly strong was the association between Transactional Leadership Style and Self-Motivation ($r = 0.58$), whilst the weakest relationship was between Transformational Leadership Style and Self-Awareness ($r = 0.25$). Transactional Leadership was two times ($r = 0.51$) more associated to Self-Awareness than Transformational. Only in the relationship Managing Emotions - Leadership style, did the link between Transformational Leadership and an Emotional Intelligence component prove stronger than between Transactional L.S. and an E.I. component ($r = 0.41$ against $r = 0.31$). The correlation between Relating Well and Leadership style proved to be almost equal for the two styles ($r = 0.44$ and $r = 0.43$). Finally, Emotional Mentoring was more associated to Transactional than Transformational Leadership by 13%.

Table 3: Correlation among variables

	TA L.S	TF L.S	E.I. 1	E.I. 2	E.I. 3	E.I. 4
TA L.S.	-					
TF L.S	0.22	-				
E.I. 1	0.51	0.25	-			
E.I. 2	0.31	0.41	0.56	-		
E.I. 3	0.58	0.44	0.55	0.79	-	
E.I. 4	0.44	0.43	0.67	0.54	0.71	-
E.I. 5	0.46	0.33	0.60	0.52	0.69	0.97

Note: n 30; E.I. 1: Self-Awareness, E.I.2: Managing motions, E.I. 3: Self-Motivation, E. I. 4: Relating Well, E. I. 5: Emotional Mentoring

Whist for the variables discussed so far the degree of association between them can overall be characterized as moderate, that among the various components of Emotional Intelligence can be regarded as strong. All correlation coefficients were above 0.5, with a particularly strong relationship nearing perfect positive linear correlation ($r = 0.97$) between Relating

Well and Emotional Mentoring. It must be stated at this point however, that such high correlation coefficients amongst E.I Components were largely to be expected, given that it was known from the beginning that statements in the E.I. questionnaire used, and their associate scores, often corresponded to more than one E.I. component (see Appendix

for the scoring method used). Therefore, this study took a certain degree of correlation between E.I. competencies for granted, and solely aimed to provide an overview of the extent of such correlations. In this light, it is also worth noting the very high degree of association between Managing Emotions and Self-Motivation ($r = 0.79$), as well as Self-Motivation and Relating Well ($r = 0.71$).

6. Discussion

The analysis carried out above has resulted in a number of interesting findings associated with the inter-relationship between gender, leadership style and emotional intelligence.

Firstly, contrary to this study's two initial hypothesis, no gender differences were found between transactional or transformational leadership scores of male and female managers. As mentioned in the Literature Review section of this study, previous research on this subject has revealed ambiguous findings. Some researchers have found women to be more transformational than men (Carless, 1998). While other researchers such as Eagly and Carli (2003) found that contrary to stereotypic expectations, women were not found to lead in a more interpersonally oriented and less task-oriented manner than men in organizational studies. These differences were found only in settings where behavior was more regulated by social roles, such as experimental settings. Additionally, a very recent study conducted for a multinational corporation headquartered in Germany with branches in China, Japan and the USA, found that men and women independent of nationality exhibit rather similar penchants for managerial style (Gunkel, et-al 2007). It thus becomes apparent that emphasis should perhaps now be shifted from gender differences in leadership style to a more profound investigation of each gender's particular strengths which could prove beneficial in a managerial role. These strengths might not necessarily be categorized into Leadership styles.

Before moving on to a discussion about the role of Leadership styles in determining successful leadership, some further attention must be placed on the ways this study's scores were attained. It can be argued that the combination

of a 360 degree survey together with Self-Reports, offers a reliable measure of assessing Leadership Styles. However, the analysis carried out earlier on, demonstrated a significant difference between SRs and ORs, in favour of the first. An important question then arises as to who (and perhaps how many) can be deemed more suitable to assess one's leadership style. Questions also arise as to why it might be that Self-Report scores in these questionnaires were higher than Observer Reports. Do people in general tend to rate themselves more highly than others, or is it perhaps that leaders, given the confidence acquired through their role, and perhaps the inferior (and thus more critical) position of subordinates, that the observed discrepancy can be explained? People's concern with social desirability, is undoubtedly also a factor to be kept in mind when considering such questions. In any case, it cannot be stated with absolute certainty how the SR — OR composition of the sample would affect the leadership style scores.

Given that both genders exhibit similar leadership styles, it can be inferred that explanations relating to gender inequalities at managerial positions should concentrate on factors outside leadership styles. If leadership success is dependent / strongly related to leadership styles (and the latter is almost equal for both genders), then it follows that men cannot be considered as more successful managers than women. An important question that was raised at the beginning of this study therefore manifests itself once more, as to what essentially defines successful leadership, and the extent to which it is dependent on leadership styles. This is also important to explore before moving on to a discussion about the relationship between Emotional Intelligence and Transformational / Transactional leadership styles. Blake and Mouton's Managerial Grid (1964, 1978, 1985) [in Northouse, (2007). *Leadership: Theory and Practice*. London: Sage. p. 72-76], which was republished in 1991 as the Leadership Grid, can provide a solid basis upon which to investigate the relationship between leadership style and success. The Grid was designed to explain how leaders help organizations to reach their purposes through two factors: concern for production (paralleled

to transactional leadership) and concern for people (paralleled to transformational style). The Grid proposes five leadership styles and their associated scores (with 1 being the lowest and 9 the highest) in each of these two dimensions. This style approach marked a major shift in the general focus of leadership research, as leadership was no longer treated as an exclusively personality trait: focus on it expanded to include what leaders did and how they acted. The style approach declares that whenever leadership occurs, the leader is acting out both task and relationship behaviors; the key to being an effective leader often rests on how the leader balances these two behaviors.

The above approach has not adequately shown how leaders' styles are associated with performance outcomes. Researchers have not been able to establish a consistent link between task and relationship behaviors and outcomes such as morale, job satisfaction, and productivity. Even though this approach has failed to find a universal style of leadership that could be effective in almost every situation, Blake and Mouton do exalt the merits of maximizing both production-oriented and people-oriented methods in leadership use. This study's initial emphasis on the additive effect of transformational leadership therefore, now shifts attention from a single style of management to the combination of both (transactional and transformational). Even if this constitutes an ideal, Blake and Mouton claim that it is an ideal which is worth working for. Another question which arises here however, is the extent to which transactional and transformational leadership styles can be considered as two independent variables. Despite claims that this is indeed the case - supporting even the relevant questionnaire used in this study by Northouse, valid beliefs underlining the human nature of both of these variables, predicted the high likelihood that they are to a certain degree correlated. As demonstrated earlier, this study proved this assumption to be a fact, with a rather low but still significant degree of positive correlation of 0.22 between the two variables. This result therefore suggests that the way people lead cannot only wholly be dependent on one of the two styles; it can thus also be derived, that a successful

leadership style cannot be defined solely by a transactional or transformational approach. The positive correlation also suggests that if one improves on one of these styles, not only will it have an impact on the other, but this will also be positive (even if limited). Overall, building on House and Avolio (1993) work, described transactional and transformational leadership as a single continuum rather than mutually independent continua.

As expressed in the Literature Review, transformational leadership did not generally prove to be as connected to emotional intelligence as transactional. In fact, the difference in favour of the latter in three of EI's attributes — Self-Awareness, Self-Motivation and Emotional Mentoring — was considerable. According to various researchers (Bass, 1997; Burns, 1978; Ross and Offerman, 1997), a transformational leader exhibits qualities including empathy, motivation, self-awareness, and self-confidence, all of which Goleman (1996) described as subcomponents of emotional intelligence. This study does not prove the opposite, as correlations between transformational leadership and all of EI's tested components were both positive and moderate (with the exception of "Self-Awareness" which can be considered as rather low). The "Managing emotions" component was also clearly more associated to transformational rather than transactional leadership. This can be considered as reasonable, given that the very definition of transformational leadership is concerned with change, and especially change in one's emotional state, to the most productive outcome.

This study however, demonstrates that transactional leadership can potentially be even more related to some aspects of E.I. than transformational. It has underlined the relationship that has always undoubtedly existed, between, for instance, self-awareness and transactional leadership — a task-oriented behavior. Weisinger (2000) asserts that with high self-awareness you are able to monitor yourself, observe yourself in action, to influence your actions so that they work to your benefit. He stresses moreover, that self-awareness is the

core of each of E.I.'s skills, "because emotional intelligence can only begin when affective information enters the perceptual system". Its importance for success in the workplace is considered paramount. The highest correlation coefficient attained was that between Transactional leadership and Self-Motivation. This relationship can again be explained in the way Weisinger (2000) associates self-motivation with productivity. He asserts that when you are self-motivated, you are able to begin a task or assignment, stick with it, and move ahead to completion, all the while dealing with any setbacks that may arise. Self-Motivation, together with Self-Awareness and to a less degree Emotional Mentoring, concentrate attention on the self and its role in the process of task completion, rather than the other, which makes their stronger association with transactional rather than transformational leadership appear logical in hindsight.

It is of interest to note however, that E.I.'s 'Relating Well' factor — of incalculable value in the workplace — did not meet initial expectations that it would most strongly be associated to the transformational style. This is where one of the greatest criticisms of transformational leadership comes into surface: Relating a lot to people, and having a great impact on people, does not necessarily imply that this relationship is good, explaining therefore the presence of E.I. Researchers have on occasions emphasized that the charismatic nature of transformational leadership presents significant risks for organizations because it can be used for destructive purposes (Howell and Avolio, 1993). Taking into consideration the above complications, coming to valid conclusions about the relationship between successful leadership and emotional intelligence is no straightforward task. Given in addition, the high degree of correlation between all of E.I.'s components, it is difficult to consider them as distinct factors whilst also given the variability of the correlations, no reliable overall E.I. score may be obtained. For the purposes of this study's investigation, it was deemed suitable to take the "Self-Awareness" component (which is besides, as argued earlier, at the core of all of E.I.'s skills) and "Relating Well" (which, contrary to Self-Awareness,

belongs to the Interpersonal sphere of E.I.), and compare them to both the highest and lowest combination of leadership style scores.

As highlighted in Table 3.1 in the Appendix, it can be seen how the highest combination scores in leadership style are also associated with some of the highest scores in the two components of E.I. mentioned earlier. However, the lowest set of combination leadership style scores was not necessarily associated with the lowest two E.I. scores or vice versa. Nor did the highest E.I. scores necessarily relate to some of the highest combination L.S. scores. If therefore one takes Blake and Mouton's high transactional — high transformational proposition as model of leadership success, Emotional Intelligence can indeed (Goleman, 1996), be considered an important prerequisite of managerial effectiveness. This said, neither does high E.I. seem to guarantee leadership success, nor does relatively low E.I. associate to an overall poor leadership style. The conclusions just reached contain all of the nuances mentioned earlier on however, regarding for instance the way successful leadership can be defined, the extent to which various leadership styles' success can be dependent on the situation, and the degree to which one can associate Self-Awareness' and Relating Well' to overall impressions about E.I. Having examined also the relationship between gender and leadership style and found no significant differences, it is now also worth discussing the results based on the relationship between gender and Emotional Intelligence.

The results of this study showed that there are significant differences in the Emotional Intelligence scores between men and women only in some of E.I.' factors. It was found that women scored more highly than men in the Interpersonal domain of E.I., namely in the 'Relating Well' and Emotional Mentoring' factors. This seems to be in agreement with Petrides and Furnham's (2000) findings: having had two hundred and sixty participants complete a measure of trait emotional intelligence and estimated their scores, they found that females scored higher than males on the 'social skills' factor of measured trait E.I. As discussed earlier on, this is less likely to be due to biological predisposition, and more likely to

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8. Appendix

• Section 1

Table 1 Data Set

I.D.	M/F	SR/ OR	TA L.S. (10-50)	TF L.S. (10-50)	EI 1 (12- 84)	EI 2 (10- 70)	EI 3 (7-49)	EI 4 (20- 140)	EI 5 (13- 91)
1	0	1	43	46					
2	0	1	38	38					
3	0	1	38	36					
4	0	1	41	31					
5	0	0	43	39					
6	0	1	34	40					
7	0	1	31	39					
8	0	0	34	42					
9	0	1	31	40					
10	0	1	47	43					
11	0	1	39	44					
12	0	1	40	44					
13	0	0	48	46	74	51	41	127	82
14	0	0	39	39	61	47	29	103	70
15	0	0	40	38	56	48	36	93	61
16	0	0	50	49	84	67	47	140	91
17	0	0	45	41	69	45	34	92	57
18	0	0	39	42	61	51	32	108	70
19	0	0	34	44	63	47	32	106	71
20	0	0	45	35	76	43	31	102	67
21	0	0	46	39	63	54	41	108	73
22	0	0	38	41	58	47	30	93	62
23	0	0	42	43	71	51	42	123	79
24	0	0	35	39	67	44	25	99	64
25	0	0	44	42	60	43	32	106	66
26	0	0	25	41	65	51	31	95	58
27	0	0	35	48	50	34	24	93	59
28	0	0	37	40	56	41	29	91	56
29	0	0	35	38	49	40	29	91	65
30	1	1	38	28					
31	1	1	34	40					
32	1	0	47	45					
33	1	1	38	39					
34	1	1	33	34					
35	1	1	23	28					
36	1	1	38	38					
37	1	1	25	33					
38	1	1	29	35					
39	1	0	38	42	63	53	41	105	69
40	1	0	41	39	71	41	31	135	86
41	1	0	49	49	76	60	46	126	81
42	1	0	39	42	68	49	38	122	79
43	1	0	41	40	61	42	33	109	69
44	1	0	38	47	56	38	28	101	66
45	1	0	43	44	61	50	40	120	77

Table 2 : Descriptive Statistics – Men and Women

MandF	TA. L.S. (10-50)	TF. L.S. (10-50)	E.I. I (12-84)	E.I. 2 (10-70)	EJ. 3 (7-49)	E.I. 4 (20-140)	E.I. 5 (13-91)
n	51	51	30	30	30	30	30
Mean Scores	38.59	40.29	64.67	46.37	33.93	108.23	70.27
St. Dev.	6.15	4.74	8.02	7.45	6.15	14.71	9.30

Table 3 : Descriptive Statistics – Men

M	TA. L.S. (10-50)	TF. L.S. (10-50)	E.I. I (12-84)	E.I. 2 (10-70)	EJ. 3 (7-49)	E.I. 4 (20-140)	E.I. 5 (13-91)
N	29	22	17	17	17	17	17
Mean Scores	39.17	40.93	63.71	47.29	33.24	104.12	67.71
St. Dev.	5.71	3.84	9.18	7.12	6.26	14.10	9.51

Table 4 : Descriptive Statistics – Women

M	TA. L.S. (10-50)	TF. L.S. (10-50)	E.I. I (12-84)	E.I. 2 (10-70)	EJ. 3 (7-49)	E.I. 4 (20-140)	E.I. 5 (13-91)
N	29	22	13	13	13	13	13
Mean Scores	37.82	39.45	65.92	45.15	34.85	113.61	73.62
St. Dev.	6.74	5.70	6.34	7.99	6.14	14.23	8.19

Table 5 : Transactional Leadership Style

t-Test: Two-Sample Assuming Unequal Variances

	Male	Female
Mean	39.17241	37.81 818
Variance	32.57635	45.39394
Observations	29	22
Hypothesized Mean Difference	0	
df	41	
t Stat	0.758619	
P(T<=t) one-tail	0.22621	
t Critical one-tail	1.682879	

Table 6 : Transformational Leadershin Style.

t-Test: Two-Sample Assuming Unequal Variances

	Male	Female
Mean	40.93103	39.45455
Variance	14.70936	32.54545
Observations	29	22
Hypothesized Mean Difference	0	
df	35	
t Stat	1.047562	
P(T<=t) one -tail	0.151 011	
t Critical one -tail	1.689573	

Table 7 : E.I. 1- Self-Awareness

t-Test: Two-Sample Assuming Unequal Variances

	Male	Female
Mean	63.70588	65.92308
Variance	84.22059	40.24359
Observations	17	13
Hypothesized Mean Difference	0	
df	28	
t Stat	-0.78147	
P(T<=t) one-tail	0.220543	
t Critical one-tail	1.70113	

Table 8 : E.I. 2 - Managing Emotions

t-Test: Two-Sample Assuming Unequal Variances

	Male	Female
Mean	47.29412	45.15385
Variance	50.72059	63.80769
Observations	17	13
Hypothesized Mean Difference	0	
df	24	
t Stat	0.761868	
P(T<=t) one-tail	0.226781	
t Critical one-tail	1.710882	

Table 9 : E.I. 3 - Self-Motivation

t-Test: Two-Sample Assuming Equal Variances

	Male	Female
Mean	33.23529	34.84615
Variance	39.19118	37.64103
Observations	17	13
Pooled Variance	38.52683	
Hypothesized Mean Difference	0	
df	28	
t Stat	-0.70439	
P(T<=t) one-tail	0.243505	
t Critical one-tail	1.70113	

Table 10 : E.I. 4 - Relating Well

t-Test: Two-Sample Assuming Equal Variances

	Male	Female
Mean	104.1176	113.6154
Variance	198.8603	202.4231
Observations	17	13
Pooled Variance	200.3872	
Hypothesized Mean Difference	0	
df	28	
t Stat	-1.82105	
P(T<=t) one-tail	0.039651	
t Critical one-tail	1.70113	

Table 11 : E.I 5 - Emotional Mentoring

t-Test: Two-Sample Assuming Unequal Variances

	Male	Female
Mean	67.70588	73.61 538
Variance	90.47059	67.08974
Observations	17	13
Hypothesized Mean Difference	0	
df	28	
t Stat	-1.82523	
P(T<=t) one-tail	0.039326	
t Critical one-tail	1.70113	

• Section 2

Table 1 : Self-Report/Observer Report Data Set Table

I.D.	SR/OR	M/F	TA L.S. (10 - 50)	TF L.S. (10- 50)
13	0	0	48	46
14	0	0	39	39
15	0	0	40	38
16	0	0	50	49
8	0	0	34	42
17	0	0	45	41
18	0	0	39	42
19	0	0	34	44
20	0	0	45	35
21	0	0	46	39
22	0	0	38	41
23	0	0	42	43
24	0	0	35	39
25	0	0	44	42
26	0	0	25	41
27	0	0	35	48
28	0	0	37	40
5	0	0	43	39
29	0	0	35	38
39	0	1	38	42
40	0	1	41	39
41	0	1	49	49
42	0	1	39	42
43	0	1	41	40
44	0	1	28	47
45	0	1	43	44
46	0	1	47	41
47	0	1	39	42
48	0	1	32	45
32	0	1	47	45
49	0	1	35	32
50	0	1	39	43
51	0	1	46	42
10	1	0	47	43
11	1	0	39	44
12	1	0	40	44
9	1	0	31	40
1	1	0	43	46
2	1	0	38	38
6	1	0	34	40
7	1	0	31	39
38	1	1	29	35
36	1	1	38	38
35	1	1	23	28
34	1	1	33	34
33	1	1	38	39

Table 2 : Transactional L.S - Self-Report/Observer-Report

t-Test: Two-Sample Assuming Unequal Variances

	SR	OR.
Mean	40.24242	35.55556
Variance	30.93939	37.79085
Observations	33	18
Hypothesized Mean	0	
Difference	32	
Df	2.689409	
t Stat	0.005637	
P(T< t) one-tail	1.693888	
t Critical one-tail		
P(T<= t) two-tail	2.036932	
Critical two-tail		

Table 3 : Transformational L.S. - Self-Report/Observer-Report

t-Test: Two-Sample Assuming Unequal Variances

	S.R	O.R
Mean	41.78788	37.55556
Variance	13.73485	27.9085
Observations	33	18
Hypothesized Mean		
Difference	0	
Df	26	
t Stat	3.01795	
P(T< t) one-tail	0.002817	
t Critical one-tail	1.705616	
P(T<= t) two-tail	0.005634	
t Critical two-tail	2.055531	

• Section 3

Table 1 : 30 Managers' Data Set Table

I.D.	M/F	SR/ OR	TA L.S. (10-50)	TF L.S. (10-50)	EI 1 (12-84)	EI 2 (10-70)	EI 3 (7-49)	EI 4 (20-140)	EI 5 (13-91)
13	0	0	48	46	74	51	41	127	82
14	0	0	39	39	61	47	29	103	70
15	0	0	40	38	56	48	36	93	61
16	0	0	50	49	84	67	47	140	91
17	0	0	45	41	69	45	34	92	57
18	0	0	39	42	61	51	32	108	70
19	0	0	34	44	63	47	32	106	71
20	0	0	45	35	76	43	31	102	67
21	0	0	46	39	63	54	41	108	73
22	0	0	38	41	58	47	30	93	62
23	0	0	42	43	71	51	42	123	79
24	0	0	35	39	67	44	25	99	64
25	0	0	44	42	60	43	32	106	66
26	0	0	25	41	65	51	31	95	58
27	0	0	35	48	50	34	24	93	59
28	0	0	37	40	56	41	29	91	56
29	0	0	35	38	49	40	29	91	65
39	1	0	38	42	63	53	41	105	69
40	1	0	41	39	71	41	31	135	86
41	1	0	49	49	76	60	46	126	81
42	1	0	39	42	68	49	38	122	79
43	1	0	41	40	61	42	33	109	69
44	1	0	38	47	56	38	28	101	66
45	1	0	43	44	61	50	40	120	77
46	1	0	47	41	73	35	28	96	62
47	1	0	39	42	63	46	30	91	60
48	1	0	32	45	75	53	35	128	78
49	1	0	35	32	60	36	26	100	71
50	1	0	39	43	62	35	36	115	75
51	1	0	46	42	68	49	41	129	84

Table 2 : 30 Managers' Data Set Table in Standardized format

I.D	M/F	TRC L.S.	TRF L.S	E.I. 1	E.I. 2	E.I. 3	E.I. 4	E.I. 5
13	0	1.414108	1.110601	1.163328	0.621654	1.148521	1.275755	1.261232
14	0	-0.20372	-0.7258	-0.45702	0.084974	-0.8018	-0.35576	-0.02866
15	0	-0.02396	-0.98814	-1.08023	0.219144	0.335889	-1.03556	-0.99609
16	0	1.773625	1.897629	2.409751	2.768376	2.12368	2.159491	2.228654
17	0	0.874832	-0.20111	0.540116	-0.18337	0.010836	-1.10354	-1.42605
18	0	-0.20372	0.061231	-0.45702	0.621654	-0.31422	-0.01586	-0.02866
19	0	-1.10251	0.585916	-0.20774	0.084974	-0.31422	-0.15182	0.078827
20	0	0.874832	-1.77517	1.412613	-0.45171	-0.47674	-0.42374	-0.35114
21	0	1.05459	-0.7258	-0.20774	1.024165	1.148521	-0.01586	0.293809
22	0	-0.38348	-0.20111	-0.83095	0.084974	-0.63927	-1.03556	-0.8886
23	0	0.335556	0.323573	0.789401	0.621654	1.311048	1.003836	0.938758
24	0	-0.92276	-0.7258	0.290832	-0.31754	-1.4519	-0.62768	-0.67361
25	0	0.695073	0.061231	-0.58166	-0.45171	-0.31422	-0.15182	-0.45863
26	0	-2.72034	-0.20111	0.041547	0.621654	-0.47674	-0.8996	-1.31856
27	0	-0.92276	1.635287	-1.82809	-1.65924	-1.61443	-1.03556	-1.21107
28	0	-0.56324	-0.46345	-1.08023	-0.72005	-0.8018	-1.17151	-1.53354
29	0	-0.92276	-0.98814	-1.95273	-0.85422	-0.8018	-1.17151	-0.56612
39	1	-0.38348	0.061231	-0.20774	0.889994	1.148521	-0.2198	-0.13616
40	1	0.155797	-0.7258	0.789401	-0.72005	-0.47674	1.819593	1.691197
41	1	1.593866	1.897629	1.412613	1.829185	1.961154	1.207775	1.153741
42	1	-0.20372	0.061231	0.415474	0.353314	0.660942	0.935856	0.938758
43	1	0.155797	-0.46345	-0.45702	-0.58588	-0.15169	0.05212	-0.13616
44	1	-0.38348	1.372944	-1.08023	-1.12256	-0.96432	-0.49172	-0.45863
45	1	0.515314	0.585916	-0.45702	0.487484	0.985995	0.799897	0.723775
46	1	1.234349	-0.20111	1.038686	-1.52507	-0.96432	-0.83162	-0.8886
47	1	-0.20372	0.061231	-0.20774	-0.0492	-0.63927	-1.17151	-1.10358
48	1	-1.46203	0.848259	1.28797	0.889994	0.173362	1.343735	0.831266
49	1	-0.92276	-2.5622	-0.58166	-1.3909	-1.28938	-0.5597	0.078827
50	1	-0.20372	0.323573	-0.33238	-1.52507	0.335889	0.459998	0.508792
51	1	1.05459	0.061231	0.415474	0.353314	1.148521	1.411714	1.476215

FACTORS AFFECTING THE SATISFACTION OF PATIENTS WITH SPACIAL REFERENCE TO SUPER SPECIALITY HOSPITALS

Dr. K.Sai Kumar

Department of Management, Narayana Engineering College,

Nellore – 524004 (A.P)

e-mail : dr.k.saikumar@gmail.com

Abstract : The objective of this study is to explore the factors that determine the satisfaction of people with the health care system above and beyond their experience as patients. The data were obtained from 250 patients. Patients' satisfaction was analyzed by factor analysis method. Factors are ranked according to the proportion of variance explained. The analysis identifies seven key factors namely care, accessibility, fee structure, availability, cleanness, effective work environment and friendly atmosphere. Chi square test has been applied to find out the relationship of satisfaction with the personal characteristics of the patients. The findings of Chi square test shows that gender, age and occupation of the patients have not shown any significant association with the satisfaction of patients.

Key Words : patients' satisfaction, availability, care, accessibility.

1. Introduction

The success or failure of any hospital is largely depends on the satisfaction met by the patients on various services offered. Patients' satisfaction is a combination of psychological, physiological and other health care related factors that make a patient to feel happy. Patient satisfaction has been considered as a state where patients express their feelings, prepares to attend for the same hospital more number of times, accept the services and promote the image and goodwill of the hospital more happily. Satisfaction of patients is an emotion, a feeling and a matter of perception. It arises from the patients' appraisal of experience in hospital services; it involves likes and dislikes which are internal and external to the patients.

With the various changes and developments that take place in health care related environment, patients place more importance on the quality of services offered than before. In recent days patients emphasize not only the environment in the hospitals, but also various services offered in the hospitals. Therefore understanding patients' satisfaction is becoming more important.

2. Significance of the Study

Patient satisfaction is one of the important factors for the survival of any hospital. Patients' satisfaction with reference to hospital environment is the feeling with which patients as individuals and groups respond to the

services received. It is a state of healthy balance in the hospital in which doctors and other service providers give their respective contributions to achieve the goals set by the hospital management. In recent days, patients put more emphasis on the quality of services than before, as a result the competition developed among the hospitals. The competition was developed in terms of attracting large number of patients as their customers, to fill up the beds and to retain them by offering various services; as a result, patients' satisfaction becomes an important issue for hospital administration. When patients have high degree of satisfaction on the services received, they tend to give positive response about the hospital.

Though every organization has its own policies to accomplish the objectives, continuous updating and monitoring of these policies is essential to keep the pace with the change in time and to avoid any dissatisfaction of patients. Usually, patients worry about their outcome that can even affect the way they treat the hospital and how they communicate with their friends and relatives. The study is based on various factors which are directly and indirectly related to hospital environment. The need for the study is to ascertain various factors that influence satisfaction of patients. The present study will help the managements of hospitals, to develop more appropriate strategies and these could be incorporated into a well designed set of hospital

administration policies for better satisfaction of the patients.

3. Review of Literature

Across the United States of America and Europe, consumer satisfaction is playing an increasingly important role in quality of care reforms and health-care delivery more generally. However, consumer satisfaction studies are challenged by the lack of a universally accepted definition or measure (Crow, et al 2002). The absence of a solid conceptual basis and consistent measurement tool for consumer satisfaction has led, over the past few years, to a proliferation of surveys that focus exclusively on patient experience, i.e. aspects of the care experience such as waiting times, the quality of basic amenities, and communication with health-care providers, all of which help identify tangible priorities for quality improvement. The increasing importance of patient experience and the sustained interest in comparing people's satisfaction with the health system across different countries and time periods suggests the need to characterize the factors affecting the satisfaction. Studies of patient satisfaction towards health services, health personnel and resources constitute important elements in the extent to which health services received meet consumers' expectations and needs. They can be used as a means to assess the quality of health care provided. They also help providers to better understand consumers' views (Doghaither et al 2000). Patient satisfaction studies started to appear in the literature about half a century ago. With the growing awareness of the patient as an evaluator of healthcare, more sophisticated and specialized multidimensional scales for measurement of satisfaction were suggested in the literature.

Satisfaction can be defined as the extent of an individual's experience compared with his or her expectations (Pascoe, 1983). Patients' satisfaction is related to the extent to which general health care needs and condition-specific needs are met. Evaluating to what extent patients are satisfied with health services is clinically relevant, as satisfied patients are more likely to comply with treatment (Guldvog, 1999), take an active role in their own care

(Donabedian, 1988), to continue using medical care services and stay within a health provider and maintain with a specific system (Marquis, 1983). Satisfaction is one of the core outcome measures for health care. It is intuitively more appealing than measures of health care effectiveness or efficiency that are more difficult to understand. Satisfaction with health care is a measure with a long history in the social sciences. Most current research is less interested in correlations between patients' characteristics and satisfaction and more focused on improving the quality of care and service delivered to patients and health plan members. Research on health system satisfaction, which is largely comparative, has identified ways to improve health, reduce costs and implement reform (Blendon, et al, 2003)

Satisfaction of patients appears to be a major device in order to take important decisions by the hospital managements. According to Donabedian (1988), any health care provider must decide its basic goals and objectives by offering various patient support services. Therefore, the managements of the health care centers, as a matter of fact, take satisfaction of patients into account as a main goal of strategies. Marquis et al (1983) and Salam (1998), in their studies also opined to change the attitude of management towards providing relevant, purposeful and meaningful services for the patients and for the society as a whole. Wilkin et al (1992), in their study opine that the measurement of patients' satisfaction is a common component of many evaluations. It is a wholly subjective assessment of the quality of health care and, as such, is not a measure of final outcome. Evidence has suggested that care, which is less than satisfactory to the patients, is also less effective, because dissatisfaction is associated with noncompliance with treatment instructions, delay in seeking further care and poor understanding and retention of medical information. The substance of literature is that most of the studies identified factors responsible for patient satisfaction in various health care centers conducted in foreign locations giving least scope for the Indian context. Hence, the present study may be considered as one among many studies, which will help the health care providers in better understanding about the

various factors that influence the satisfaction of patients and also helps in framing the strategies for effective management of hospitals. Thus the aim of this study was mainly exploratory in nature; with a view to better understand the factors that were associated with patients' satisfaction,

4. Objectives of the Study

The purpose of this study is to investigate and explore the various factors that influence the satisfaction of patients. The following are the research objectives formulated to guide the study.

- i. To find out the factors affecting the satisfaction of patients, and
- ii. To investigate the relationship of satisfaction with personal variables of patients.

5. Hypothesis

This study infers that there is no difference between the satisfaction and gender as well as age and occupation of patients. Against this background, the statement of hypothesis is as follows.

H₀1: There is no significant association between level of satisfaction and gender of the respondents.

H₀2: There is no significant association between level of satisfaction and age of the respondents.

H₀3: There is no significant association between level of satisfaction and occupation of the respondents.

6. Methodology

6.1 Instrument Development

The instrument used in this study consists of two parts. The first part deals with the demographic profile such as gender, age, education, income levels and occupation of the respondents. Part two deals with a structured questionnaire prepared for exploring the perceptions of the patients towards satisfaction. It consists of 22 items; all of them were selected from published patient satisfaction questionnaires (Marsh 1999 and Gadallah et al 2003). Each of which is measured on a four point Likert's scale in which, 1 indicated "strongly disagree", 2 indicated "disagree", 3 indicated "agree", and 4 indicated

"strongly agree". Contents and validity of the statements were established by experts consisting of important persons related to hospital administration. Each of the experts on the panel was asked to verify the instrument for clarity, wording, overall appearance and meaning in addition to content and validity. The instrument was pilot tested with a group of patients selected from different hospitals, not included in the sample. It was found that all items of the questionnaire were clear, and the average time required to complete it was between 10 - 12 minutes.

6.2 Data Collection

Personnel interview method was adopted to collect data from the respondents. Data were collected from various categories of patients getting treatment in the super specialty hospitals located in and around Nellore, Chittoor and Krishna districts of Andhra Pradesh in India. A total of 250 respondents were selected randomly from 15 super specialty hospitals, and questionnaires were delivered to them. The data were collected systematically during the period between April 2011 and May 2011.

6.3 Analysis of Data

The primary data collected have been sorted, classified and tabulated in a format and analyzed by using statistical package for social sciences (SPSS16.0). Appropriate statistical procedures like Factor analysis, Chi-square tests and averages have been used for analysis and inference. The factor analysis allows for defining the factors affecting the perceptions of patients towards services received and Chi-square test is applied to find the association between perceptions and personal characteristics of the patients.

7. Results and Analysis

7.1 Profile of the Respondents

Of those responding to the questionnaire, it was found that 60 percent (150) were male while 40 percent (100) were female (Table 1). The table further shows that the respondents selected for the study are male dominated. Out of which 12.8 percent (32) of the respondents were below 25 years of age, 14.8 percent (37) were in the age group of 25 to 35 years, 28 percent (70) were in the age group of 35 to 45 years, 20.08 percent

Table 1 Profile of the patients

1.Gender	No of Respondents	Percentage
a) Male	150	60.0
b) Female	100	40.0
Total	250	100
2.Age		
Less than 25 Years	32	12.8
25-35 Years	37	14.8
35-45 Years	70	28.0
45 -55Years	52	20.8
Above 55Years	59	23.6
Total	250	100
3.Education		
SSC	40	16.0
HSC	46	18.4
Graduation	65	26.0
Post Graduation	29	11.6
Illiterate	70	28.0
Total	250	100
4.Occupation		
House hold	37	14.8
Farmer	43	17.2
Business	65	26.0
Employee	62	24.8
Labour	43	17.2
To tal	250	100
5.Income		
Less than Rs. 10,000	32	12.8
Rs. 10,000 –Rs.30,000	45	18.0
Rs. 30,000 –Rs.50,000	52	20.8
Rs. 50,000 –Rs.70,000	68	27.2
Above Rs.70,000	53	21.2
Total	250	100

(52) respondents were with above 45 to 55 years of age and the remaining 23.6 percent (59) were above 55 years of age. An analysis of the age of the respondents reveals that majority of the respondents were in the age group of 35 to 45 years. With respect to education, 16 percent (40) of the patients belongs to SSC, 18.4 percent (46), belongs to HSC, 26 percent (65) belongs to graduation, 11.6 percent (29) belongs to post graduation and the remaining 28 percent (70) belongs to illiterate category. With respect to occupation of the patients 17.2 percent each (43) belongs to labour and farmers, 26.0 percent

(65) belongs to business, 24.8 percent (62) belongs to employees and the remaining 14.8 percent (37) belongs to households. With respect to income levels of the patients selected for the study, 12.8 percent (32) belongs to less than Rs.10, 000, 18.0 percent (45) belongs to Rs.10, 000 to Rs.30, 000, 20.8 percent (52) belongs to Rs.30, 000 to Rs.50, 000, 27.2 percent (68) belongs to Rs.50, 000 to Rs.70, 000, and the remaining 21.2 percent (53) belongs to above Rs.70, 000. An analysis of the education, occupation and income levels of the sample patients shows that majority of patients

belongs to graduation, doing business and whose annual income lie between Rs.50, 000 and Rs.70, 000.

7.2 Reliability

The internal reliability of various items of the questionnaire was verified by calculating Cronbach's alpha. Cronbach's alpha is used to measure the reliability of the instrument that ranges from 0 to 1, with values of 0.6 as lower level of acceptability (Hair et al.1998 & Nunnally, 1978). The Cronbach's alpha estimated in the present study for computing the perceptions of patients was 0.712, which is much higher than the acceptable level, the constructs were therefore deemed to have adequate reliability.

7.3 Factor Analysis

The basic reason for applying factor analysis is to group the variables that are highly correlated. The factor analysis involves extraction of factors from a correlation matrix, deciding how many factors to be interrupted and finally rotating the retained factors. (Alias Radam et al, 2010). The adequacy of data for applying factor analysis has been verified by Kaiser-Meyer-Okin (KMO) test. Generally, a value greater than 0.5, indicates that the factor analysis is appropriate. (Naresh Malhotra, 2009). In the present study the KMO test value is 0.657 shows that sample selected for the study is adequate and is statistically significant for factor analysis. Data were subjected to factor analysis and the factors were generated using principle component analysis and varimax rotation. The principal component analysis in data extraction extracted seven factors with Eigen values above 1.0. The Table 2 shows the result of factor analysis.

The seven factors are namely, care, accessibility, fee structure, availability, cleanness, effective work environment, friendly atmosphere, and the total variance explained by the seven factors is 65.24 percent. According to Hair et al (1998), the sum of square of the factor loadings of each variable on a factor represents the total variance explained by the factor. And, so Eigen values greater than 1.0 are considered significant and a total variance greater than 60 percent is also

considered satisfactory. Further, the percentage of variance explained is a summary measure indicating how much of the total variance of all variables, the factor represents and the percentage of variance explained statistically useful in evaluating and interpreting the factor (Aaker et al., 2001).

As per the analysis, the most important factor accounting for 13.311 % of variance is care. The statements of this factor are related to care taken by the hospital management. This factor consists of six variables namely, doctors are sincere and patience toward patients, good explanation is given to patients, good consulting exists, nurses give medicines timely, doctors give proper suggestions before discharge, patients are treated with respect. The loadings for the statements are ranging between 0.464 and 0.714, and the mean values are ranging between 2.57 and 3.21 respectively. The mean score of all the statements of this factor indicated that customers are more inclined towards 'agree'.

The second factor named, 'accessibility' explained a total variance of 12.479%. It consists of four statements and the items are loaded from 0.436 to 0.700. The mean values of the variables showed that patients are somehow strongly agreed with the statements. The various statements that come under accessibility are more distance to be travelled to reach the hospital (2.56), good transportation facility is there to reach hospital (2.87), more waiting time is there for consulting the doctor (2.32) and the location of the hospital is convenient (2.97).

The third factor is the 'fee structure' recorded 10.979% of total variance and it consists of three statements. These items are loaded from 0.545 to 0.698. The mean values of the statements are fee charged for services is affordable (2.12), flexibility in payments exists (2.23), insurance coverage exists (2.07). The analysis of the overall mean value of the factor shows that the respondents are more inclined towards 'disagree'.

Availability being the fourth factor recorded 9.748 % of total variance. This factor consists of two statements and their factor loadings 0.425 and 0.672. The mean values of the statements

Table 2 Factor Analysis Results

Factor 1(Care)		Loadings	Mean scores	Eigen value =2.929 Percentage of variance =13.311
	Doctors are sincere and patience toward patients	.649	3.21	
	Good explanation is given to patients	.504	2.57	
	Good consulting exists	.714	2.92	
	Nurses give medicines timely	.495	2.77	
	Doctors give proper suggestions before discharge	.464	3.02	
	Patients are treated with respect	.584	2.92	
Factor 2(Accessibility)				Eigen value =2.745 Percentage of variance =12.479
	More distance to be travelled to reach the hospital	.436	2.56	
	Good transportation facility is there to reach hospital	.594	2.87	
	More waiting time is there for consulting the doctor.	.700	2.32	
	Location of the hospital is convenient	.580	2.97	
Factor 3(Fee structure)				Eigen value =2.551 Percentage of variance =10.979
	Fee charged for services is affordable	.545	2.12	
	Flexibility in payments exists	.698	2.23	
	Insurance coverage exists	.621	2.07	
Factor 4(Availability)				Eigen value =2.104 Percentage of variance =9.748
	Required number of physicians exists	.672	3.12	
	Nurses and other services providers are available at the required time	.425	2.97	
Factor 5(Cleanness)				Eigen value =1.485 Percentage of variance =7.751
	Good canteen and food facilities are available	.537	2.15	
	Cleanness is maintained in the hospital	.609	2.24	
	Toilets in the hospitals are clean and good	.578	2.45	
Factor 6(Effective work environment)				Eigen value =1.293 Percentage of variance =5.578
	The hospital staff are more sincere about their work	.595	2.95	
	There exists respectful environment in the hospital	.480	2.72	
	The hospital staff have more respect towards patients	.475	2.65	
	High standards in diagnosis and treatment	.421	2.59	
Factor 7(Friendly atmosphere)				

are required number of physicians exists (3.12), nurses and other services providers are available at the required time (2.97), The analysis of the overall mean value of this factor shows that the respondents are more inclined towards 'agree'.

The fifth factor named cleanness recorded 7.751 % of total variance. This factor consists of the statements such as good canteen and food facilities are available, cleanness is maintained in the hospital and toilets in the hospitals are clean and good. The factor loadings of the three statements are 0.537, 0.609 and 0.578 and the corresponding mean values are 2.15, 2.24 and 2.45 respectively. The overall mean value of this factor is more inclined towards 'disagree'.

The sixth factor is the effective work environment. This factor recorded a total variance of 5.578 %. This factor consists of four statements such as the hospital staff is more sincere about their work, there exists respectful environment in the hospital, and hospital staff has more respect towards patients and high standards in diagnosis and treatment. The factor loadings of the four statements are ranging from 0.421 to 0.595 and the corresponding mean

values are ranging from 2.59 to 2.95 respectively. The overall mean value of this factor is more inclined towards 'agree'.

The seventh factor named friendly atmosphere recorded a total variance of 5.094 %. This factor consists of five statements such as pleasant atmosphere exists in the hospital, good ambience exists, good ventilation exists at the rooms, frequent power problems arise in the hospital and hospital maintenance system is good. The factor loadings of the statements are ranging between 0.401 and 0.576 and the corresponding mean values are ranging from 2.25 to 2.96 respectively. The overall mean value of this factor is slightly inclined towards 'agree'. This factor is the least important factor explaining only 5.094 % of total variance. The overall mean score of the factors shows that availability is the factor ranked the first response. Similarly, the care taken by the hospital staff and the effective work environment are the other factors occupied second and third best responses.

8. Schematic Diagram of Patient Satisfaction

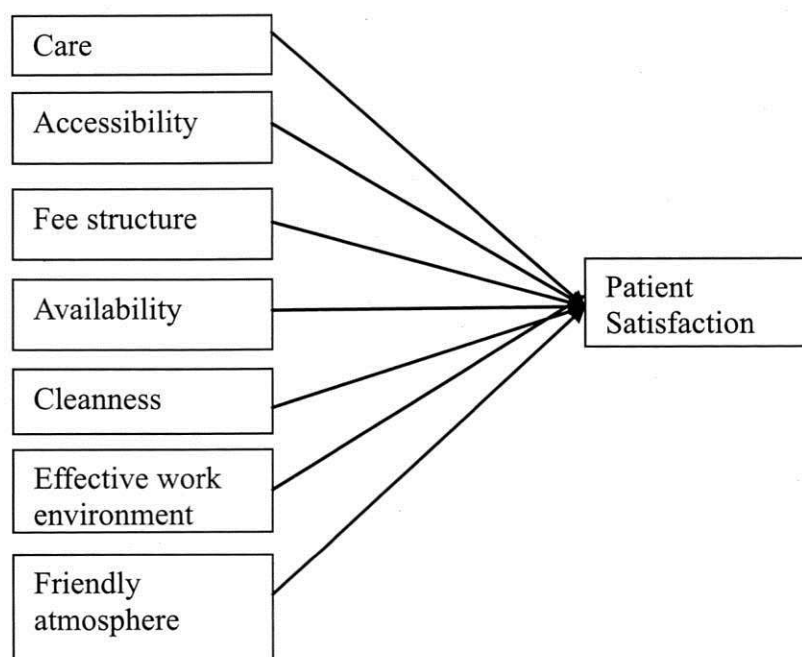


Figure 1 : Theoretical frame work of Patient Satisfaction

A theoretical frame work for the solutions to patient satisfaction problems is developed based on the objectives of the study. The model is developed in consistence with the various factors that represent the patient satisfaction. The development of this model will provide a sound base and will help the hospital administrators in further examination as to what extent can these factors influence the solutions to patient satisfaction problems.

9. Test of Hypothesis

To satisfy one of the objectives of the study and to test the association between the perceptions and the personal characteristics of the respondents, such as gender, age and

occupation, Pearson's Chi-square test has been applied. Based on the data obtained from the patients, the perception scores have been calculated.

The satisfaction of the patients may be Low or Normal or High. The highest possible score by the individual is 108 and the lowest possible score is 27. On the basis of the satisfaction levels of the sample respondents, they were divided into three groups i.e. Low, Normal and, High (Table.3). Those who scored between 27 and 54 are identified as having Low satisfaction, between 55 and 81 are identified as having Normal satisfaction, and between 82 and 108 are identified as having satisfaction at High level.

Table 3 : Satisfaction of Patients

Low (27-54)	62	24.8
Normal (55-81)	112	44.8
High (82-108)	76	30.4
Total	250	100.0

It is clear from Table.3, that the majority of respondents i.e., 44.8 percent are having normal satisfaction about the hospital services, followed by 30.4 percent of the respondents with high satisfaction and 24.8 percent of the respondents with low satisfaction.

9.1 Testing of Hypothesis 1

Null hypothesis: There is no significant association between satisfaction and gender of the respondents.

Alternative hypothesis: There is a significant association between satisfaction and gender of

the respondents.

Interpretation 1: For 2 degrees of freedom, Chi square value at 5 % level of significance is 5.9915. The calculated value of Chi square is 1.0126, which is less than the table value. Therefore the association between gender and the satisfaction of the patients is not significant. Thus, the null hypothesis is accepted.

9.2 Testing Hypothesis 2

Null hypothesis: There is no significant association between satisfaction and age of the patients

Table 4 Gender and Satisfaction of Patients

Level of Satisfaction	Gender		Total
	Male	Female	
Low	35	27	62
Normal	66	46	112
High	49	27	76
Total	150	100	250
Df=(r-1)(c-1)=2.			
Chi Square value is 1.0126			

Alternative hypothesis: There is a significant association between satisfaction and age of the patients

Interpretation 2: For 8 degrees of freedom, Chi square value at 5 % level of significance is 15.507. The calculated value of Chi square is 2.3838, which is less than the table value. Therefore the association between age and the perception is not significant. Thus, the null hypothesis is accepted.

9.3 Testing Hypothesis 3

Null hypothesis: There is no significant

association between satisfaction and occupation of the patients

Alternative hypothesis: There is a significant association between satisfaction and occupation of the patients

Interpretation 3: For 8 degrees of freedom, Chi square value at 5 % level of significance is 15.507. The calculated value of Chi square is 3.4238, which is less than the table value. Therefore the association between occupation and the satisfaction of patients is not significant. Thus, the null hypothesis is accepted.

Table 5 Age and satisfaction of Patients

Level of Satisfaction	Age					Total
	Less than 25	25-35	35-45	45-55	Above 55	
Low	8	9	18	12	15	62
Normal	14	17	30	21	30	112
High	10	11	22	19	14	76
Total	32	37	70	52	59	250
Df=(r-1)(c-1)=8 Chi Square value is 2.3838						

Table 6 Occupation and Satisfaction of Respondents

Perception Scores	Occupation					Total
	House hold	Farmer	Business	Employee	Labour	
Low	11	12	15	16	8	62
Normal	18	17	30	28	19	112
High	8	14	20	18	16	76
Total	37	43	65	62	43	250
Df=(r-1)(c-1)=8. Chi Square value is 3.4238						

10. Conclusion

The services provided by the hospitals have been studied to determine a solution to the patient's dissatisfaction. The results of factor analysis technique shows that availability of

required number of doctors and nurses in the hospital is the most important factor followed by care taken by the hospital staff, effective work environment, accessibility, friendly environment, cleanness and fee structure.

Therefore the hospital management authorities must give utmost importance to these factors to overcome the dissatisfaction problems faced by them as all these factors contribute to the positive perceptions of patients towards effective management of hospitals.

Factors mean score values indicate that fee structure of the hospitals recorded the lowest response among other factors. The reason for the poorest response may be due to charging higher amounts for the services affordable and non acceptance of delayed payments etc. Cleanliness is the next lowest response factor. The reason for getting dissatisfaction on this factor may be due to absence of proper canteen and food facilities, no neatness in the hospital premises and dirty toilets etc. The next poorest response is related to the friendly atmosphere. It may be due to absence of pleasant atmosphere and lack of ambience and hospital maintenance system. On the other hand, the respondents have given highest response to availability of doctors

and nurses in required number. The reason may be due to getting an easy access with the doctors and nurses and their availability as and when required. The next best response factors are the care taken by the hospital staff, followed by the effective work environment, shows that the attitude of the hospital staff plays a majority role in minimizing the dissatisfaction of the patients. Chi-square test has been used to study the relation of satisfaction scores and the personal characteristics of the respondents. The results of Chi-square test show that there is no significant relation with gender, age and occupation of the respondents.

The analysis of this research paper and the results obtained will provide a strong base to the hospital authorities about various factors to be taken into consideration, to minimize the patient dissatisfaction problems and to focus attention on the factors for the effective management of the hospitals.

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NISARG Ayu Care and Panchkarma Hospital*

By Dr. U. M. Deshmukh

Head, Department of Production Management, SIBER, Kolhapur

(* Case developed by the author as a part of the FDPM at IIM, Ahmadabad, 6th June - 24th Sept. 2011)

Dr. Rajesh Thakkar, an Ayurved Consultant and Panchkarma Physician offered his medical services in Ahmedabad. He was also recognized as the Trustee of AyuTrust - an Apex body for Ayurveda Medication which conducted several Ayurved Camp, Conferences and promoted Ayurved Herb plantation etc in Ahmedabad. Vaidya Thakkar practiced in Ayurveda Sastra since 1996 and his belief in the Traditional medicine can be understood through his words.

With the invention of penicillin in 1928, more than 1000 groups of antibiotics crept in the market. Though they were successful in curing the diseases they have not helped much in prevention. When there are four people around a person with a highly contagious disease like TB, only one or two are prone to get the disease. Self- immunity decided the vulnerability of an individual towards any disease. This immunity is known as *Vyadhikshamatva* in Sanskrit which translated as "forgiveness of diseases". As the community became more health conscious due to the increased awareness levels, people believe in CARE than CURE. This has lead to the resurgence of Traditional medicines. Therefore, while 20th century medical sciences belonged to Allopathy, 21st century is for Natural medicines like Ayurvedha.

Dr. Thakkar completed his BAMS (Bachelor of Ayurvedic Medicina and Surgery) from Government Akhandanad Ayurvedic College,

Ahmedabad and started his practice with Out Patient Department (OPD) in Ahmedabad. In 2003, he took Franchisee from one of the Kerala based Herbal medicine company 'Nagarjuna Herbal Concentrates Ltd' which supported him in procuring ayurvedic medicine. He continued his association with them until he started working on his own venture.

His treatment was primarily for Infertility (25% cases), Arthritis (10% cases), Skin diseases (10% cases) and others such as Kidney failure, Cancer, Abdominal problem, Migraine, Neuro disorders and Asthma which constituted around (55% cases). Each patient required about 15-20 minutes time for investigation and consultation. On an average he met around 30 patients in a day. His consultation was from morning 11-1.30 pm and evening 6- 8.30 pm during week days. During the weekends he extended his service to nearby units in Mahesana on Saturday evenings, Patan (Palanpur) on Sunday mornings and Harij, his own village on Sunday evenings which were around 100-120 kms distance from Ahmedabad since 2000. Dr. Thakkar was involved in manufacturing ayurvedic medicines and designing instruments for the treatment.

His service procured him more than 12000 patients from all over the country as well as from countries abroad. His client base across years is given in Exhibit 1.

Exhibit: 1. Number of Patients over 15 years

Year	Number of patients	Cumulative Number of
1996-97	registered 397	patients 397
1997-98	958	1355
1998-99	1037	2392
1999-00	1187	3579
2000-01	879	4458
2001-02	904	5362
2002-03	887	6249
2003-03	763	7012
2004-05	513	7525
2005-06	676	8201
2006-07	987	9188
2007-08	817	10005
2008-09	658	10663
2009-10	949	11612
2010-11	537	12149

He had clients in 17 foreign nations, who were predominantly Gujaratis living in other parts of the world and their references. He had also launched the online health care delivery service,

nutrition tips for patients residing in foreign countries. Details of his clients in foreign countries are given in Exhibit 2:

Exhibit: 2. Details of Foreign Clients

Country	No. of Customers
London	25
America	81
Kenya	20
Dubai	28
Australia	78
European	26
Canada	36
Others	30

It was in late 2008 Dr. Thakkar came to know that 39 out of his 45 batch mates had started practicing allopathy mainly due to the challenges in convincing the market about ayurvedha. He also stated "Due to the high cost involved in the research, development, standardization and commercialization of the herbal medicines, Ayurvedic treatment had long been meant for premium customers. This made me to realize the need for an organized and unique approach to Ayurvedha which will effectively take it to the common masses. I wished to offer a blend of 'Tradition with

Technology' without compromising on the basic principles of Sasthram".

Though his mission was clear, he felt inadequate in terms of his readiness to take up the venture. To equip himself, he underwent one month training on July 2009, sponsored by the Ministry of MSME (Micro, Small and Medium Enterprises) at the Centre for Entrepreneurship Development, at Gujarat. To step into the world of Management, he acquainted himself with the guiding philosophies such as Cash Flow, fund flow, Government Policies and guidelines for new project. He pursued a short course on

Import and Export Documentation procedures through MSME. He also improved his English Communication Skills with the help of a Cambridge Certified Course run by Gujarat Government.

Further to this, he studied the set up of over 28 Institutions across the country including, Central Drug Research Institute, Lucknow; Dabur Research Foundation, Ghaziabad; Himalaya Drug Company, Bangalore; Institute of Medical Sciences, Faculty of Ayurveda, Varanas; Institute of Postgraduate Teaching and Research in Ayurveda, Jamnagar and the like. He travelled extensively to understand the functioning of over 55% of the country's Ayurved Institutes. Though he had to forego around 5% of his income in such additional efforts, it enhanced his knowledge about the Industry practices.

Dr. Thakkar realized that his dream project required a large fund which cannot be generated without the support of public agencies. What was a 50 lakhs project in 2004, by now became a one crore project. He approached the bank with a detailed proposal of Critical Management Analysis (CMA) which was a 150 page project feasibility report, seeking Rs. 97 lakhs. The bank refused to sanction the amount stating that the maximum funds allocated for projects on ayurved is 20 lakhs. He contacted several higher officials of SBI, consulted with experts, revised the proposal and managed to get an approval for 86 lakhs. This in turn gave him a liability of Rs. 1.75 lakhs to be paid as Installment to the bank from the April, 2011.

While over 70% of funds were provided by the bank, he had the responsibility to raise another 30% of the funds. He contacted his friends and well wishers and generated 30 lakhs from them and invested another 25 lakhs from his personal savings.

The project was named as NISARG meaning NATURE. It started functioning from 11th March, 2011 under four divisions.

- i. Ayurvedham – It was primarily aimed at providing consulting services for the ailments of patients with panchkarma treatment.
- ii. Aushadham- This pharmacy division was started to support the panchkarma treatment

with suitable ayurvedic medicines.

- iii. Nisarg Arogyam- This division provided eco friendly ayurvedic health care products such as tooth paste, hair oil, shampoo, baby care, beauty and skin care products
- iv. Nisarg Yantram- This division dealt with the design and development of instrument and equipment used in Ayurvedic Treatment

Dr. Thaakar designed the new unit with the several key features. All healthcare services came under one roof which was the first of its kind in Ahmedabad. The interior of NISARG was designed aesthetically, presenting itself more as a health care centre than a hospital. Like any Multi specialty hospital in the town, the Centre had provision for consultation from other super specialist (ayurvedha) from Ahmedabad. The centre had two additional consulting rooms to accommodate the services of visiting doctors. The centre housed over 360 classical medicinal products of which 60 were proprietary products with trademark. Next year organic products were planned to be introduced in Aushadham division.

Dr. Thakkar also managed to acquire a contract from Maharashtra government through his tender submitted for supply of Ayurvedic medicine at Akola Ayurveda College for Rs. 1.57 lac in May 2011. He was successful in getting repeated contracts for Rs. 40000 every month since then.

It was at this juncture that in one of the Ayu Trust Association meetings held in July 2011, did he get across his fellow colleagues in the field. While they appreciated his works, five of them showed definite interest in emulating his success in their areas through Franchisee Business.

Dr. Thakkar was happy that his dream had come true. But he found himself to be hard pressed by time and monetary commitments. He contemplated as to how to increase his customer base and revenue base. He planned to study the revenue pattern of his business and make the crucial decision, on its expansion strategies. He wondered whether at this budding stage of Nisarg, expansion through Franchisee would be suitable for its future? (His business turnover across his years of service is given in Exhibit 3 and 4)

Exhibit: 3. Revenue Generated

Year	Revenue (Rs. Lakh)
1997-98	1.10
1998-99	1.30
1999-00	1.70
2000-01	1.80
2001-02	2.80
2002-03	3.20
2003-03	3.80
2004-05	4.20
2005-06	4.70
2006-07	6.00
2007-08	8.00
2008-09	9.50
2009-10	13.50
2010-11	18.00

Exhibit: 4. Revenue after March 2011

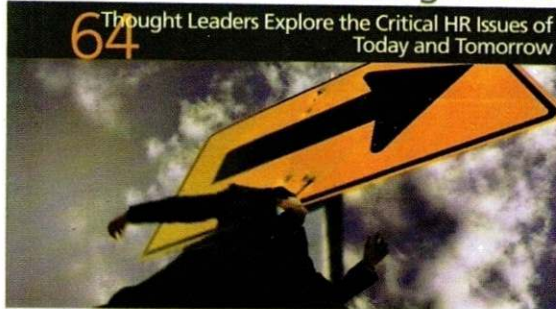
Month	Revenue (Rs. Lakhs)
April	2.03
May	1.90
June	2.10

Teaching Objectives:

The case deals with the New Service Design and Development Challenges of Dr. Thakkar in the unexplored field of Services Industry. The case on NISARG Ayucare Hospital can facilitate the learning of the student in the following Service management dimensions:

- Challenges of Service Design
- Stages in New Service Development
- Service Expansion Strategies

The FUTURE of Human Resource Management



Edited by

Mike Losey Sue Meisinger David Ulrich

The Future of Human Resource Management

Edited by Mike R. Losey, Sue Meisinger and David Ulrich

John Wiley and Sons, New Jersey, USA (2005); Pages: 424

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"The Future of Human Resource Management-64 Thought Leaders Explore the Critical HR issues of Today and Tomorrow" is sponsored by Adecco in conjunction with the 11th world HR Congress Singapore, 2006. This is an anthology of articles by some of the most renowned intellectuals of the world. The articles envisage plausible and practical set of thoughts and means to bring to the fore of the standard of HRM in the global context as a decision science. This anthology comprise many of the articles examining the issues and trends facing today's HR professionals, this one-of-a-kind work presents a wide range of new, enlightening and thought provoking perspectives from 64 leaders of the HR field. This culmination of thoughts of 64 powerful leaders may become a reality of the further course of HR activities. This influencing voice may become not only course content for the MBA Colleges, but course material for the HR program and a tool for the practicing HR professionals in particular also.

This book opens with an introductory article "The future of Human Resources" by Michael R. Losey, Sue Meisinger and Dave Ulrich. They

have succinctly discussed HRM as a profession and the key to HR success. The last part of this introductory chapter explains the further HR requirements and why it is needed and discusses the logic of each section included. The choice of articles is excellent, providing a number of different perspectives on the responsibilities and duties of HR in the future. According to the editors, these nine sections could be the logical sequence of chapter headings of future HR text books which focus more on outcomes and results, not action and activities. The total nine sections include 45 chapters. Our attempt is to introduce this book and make a section wise review for the benefit of HR fraternity and business community.

Section I: 'Understanding and managing people'

This section really examines the new employment relationships and how world's largest employer, Wal-Mart gets, keeps and grows people. In this section there are two articles on the same subject "Will there be labor shortage?" but with different conclusions. Peter Capelli concludes that there will not be a long term US labor shortage but Mike Losey says

there will be a shortage in the future. In the article "The motivators dilemma" James G. Clawson and Douglas S. Newberg emphasizes that managing latent energy of self and others is the key to leadership and HR managers should be able to identify the point at which the goals becomes ends that drain energy. They also stress on the fact that the goals should flow from inside-out energy of people and build on it instead of killing it. In his article, 'Get, Keep, Grow' Coleman Peterson gives new philosophy for HR managers, "GET good people, KEEP good people and GROW good people". According to him this practice helped him to reduce attrition rate from 70% to 44% within a short period of 4 years in Wal-Mart.

Section II: 'Invest in the next generation of Human resource Professionalism'

This section is about Human Resource education, Human Resource Career model, HR after outsourcing as a strategic business partner, moving beyond the role of strategic business partner and the new characteristics of HR professionals. All these chapters commonly emphasizes the knowledge, skills and abilities needed to become a successful HR leader and stress the fact that continuous learning and ability to adapt to changes are essential. In this section, HR practices at GM and AT&T are examined in the view point of how to make the function of HRM successful. Barclay and Thivierge emphasizes on experience and training needed to be successful in this field. Cohen suggests that HR education should be based on the expectations of employers and business community. The four Cs suggested by Meisinger: Competent, Curious, Courage and Caring really shows the characteristics of an HR Professional in the coming decades.

Section III: 'Learn to Master and play new roles'

As its name indicates, this section is about changing roles of HR in the dynamic context. Bruce. J. Avolio says HR will have a role of Chief Integrative Leader, who integrates the business functions through effective people management in the context of diverse culture, social networks and helps to link people across time and space. Wayne F. Cascio says, in future HR is going to drive business success and J.T.

Childs Jr. highlights the significance of workforce diversity. Other articles in this section throws light on the strategic role and importance of HRM, new rules for Managing HR and Human resource Management and Organizational effectiveness. Collectively all authors in this section admit that the role of HR is changing with additional responsibility of managing people with practices and organization. They also recognize the fact that the role of HR is attracting, developing and retaining Global leaders and diverse workforce who are guardian of their culture and value system and they bring managerial excellence and integration among different business functions.

Section IV: 'Discern, create, and adapt culture to business conditions'

This section focus on the role of HR in creating and delivering a culture which helps to run the company very smoothly and effectively. This section starts with a case study on cultural transformation at American express. The author explains the major role played by HR leadership in this cultural transformation. In the following chapter Pfeffer points out that HR can help in changing mindset of employees, which in turn can help in cultural change. The next chapter by Rao and Dewar explains the importance of creating an employment brand that is consistent with the customer brand with the help of an example of 'Washington Mutual'. In the next chapter Sartain explains how an HR manager can connect company brand with employment brand. The last chapter by Soupata is about the significance of team culture and he gives the live example of UPS and its value based culture from his own experience. The essence of this chapter emphasize the active role of HR leaders in shaping organization culture and HR's role in cultural change by leading the same.

Section V: 'Rethink organization as capabilities, not Structures'

This section is related to Organization capabilities and the role of HR in building it. The contributors in this section commonly stress a need for creating an identity of the firm in the stakeholders mind in the form of capability and the role of HR managers in

building these capabilities by designing proper HR practices. According to the different authors in this section, building capability through HR practices could be the right way of solving business problems not structural changes like removing layers, downsizing, changing reporting relationship etc. Beatty and Schneier emphasize the need for connecting workforce strategy with business strategy and HR strategy. The capabilities of an organization as identified by different authors are strategic clarity (Hewitt, Chapter 24) Foundation capabilities viz, to focus strategy, execute flawlessly, maintain a performance oriented culture and building a flexible organization (Joyce, Nohria and Roberson, Chapter 25) Intangible Capabilities (Ulrich and Smallwood, Chapter, 26) and Complex and Paradoxical capabilities (Chapter 27, 28,29). According to Dyer and Erickson the main challenge of HR managers is to making happen the paradoxical capability of building both a) freedom and flexibility and b) discipline and order.

Section VI: 'See HR as a decision science and Bring discipline to it'

In the words of editors, "contributors in this section have turned their attention to how HR can use measurements analytics to define, make and accomplish decisions with exactness and confidence". Some HR Measurement Masters explained the use of scientific analysis in selection decision in retailing (Fitz-enz, chapter 30) and HR Accounting and its use in Human capital Management (Falmholtz, chapter 31) Other contributors in this section are Huselid and Becker, Lewin, John Bourdreau and Peter Ramstad. All of these authors have expressed a common feeling that Decision science tools and techniques in HR is essential and argue for a new discipline for the HR professionals and they wish to treat HR as a decision science. At the same time they agree that the science of HR should not replace the art of HR. According to them without scientific vigor HR will not reach its full potential. To make the professionals more scientific they suggest for undergoing certification programs and ensure that the scientific grounding will help to increase the credibility of HR professionals.

Section VII: 'Create mutually collaborative ventures'

The all articles in this section argue that an integrated business management or Collaborative effort is needed instead of working as silos like HR, Finance, and Marketing etc. HR has a great role in achieving this collaboration and cooperation among functional departments and the real role of HR Manager will be synergizing the whole organization and help the whole be greater than the parts by ensuring free flow of communication and ideas. Different authors put forth different models to bring collaboration and cooperation in the organization. According to Culbert and Coget give the two-way model of teamwork where both the managers and the subordinates give inputs for each others performance. Gratton used the example of Nokia to explain about how they bring horizontal cooperation in the organization and Seeman highlights the importance of power in creating collaboration and cooperation. This section clearly says that an organization is organic and the role of HR will be maintaining and adjusting the structure according to the context and should ensure the free flow of information.

Section VIII: 'Responding to social expectations and public policy and the renewed importance of ethics'

In this section HR is considered as an agent for detecting and preventing corporate fraud and as an expert of public policy and social issues related to business. According to authors to ensure business faith and justice strong HR practices are needed. This section emphasizes on the fact that HR leaders must show courage to make decisions against unethical practices and should be involved in identifying and act on ethical violation. Richard Beaumont suggests that HR leaders are the most appropriate management representatives to help develop a more systematic approach to social and public policy issues. According to Patricia Harned HR should take a leading role in ensuring ethical practices with total involvement of HR professionals across the organization. The authors commonly suggest that public policy and ethical issues will be very important in the

coming decades and also admit the fact that clear, viable and practical ethical conduct can increase employee commitment, customer share and investor confidence.

Section IX: 'live globally, act locally'.

The Chapters 41 to 45 is related to 'live globally, act locally'. It is a mantra for the HR managers in the global context. When companies go globally for talents, the real challenge is a multi dimensional puzzle lies at the crossroad of national culture and corporate culture. Attracting, developing and retaining talents in the context of globalization are the most important challenge according to authors in this section. Developing expatriate HR managers/global HR manger is a daunting task as global HR is much more attuned to a nation's history, language and culture. The contributors in this section shared their global experience and emphasize the importance of maintain a balance between Global and Local practices. The most important finding from this section is that there are some Universal best practices but there are also important regional best practices, this shows the importance of need for a right balance (Chapter 44). This section concludes with a remark that HR professionals are not immune to Globalization. In chapter 45, Arthur Yeung shares his experience of Managing HR in the Chinese context and also explains the role they play now and what roles they must play in future.

The book definitely covers quite a lot of ground when it comes to HR practices in the changing context. The eminent authors have covered a wide range of topics and provided a broader and lucid view, summarizing various changing HR roles. Overall, this book is an inspiring read for all HR Managers and Students and Faculty. In summation, the book is insightful and rich in content and all the contributors tried to put a right spirit without leaving from the core of HR as an emerging Discipline with scientific grounding. For the interested reader, it gives a kaleidoscopic vie of new age Organizations and changing role of HR. Recommended to all who study HR as part of their MBA program and all who practice HR in the global context.

Dr. Babu Thomas

Professor, Dept of MBA
AIMIT, St. Aloysius College (Autonomous)
Mangalore
e-mail: babu@stalloysius.ac.in

Mr. Renjith Krishnan K

Asst. Professor, Dept of MBA
AIMIT, St. Aloysius College (Autonomous)
Mangalore
e-mail: renjithkrishnank@stalloysius.ac.in

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Chh. Shahu Institute of Business Education & Research (SIBER)

University Road, Kolhapur - 416 004, Maharashtra State, INDIA

Contact: 91-231-2535706 / 07 Fax: 91-231-2535708

Website: www.siberindia.co.in, Email: sajmr@siberindia.co.in, sibersajmr@gmail.com

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